

FILE NO: 181027

Petitions and Communications received from October 15, 2018, through October 22, 2018, for reference by the President to Committee considering related matters, or to be ordered filed by the Clerk on October 30, 2018.

Personal information that is provided in communications to the Board of Supervisors is subject to disclosure under the California Public Records Act and the San Francisco Sunshine Ordinance. Personal information will not be redacted.

From the Residential Rent Stabilization and Arbitration Board, submitting an Annual Report for FY2017-18. Copy: Each Supervisor. (1)

From Department of Homelessness and Supportive Housing, submitting an Annual Report on Evictions from Subsidized Housing for FY2017-2018. Copy: Each Supervisor. (2)

From the Department of Recreation and Park, pursuant to Resolution No. 157-99, submitting the FY2018-2019, 1st quarter Lead Poisoning Prevention report. Copy: Each Supervisor. (3)

From the Planning Department, submitting Notice of Public Hearing and availability of a draft Environmental Impact Report for the proposed project at 10 South Van ness Avenue. Copy: Each Supervisor. (4)

From the Planning Department, submitting a request for the Final Environmental Impact Report for the 10 South Van Ness Avenue Mixed-Use Project. Copy: Each Supervisor. (5)

From the Department of Elections, regarding the recruitment of Poll Workers for the November 6, 2018 election. Copy: Each Supervisor. (6)

From the Planning Department, submitting Notice of Availability of and Intent to Adopt a Mitigated Negative Declaration for a proposed project on Seawall Lots 323 and 324 – Hotel and Theater Project. Copy: Each Supervisor. (7)

From Spencer Hudson of Indivisible SF, regarding a proposed amendment to the Inclusionary Housing Ordinance. File No. 180911. Copy: Each Supervisor. (8)

From Michael Janis, General Manager of the SF Market Source for Fresh Produce, regarding the proposed Refuse Separation Compliance legislation. File No. 180646. Copy: Each Supervisor. (9)

From Yasushi Ito, regarding the memorial for Comfort Women. Copy: Each Supervisor. (10)

From Rosie Martin, regarding issues around Lafayette Park. Copy: Each Supervisor. (11)

From Becky Davis, Chair of the San Francisco Sierra Club, regarding the proposed transit-only lanes. File No. 180876. Copy: Each Supervisor. (12)

From Richard Toshiyuki Drury, of Lozeau Drury, LLP, regarding the Central SoMa Plan and Environmental Impact Report for the Central SoMa Plan. Copy: Each Supervisor. (13)

From the San Francisco Public Utilities Water Power Sewer Service, pursuant to Administrative Code, Chapter 11, Article V, Section 11.44(b), submitting a report regarding NRG Energy Center San Francisco LLC's compliance with all provisions of Administrative Code, Chapter 11 and the NRG Franchise. Copy: Each Supervisor. (14)

City and County of San Francisco

Residential Rent Stabilization
and Arbitration Board

October 10, 2018

Angela Calvillo
Clerk of the Board
Board of Supervisors, Room 244
1 Carlton B. Goodlett Place
San Francisco, CA 94102

Re: Rent Board Annual Report 2017-18

Dear Ms. Calvillo:

Please find attached the department's annual report for FY2017-18.

Please call me at 252-4628 if you have any questions.

Very truly yours,

A handwritten signature in blue ink that reads "Robert A. Collins".

Robert A. Collins, Executive Director
Rent Stabilization and Arbitration Board

encl.

cc:

Mayor London N. Breed
Supervisor Malia Cohen
Supervisor Sandra Lee Fewer
Supervisor Catherine Stefani
Supervisor Aaron Peskin
Supervisor Katy Tang
Supervisor Jane Kim
Supervisor Norman Yee
Supervisor Rafael Mandelman
Supervisor Hillary Ronen
Supervisor Vallie Brown
Supervisor Ahsha Safai
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San Francisco Residential Rent
Stabilization and Arbitration Board

Rent Board Annual Report

Fiscal Year 2017 - 2018

SAN FRANCISCO RENT BOARD

The following pages reflect the filings and activities at the Rent Board for the past fiscal year ending June 30, 2018. Overall, the number of petitions filed with the Board increased by 5% from 1,792 in FY16-17 to 1,879 in FY17-18. Total tenant petitions decreased by 8%, from 1,047 in FY16-17 to 964 in FY17-18. Total landlord petitions increased by 23%, from 745 in FY16-17 to 916 in FY17-18, including a 104% increase in utility passthrough petitions/worksheets from 100 in FY16-17 to 204 in FY17-18. Operating and Maintenance Petitions increased 30% from 77 in FY16-17 to 100 in FY17-18, while Capital Improvement Petitions increased 14% from 429 in FY16-17 to 490 in FY17-18.

Total eviction notices filed with the Board decreased by 8% from 1,798 in FY16-17 to 1,655 in FY17-18, while the number of tenant reports of alleged wrongful eviction decreased by 4% from 397 in FY16-17 to 381 in FY17-18. The number of units withdrawn from the rental market under the Ellis Act increased 7% from 260 in FY16-17 to 278 units in FY17-18. The number of pre-buyout declarations filed increased 7% from 872 in FY16-17 to 936 in FY17-18 and buyout agreements increased by 6% from 337 in FY16-17 to 356 in FY17-18. Highlights of some of the tables are as follows (percentages as compared to last fiscal year):

+104%	Utility Passthrough Petitions/Worksheets
+30%	Operating and Maintenance Petitions
+14%	Capital Improvement Petitions
+7%	Pre-Buyout Disclosures
+6%	Buyout Agreements
+5%	Tenant Appeals
-4%	Reports of Alleged Wrongful Eviction
-8%	Eviction Notices
-8%	Total Tenant Petitions
-18%	Landlord Appeals
-21%	Subtenant Petitions
-46%	Costa-Hawkins Petitions

Our services last year also included the following:

27,436 calls handled by the counseling staff [no change]
11,882 front counter visitors were served [-2%]
1,008,481 web site page views [+2%]

This report can also be obtained on our website at www.sfrb.org under “Statistics.”

October 10, 2018





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Rent Board Monthly Statistical Summary • 2017-2018

		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Totals
Tenant Petitions	Pet	63	71	56	62	56	75	79	69	75	82	75	91	854
Tenant Summary Petitions	Pet	3	1	1	0	0	0	1	1	1	3	1	1	13
Subtenant Petitions	Pet	9	9	7	2	6	6	9	3	5	5	7	7	75
Tenant ADR Requests	Pet	2	1	1	0	2	3	0	4	4	1	3	1	22
TOTAL TENANT PETITIONS		77	82	65	64	64	84	89	77	85	91	86	100	964
Capital Improvement Petitions	Pet	35	41	45	52	30	23	25	29	61	51	63	35	490
	Units	229	288	323	440	179	153	166	475	657	428	796	282	4,416
Operating & Maintenance Petitions	Pet	6	2	4	11	1	19	27	9	4	10	6	1	100
	Units	54	24	42	88	1	272	318	138	21	104	11	10	1,083
Comparable Rent Petitions	Pet	1	0	0	1	2	0	0	1	0	1	1	0	7
	Units	1	0	0	1	2	0	0	1	0	1	1	0	7
Costa-Hawkins Petitions	Pet	2	5	3	1	0	1	1	2	2	1	3	4	25
	Units	2	5	3	1	0	1	1	2	2	1	3	4	25
1.21 Tenant In Occupancy Petitions	Pet	2	9	1	3	3	1	4	2	1	1	2	1	30
	Units	2	9	1	3	3	2	4	2	1	1	2	1	31
Utility Passthrough Petitions	Pet	34	0	0	2	0	4	7	0	1	0	0	0	48
	Units	270	0	0	190	0	25	36	0	1	0	0	0	522
Utility Passthrough Worksheets	Pet	92	0	0	8	0	16	36	0	4	0	0	0	156
	Units	621	0	0	635	0	107	125	0	9	0	0	0	1,497
Extension of Time Petitions	Pet	1	1	0	1	1	2	2	1	1	2	0	2	14
	Units	1	2	0	2	1	2	4	2	2	5	0	2	23
Landlord "Other" Petitions	Pet	1	1	1	0	0	2	0	0	1	1	1	3	11
	Units	1	1	1	0	0	2	0	0	1	1	1	3	11
Landlord ADR Requests	Pet	2	3	2	5	0	4	5	2	6	0	2	3	34
	Units	3	3	2	7	0	6	7	2	8	0	2	5	45
TOTAL LANDLORD PETITIONS		176	62	56	84	37	72	107	46	81	67	78	49	915
TOTAL ALL PETITIONS		253	144	121	148	101	156	196	123	166	158	164	149	1,879
Landlord Appeals	App	7	7	6	3	8	1	8	4	3	6	4	5	62
	Units	7	7	45	3	8	1	8	4	3	8	5	5	104
Tenant Appeals	App	3	5	3	3	6	4	5	3	5	5	1	3	46
TOTAL APPEALS		10	12	9	6	14	5	13	7	8	11	5	8	108
Ellis Eviction Filings (Landlord)	Pet	3	16	10	5	6	6	11	10	11	5	8	7	98
	Units	10	45	30	17	14	14	43	27	32	9	20	17	278
Wrongful Eviction Reports (Tenant)	Rpt	30	24	28	33	32	28	34	32	31	36	32	41	381
Eviction Notices	Notices	118	146	110	125	99	113	158	151	156	153	180	146	1,655
OMI Rescissions	Rescission	0	1	6	0	1	0	0	3	6	2	3	7	29
Pre-Buyout Declarations	Declaration	81	91	78	79	82	37	112	48	87	73	82	86	936
Buyout Agreements	Agreement	24	35	22	30	34	29	24	18	24	38	37	41	356
GRAND TOTAL		519	469	384	426	369	374	548	392	489	476	511	485	5,442



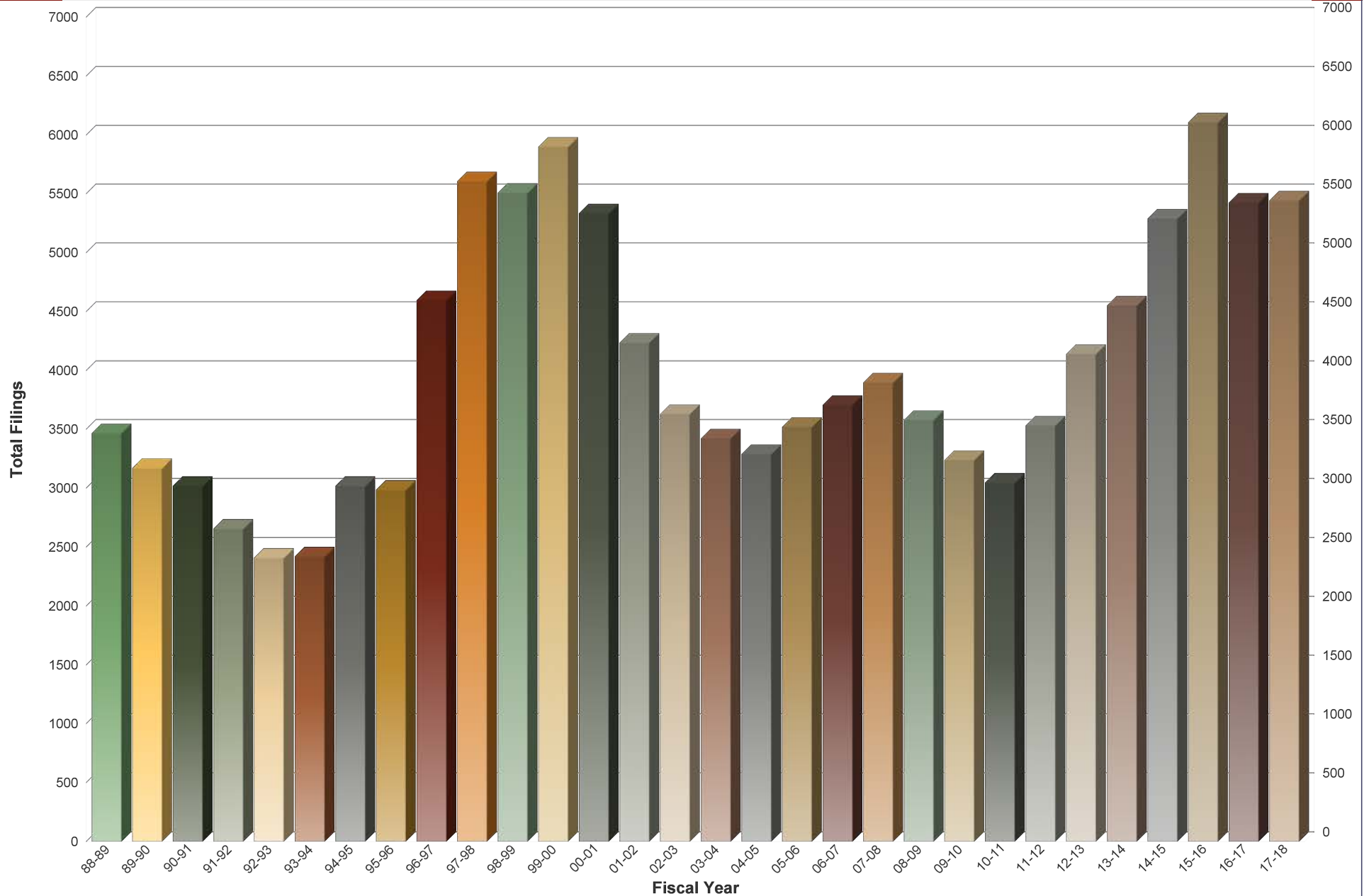
Rent Board 10-Year Statistical Summary • Total Filings (Detail)

Fiscal Year		08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Tenant Petitions	Pet	720	648	676	791	773	959	1,260	791	919	854
Tenant Summary Petitions	Pet	51	30	31	34	42	28	19	21	13	13
Subtenant Petitions	Pet	1	12	18	67	61	92	87	115	95	75
Tenant ADR Requests	Pet	24	30	32	48	30	48	45	21	20	22
TOTAL TENANT PETITIONS		796	720	757	940	906	1,127	1,411	948	1,047	964
Capital Improvement Petitions	Pet	199	134	145	214	285	328	343	421	429	490
	Units	1,650	629	852	1,421	1,747	2,174	2,348	3,286	2,785	4,416
Operating & Maintenance Petitions	Pet	27	12	20	25	46	40	45	73	77	100
	Units	197	131	113	171	313	375	510	905	784	1,083
Comparable Rent Petitions	Pet	7	10	11	10	11	7	8	9	4	7
	Units	7	10	11	13	11	7	8	9	5	7
Costa-Hawkins Petitions	Pet	35	23	37	40	45	49	50	51	46	25
	Units	35	23	38	40	45	49	50	55	47	25
1.21 Tenant In Occupancy Petitions	Pet	30	18	19	38	44	40	45	36	36	30
	Units	30	18	19	38	44	40	45	37	36	31
Utility Passthrough Petitions	Pet	341	76	8	34	21	23	49	67	21	48
	Units	2,642	1,891	372	255	115	155	306	834	145	522
Utility Passthrough Worksheets	Pet	46	171	46	48	95	60	96	233	79	156
	Units	971	651	126	475	1,092	384	491	1,830	518	1,497
Extension of Time Petitions	Pet	6	6	7	7	11	13	13	17	7	14
	Units	17	13	9	26	59	26	30	31	10	23
Landlord "Other" Petitions	Pet	9	9	11	8	23	22	29	60	21	11
	Units	11	11	11	10	30	34	31	81	63	11
Landlord ADR Requests	Pet	22	33	29	25	35	33	35	27	25	34
	Units	22	33	29	25	6	45	42	38	30	45
TOTAL LANDLORD PETITIONS		722	492	333	449	616	615	713	994	745	915
TOTAL ALL PETITIONS		1,518	1,212	1,090	1,389	1,522	1,742	2,124	1,942	1,792	1,879
Landlord Appeals	App	67	43	49	47	55	44	60	75	76	62
	Units	141	44	55	47	77	67	106	95	85	104
Tenant Appeals	App	153	126	66	62	73	152	89	95	44	46
TOTAL APPEALS		220	169	115	109	128	196	149	170	120	108
Ellis Eviction Filings (Landlord)	Pet	36	34	24	42	57	76	63	68	95	98
	Units	165	108	72	121	192	304	191	273	260	278
Wrongful Eviction Reports (Tenant)	Rpt	488	452	491	570	497	471	559	484	397	381
Eviction Notices	Notice	1,315	1,372	1,328	1,421	1,934	2,064	2,194	2,304	1,798	1,655
OMI Rescissions	Rescissions	0	0	0	0	0	3	6	29	14	29
Pre-Buyout Declarations	Declaration	0	0	0	0	0	0	156	809	872	936
Buyout Agreements	Agreement	0	0	0	0	0	0	38	301	337	356
GRAND TOTAL		3,577	3,239	3,048	3,531	4,138	4,552	5,289	6,107	5,425	5,442

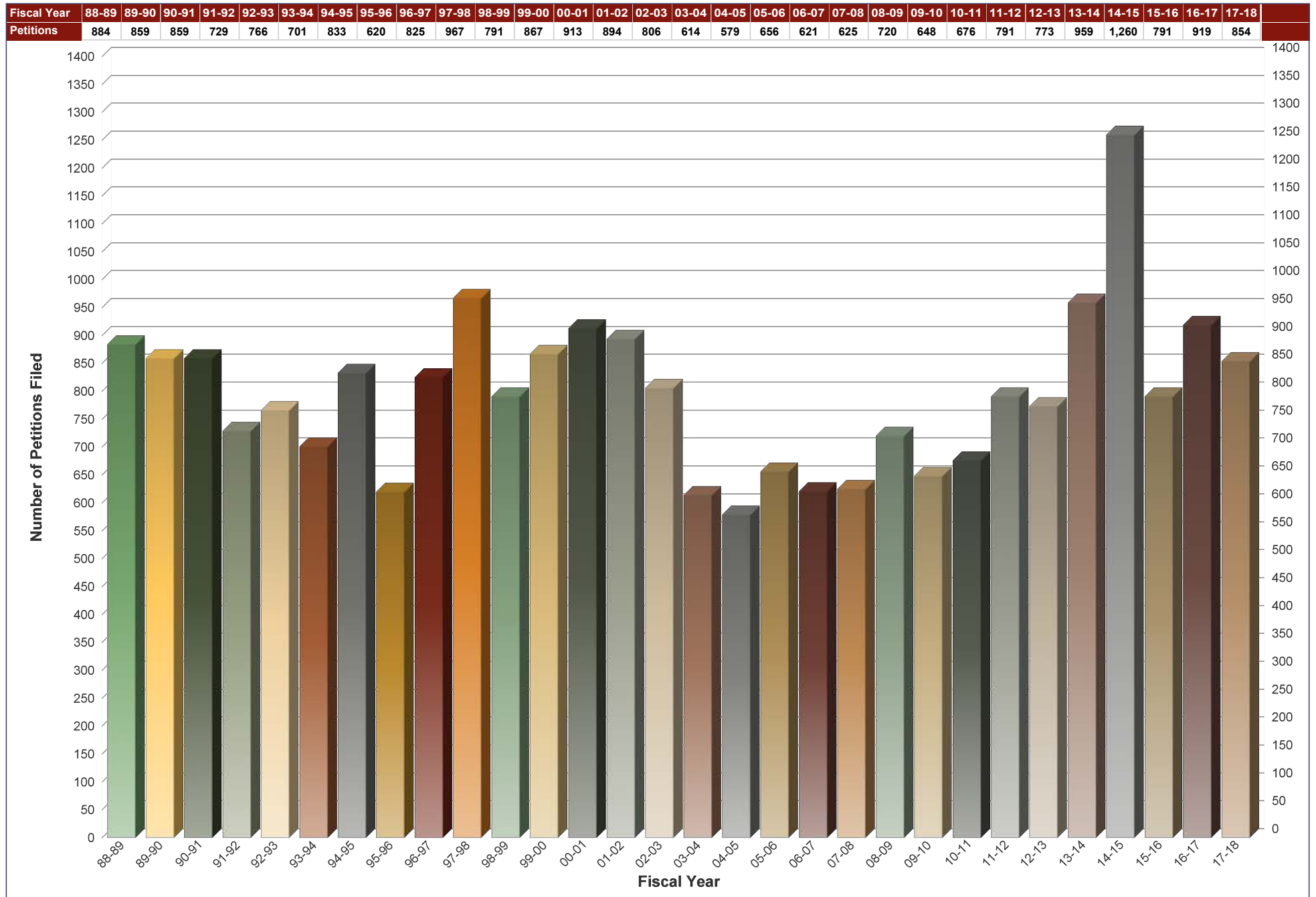


Rent Board 30-Year Statistical Summary • Total Filings (Overview)

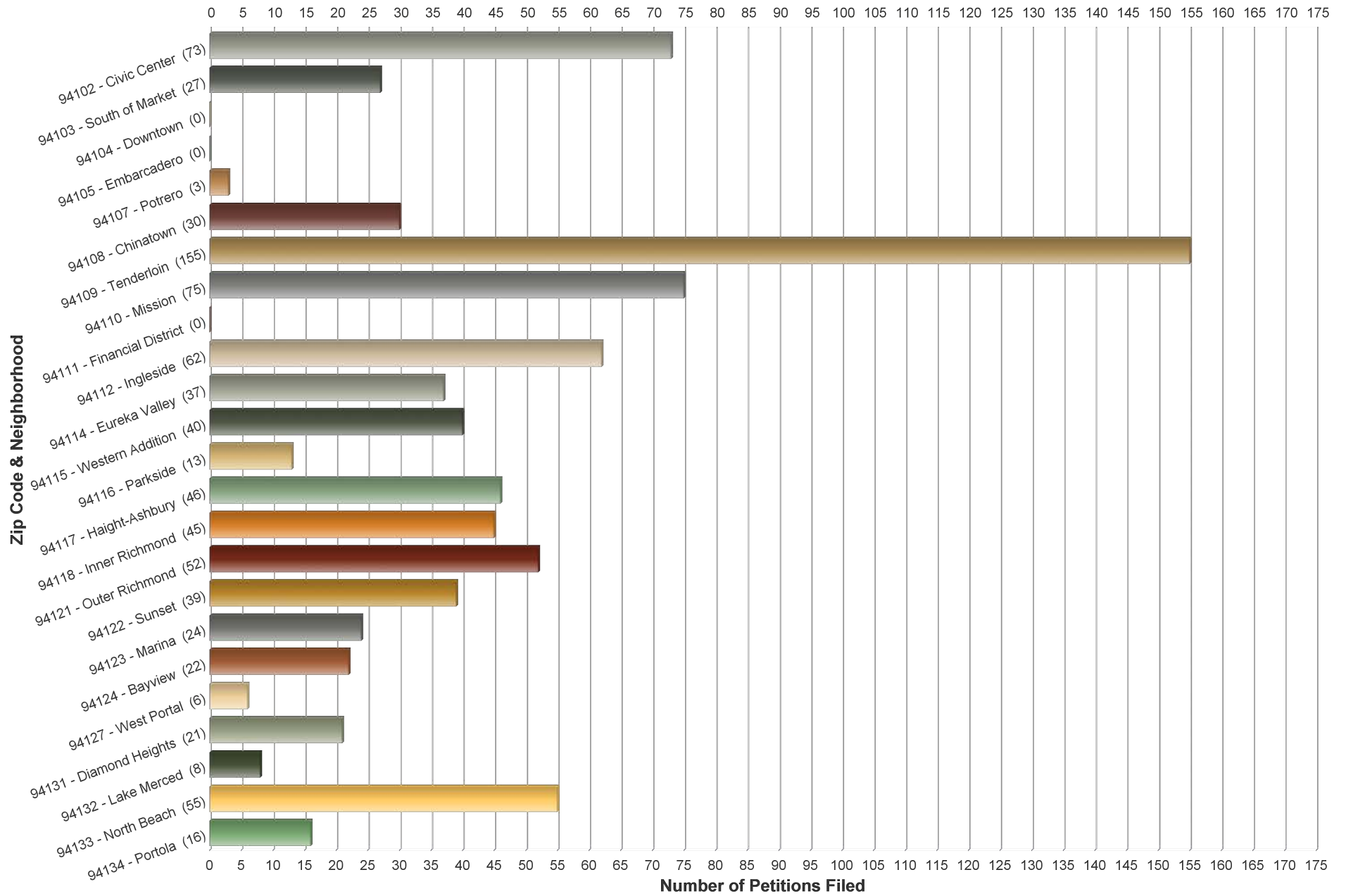
Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Filings	3,467	3,171	3,020	2,657	2,409	2,421	3,019	2,987	4,596	5,605	5,507	5,900	5,334	4,234	3,629	3,423	3,289	3,519	3,707	3,897	3,577	3,239	3,048	3,531	4,138	4,552	5,289	6,107	5,425	5,442



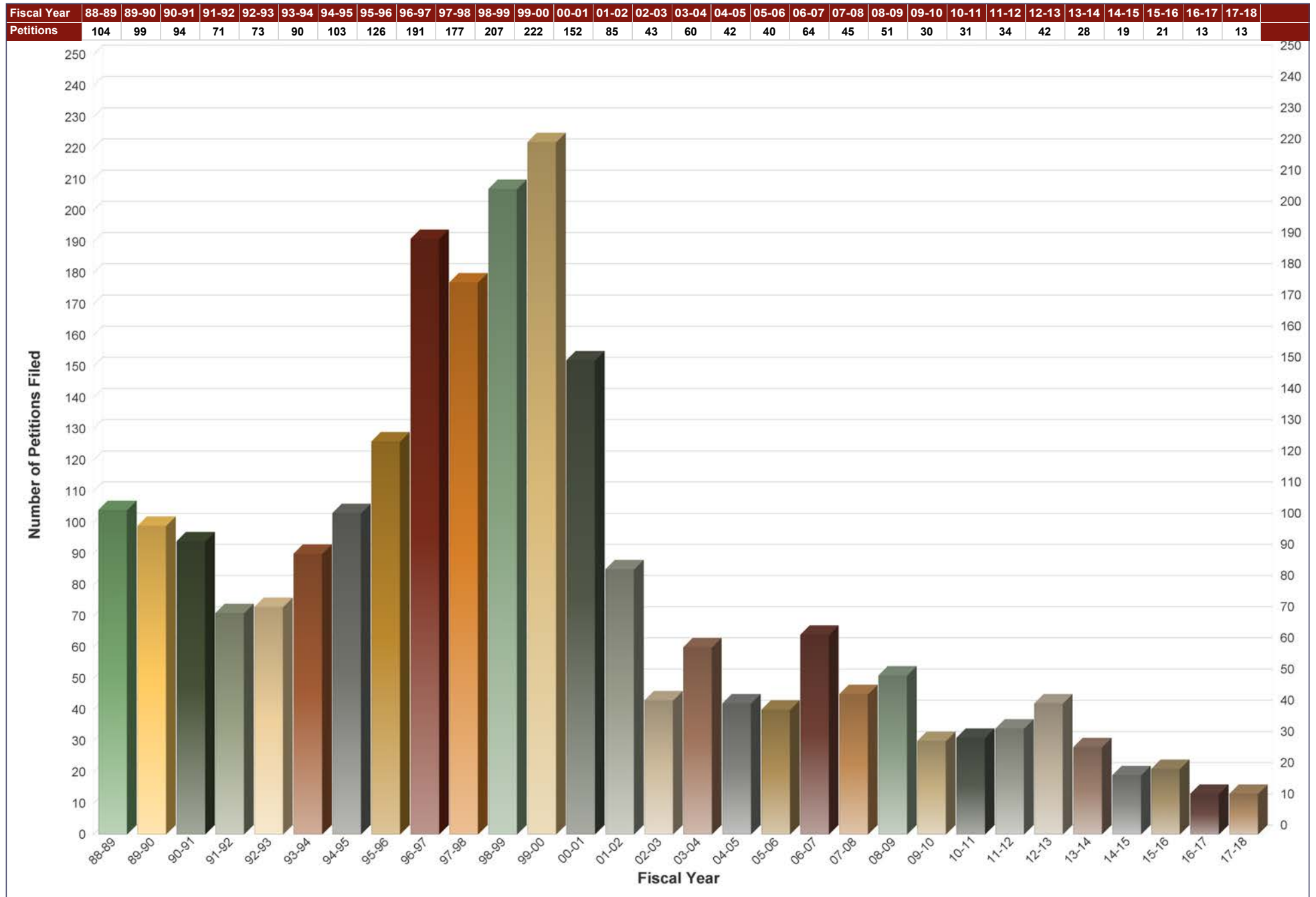
Tenant Petitions • 30-Year Trend



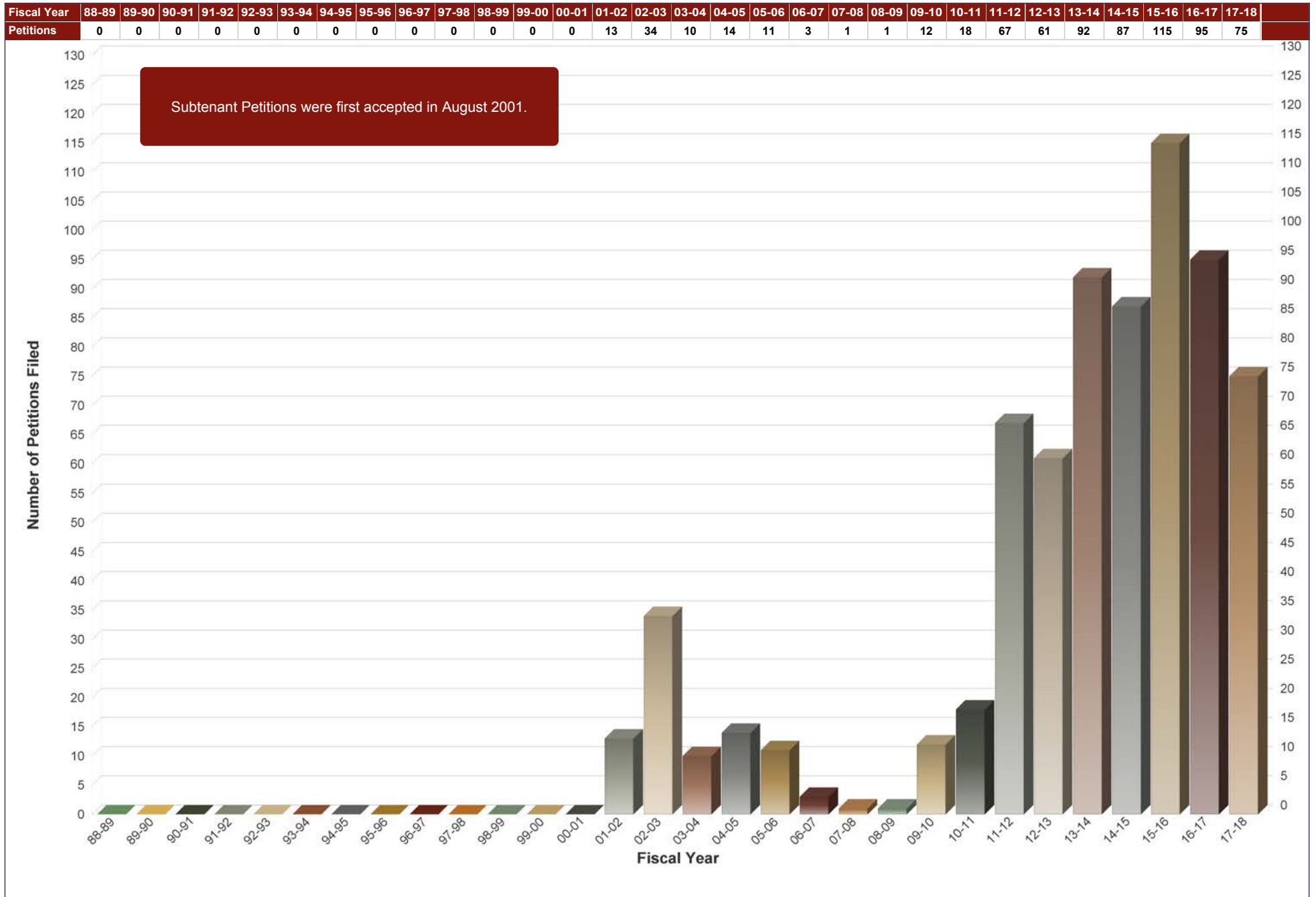
Tenant Petitions by Zip Code • Fiscal Year 2017-2018



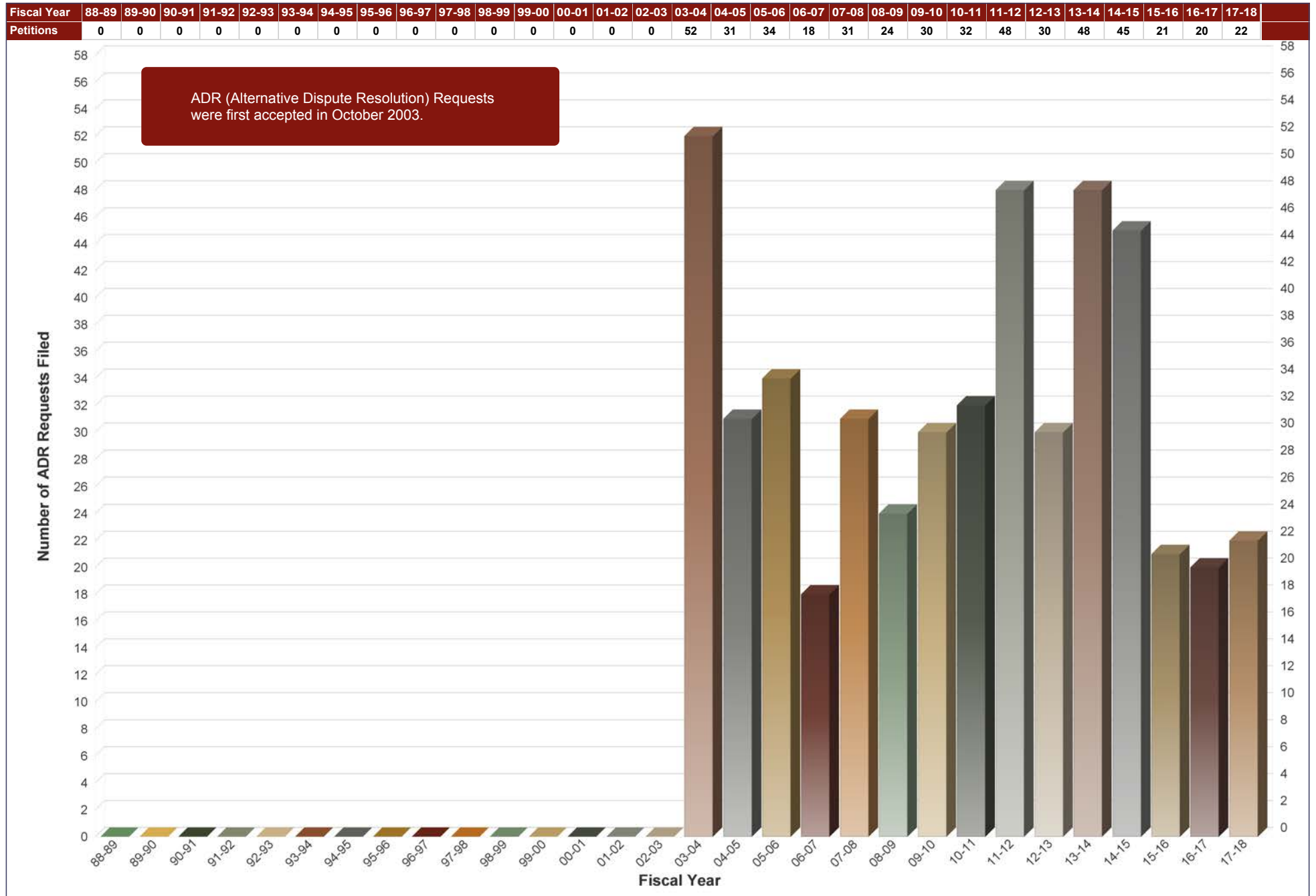
Tenant Summary Petitions • 30-Year Trend



Subtenant Petitions • 30-Year Trend

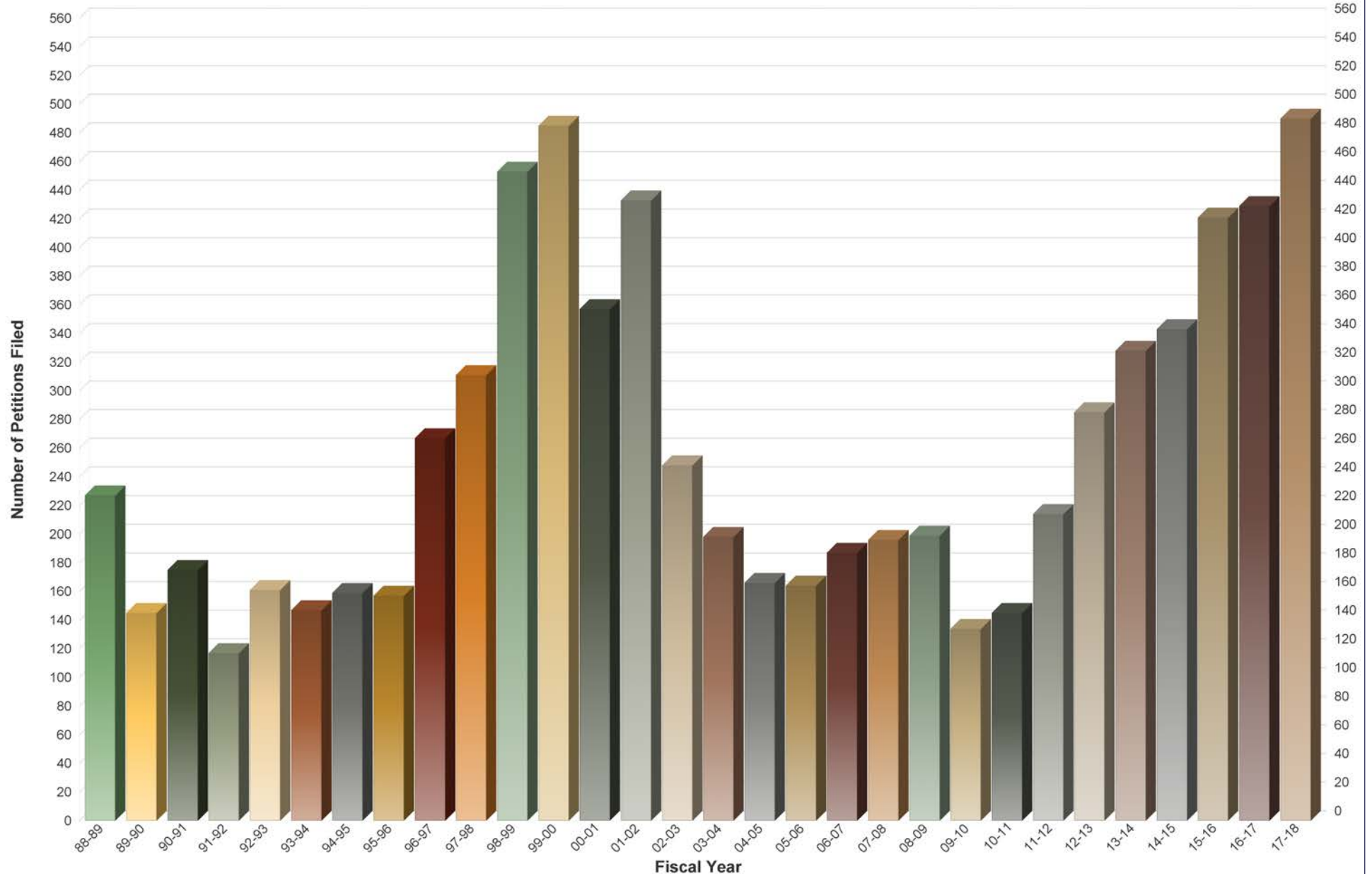


Tenant ADR Requests • 30-Year Trend

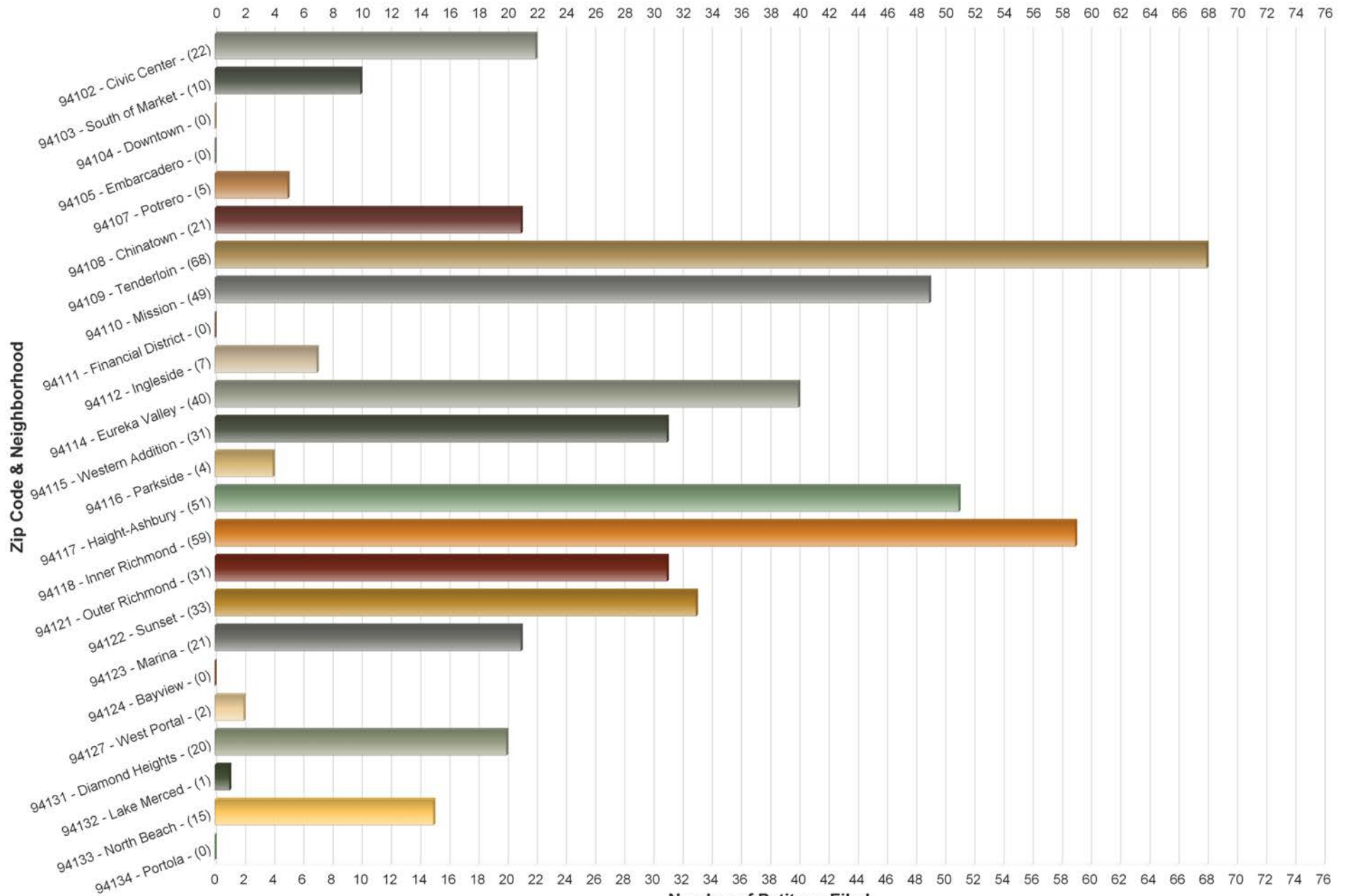


Landlord Capital Improvement Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	227	145	175	117	161	147	159	157	267	311	453	485	357	433	248	198	166	164	187	196	199	134	145	214	285	328	343	421	429	490	
Units	1,945	753	1,900	915	1,315	3,341	1,172	988	1,509	1,473	3,392	3,845	3,184	4,592	1,543	1,691	908	707	1,043	1,025	1,650	629	852	1,421	1,747	2,174	2,348	3,286	2,785	4,416	

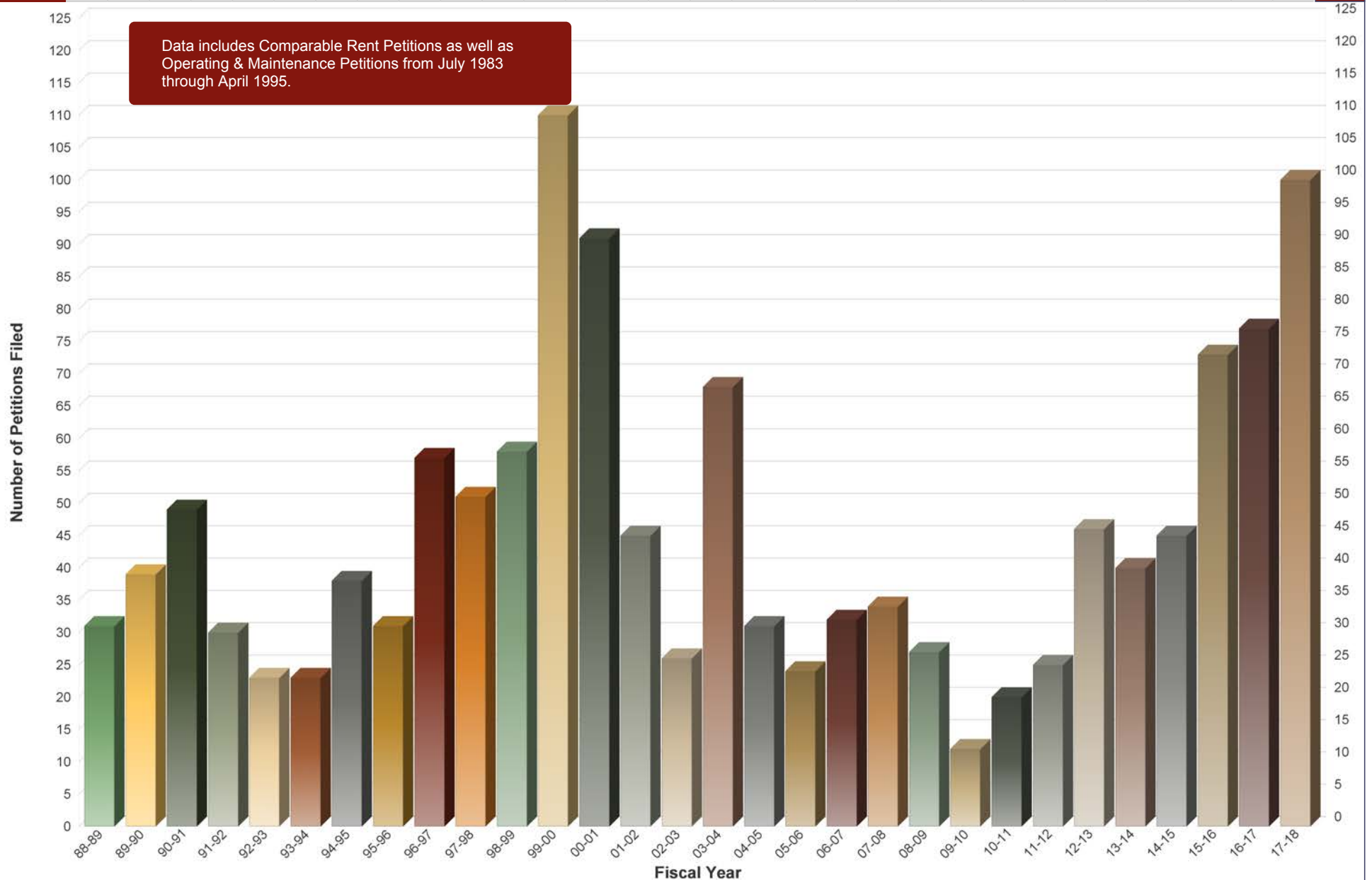


Landlord Capital Improvement Petitions by Zip Code • Fiscal Year 2017-2018



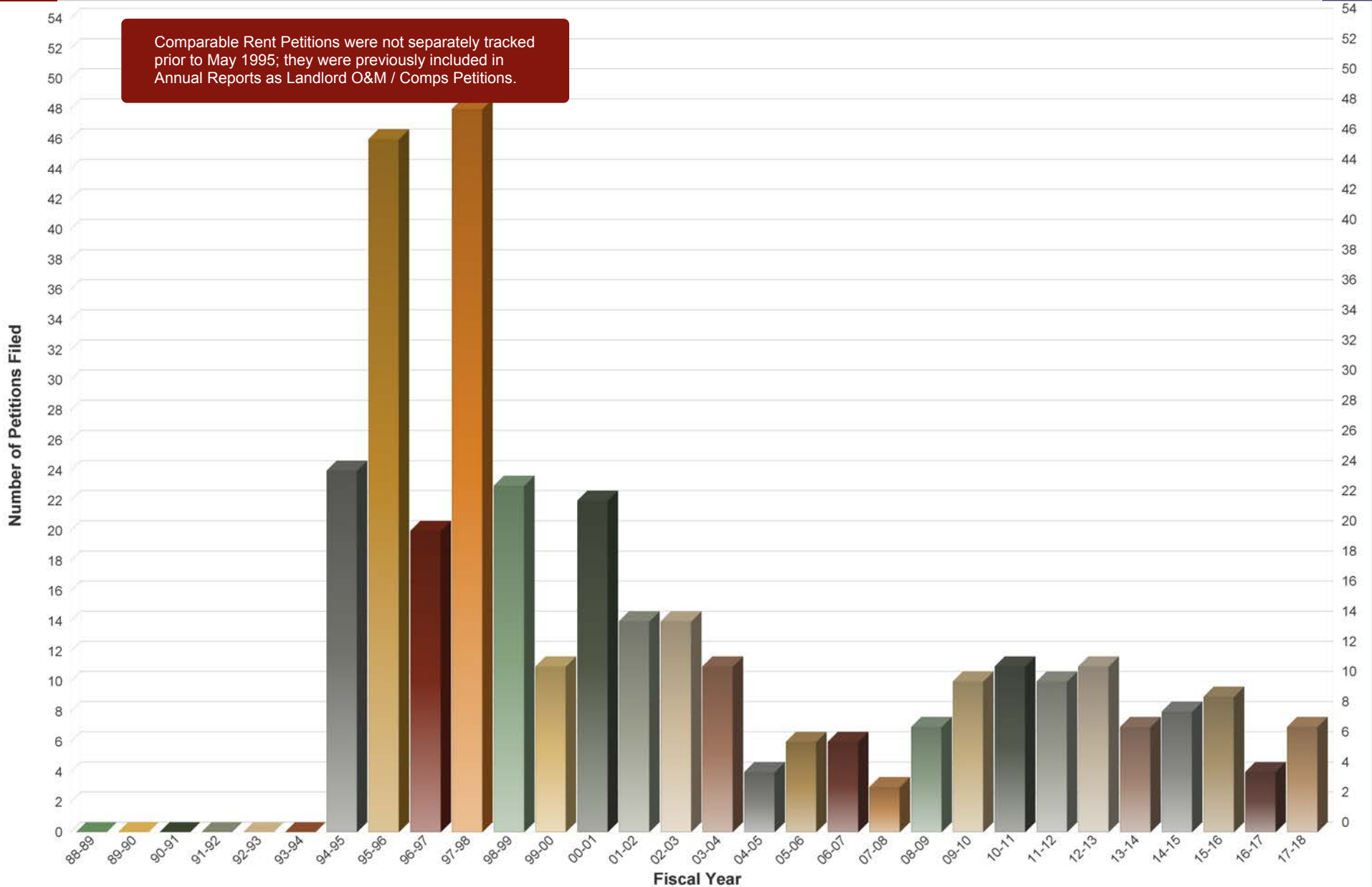
Landlord Operating & Maintenance Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	31	39	49	30	23	23	38	31	57	51	58	110	91	45	26	68	31	24	32	34	27	12	20	25	46	40	45	73	77	100	
Units	153	182	286	133	152	55	125	145	341	189	333	3,439	3,160	233	198	1,791	119	177	228	168	197	131	113	171	313	375	510	905	784	1,083	



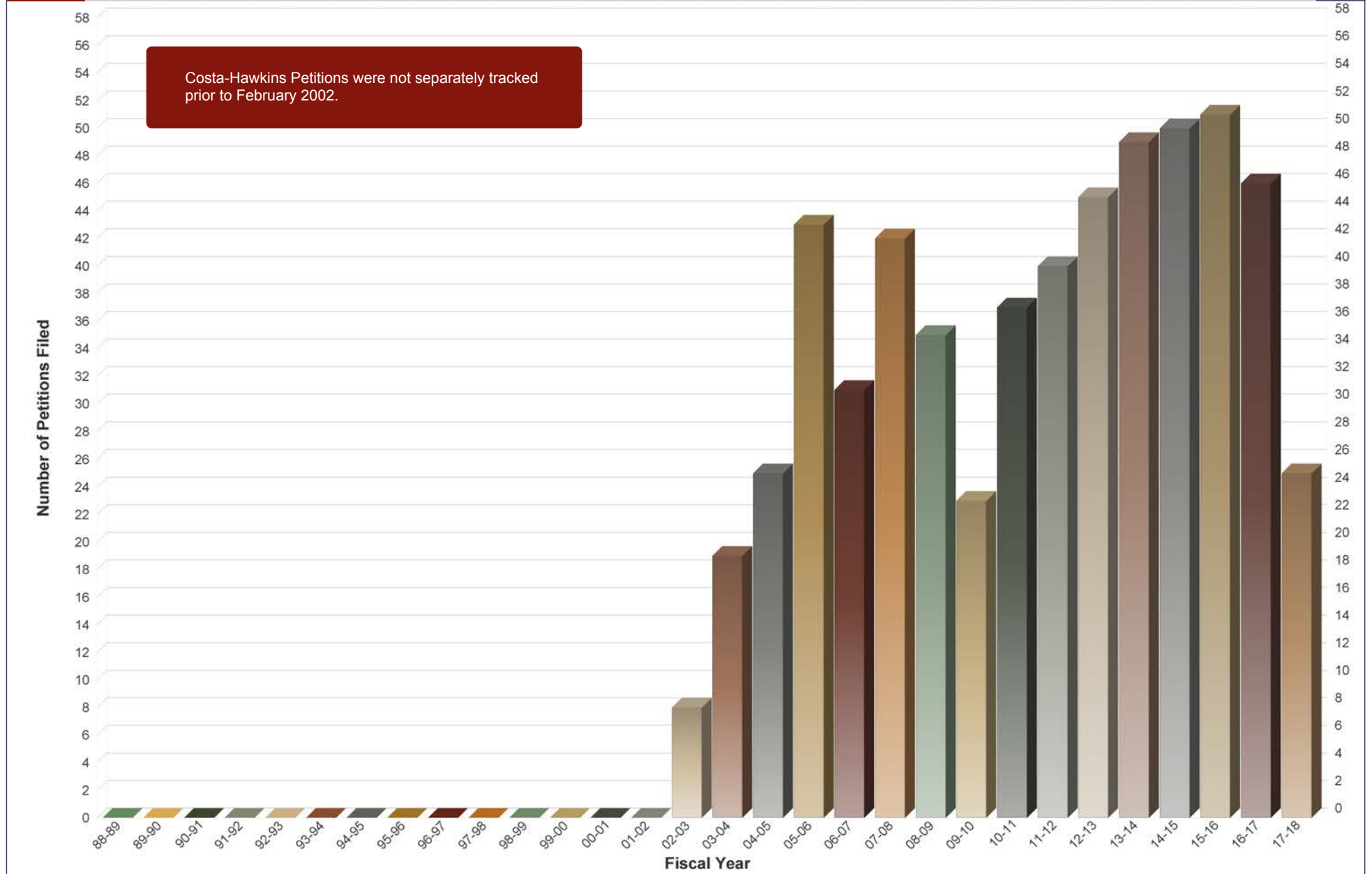
Landlord Comparable Rent Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	24	46	20	48	23	11	22	14	14	11	4	6	6	3	7	10	11	10	11	7	8	9	4	7	
Units	0	0	0	0	0	0	35	53	26	74	27	20	24	15	19	11	4	6	6	3	7	10	11	13	11	7	8	9	5	7	



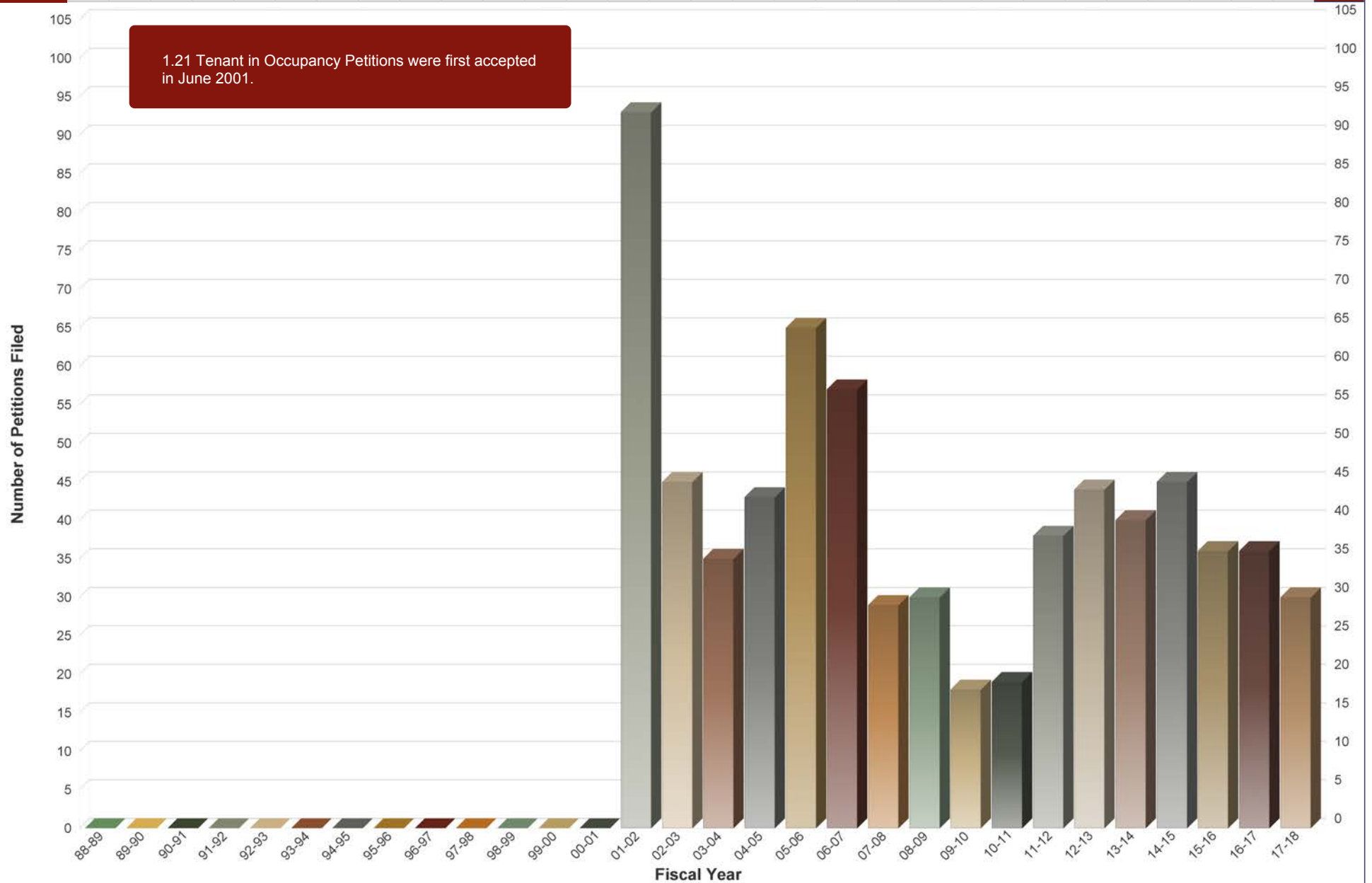
Landlord Costa-Hawkins Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19	25	43	31	42	35	23	37	40	45	49	50	51	46	25	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19	25	43	31	42	35	23	38	40	45	49	50	55	47	25	



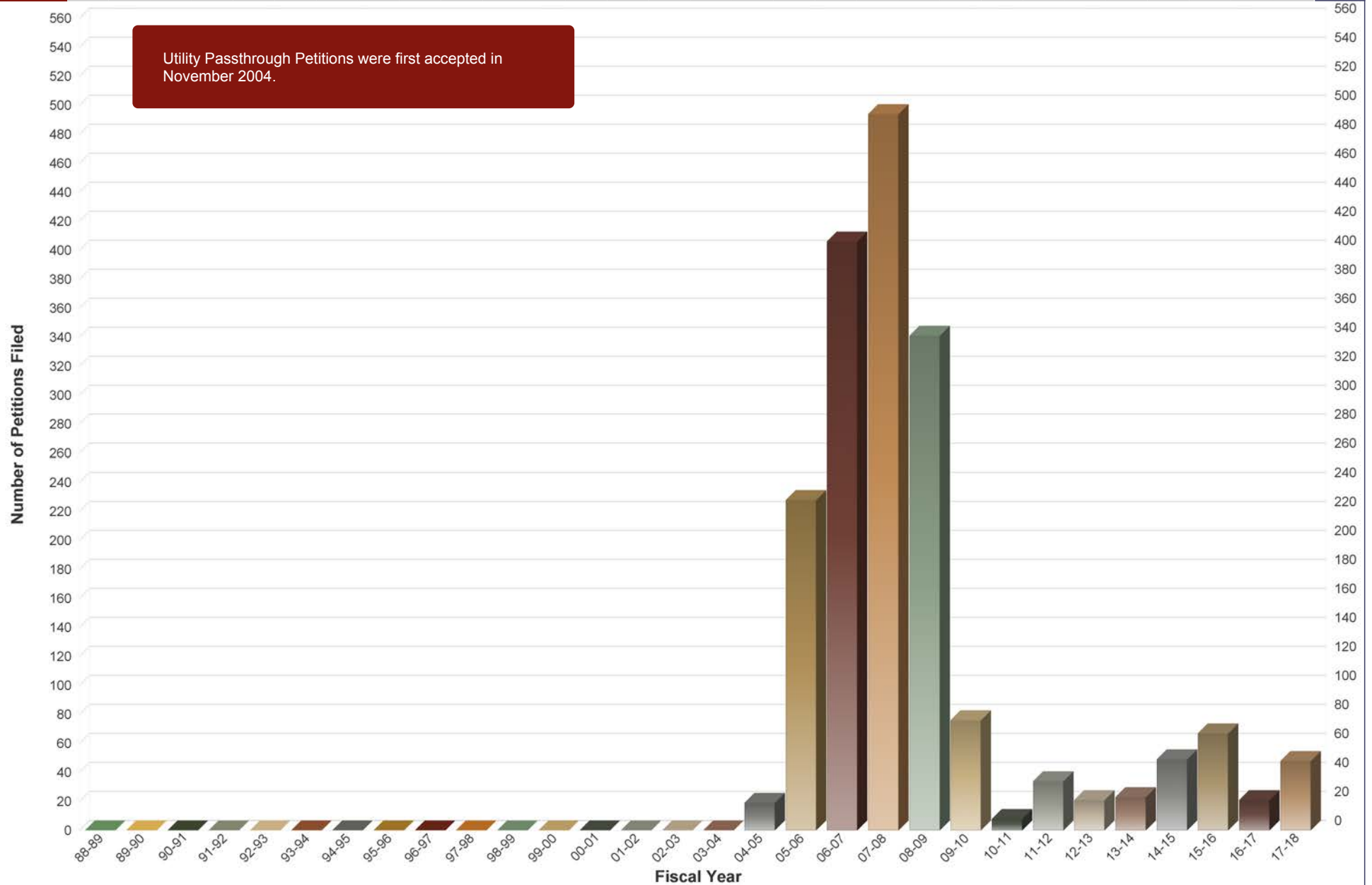
Landlord 1.21 Tenant in Occupancy Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	93	45	35	43	65	57	29	30	18	19	38	44	40	45	36	36	30	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	93	45	35	43	65	57	32	30	18	19	38	44	40	45	37	36	31	



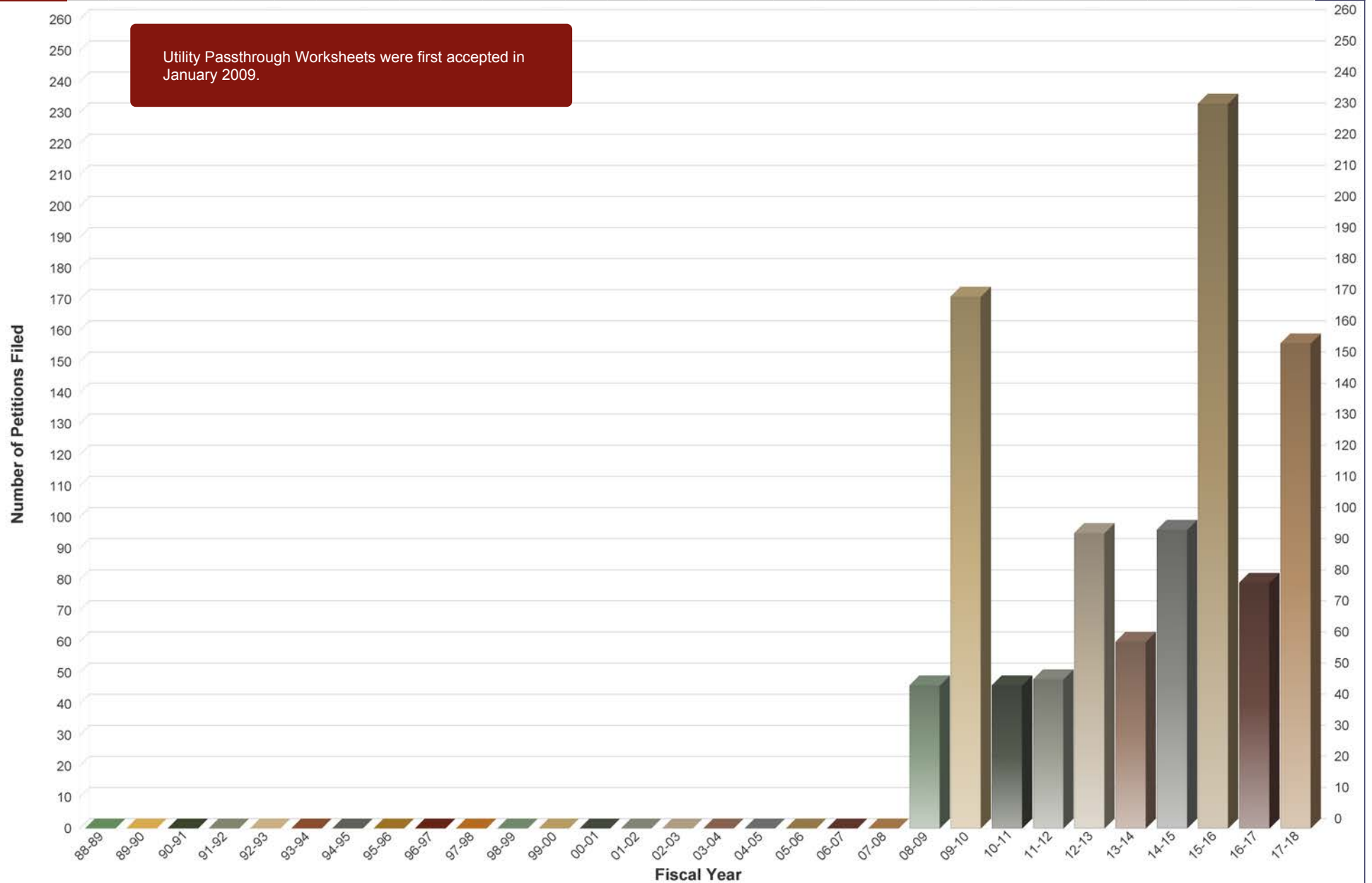
Landlord Utility Passthrough Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	228	406	494	341	76	8	34	21	23	49	67	21	48	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	478	4,746	4,703	5,665	2,642	1,891	372	255	115	155	306	834	145	522	



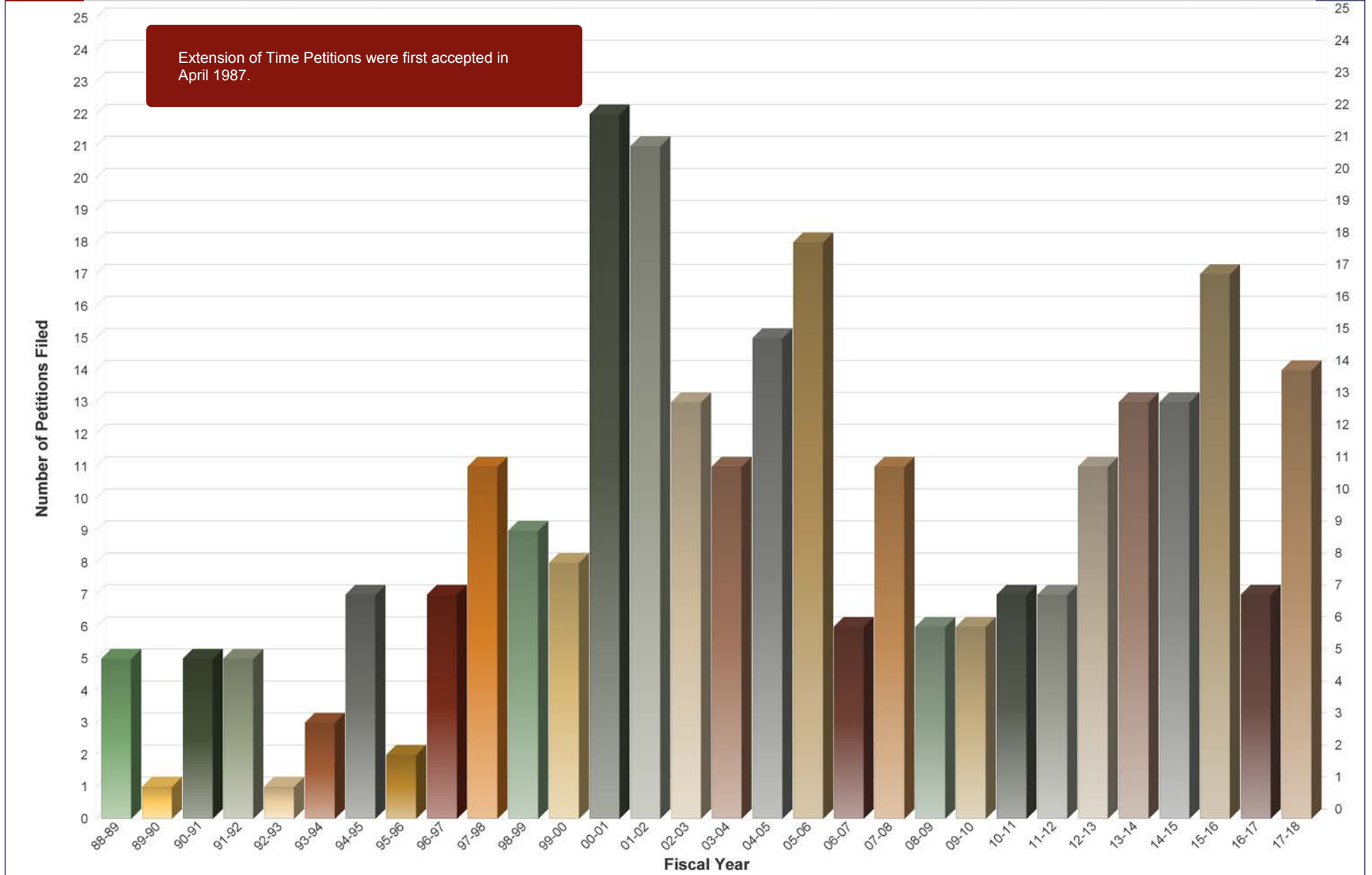
Landlord Utility Passthrough Worksheets • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	171	46	48	95	60	96	233	79	156	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	971	651	126	475	1,092	384	491	1,830	518	1,497	



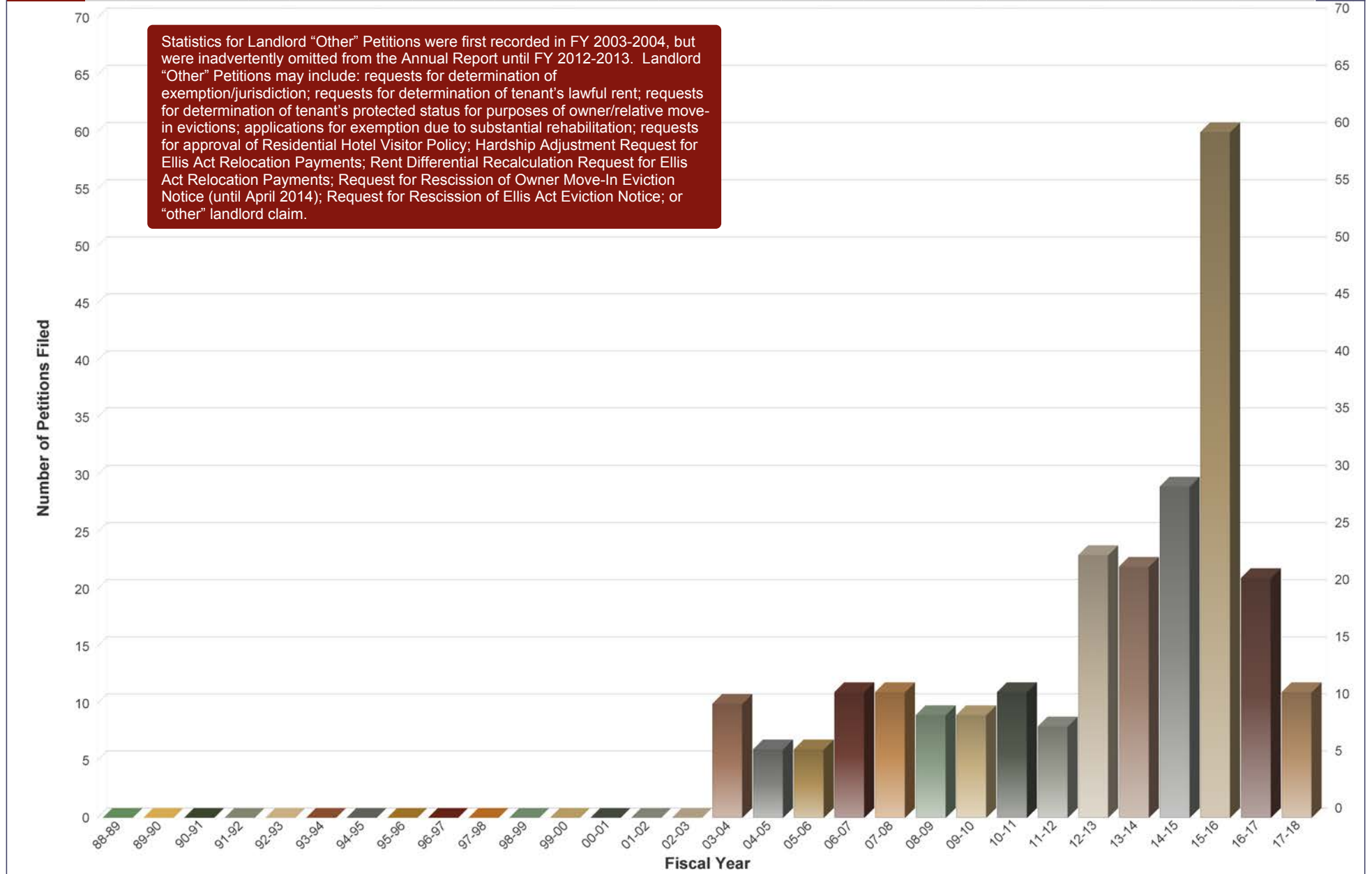
Landlord Extension Of Time Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	5	1	5	5	1	3	7	2	7	11	9	8	22	21	13	11	15	18	6	11	6	6	7	7	11	13	13	17	7	14	
Units	53	1	14	5	1	7	67	2	16	19	20	21	43	32	16	39	21	33	14	23	17	13	9	26	59	26	30	31	10	23	



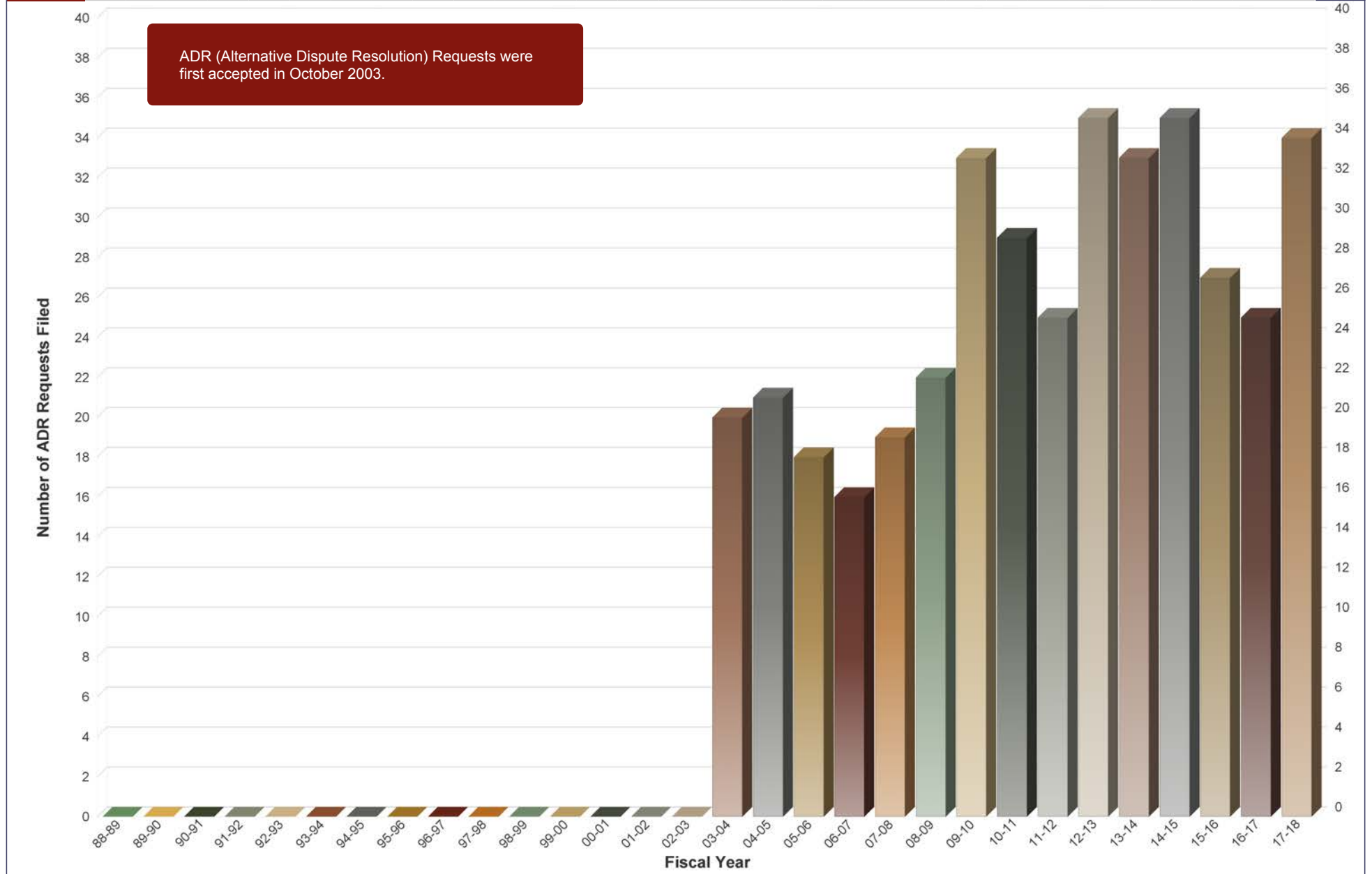
Landlord “Other” Petitions • 30-Year Trend

Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	6	6	11	11	9	9	11	8	23	22	29	60	21	11	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	12	35	11	95	11	11	11	10	30	34	31	81	63	11	

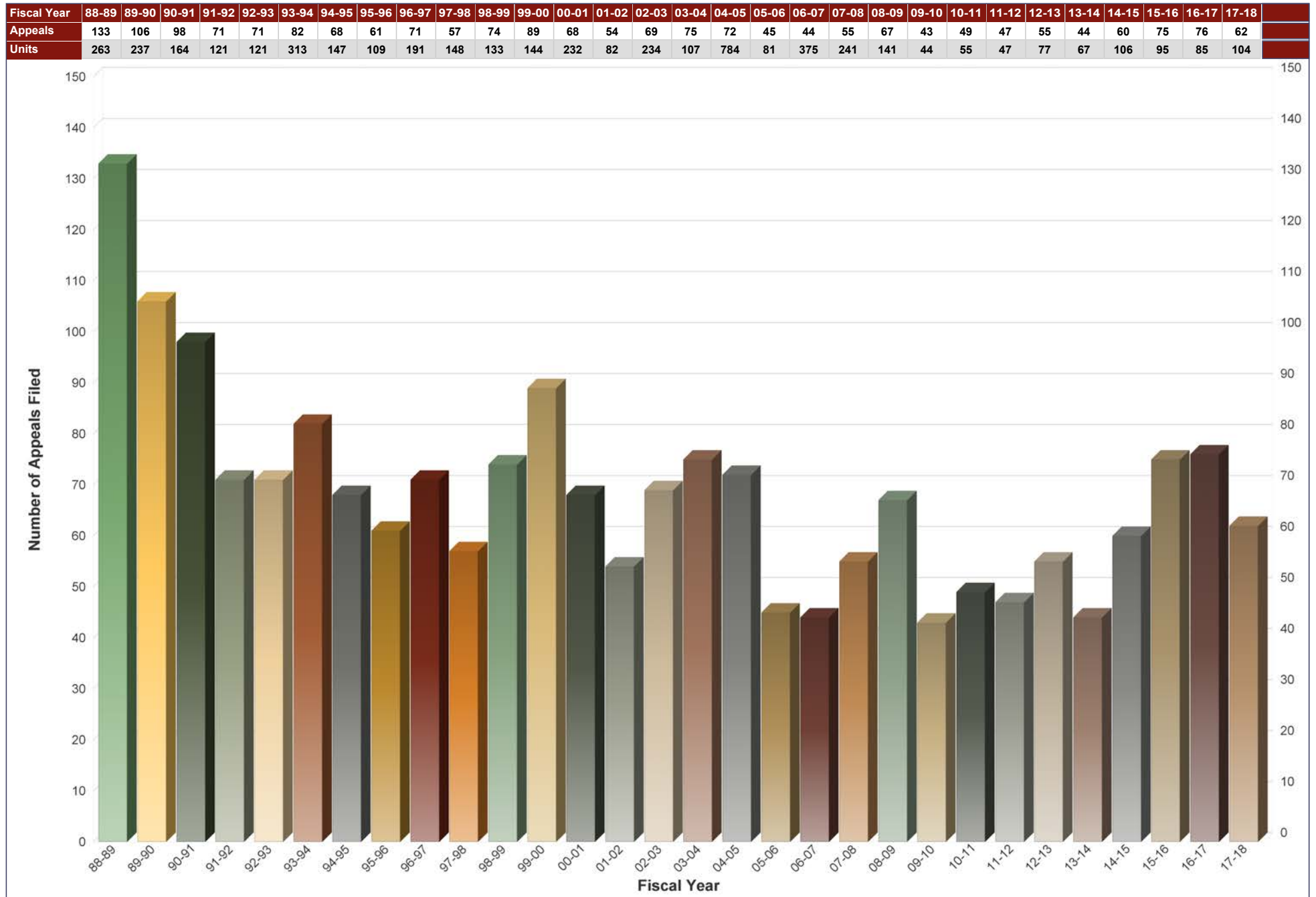


Landlord ADR Petitions • 30-Year Trend

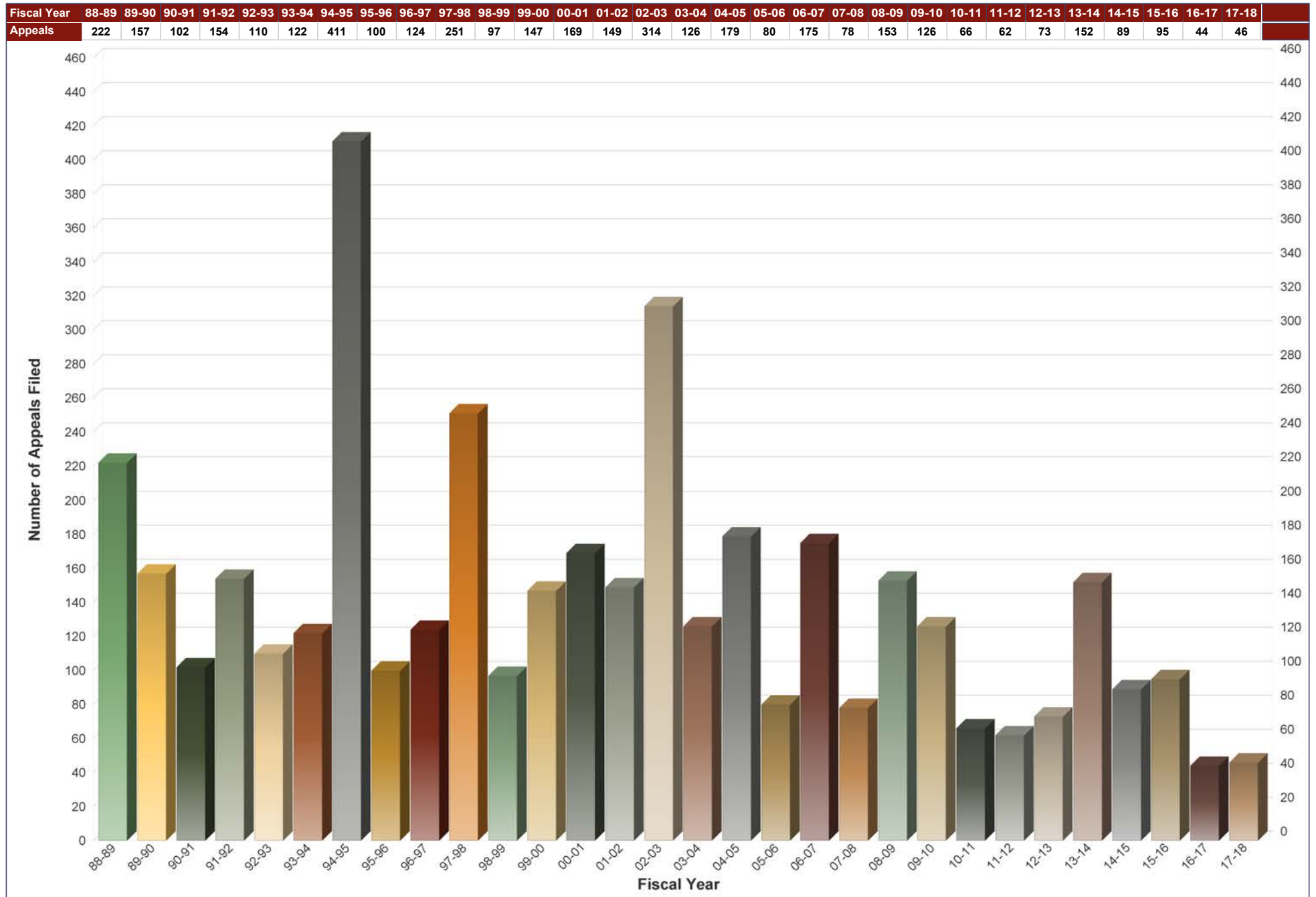
Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	18	16	19	22	33	29	25	35	33	35	27	25	34	
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	18	16	19	22	33	29	25	6	45	42	38	30	45	



Landlord Appeals • 30-Year Trend

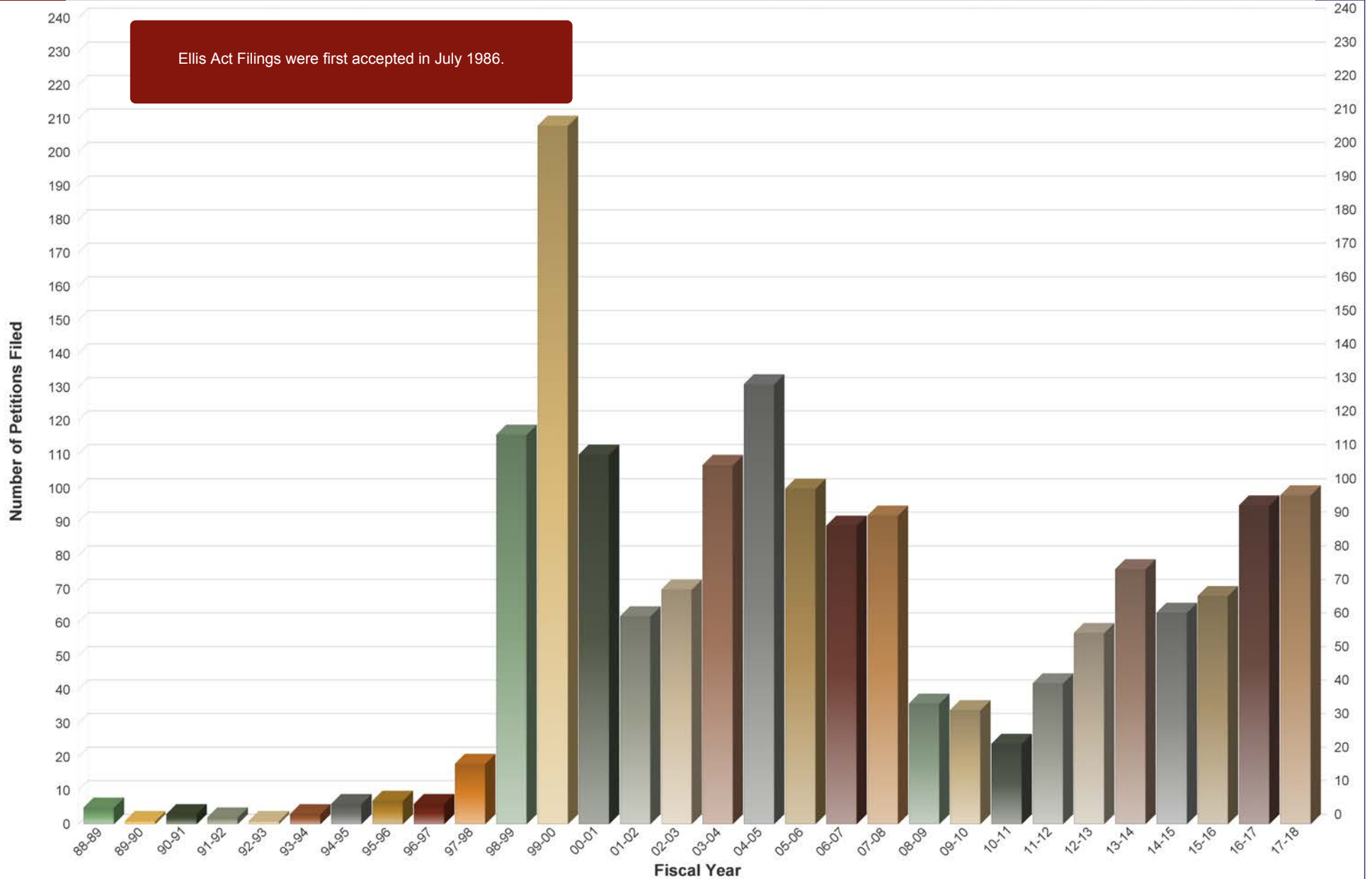


Tenant Appeals • 30-Year Trend

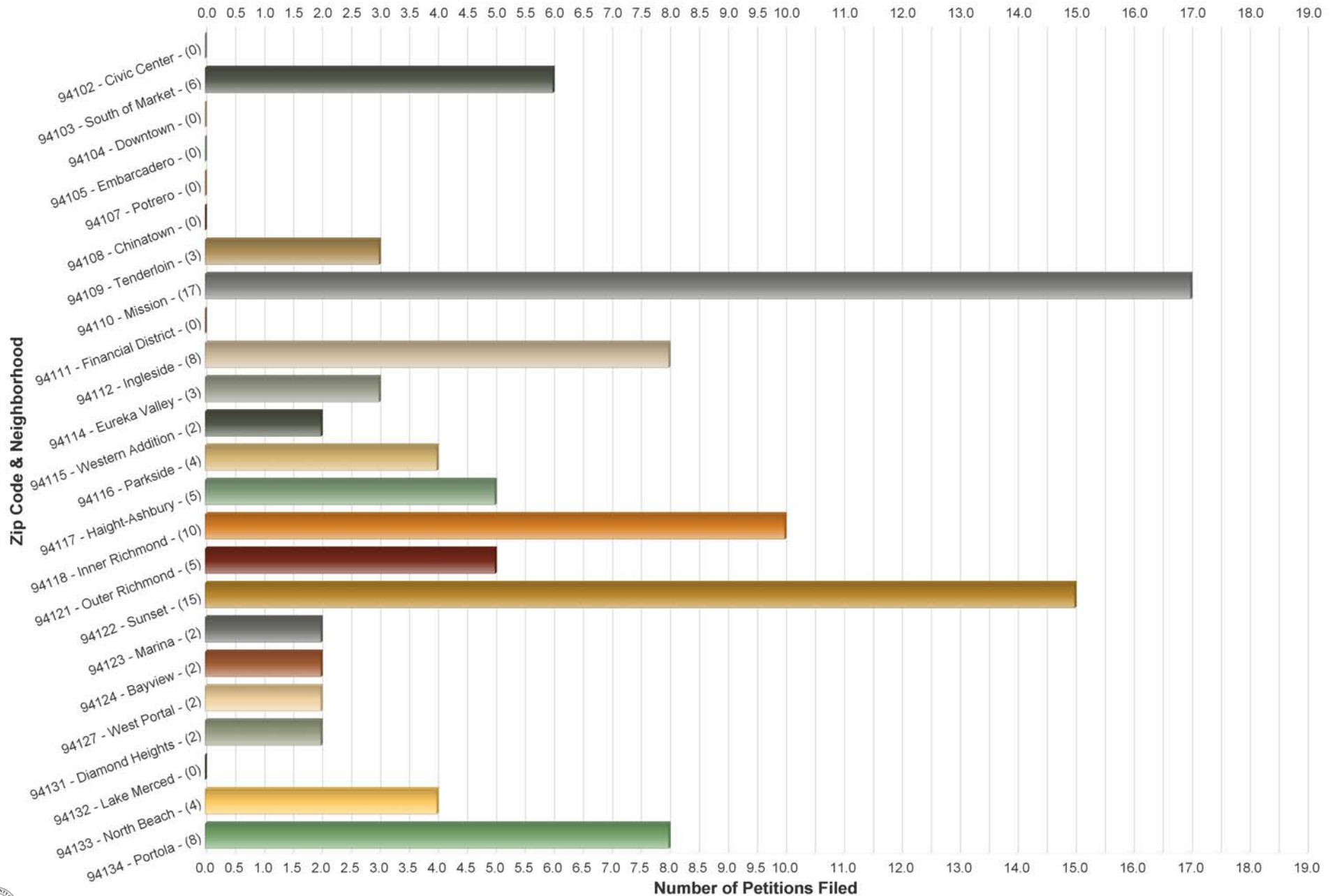


Landlord Ellis Act Filings • 30-Year Trend

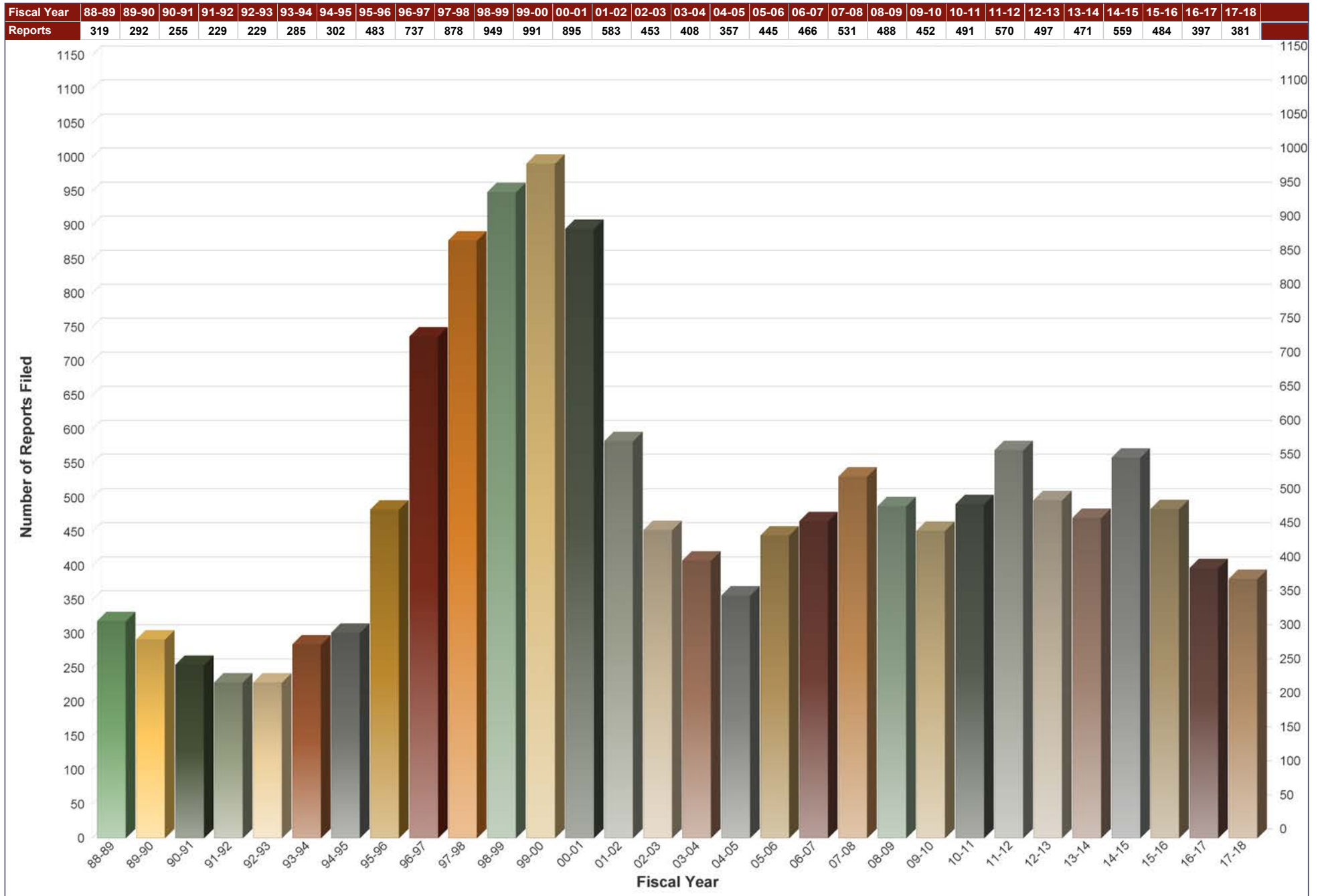
Fiscal Year	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
Petitions	5	1	3	2	1	3	6	7	6	18	116	208	110	62	70	107	131	100	89	92	36	34	24	42	57	76	63	68	95	98	
Units	93	1	25	10	1	20	85	27	10	61	291	879	281	188	233	352	480	454	330	393	165	108	72	121	192	304	191	273	260	278	



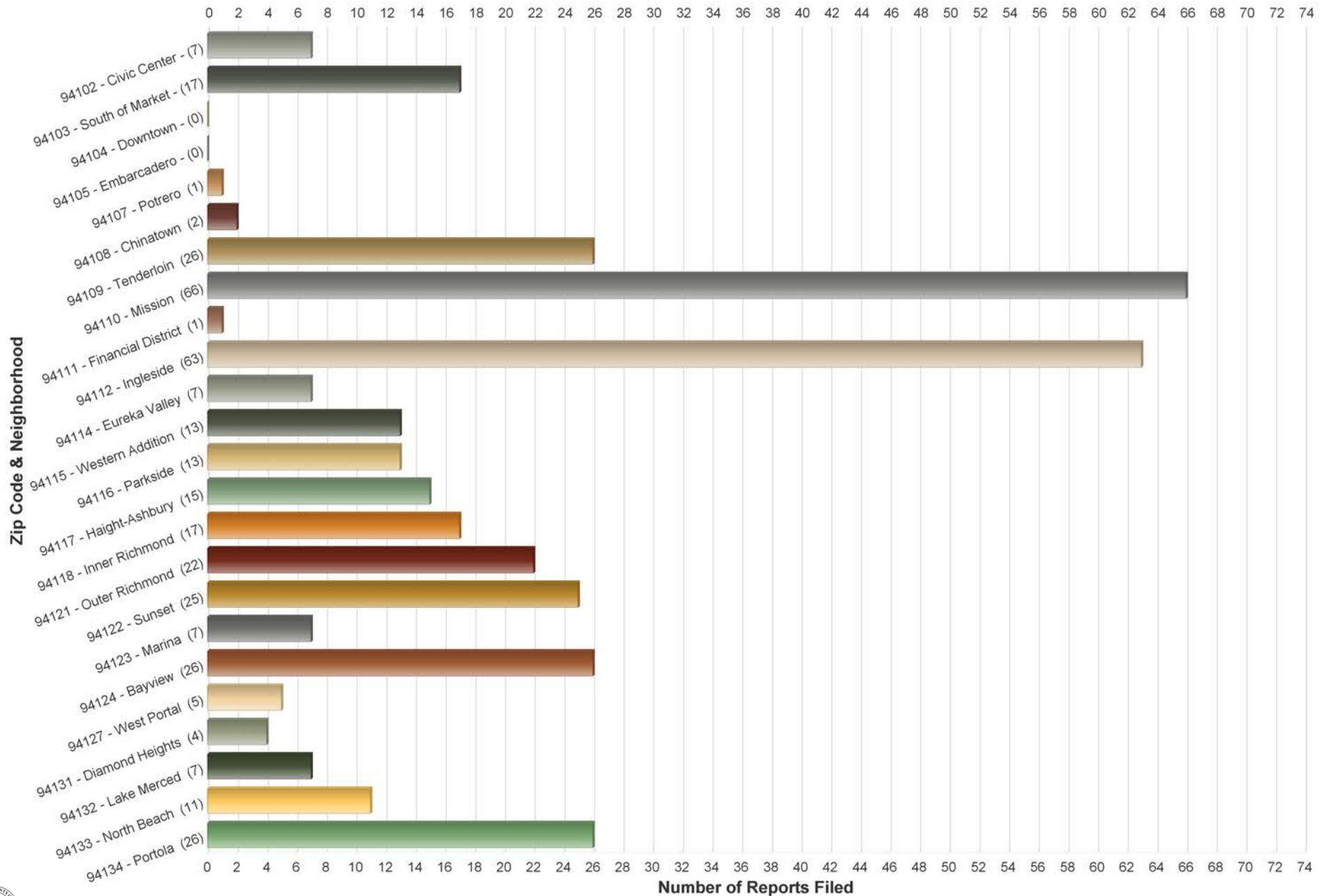
Landlord Ellis Act Filings by Zip Code • Fiscal Year 2017-2018



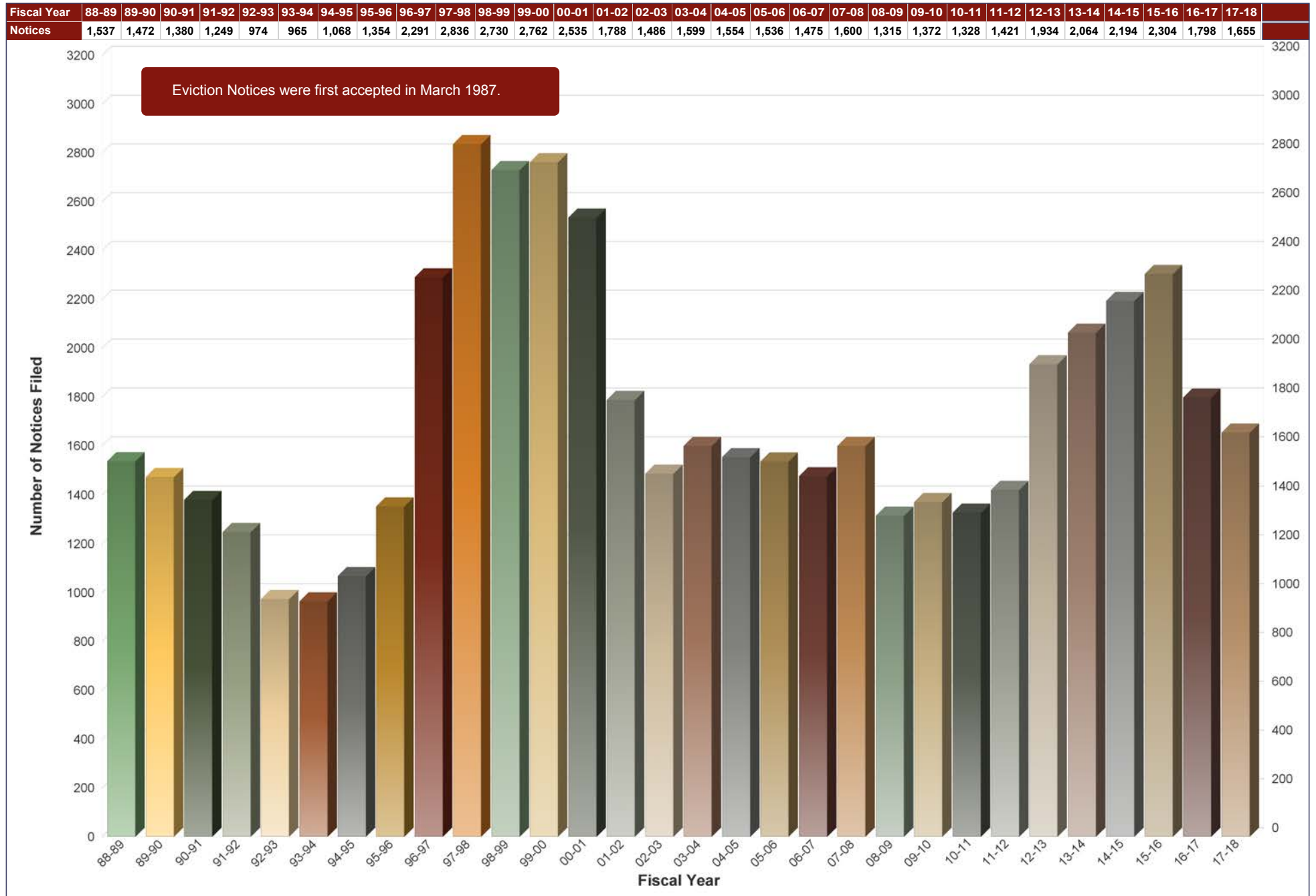
Tenant Wrongful Eviction Reports • 30-Year Trend



Tenant Wrongful Eviction Reports by Zip Code • Fiscal Year 2017-2018



Eviction Notices • 30-Year Trend



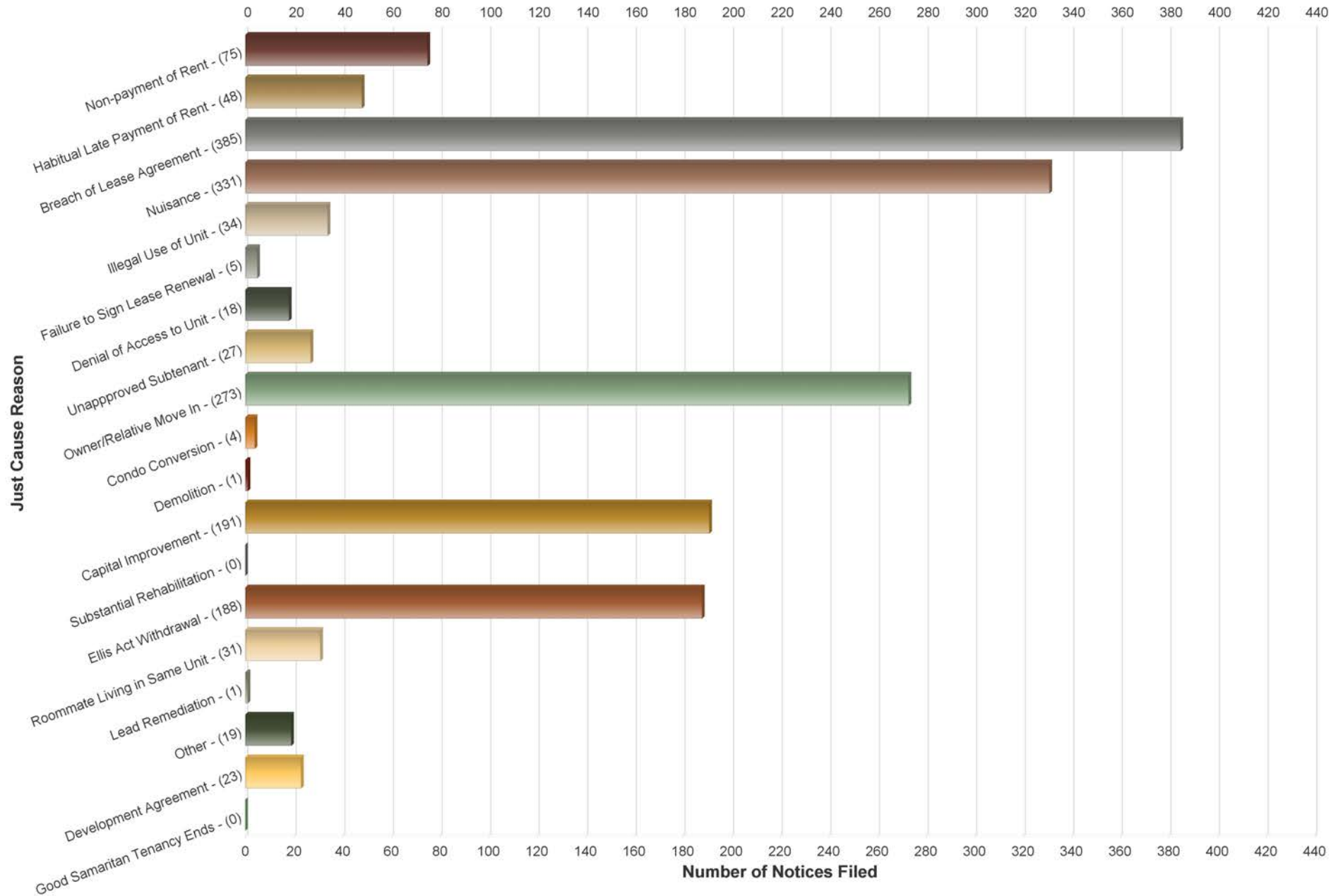
Eviction Notices by Just Cause Reason • 30-Year Trend

	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03
Non-payment of Rent	175	107	123	137	96	101	133	125	132	142	143	150	111	109	89
Habitual Late Payment of Rent	53	98	88	60	72	50	40	49	85	100	101	93	86	57	65
Breach of Lease Agreement	90	204	183	158	136	133	104	172	290	327	344	327	398	329	236
Nuisance	207	231	227	205	215	159	204	236	247	258	247	278	256	283	247
Illegal Use of Unit	6	16	9	11	11	15	9	53	16	17	24	32	27	41	18
Failure to Sign Lease Renewal	21	18	17	114	3	0	0	0	0	2	4	6	2	2	1
Denial of Access to Unit	11	8	12	13	8	5	11	1	0	18	12	14	9	6	9
Unapproved Subtenant	28	74	96	40	34	12	25	34	67	90	168	84	30	4	13
Owner/Relative Move-In	564	545	469	356	293	344	361	481	1,075	1,410	1,200	937	991	594	422
Condo Conversion			1	0	0	0	0	1	1	1	0	6	5	5	7
Demolition	4	14	13	13	12	12	33	36	53	77	39	43	84	88	94
Capital Improvement	149	47	30	30	10	33	8	18	53	44	24	80	58	47	64
Substantial Rehabilitation	114	16	13	13	1	4	7	10	38	35	26	14	7	8	2
Ellis Act Withdrawal	18	3	4	4	0	0	0	0	3	12	206	440	274	83	115
Roommate Living in Same Unit	15	24	38	38	10	20	30	49	71	119	104	146	130	94	73
Lead Remediation	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Other	82	67	57	57	73	77	104	103	160	194	90	110	69	37	31
Development Agreement															
Good Samaritan Tenancy Ends															
TOTAL:	1,537	1,472	1,380	1,249	974	965	1,069	1,368	2,291	2,846	2,732	2,761	2,538	1,787	1,486

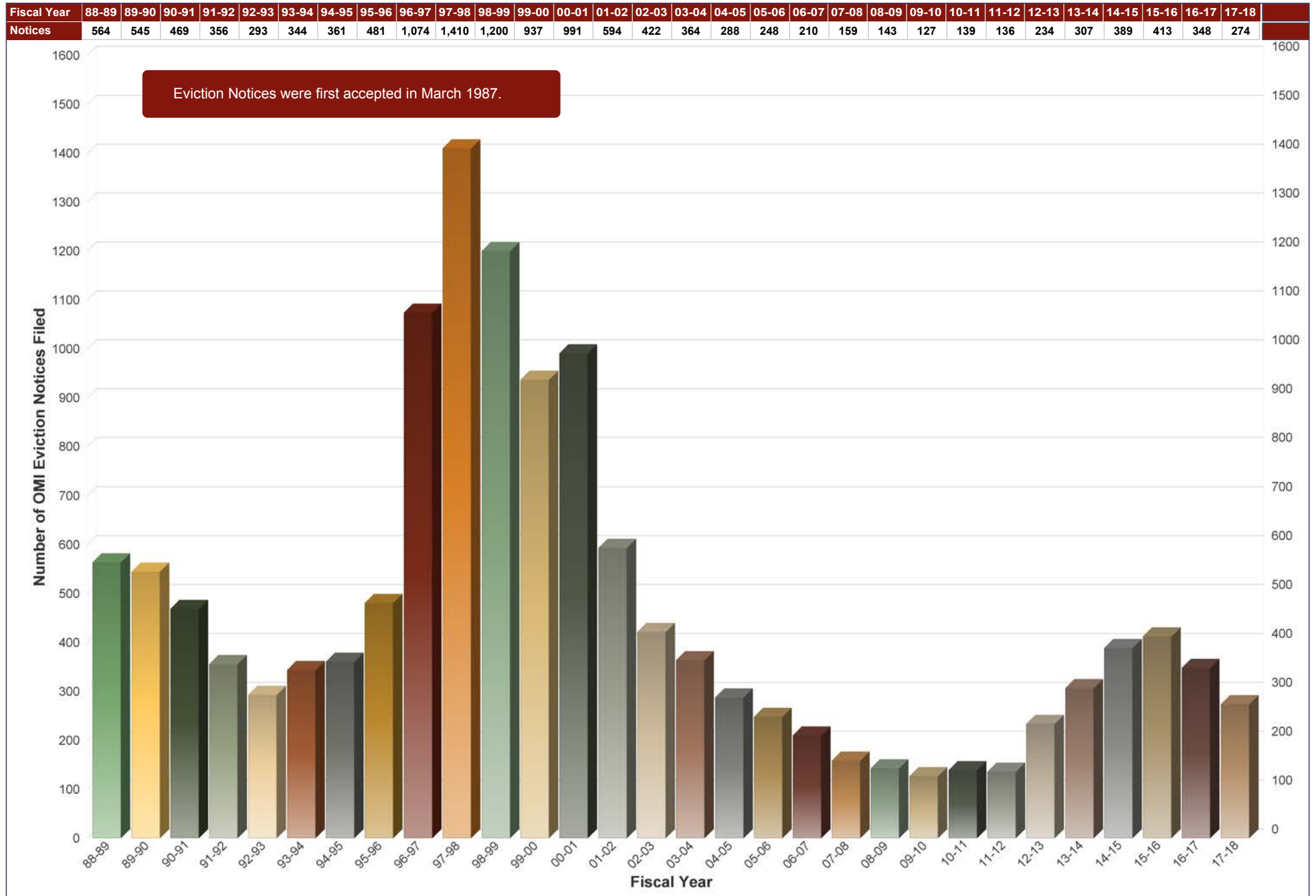
	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Non-payment of Rent	114	86	103	99	98	129	85	106	73	74	116	130	119	119	75
Habitual Late Payment of Rent	62	49	60	72	88	88	60	42	59	70	78	72	125	80	48
Breach of Lease Agreement	274	246	271	294	424	376	457	428	536	510	646	736	555	427	385
Nuisance	285	274	310	310	317	279	308	261	277	350	359	406	360	348	331
Illegal Use of Unit	25	21	49	39	39	31	40	21	29	53	52	90	95	85	34
Failure to Sign Lease Renewal	0	0	0	1	9	4	11	4	7	11	1	6	2	7	5
Denial of Access to Unit	4	5	11	15	20	14	31	19	20	14	8	24	12	23	18
Unapproved Subtenant	11	15	19	24	13	18	19	15	22	21	14	25	22	29	27
Owner/Relative Move-In	364	288	248	210	161	143	127	139	136	234	307	393	413	348	274
Condo Conversion	3	7	1	4	2	3	2	3	6	10	13	8	20	3	4
Demolition	73	66	48	47	39	29	24	37	42	62	112	60	43	5	1
Capital Improvement	69	70	83	58	56	24	21	27	39	36	34	36	298	70	191
Substantial Rehabilitation	0	1	5	0	0	0	0	1	0	6	0	0	0	0	0
Ellis Act Withdrawal	228	330	248	210	265	99	69	40	81	144	215	121	146	149	188
Roommate Living in Same Unit	57	49	39	42	19	30	30	32	32	40	55	40	53	66	31
Lead Remediation	0	7	0	1	2	3	0	0	0	0	0	0	0	0	1
Other	30	40	41	49	48	45	88	47	62	66	54	46	40	32	19
Development Agreement								106	0	232	0	1	1	0	23
Good Samaritan Tenancy Ends								0	0	1	0	0	0	7	0
TOTAL:	1,599	1,554	1,536	1,475	1,600	1,315	1,372	1,328	1,421	1,934	2,064	2,194	2,304	1,798	1,655



Eviction Notices by Just Cause Reason • Fiscal Year 2017-2018



OMI (Owner Move-In) Eviction Notices • 30-Year Trend



OMI (Owner Move-In) Eviction Notices by Zip Code • 30-Year Trend

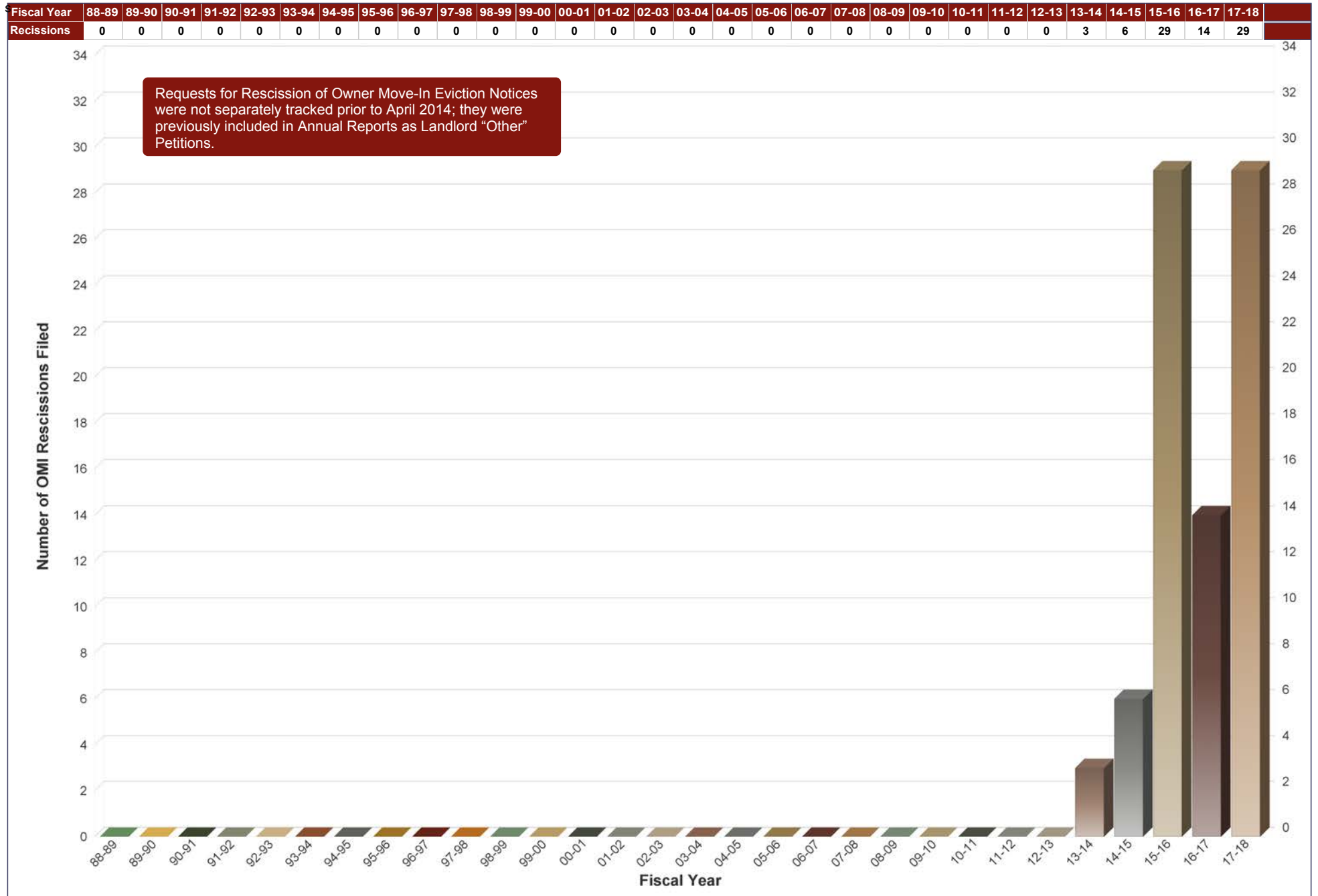
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03
94102 Civic Center							7	7	23	27	18	21	12	3	1
94103 South of Market							13	12	40	42	27	22	19	11	9
94104 Downtown							0	0	0	0	0	0	0	0	0
94105 Embarcadero							0	0	0	0	0	0	0	0	1
94107 Potrero							9	18	26	40	33	25	27	14	9
94108 Chinatown							4	3	11	8	4	12	7	3	1
94109 Tenderloin							17	31	55	42	31	38	37	19	5
94110 Mission							37	72	158	217	166	133	125	70	67
94111 Financial District							0	0	4	1	1	2	1	0	0
94112 Ingleside							18	33	58	86	94	77	122	49	41
94114 Eureka Valley							46	61	103	103	98	55	59	52	29
94115 Western Addition							29	35	66	57	39	42	31	22	15
94116 Parkside							15	8	38	50	62	60	51	21	22
94117 Haight-Ashbury							26	39	100	156	109	54	41	28	31
94118 Inner Richmond							23	25	96	101	61	61	77	62	34
94121 Outer Richmond							28	21	56	97	69	65	58	40	24
94122 Sunset							23	35	72	103	133	91	118	89	45
94123 Marina							25	29	48	84	49	23	23	17	11
94124 Bayview							1	2	9	11	43	31	33	20	17
94127 West Portal							2	1	11	28	12	10	12	2	9
94131 Diamond Heights							10	15	36	58	44	35	35	22	20
94132 Lake Merced							2	4	7	19	13	15	13	6	3
94133 North Beach							20	23	35	38	51	27	40	4	12
94134 Portola							6	7	22	42	43	38	50	40	16
TOTAL:	564	545	469	356	293	344	361	481	1,074	1,410	1,200	937	991	594	422

Errors in zip code data reported for FY 13-14, 14-15 and 15-16 have now been corrected. Total number of OMI notices per year remains unchanged.

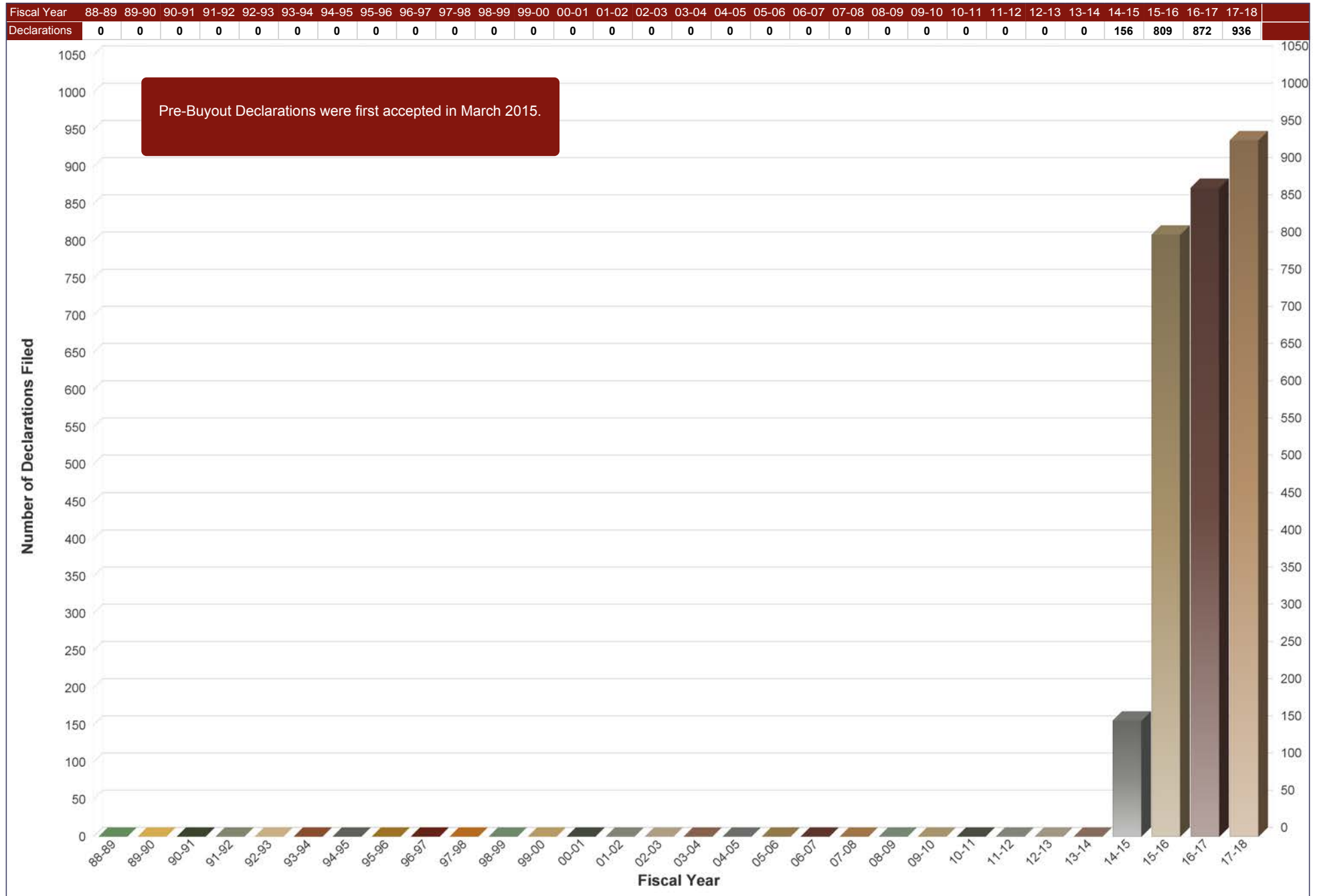
	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
94102 Civic Center	4	3	5	2	0	1	1	1	1	4	2	5	6	0	2
94103 South of Market	11	7	5	1	6	3	2	2	3	4	2	4	5	3	6
94104 Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94105 Embarcadero	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0
94107 Potrero	9	6	5	4	1	6	3	5	5	9	9	12	5	9	6
94108 Chinatown	3	0	2	0	1	0	0	2	0	0	0	1	1	0	0
94109 Tenderloin	7	8	12	9	5	7	6	0	4	7	14	12	6	4	2
94110 Mission	67	51	42	40	23	14	19	27	21	38	38	52	54	43	25
94111 Financial District	0	0	3	6	0	0	0	0	0	0	0	0	2	0	1
94112 Ingleside	25	17	19	6	12	12	8	12	8	10	29	55	50	62	50
94114 Eureka Valley	34	14	19	20	14	9	7	15	10	13	19	32	16	22	9
94115 Western Addition	16	5	9	8	7	9	3	6	6	10	13	11	18	7	9
94116 Parkside	17	15	9	12	5	2	7	4	9	13	29	24	25	23	19
94117 Haight-Ashbury	29	27	16	11	13	13	19	9	15	17	22	20	26	12	12
94118 Inner Richmond	22	14	13	15	12	18	6	6	3	27	32	26	31	19	25
94121 Outer Richmond	23	34	26	16	9	18	7	8	10	12	21	27	27	34	23
94122 Sunset	30	21	27	24	19	11	14	9	10	20	27	32	40	41	26
94123 Marina	18	17	4	11	10	5	8	4	9	14	6	11	14	9	11
94124 Bayview	7	3	3	0	2	3	3	5	4	4	4	4	19	18	14
94127 West Portal	8	5	4	3	5	3	2	2	2	8	2	7	7	1	3
94131 Diamond Heights	8	10	5	8	7	6	6	9	7	5	12	16	13	4	10
94132 Lake Merced	5	9	5	1	4	0	0	0	1	6	3	6	5	6	1
94133 North Beach	5	7	9	10	1	3	4	7	5	8	7	13	12	8	5
94134 Portola	15	13	6	3	2	0	2	6	3	5	16	19	31	23	15
TOTAL:	364	288	248	210	159	143	127	139	136	234	307	389	413	348	274



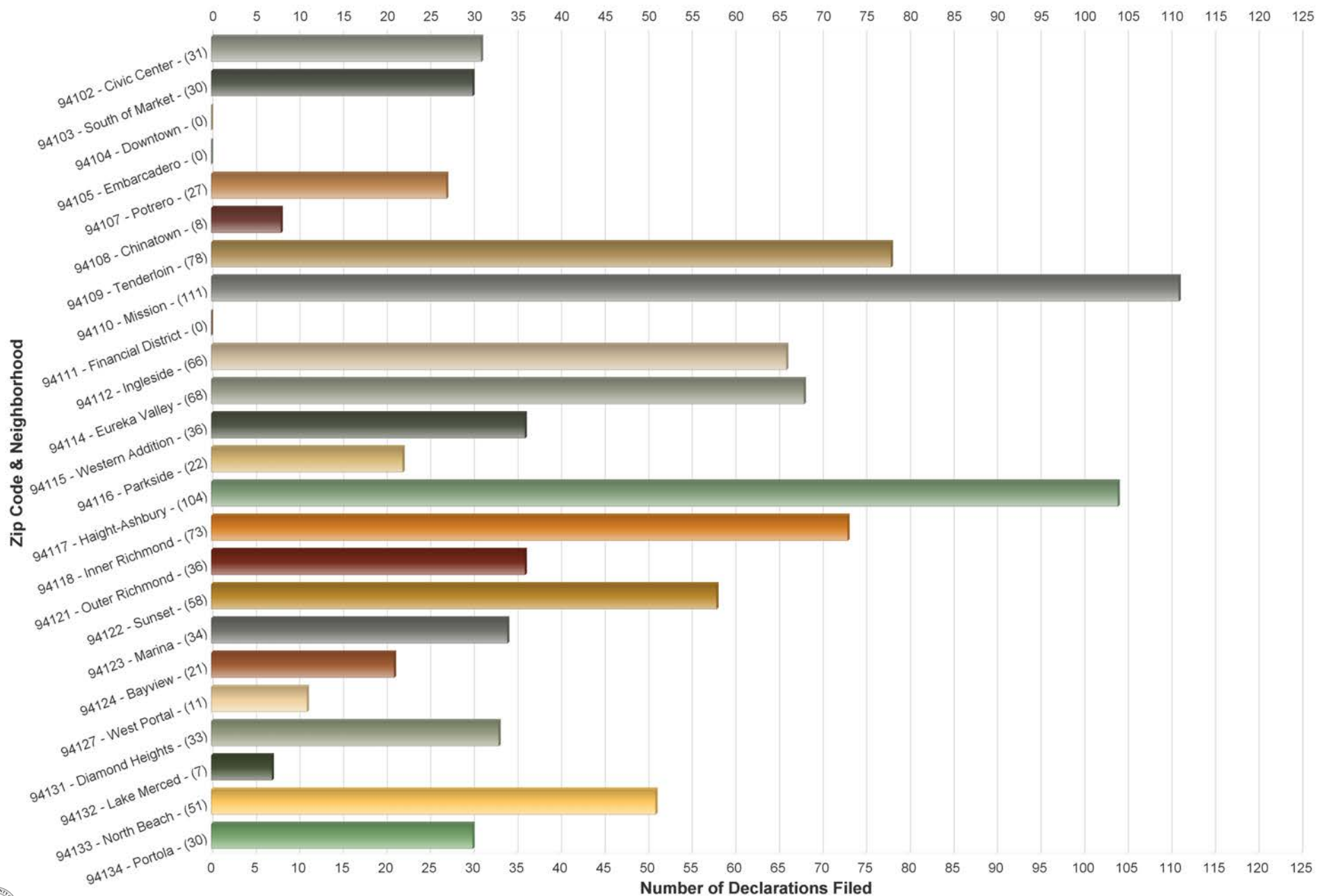
OMI (Owner Move-In) Rescission Requests • 30-Year Trend



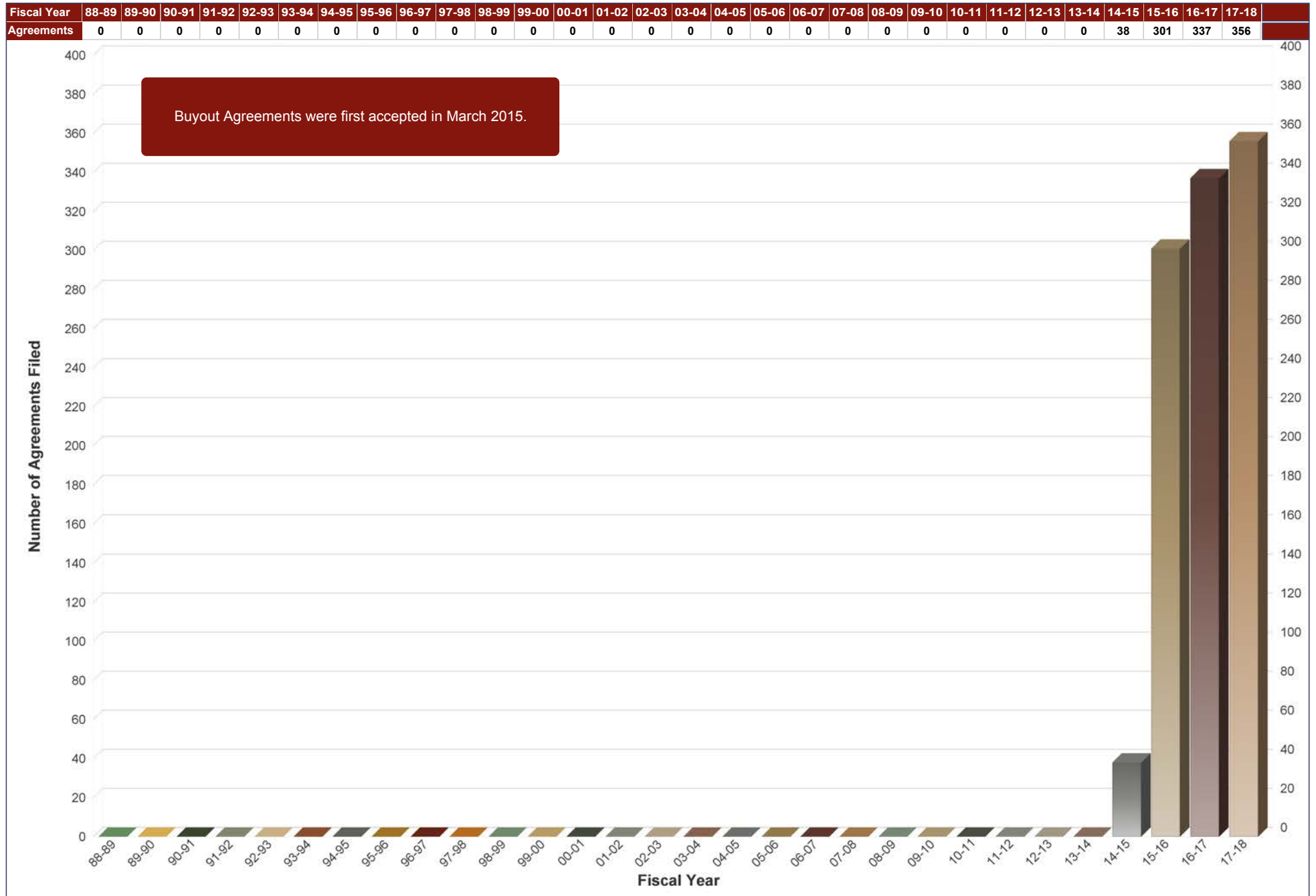
Pre-Buyout Declarations • 30-Year Trend



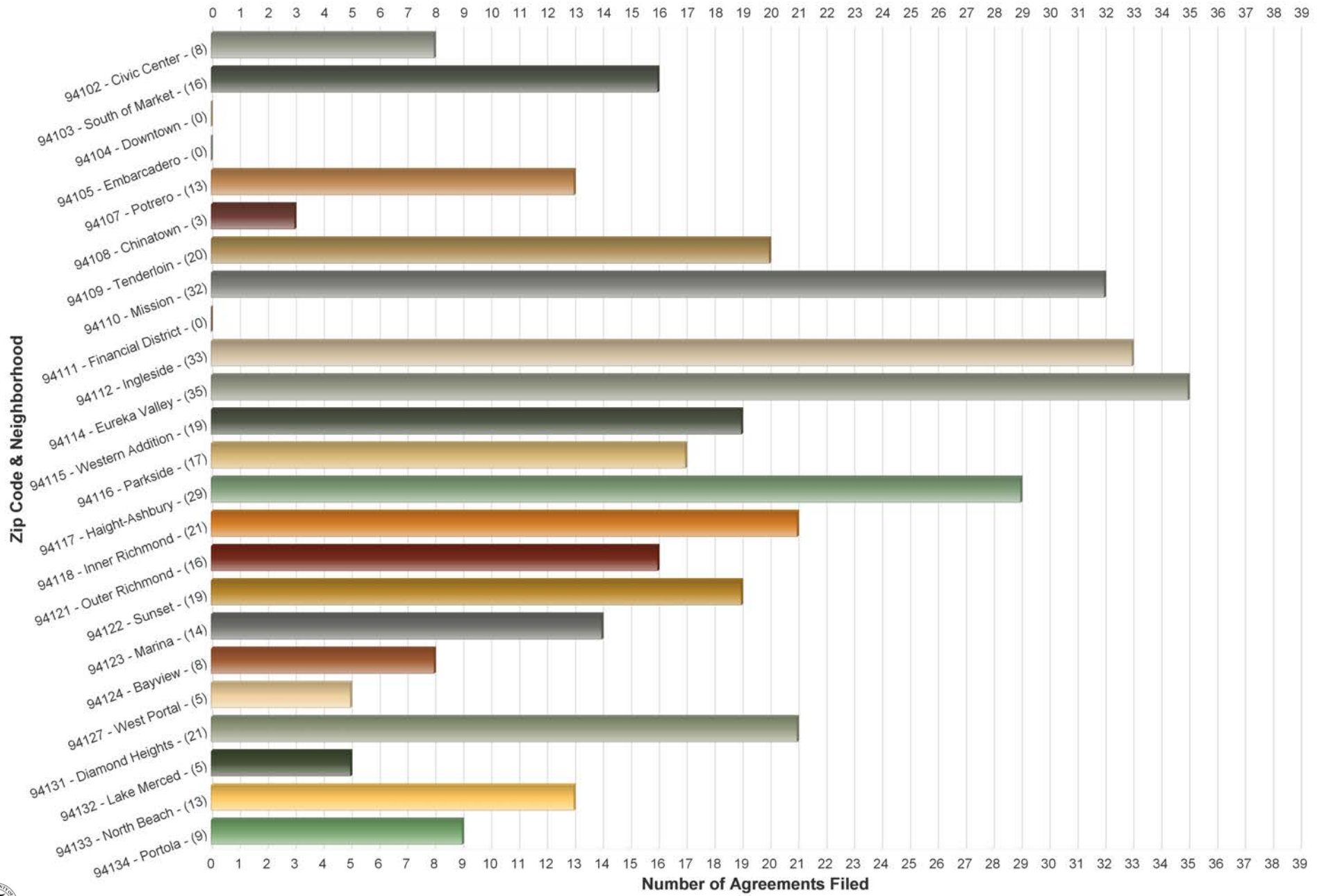
Pre-Buyout Declarations by Zip Code • Fiscal Year 2017-2018



Buyout Agreements • 30-Year Trend



Buyout Agreements by Zip Code • Fiscal Year 2017-2018





DEPARTMENT OF
HOMELESSNESS AND
SUPPORTIVE HOUSING

October 1, 2018

Mayor London N. Breed
San Francisco Board of Supervisors
City Hall
1 Dr. Carlton B Goodlett Pl.
San Francisco, CA 94102

Re: Annual Report on Evictions from Subsidized Housing for Fiscal Year 2017-18.

Dear Mayor Breed and Members of the Board of Supervisors,

Attached is the report required by Article XIV, the Tenant Eviction Annual Reports Ordinance. The report documents evictions from the subsidized housing programs that were funded by the Department of Homelessness and Supportive Housing for the past fiscal year from July 1, 2017 through June 30, 2018.

The report documents the number of unlawful detainer filings, evictions filed, and evictions completed within the City's permanent supportive housing portfolio. Below is a basic overview of our findings for FY 2017-18. More detail can be found in the attached report.

	PSH Sites	Households	# of Unlawful Detainer Filings	# of Evictions	% of Households Evicted
HSH	133	10,067	432	214	2.13%

Sincerely,

Jeff Kositsky
Director
Department of Homelessness and Supportive Housing



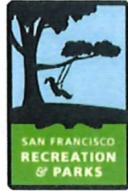
Department of Homelessness and Supportive Housing Reporting/Fiscal Year: 7/1/2017 - 6/30/2018	TENANTS and HOUSEHOLDS		NUMBER of WRITTEN NOTICES Issued and the REASONS FOR EACH				NUMBER of UNLAWFUL DETAINER ACTIONS filed and the REASONS FOR EACH				NUMBER of EVICTIONS (writ of possession stage or court-issued eviction) and the REASONS FOR EACH			
Site Name	Number of tenants (adults only) who lived in the housing facility at any time during this period	Number of households who lived in the housing facility at any time during this period	Total number of households who were issued one or more written Notices of Eviction	Number of written Notices of Eviction for non-payment of rent only	Number of written Notices of Eviction for lease violations only	Number of written Notices of Eviction for a COMBINATION of non-payment of rent and lease violations	Total number of households who were issued one or more Unlawful Detainer Filings	Number of Unlawful Detainer Filings for non-payment of rent only	Number of Unlawful Detainer Filings for lease violations only	Number of unique Unlawful Detainer Filings for a COMBINATION of non-payment of rent and lease violations	Total number of households evicted	Number of evictions for non-payment of rent only	Number of evictions for lease violations only	Number of unique evictions for a COMBINATION of non-payment of rent and lease violations
10th & Mission (HSH-44) - 1390 Mission Street	70	44	36	50	0	0	0	0	0	0	0	0	0	0
1100 Ocean Avenue (HSH-29) - 1100 Ocean Avenue	22	7	7	0	0	16	2	0	2	3	0	3	0	1
1180 4th Street (HSH-50) - 1180 4th Street	74	50	12	11	0	1	12	11	0	1	0	0	0	0
149 Mason Street (HSH/DAH-55) - 149 Mason Street	55	55	5	4	3	2	4	3	2	1	1	0	0	1
5th Street Apartments (HSH-19) - 374 5th Street	22	22	37	46	3	0	3	0	3	0	0	0	0	0
864 Ellis (HSH-25) - 864 Ellis Street	28	24	1	1	0	0	1	1	0	0	0	0	0	0
990 Polk Street (HSH/DAH-50) - 990 Polk Street	157	118	2	0	2	0	2	0	2	0	0	0	0	0
Alder Hotel (HSH-116) - 175 6th Street	130	113	15	10	5	0	9	5	5	0	9	5	4	1
All Star Hotel (HSH-86) - 2791 16th Street	106	101	68	84	0	0	12	5	7	0	6	1	5	0
Allen Hotel (HSH-63) - 1693 Market Street	67	67	5	1	4	0	13	1	7	4	5	1	4	0
Altamont Hotel (HSH-88) - 3048 16th Street	88	88	15	4	11	0	10	0	10	0	4	0	4	0
Ambassador Hotel (HSH/DAH-9) - 55 Mason Street	160	160	2	0	2	0	2	0	2	0	0	0	0	0
Ambassador Hotel (HSH-50) - 55 Mason Street	160	160	5	3	2	0	5	3	2	0	4	2	2	0
Apollo Hotel (HSH-80) - 422 Valencia Street	80	80	13	5	8	0	13	5	8	0	6	3	3	0
Aranda Hotel (HSH-110) - 64 Turk Street	121	120	3	1	2	0	13	2	10	1	5	1	4	0
Arlington Residence (HSH/DAH-153) - 480 Ellis Street	149	149	8	11	6	1	9	3	6	3	0	2	2	1
Armstrong Place Senior Housing (HSH/DAH-23) - 5600 Third Street	159	119	7	7	0	0	0	0	0	0	0	0	0	0
Arnett Watson Apartments (HSH-47) - 650 Eddy Street	118	90	14	13	1	0	1	0	1	0	5	5	0	0
Auburn (HSH-78) - 481 Minna St	64	62	5	3	1	1	3	0	3	0	5	2	3	0
Baldwin Hotel (HSH-185) - 74 6th Street	217	211	134	169	0	0	8	2	6	0	5	2	3	0
Bayanihan House (HSH/DAH-9) - 88 Sixth Street	10	10	2	1	1	0	0	0	0	0	0	0	0	0
Bayanihan House (HSH-38) - 88 6th Street	43	43	2	2	0	0	0	0	0	0	0	0	0	0
Bayview Commons (HSH-30) - 4445 Third Street	57	30	1	1	0	0	0	0	0	0	0	0	0	0
Bayview Hill Gardens (HSH-72) - 1075 Le Conte Avenue	81	72	30	26	4	0	3	3	0	0	2	2	0	0
Bernal Gateway (HSH-54) - 3101 Mission Street	121	54	10	15	1	0	2	2	0	0	0	0	0	0
Bishop Swing Community House (HSH-134) - 275 10th Street	151	130	150	126	24	0	13	2	11	0	9	2	7	0
Boyd Hotel (HSH-82) - 41 Jones Street	87	85	58	79	0	0	1	1	0	0	0	0	0	0
Broadway/Sansome (HSH-75) - 255 Broadway Street	62	39	3	2	1	0	2	2	0	0	1	1	0	0
Cadillac Hotel (HSH-90) - 380 Eddy Street	150	150	2	0	2	0	2	0	2	0	2	0	2	0
CalDrake Hotel (HSH-51) - 1541 California Street	51	50	18	20	0	0	0	0	0	0	0	0	0	0
Cambridge Hotel (HSH-60) - 473 Ellis Street	66	66	5	5	0	0	4	4	1	0	2	1	1	0
Camelot Hotel (HSH/DAH-55) - 124 Turk Street	57	57	4	2	2	0	2	1	1	0	0	0	0	0
Canon Barcus Community House (HSH-48) - 670 Natoma Street	176	47	3	1	1	3	3	1	1	3	0	0	0	0
Canon Kip Community House (HSH-103) - 705 Natoma Street	74	74	1	0	1	0	1	0	1	0	0	0	0	0
Catholic Charities - Scattered Sites (HSH-34)	0	0	2	0	2	0	1	0	1	0	0	0	0	0
Civic Center Hotel - Permanent Tenants Only (HSH) - 20 12th Street	42	35	6	6	0	1	2	2	0	1	0	0	0	0
Civic Center Residence (HSH/DAH-75) - 44 McAllister Street	85	85	2	0	1	1	1	0	0	1	1	0	0	1
Civic Center Residence (HSH-25) - 44 McAllister Street	30	30	0	0	0	0	0	0	0	0	0	0	0	0
Coronado Hotel (HSH-65) - 373 Ellis Street	98	97	8	9	2	0	6	4	2	0	4	4	0	0
Coronet Senior Housing (HSH/DAH-25) - 3575 Geary Street	230	155	0	0	0	0	0	0	0	0	0	0	0	0
Crosby Hotel (HSH-124) - 516 O'Farrell Street	151	119	27	12	13	3	27	12	15	0	12	9	3	0
Crown Hotel (HSH-50) - 928 Valencia Street	51	50	17	17	0	0	3	2	1	0	2	2	0	0
Curran House (HSH-10) - 145 Taylor Street	132	68	0	0	0	0	0	0	0	0	0	0	0	0
Dalt Hotel (HSH/DAH-10) - 34 Turk Street	205	205	3	0	3	0	3	0	3	0	0	0	0	0
Dolores Hotel/Casa Quezada (HSH/DAH-52) - 35 Woodward Street	56	56	2	2	0	0	2	2	0	0	0	0	0	0
Dr. Davis Senior Community (HSH/DAH-23) - 1751 Carroll Avenue	121	120	9	3	6	1	4	1	3	1	0	0	0	0
Dudley Apartments (HSH/DAH-15) - 172 6th Street	15	15	0	0	0	0	0	0	0	0	0	0	0	0
Dudley Apartments (HSH-75) - 172 6th Street	70	70	53	53	0	0	1	1	0	0	0	0	0	0
Eddy Street Apartments (HSH/DAH-15) - 425 Eddy Street	17	15	1	0	1	0	1	0	1	0	1	0	1	0
Edgeworth Hotel (HSH-43) - 770 O'Farrell Street	47	46	18	18	0	0	1	1	0	0	1	1	0	0
Edith Witt Senior Community (HSH/DAH-27) - 66 9th Street	28	27	0	0	0	0	0	0	0	0	0	0	0	0
Edward II (HSH-24) - 3155 Scott Street	36	36	22	23	5	0	3	2	1	0	0	0	0	0
El Dorado Hotel (HSH-10) - 150 9th Street	11	11	0	0	0	0	0	0	0	0	0	0	0	0
Elk Hotel (HSH-88) - 670 Eddy Street	101	99	47	54	0	0	4	3	1	0	4	4	0	0
Elm Hotel (HSH-85) - 364 Eddy Street	99	78	2	2	0	0	1	1	0	0	3	2	1	0
Empress Hotel (HSH/DAH-89) - 144 Eddy Street	102	102	5	2	3	0	2	0	2	0	2	1	1	0
Essex Hotel (HSH-84) - 684 Ellis Street	89	89	12	2	10	0	1	0	1	0	0	0	0	0
Fairfax Hotel (HSH-17) - 420 Eddy Street	24	24	6	3	3	0	6	3	3	0	4	3	1	0
Folsom/Dore Apartments (HSH/DAH-20) - 75 Dore Street	130	98	7	3	4	0	4	0	4	0	1	0	1	0
Folsom/Dore Apartments (HSH-20) - 75 Dore Alley	20	20	6	4	2	0	3	1	2	0	0	0	0	0
Franciscan Towers - Scattered Sites (HSH-35) -	36	32	4	3	1	0	0	0	0	0	0	0	0	0
Glide Community House (HSH-22) - 333 Taylor Street	63	51	41	38	2	1	2	1	0	1	1	0	1	0
Graystone Hotel (HSH-74) - 66 Geary Street	78	78	35	39	0	0	4	4	0	0	0	1	0	0
Hamlin Hotel (HSH-75) - 385 Eddy Street	75	75	75	63	11	1	0	5	1	0	1	0	0	1
Hartland Hotel (HSH-137) - 909 Geary Street	156	153	46	62	0	0	12	11	0	5	4	1	0	0
Hazel Betsy Community (HSH-9) - 3554 17th Street	9	9	0	0	0	0	0	0	0	0	0	0	0	0
Henry Hotel (HSH-121) - 106 6th Street	141	113	12	9	7	0	8	1	7	0	9	7	2	0
Hilldale Hotel (HSH-84) - 51 6th Street	85	72	1	1	0	0	1	1	0	0	1	1	0	0
Hope House - Scattered Sites (HSH-95)	87	87	11	9	0	2	0	0	0	0	0	0	0	0
Hotel Isabel (HSH/DAH-4) - 1095 Mission Street	87	4	0	0	0	0	0	0	0	0	0	0	0	0
Hotel Isabel (HSH-68) - 1095 Mission Street	78	78	1	1	0	0	0	0	0	0	0	0	0	0
Hotel LeNain (HSH/DAH-86) - 730 Eddy Street	91	91	13	5	8	0	5	0	5	0	1	0	1	0
Iroquois Hotel (HSH-74) - 835 O'Farrell Street	82	77	30	30	0	0	0	0	0	0	0	0	0	0
Island Bay Homes (HSH-111) - Treasure Island	328	102	126	126	0	0	3	3	0	0	0	0	0	0
Jefferson Hotel (HSH-111) - 440 Eddy Street	133	132	73	90	0	0	10	7	3	0	2	2	0	0
John Burton Advocates for Youth Housing (HSH-25) - 800 Presidio Ave	25	25	0	0	0	0	0	0	0	0	0	0	0	0
Juan Pifarre Apartments (HSH-4) - 3101 21st Street	6	4	2	1	2	3	1	1	1	2	0	0	0	0
Kelly Cullen Community (HSH/DAH-172) - 220 Golden Gate Avenue	195	195	7	2	5	0	5	0	5	0	1	0	1	0
Knox Hotel (HSH/DAH-16) - 241 6th Street	17	17	1	0	0	0	0	0	0	0	0	0	0	0
Knox Hotel (HSH-18) - 241 6th Street	21	21	1	0	1	0	0	0	0	0	0	0	0	0
Lyric Hotel (HSH-58) - 140 Jones Street	58	58	6	3	4	1	5	4	4	0	4	4	0	0
Mary Elizabeth Inn (HSH-58) - 1040 Bush Street	82	82	42	40	2	0	3	1	2	0	0	0	0	0
Mary Helen Rogers Senior Community (HSH/DAH-20) - 701 Golden Gate Avenue	21	21	0	0	0	0	0	0	0	0	0	0	0	0
Mayfair Hotel (HSH-54) - 626 Polk Street	55	53	6	6	0	0	0	0	0	0	1	0	1	0
McAllister Hotel (HSH-80) - 270 McAllister Street	97	80	21	13	7	1	10	4	5	1	4	2	2	0
Mentone Hotel (HSH-71) - 387 Ellis Street	79	66	3	1	1	1	4	1	3	0	1	1	0	0
MHSA Scattered Sites - Cambridge Hotel (HSH/DAH-9) - 473 Ellis Street	9	9	1	1	0	0	0	0	0	0	0	0	0	0
MHSA Scattered Sites - San Cristina (HSH/DAH-8) - 1000 Market Street	14	14	5	5	0	0	0	0	0	0	0	0	0	0
Midori Hotel (HSH-10) - 240 Hyde Street	10	10	8	7	3	1	4	2	3	1	3	2	2	1
Minna Lee Hotel (HSH-50) - 149 6th Street	18	18	0	0	0	0	0	0	0	0	0	0	0	0
Mission Creek Senior Community (HSH/DAH-51) - 225 Berry Street	59	58	1	0	1	2	1	0	1	1	0	0	0	0
Mission Hotel (HSH-248) - 520 S Van Ness Avenue	286	281	144	175	0	0	13	12	1	0	7	3	4	0
Mission Veterans Residence (HSH-32) - 2524 Mission Street	28	28	6	3	5	2	5	2	4	2	2	1	1	0
Monterey Blvd Apts - Scattered Sites (HSH-4) - 403 Monterey Blvd.	6	6	0	0	0	0	0	0	0	0	0	0	0	0
Mosaica (HSH/DAH-11) - 680 Florida Street	28	25	0	0	0	0	0	0	0	0	0	0	0	0
Mosaica (HSH-20) - 680 Florida Street	209	93	0	0	0	0	0	0	0	0	0	0	0	0
National (HSH-91) - 1138 Market Street	94	93	79	83	0	0	3	2	1	0	3	2	1	0
One Church Street Apartments (HSH-93) - 1 Church Street	172	91	1	1	0	0	0	0	0	0	0	0	0	0
Pacific Bay Inn (HSH/DAH-75) - 520 Jones Street	79	79	3	0	3	0	2	0	2	0	2	0	2	0
Parkview Terrace Apartments (HSH/DAH-20) - 871 Turk Street	20	20	0	0	0	0	0	0	0	0	0	0	0	0
Pierre Hotel (HSH-87) - 540 Jones Street	112	105	36	45	0	0	1	1	0	0	2	2	0	0

Plaza Apartments (HSH/DAH-106) - 988 Howard Street	157	152	7	4	2	1	5	1	3	1	2	0	2	0
Railton Place (HSH-40) - 242 Turk Street	41	41	1	3	0	3	0	0	0	0	0	0	0	0
Raman Hotel (HSH-85) - 1011 Howard Street	104	98	24	32	0	0	2	2	0	0	1	1	0	0
Rene Cazenave Apartments (HSH/DAH-120) - 25 Essex Street	123	123	6	1	6	0	1	1	0	0	1	1	0	0
Richardson Apartments (HSH/DAH-120) - 365 Fulton Street	128	128	7	1	6	0	1	1	0	0	4	3	1	0
Rita da Cascia (HSH-7) - 1652 Eddy Street	10	10	0	0	0	0	0	0	0	0	0	0	0	0
Ritz Hotel (HSH/DAH-2) - 216 Eddy Street	89	89	2	0	1	1	1	0	1	0	1	0	1	0
Rose Hotel (HSH-67) - 125 6th Street	86	64	44	57	6	0	2	0	2	0	2	0	2	0
Royan Hotel (HSH-69) - 405 Valencia Street	80	75	53	68	0	0	5	5	0	0	3	3	0	0
San Cristina Hotel (HSH-58) - 1000 Market Street	62	62	9	9	0	0	1	1	0	0	0	0	0	0
Senator Hotel (HSH-89) - 519 Ellis Street	103	91	8	3	5	0	2	2	0	0	0	0	0	0
Seneca Hotel (HSH-204) - 34 6th Street	231	226	119	146	0	0	15	13	2	0	4	2	2	0
South Park Hotels (HSH-84) - 22 & 102 South Park Street	46	44	2	3	1	0	1	0	1	0	0	0	0	0
Stanford Hotel (HSH-131) - 250 Kearny Street	145	136	9	5	3	1	8	4	3	1	8	4	3	1
Star Hotel (HSH/DAH-54) - 2176 Mission Street	60	60	1	0	1	0	5	0	5	0	1	0	1	0
TRA - Scattered Sites (HSH-20)	43	21	0	0	0	0	0	0	0	0	0	0	0	0
Treasure Island - S-t-P (HSH-24) - Treasure Island	108	82	22	23	0	1	5	2	2	1	0	0	0	0
Treasure Island Phase 1 (HSH-29) - Treasure Island	0	0	4	4	0	0	1	1	0	0	0	0	0	0
Treasure Island Phase 2 (HSH-35) - Treasure Island	70	36	69	69	0	0	0	0	0	0	0	0	0	0
Union Hotel (HSH-60) - 811 Geary Street	73	69	29	31	0	0	2	1	1	0	0	0	0	0
Vera Haile Senior Community (HSH/DAH-18) - 121 Golden Gate Avenue	18	18	0	0	0	0	0	0	0	0	0	0	0	0
Verona Hotel (HSH-65) - 317 Leavenworth Street	56	56	29	27	1	1	3	2	0	1	2	2	0	0
Veterans Academy (HSH-100) - 1029 & 1230 Girard Road	116	116	15	15	0	0	6	6	0	1	3	3	0	0
Veterans Commons (HSH-75) - 150 Otis Street	83	83	21	16	5	0	14	9	5	0	8	4	4	0
Vincent Hotel (HSH-103) - 459 Turk Street	122	119	62	74	0	0	9	4	8	0	5	3	2	0
West Hotel (HSH/DAH-40) - 141 Eddy Street	118	118	1	0	1	0	0	0	0	0	0	0	0	0
William Penn Hotel (HSH/DAH-10) - 160 Eddy Street	10	10	0	0	0	0	1	1	0	0	1	1	0	0
William Penn Hotel (HSH-27) - 160 Eddy Street	35	35	4	3	1	0	0	0	0	0	0	0	0	0
Willie B. Kennedy Senior Housing (HSH/DAH-20) - 1251 Turk Street	146	101	0	0	0	0	0	0	0	0	0	0	0	0
Windsor Hotel (HSH/DAH-91) - 238 Eddy Street	98	98	6	1	4	1	3	0	3	0	2	0	2	0
Winton (HSH-108) - 455 O'Farrell Street	111	110	126	154	0	7	5	2	5	0	3	2	0	0
Zygmunt Arendt House (HSH-47) - 850 Broderick Street	53	53	1	0	1	0	0	0	0	0	0	0	0	0
TOTALS	11519	10067	2434	2504	258	55	432	211	214	31	214	109	97	9

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JB



London N. Breed, Mayor
Philip A. Ginsburg, General Manager

October 15, 2018

Ms. Angela Calvillo
Clerk of the Board
City Hall, Room 244
1 Dr. Carlton B. Goodlett Place
San Francisco, California 94102-4689

Dear Ms. Calvillo:

Please find attached the Recreation and Park Department's report for the 1st quarter of FY18-19 in response to the requirements of Resolution 157-99 Lead Poisoning Prevention. To date, the Department has completed assessment and clean-up at **189** sites since program inception in 1999.

Since the last report, a survey and clean up was completed at Seward Mini Park. Our next planned site is Crags Court Community Garden. We also continue to assess water fixtures at our sites and are currently revising our site prioritization list to ensure correct site information.

I hope that you and interested members of the public find that the Department's performance demonstrates our commitment to the health and well-being of the children we serve.

Thank you for your support of this important program. Please do not hesitate to contact me with any questions, comments or suggestions you have.

Sincerely,

Philip A. Ginsburg
Philip A. Ginsburg
General Manager

Attachments: 1. FY18-19 Implementation Plan, 1st Quarter Status Report
2. Status Report for All Sites

Copy: H. Ahmad, DPH, Children's Environmental Health Promotion



Attachment 1. Implementation Plan Status Report

1st Quarter Status Report

Plan Item	Status
I. Hazard Identification and Control	
a) Program Revision	Guidelines will be updated as needed.
b) Site Prioritization	<p>Prioritization is based on verified hazard reports (periodic inspections), documented program use (departmental and day care), estimated participant age, and presence of playgrounds or schoolyards.</p> <p>Sites are selected on a rolling basis; as one site is completed, the next site on the list becomes active.</p> <p>The prioritization is currently being updated for changes in site information.</p>
c) Survey	Seward Mini Park was completed.
d) Cleanup	Clean up was completed at Seward Mini Park. We also continue to assess water fixtures at our sites.
e) Site Posting and Notification	Each site has been or will be posted in advance of clean-up work so that staff and the public may be notified of the work to be performed.
f) Next site	Crags Court Community Garden
II. Facilities Operations and Maintenance	
a) Periodic Inspection	Annual periodic facility inspections are completed by staff. The completion rate for FY17-18 is not available yet and will be reported next quarter.
b) Housekeeping	Staff is reminded of this hazard and the steps to control it through our Lead Safe Work Practice.

c) Staff Training

Under the Department's Injury and Illness Prevention Program, basic lead awareness training is recommended every two years for appropriate staff (e.g. custodians, gardeners, recreation staff, structural maintenance staff, etc.).

Attachment 2. Status Report for RPD Sites

Status Report for RPD Sites

Sites are listed in order in which they were prioritized for survey. Prioritization is done using an algorithm which takes into account attributes of a site that would likely mean the presence of children from 0-12 years old (e.g. programming serving children, or the presence of a playground).

Sites are surveyed on a rolling basis. "Rolling" means that when one site finishes, the next site on the list will begin. Current sites are listed at the top. Sites not be completed in exact order of priority due to re-tests and other extenuating circumstances.

Re-tests of previous sites are completed every 10 surveys to ensure that past work has sustained an acceptable level of protection.

ALL SITES

Priority	Property Name	Location	Completed	Notes	Retest
180	Noe-Beaver Community Garden	Noe/Beaver			
181	Brewster-Rutledge Community Garden				
182	Crags Court Community Garden	8 Crags			
183	Lake Merced Park	Skyline/Lake Merced		Includes Harding Park, Flemming Golf, Boat House and other sites. Note that the Sandy Tatum clubhouse and maintenance facilities were built in 2004 and should be excluded from the survey.	
184	Edgehill Mountain	Edgehill/Kensington Way			
185	Everson-Digby Lots	61 Everson			
186	Fairmount Park	Fairmont/Miguel			
187	15th Avenue Steps	Kirkham/15th Avenue			
188	Geneva Avenue Strip	Geneva/Delano		Includes Geneva Community Garden	
189	Grand View Park (includes Grand View Open Space)	Moraga/14th Avenue			
190	Hawk Hill	14th Avenue/Rivera			
191	Interior Green Belt	Sutro Forest			
192	Japantown Peace Plaza	Post/Buchanan/Geary			
193	Jefferson Square	Eddy/Gough			
194	Joseph Conrad Mini Park	Columbus/Beach			
194	Kite Hill	Yukon/19th			
196	Lakeview-Ashton Mini Park	Lakeview/Ashton			
197	Maritime Plaza	Battery/Clay			
198	Mt. Davidson Park	Myra Way			
199	Mt. Olympus	Upper Terrace			
200	Mullen-Peralta Mini Park	Mullen/Peralta Mini Park			
201	O'Shaughnessy Hollow	O'Shaughnessy Blvd.			
202	Park Presidio Boulevard	Park Presidio Blvd.			
203	Rock Outcropping	Ortega/14th Avenue			
204	South End Rowing-Dolphin Club	Aquatic Park		Land is leased	
205	Saturn Street Steps	Saturn/Ord			
206	Duncan-Castro Open Space	Diamond Heights			
207	Twin Peaks	Twin Peaks Blvd.			
208	Fillmore-Turk Mini Park	Fillmore/Turk		no CPA but table seating area	
209	Esprit Park	Minnesota Street			
210	29th Street-Diamond Open Space	1701 Diamond/29th			
211	Berkeley Way Open Space	200 Berkeley Way			
212	Diamond-Farnum Open Space	Diamond/Farnum			
213	Joost-Baden Mini Park	Joost/N of Baden			
214	Balboa Natural Area	Great Highway/Balboa			
215	Fay Park	Chestnut and Leavenworth		no CPA but is the space rented out?	
216	Guy Place Mini Park	Guy Place			

Status Report for RPD Sites

Priority	Property Name	Location	Completed	Notes	Retest
217	Portola Open Space				
218	Roosevelt-Henry Steps				
219	Sunnyside Conservatory	Monterey & Baden		no CPA but is the conservatory rented out?	
220	Topaz Open Space	Monterey & Baden			
221	Howard-Langton Mini Park	Howard/Langton			
222	Bayview Hill Park	LeConte Avenue			
1	Upper Noe Recreation Center	Day/Sanchez	99-00		
2	Jackson Playground	17th/Carolina	99-00		04-05
3	Mission Recreation Center	745 Treat Street	99-00, 02-03	Includes both the Harrison (Rec) and Treat St. (Art) sides.	06-07
4	Palega Recreation Center	Felton/Holyoke	99-00		
5	Eureka Valley Recreation Center	Collingwood/18th	99-00		
6	Glen Park	Chenery/Elk	99-00, 00-01	Includes Silver Tree Day Camp	
7	Joe DiMaggio North Beach Playground (and Pool)	Lombard/Mason	99-00		
8	Crocker Amazon Playground	Geneva/Moscow	99-00	Includes La Grande Community Garden	
9	George Christopher Playground	Diamond Hts/Duncan	99-00		
10	Alice Chalmers Playground	Brunswick/Whittier	99-00		
11	Cayuga Playground	Cayuga/Naglee	99-00		
12	Cabrillo Playground	38th/Cabrillo	99-00		
13	Herz Playground (and Coffman Pool)		99-00, 00-01		
14	Mission Playground	19th & Linda	99-00		
15	Minnie & Lovie Ward Recreation Center	Capital Avenue Montana	99-00		
16	Sunset Rec Center	28th Avenue/Lawton	99-00		
17	West Sunset Playground	39th Avenue/Ortega	99-00		
18	Excelsior Playground	Russia/Madrid	99-00		
19	Helen Wills Playground	Broadway/Larkin	99-00		
20	J. P. Murphy Playground	1960 9th Avenue	99-00		
21	Argonne Playground	18th/Geary	99-00		
22	Duboce Park (includes Harvey Milk RC)	Duboce/Scott	99-00, 01-02		
23	Golden Gate Park - Section 1		var	Includes Panhandle, Tennis Courts, Carrousel, Sharon Art, Conservatory, Kezar and Lodge. Also COMMUNITY Garden	
24	Junipero Serra Playground	300 Stonecrest Drive	99-00		
25	Merced Heights Playground	Byxbee/Shields	99-00		
26	Miraloma Playground	Omar/Sequoia Ways	99-00		
27	Silver Terrace Playground	Silver Avenue/Bayshore	99-00		
28	Eugene Friend Recreation Center	Folsom/Harriet/6th	99-00		
29	South Sunset Playground	40th Avenue/Vicente	99-00		
30	Potrero Hill Recreation Center	22nd/Arkansas	99-00		
31	Rochembeau Playground	24th Avenue/Lake Street	00-01, 09-10		
33	Cow Hollow Playground	Baker/Greenwich	00-01; 09-10		
34	West Portal Playground	Ulloa/Lenox Way	00-01		
35	Moscone Recreation Center	Chestnut/Buchanan	00-01		
36	Midtown Terrace Playground	Clarendon/Olympia	00-01		
37	Presidio Heights Playground	Clay/Laurel	00-01		
38	Tenderloin Children's Recreation Center	560/570 Ellis Street	00-01		
39	Hamilton Rec Center	Geary/Steiner	00-01		

Status Report for RPD Sites

Priority	Property Name	Location	Completed	Notes	Retest
41	Margaret S. Hayward Playground	Laguna, Turk	00-01		
43	St. Mary's Recreation Center	Murray St./JustinDr.	00-01	Includes Allemany Farm community garden	
44	Fulton Playground	27th Avenue/Fulton	00-01		
45	Bernal Heights Recreation Center	Moultrie/Jarboe	00-01		
46	Douglass Playground	Upper/26th Douglass	00-01		
47	Garfield Square	25th/Harrison	00-01		
48	Woh Hei Yuen Park	1213 Powell	00-01		
49	Father Alfred E. Boeddeker Park	Ellis/Taylor/Eddy/Jones	00-01		
50	Gilman Playground	Gilman/Griffiths	00-01		
51	Grattan Playground	Stanyan/Alma	00-01		
52	Hayes Valley Playground	Hayes/Buchanan	00-01		
53	Youngblood Coleman Playground	Galvez/Mendell	00-01		
55	Angelo J. Rossi Playground (and Pool)	Arguello Blvd./Anza	00-01		
56	Carl Larsen Park (and Sava Pool)	19th/Wawona	00-01		
57	Sunnyside Playground	Melrose/Edna	00-01		
58	Balboa Park (and Pool)	Ocean/San Jose	00-01	Includes Matthew Boxer stadium	
59	James Rolph Jr. Playground	Potrero Ave./Army Street	00-01, 02-03		
60	Louis Sutter Playground	University/Wayland	00-01		
61	Richmond Playground	18th Avenue/Lake Street	00-01		
62	Joseph Lee Recreation Center	Oakdale/Mendell	00-01		
63	Betty Ann Ong Chinese Recreation Center	Washington/Mason	00-01		
64	John McLaren Park	Visitation Valley	06-07	Include John King Community Garden	05-06
65	Mission Dolores Park	18th/Dolores	06-07		05-06
66	Bernal Heights Park	Bernal Heights Blvd.	01-02		
67	Cayuga-Lamartine-Mini Park	Cayuga/Lamartine	01-02, 09-10		
68	Willie Woo Woo Wong Playground	Sacramento/Waverly	01-02, 09-10		
70	Jospeh L. Alioto Performing Arts Piazza	Grove/Larkin	01-02		
71	Collis P. Huntington Park	California/Taylor	01-02		
72	South Park	64 South Park Avenue	01-02		
73	Alta Plaza	Jackson/Steiner	01-02		
74	Bay View Playground (and Pool)	3rd/Armstrong	01-02		
75	Chestnut-Kearny Open Space	NW Chestnut/Kearny	01-02		
76	Raymond Kimbell Playground	Pierce/Ellis	01-02		
77	Michelangelo Playground	Greenwich/Jones	01-02		
78	Peixotto Playground	Beaver/15th Street	01-02		
80	States Street Playground	States St./Museum Way	01-02		
81	Adam Rogers Park	Jennings/Oakdale	01-02		
82	Alamo Square	Hayes/Steiner	01-02		
83	Alioto Mini Park	20th/Capp	01-02		

Status Report for RPD Sites

Priority	Property Name	Location	Completed	Notes	Retest
84	Beideman--O'Farrell Mini Park	O'Farrell/Beideman	01-02		
85	Brooks Park	373 Ramsell	01-02		
86	Buchanan Street Mall	Buchanan betw. Grove & Turk	01-02		
87	Buena Vista Park	Buena Vista/Haight	01-02		
88	Bush-Broderick Mini Park	Bush/Broderick	01-02		
89	Cottage Row Mini Park	Sutter/E. Fillmore	01-02		
90	Franklin Square	16th/Bryant	01-02		
91	Golden Gate Heights Park	12th Ave./Rockridge Dr.	01-02		
92	Hilltop Park	La Salle/Whitney Yg. Circle	01-02		
93	Lafayette Park	Washington/Laguna	01-02		
94	Julius Kahn Playground	Jackson/Spruce	01-02		
95	Jose Coronado Playground	21st/Folsom	02-03		
97	Washington Square	Filbert/Stockton	02-03		
98	McCoppin Square	24th Avenue/Taraval	02-03		
99	Mountain Lake Park	12th Avenue/Lake Sreet	02-03		
100	Randolph-Bright Mini Park	Randolph/Bright	02-03		
101	Visitacion Valley Greenway	Campbell Ave./E. Rutland	02-03		
102	Utah-18th Mini Park	Utah/18th Street	02-03		
103	Palou-Phelps Park	Palou at Phelps	02-03		
104	Coleridge Mini Park	Coleridge/Esmeralda	02-03		
105	Lincoln Park (includes Golf Course)	34th Avenue/Clement	02-03		
106	Little Hollywood Park	Lathrop-Tocoloma	02-03		
107	McKinley Square	20th/Vermont	02-03		
109	Noe Valley Courts	24th/Douglass	02-03		
110	Parkside Square	26th Avenue/Vicente	02-03		
111	Portsmouth Square	Kearny/Washington	02-03		
112	Potrero del Sol Park	Potrero/Army	02-03		
113	Potrero Hill Mini Park	Connecticut/22nd Street	02-03		
114	Precita Park	Precita/Folsom	02-03		
115	Sgt. John Macaulay Park	Larkin/O'Farrell	02-03		
116	Sigmund Stern Recreation Grove	19th Avenue/Sloat Blvd.	04-05		
117	24th Street-York Mini Park	24th/York/Bryant	02-03		
118	Camp Mather	Mather, Tuolomne County	04-05		
119	Hyde-Vallejo Mini Park	Hyde/Vallejo	02-03		
120	Juri Commons	San Jose/Guerrero/25th	05-06		
121	Kelloch-Velasco Mini Park	Kelloch/Velasco	02-03		
122	Koshland Park	Page/Buchanan	02-03		
123	Head-Brotherhood Mini Park	Head/Brotherwood Way	02-03		
124	Walter Haas Playground	Addison/Farnum/Beacon	02-03		
125	Holly Park	Holly Circle	02-03		
126	Page-Laguna Mini Park	Page/Laguna	04-05		
127	Golden Gate-Steiner Mini Park	Golden Gate/Steiner			
128	Tank Hill	Clarendon/Twin Peaks	04-05		
129	Rolph Nicol Playground	Eucalyptus Dr./25th Avenue	04-05		
130	Golden Gate Park - Section 2		var	Includes Big Rec, Bandstand, Bowling Green and Nursery	

Status Report for RPD Sites

Priority	Property Name	Location	Completed	Notes	Retest
131	Golden Gate Park - Section 3		var	Includes County Fair Building	
132	Washington-Hyde Mini Park	Washington/Hyde	04-05		
133	Ridgetop Plaza	Whitney Young Circle	05-06		
134	Golden Gate Park- Section 4		var		
135	Golden Gate Park - Section 5		var	Includes Polo Field, Senior Center, Angler's Lodge, Stables	
136	Sharp Park (includes Golf Course)	Pacifica, San Mateo Co.	06-07		
137	Golden Gate Park - Section 6		var	Includes Beach Chalet, Golf Course	
139	Stow Lake Boathouse	Golden Gate Park	06-07, 11-12		
140	Golden Gate Park - Section 7		var		
143	Allyne Park	Gough/Green	06-07		
144	DuPont Courts	30th Ave./Clement	07-08		
146	Lower Great Highway	Sloat to Pt. Lobos	07-08		
148	Yacht Harbor & Marina Green	Marina	06-07, 07-08	Includes Yacht Harbor, Gas House Cover, 2 Yacht Clubs and Marina Green	
149	Palace of Fine Arts	3601 Lyon Street	09-10		
150	Telegraph Hill/Pioneer Park	Telegraph Hill	09-10		
151	St. Mary's Square	California Street/ Grant	09-10		
152	Union Square	Post/Stockton	09-10		
162	Corona Heights (and Randall Museum)	16th/Roosevelt	00-01		
163	Laurel Hill Playground	Euclid & Collins	10-11		
164	Selby-Palou Mini Park	Selby & Palou	10-11		
165	Prentiss Mini Park	Prentiss/Eugenia	10-11		
166	Lessing-Sears Mini Park	Lessing/Sears	10-11		
167	Muriel Leff Mini Park	7th Avenue/Anza	10-11		
168	10th Avenue-Clement Mini Park	Richmond Library	10-11		
169	Turk-Hyde Mini Park	Turk & Hyde	10-11		
170	Exploratorium (and Theater)	3602 Lyon Street	13-14		
171	Candlestick Park	Jamestown Avenue	10-11		
138	Pine Lake Park	Crestlake/Vale/Wawona	07-08, 16-17		
172	Broadway Tunnel West Mini Park West	Leavenworth/Broadway	16-17		
174	Ina Coolbrith Mini Park	Vallejo/Taylor	16-17		
175	Billy Goat Hill	Laidley/30th	17-18		
176	Coso-Precita-Mini Park	Coso/Precita	17-18		
177	Dorothy Erskine Park	Martha/Baden	17-18		
178	Sue Bierman Park/Embarcadero Plaza	Clay/Embarcadero	17-18	Includes Embarcadero/J Herman Plaza. Must get approval from Permits before doing to ensure there are no activities there that might interfere with clean up.	
224	Page St. Community Garden			This was done in 2017 as part of another project.	
179	Seward Mini Park	Seward/Acme Alley	FY18-19		
New Facilities: These facilities not to be included in CLPP survey as they were built after 1978.					
	Alice Marble Tennis Courts	Greenwich/Hyde		PUC demolished in 2003 and rebuilt	
	Richmond Recreation Center	18th Ave./Lake St./Calif.		New facility	
	Visitation Valley Playground	Cora/Leland/Raymond		Original building clubhouse and PG demolished in 2001. Facility is new.	
	King Pool	3rd/Armstrong		New facility	

Status Report for RPD Sites

Priority	Property Name	Location	Completed	Notes	Retest
	Patricia's Green in Hayes Valley	Hayes & Octavia		Built in 2005	
	India Basin Shoreline Park	E. Hunters Pt. Blvd.		Built in 2003	
	Parque Ninos Unidos	23rd and Folsom		Built in 2004	
	Victoria Manolo Draves Park	Folsom & Sherman		Built in 2006	
	Aptos Playground	Aptos/Ocean Avenue		Site demolished and rebuilt in 2006	



SAN FRANCISCO PLANNING DEPARTMENT

1650 Mission Street, Suite 400 • San Francisco, CA 94103 • Fax (415) 558-6409

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NOTICE OF PUBLIC HEARING AND AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Hearing Date: **December 6, 2018**
Time: **Not before 1:00 PM**
Location: **City Hall, 1 Dr. Carlton B. Goodlett Place, Room 400**
Case Type: **Environmental (Draft Environmental Impact Report)**
Hearing Body: **Planning Commission**

PROPERTY INFORMATION	APPLICATION INFORMATION
Project Address: 10 South Van Ness Avenue Cross Street(s): Market Street & South Van Ness Avenue Block /Lot No.: 3506/004 and 003A Zoning District(s): C-3-G (Downtown-General Commercial) 120-R-2 and 120/400-R-2 Height and Bulk Districts Plan Area: Market and Octavia Area Plan	Case No.: 2015-004568ENV Building Permit: n/a Applicant/Agent: 10 SVN, LLC: c/o Jim Abrams, J. Abrams Law, P.C. Telephone: (415) 999-4402 E-Mail: jabrams@jabramslaw.com

PROJECT DESCRIPTION

A draft environmental impact report (Draft EIR) has been prepared by the San Francisco Planning Department in connection with this project.

The proposed 10 South Van Ness Avenue Mixed-Use Project includes demolition of the existing two-story building on the project site and redevelopment of the site with a residential complex with ground-floor retail, totaling 1,071,095 gross square feet. The proposed project would include two 41-story, 400-foot-tall towers (420 feet, including rooftop features) and would contain 984 dwelling units. Below grade, the two structures would be connected by two basement parking levels. New publicly accessible open space would be provided in the form of a mid-block pedestrian-oriented right-of-way that would run between the two towers from South Van Ness Avenue to 12th Street under the proposed project or from Market Street to 12th Street under the variant, as discussed below.

The project sponsor is considering a variant to the proposed project that would include a single 55-story tower over a podium, totaling 1,072,989 gross square feet. The variant tower would be up to 590 feet in height (610 feet total, including roof screens and elevator penthouses). The variant would be similar to the proposed project in that it would provide 984 dwelling units, ground-floor retail space, two levels of underground parking, and a pedestrian-oriented right-of-way through the project site. The variant would require adoption of legislative amendments to the General Plan and the Zoning Map Height and Bulk Districts to permit construction of a 590-foot-tall building on the site.

Both the proposed project and the variant would include improvements to 12th Street consistent with the Better Streets Plan. The project sponsor is considering alternate improvements to 12th Street for both the proposed project and variant that would widen the eastern and western sidewalks and include two mixed-flow travel lanes, with one lane running in each direction.

DRAFT EIR: The Draft EIR finds that the proposed 10 South Van Ness Avenue Mixed-Use Project would result in the following significant and unavoidable impacts: demolition of an historical resource; a considerable contribution to a cumulative construction transportation impact; and a considerable contribution to cumulative wind hazards.

The Draft EIR, including a detailed project description, is available for public review and comment on the Planning Department's website at <http://www.sf-planning.org/sfceqadocs>.

The purpose of the public hearing is for the Planning Commission and Department staff to receive comments on the adequacy of the EIR. The Planning Commission will not respond to any of the comments or take action on the project at this hearing. Certification of the Final EIR will take place at a later hearing. Contact the planner below if you wish to be on the mailing list for future notices.

Public comments on the Draft EIR will be accepted from October 18, 2018 to 5:00 p.m. on December 11, 2018.

NOTE: The Governor of the State of California has certified the project as an Environmental Leadership Development Project under Chapter 6.5 (commencing with section 21178) of the Public Resources Code, which provides, among other things, that any judicial action challenging the certification of the EIR or the approval of the project described in the EIR is subject to the procedures set forth in sections 21185 to 21186, inclusive, of the Public Resources Code. In accordance with Public Resources section 21186(a) and (b), documents and other materials placed in the record of proceedings can be found at <https://www.ab900record.com/10svn>. Additional public notice has been separately provided regarding such certification, in accordance with the requirements of the Public Resources Code.

FOR MORE INFORMATION OR TO SUBMIT COMMENTS ON THE EIR, PLEASE CONTACT:

Planner: Rachel Schuett

Telephone: (415) 575-9030 E-Mail: CPC.10SouthVanNess@sfgov.org

GENERAL INFORMATION ABOUT PROCEDURES

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.

Only commenters on the Draft EIR will be permitted to file an appeal of the certification of the Final EIR to the Board of Supervisors.

CDs and paper copies of the Draft EIR are available at the Planning Information Center (PIC) counter on the first floor of 1660 Mission Street, San Francisco, and referenced materials are available for review by appointment (call the planner listed below). Written comments should be addressed to Rachel Schuett, EIR Coordinator, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, or emailed to **CPC.10SouthVanNess@sfgov.org**. Comments received at the public hearing and in writing will be responded to in a Draft EIR Responses to Comment (RTC) document.

10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT



DRAFT ENVIRONMENTAL IMPACT REPORT

CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT: CASE NO. 2015-004568ENV
STATE CLEARINGHOUSE NO.: 2017072018

DRAFT EIR PUBLICATION DATE: OCTOBER 17, 2018
DRAFT EIR PUBLIC HEARING DATE: DECEMBER 6, 2018
DRAFT EIR PUBLIC COMMENT PERIOD: OCTOBER 18, 2018 - DECEMBER 11, 2018

WRITTEN COMMENTS SHOULD BE SENT TO:

Rachel Schuett, EIR Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103
CPC.10SouthVanNess@sfgov.org



**SAN FRANCISCO
PLANNING
DEPARTMENT**



SAN FRANCISCO PLANNING DEPARTMENT

DATE: October 17, 2018

TO: Distribution List for the 10 South Van Ness Avenue Mixed-Use Project
Draft EIR

FROM: Lisa M. Gibson, Acting Environmental Review Officer

SUBJECT: Request for the Final Environmental Impact Report for the 10 South Van
Ness Avenue Mixed-Use Project (Planning Department File No.
2015-004568ENV)

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

This is the Draft of the Environmental Impact Report (Draft EIR) for the 10 South Van Ness Avenue Mixed-Use Project. A public hearing will be held on the adequacy and accuracy of this document. After the public hearing, our office will prepare and publish a document titled "Responses to Comments," which will contain all relevant comments on this Draft EIR and our responses to those comments. It may also specify changes to this Draft EIR. Those who testify at the hearing on the Draft EIR will automatically receive a copy of the Responses to Comments document, along with notice of the date reserved for certification; others may receive a copy of the Responses to Comments document and notice by request or by visiting our office. This Draft EIR together with the Responses to Comments document will be considered by the Planning Commission in an advertised public meeting and will be certified as a Final EIR if deemed adequate.

After certification, we will modify the Draft EIR as specified by the Responses to Comments document and print both documents in a single publication called the Final EIR. The Final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one document, rather than two. Therefore, if you receive a copy of the Responses to Comments document in addition to this copy of the Draft EIR, you will technically have a copy of the Final EIR.

We are aware that many people who receive the Draft EIR and Responses to Comments document have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the Final EIR [in Adobe Acrobat format on a CD] to private individuals only if they request them. Therefore, if you would like a copy of the Final EIR, please fill out and mail the postcard provided inside the back cover to the Environmental Planning division of the Planning Department within two weeks after certification of the EIR. Any private party not requesting a Final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the Final EIR.

Thank you for your interest in this project.

NOTE: The Governor of the State of California has re-certified this project as an Environmental Leadership Development Project under Chapter 6.5 (commencing with section 21178) of the Public Resources Code, which provides, among other things, that any judicial action challenging the certification of the EIR or the approval of the project described in the EIR is subject to the procedures set forth in sections 21185 to 21186, inclusive, of the Public Resources Code. In accordance with Public Resources section 21186(a) and (b), documents and other materials placed in the record of proceedings can be found at <https://www.ab900record.com/10svn>. Additional public notice has been separately provided regarding such certification, in accordance with the requirements of the Public Resources Code.

FOR MORE INFORMATION, PLEASE CONTACT:

Planner: Rachel Schuett

Telephone: (415) 575-9030

TO SUBMIT COMMENTS ON THE DRAFT EIR, PLEASE E-MAIL: CPC.10SouthVanNess@sfgov.org

10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT

CITY AND COUNTY OF SAN FRANCISCO

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WRITTEN COMMENTS SHOULD BE SENT TO:

Rachel Schuett, EIR Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103
CPC.10SouthVanNess@sfgov.org



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PLANNING
DEPARTMENT**

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LIST OF ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACL	absolute cumulative limit
AC Transit	Alameda–Contra Costa Transit District
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/EPA Regulatory Model
APEZ	Air Pollutant Exposure Zone
ARB	California Air Resources Board
BART	Bay Area Rapid Transit
BMP	best management practices
BRT	Bus Rapid Transit
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
CNEL	community noise equivalent level
CO	carbon monoxide
CRHR	California Register of Historical Resources
dB	decibels
dba	A-weighted decibel
DBI	Department of Building Inspection
EIR	Environmental Impact Report
EMFAC	EMission FACtors (ARB's on-road emissions inventory model)
ERO	environmental review officer
FAR	floor area ratio
FTA	Federal Transit Administration
GHG	greenhouse gas
HARP2	Hotspots Analysis and Reporting Program version 2
hp	horsepower
HRA	Health Risk Assessment
HRE	Historic Resource Evaluation
HVAC	heating, ventilation, and air conditioning
I-80	Interstate 80
I-280	Interstate 280
in/sec	inches per second
L _{dn}	day-night noise level
L _{eq}	Equivalent noise level
LEED	Leadership in Energy and Environmental Design
L _{max}	maximum noise level
L _{min}	minimum noise levels
LOS	level of service
mph	miles per hour
MSM	Mobile Source Measure

MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
Muni	San Francisco Municipal Railway
NAAQS	national ambient air quality standards
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
NRHP	National Register of Historic Places
OPR	Office of Planning and Research
PM	particulate matter
PM ₁₀	PM equal to or less than 10 microns in diameter
PM _{2.5}	PM equal to or less than 2.5 microns in diameter
POPOS	privately owned publicly accessible open spaces
PPV	peak particle velocity
RMS	root mean square
ROG	reactive organic gases
SamTrans	San Mateo County Transit District
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SF-CHAMP	San Francisco Chained Activity Model Process
SFDPH	San Francisco Department of Public Health
SFMTA	San Francisco Municipal Transportation Agency
SIP	state implementation plan
SoMa	South of Market
SO ₂	sulfur dioxide
SSMs	stationary-source control measure
SUD	Special Use District
TAAS	theoretically available annual sunlight
TAC	toxic air contaminants
TASC	Transportation Advisory Staff Committee
TAZ	transportation analysis zone
TCM	Transportation Control Measure
TDM	transportation demand management
TIS	Transportation Impact Study
U.S. EPA	U.S. Environmental Protection Agency
U.S. 101	U.S. Highway 101
VdB	vibration dB
VDECS	Verified Diesel Emission Control Strategies
VMT	vehicle miles traveled
ZOI	BART zone of influence
µg/m ³	micrograms per cubic meter

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SUMMARY

This environmental impact report (EIR) chapter summarizes the proposed 10 South Van Ness Avenue Mixed-Use Project and its potential environmental impacts. This summary is intended to highlight major areas of importance in the environmental analysis as required by section 15123 of the California Environmental Quality Act Guidelines (CEQA Guidelines). This chapter briefly summarizes the 10 South Van Ness Avenue Mixed-Use Project (referred to in this Environmental Impact Report [EIR] as “the proposed project”). Following the synopsis of the proposed project, a summary table presents the environmental impacts of the proposed project identified in the EIR by topic and the mitigation measures identified to reduce or lessen significant impacts. Improvement measures, which are not required to mitigate significant impacts but would further reduce the magnitude of less-than-significant effects, may also be identified. Significant impacts identified in the initial study are listed in a separate summary table, along with the mitigation measures that would reduce them to less-than-significant levels. Following these summary tables is a description of the alternatives to the proposed project that are addressed in this EIR and a table comparing the impacts of those alternatives with the proposed project. The chapter concludes with a summary of environmental issues to be resolved and areas of known controversy.

Table S.1: Summary of Impacts of Proposed Project Identified in the EIR, beginning on p. S.5, provides an overview of the following:

- Environmental impacts with the potential to occur as a result of the proposed project;
- The level of significance of the environmental impacts before implementation of any identified mitigation measures;
- A statement clarifying whether identified mitigation measure(s) would avoid or reduce significant environmental impacts and the level of significance for each impact after the mitigation measures are implemented; and
- Improvement measures that would further reduce less-than-significant impacts.

This summary should not be relied upon for a thorough understanding of the proposed project or variant, individual impacts, and mitigation measures. Please see Chapter 2, Project Description, for a complete description of the proposed project and variant; Chapter 4, Environmental Setting and Impacts, and the initial study (EIR Appendix B) for a complete description of impacts and mitigation measures; and Chapter 5, Alternatives, for a complete description of the alternatives to the proposed project and variant and their significant impacts.

S.1 PROJECT SYNOPSIS

The project sponsor, 10 SVN, LLC, proposes to redevelop a 51,150-square-foot (1.17-acre) triangle-shaped property at the southwest corner of South Van Ness Avenue and Market Street, in the South of Market (SoMa) neighborhood of San Francisco, with a large residential complex with ground-floor retail. The northern end of the project site was occupied by the San Francisco Honda Dealership until recently. The

dealership occupied the two-story, 30- to 45-foot-high building, and the southern end of the site encompasses a small, undeveloped area. The proposed 10 South Van Ness Avenue Mixed-Use Project would involve the demolition of the existing building and the construction of two 41-story towers. The towers would be 400 feet tall (420 feet total, including roof screens and elevator penthouses) and would contain a total of 984 dwelling units and retail space on the ground floor. Below grade, the two structures would be connected by two basement parking levels. New publicly accessible open space would be provided in the form of a new pedestrian-oriented right-of-way (or alley) that would run from South Van Ness Avenue to 12th Street under the proposed project or from Market Street to 12th Street under the variant, as discussed below.

The project sponsor is considering a variant to the proposed project that would include construction of a single 55-story tower over a podium structure. Under the variant, the tower would be up to 590 feet in height (610 feet total, including roof screens and elevator penthouses). The variant would be similar to the proposed project in that it would provide 984 dwelling units, ground-floor retail space, two levels of underground parking, and a pedestrian-oriented right-of-way through the project site.

Both the proposed project and variant would involve improvements to 12th Street that are consistent with the base requirements of the Better Streets Plan. In addition, the project sponsor is considering an alternate set of improvements to 12th Street (referred to as the “straight-shot streetscape option” in this EIR) for both the proposed project and variant that would extend the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 to 40 feet in width on 12th Street. The western sidewalk on 12th Street would be expanded to a width of 18 feet. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. In addition, both the proposed project and variant may include a street-level elevator to provide access to the San Francisco Municipal Railway (Muni) Metro station at Market Street and South Van Ness Avenue.

S.2 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The San Francisco Planning Department (planning department) published a Notice of Preparation of an Environmental Impact Report on July 12, 2017, announcing the intent to prepare and distribute a focused EIR and subsequently published an initial study on May 2, 2018. The topics analyzed in this EIR are Cultural Resources (Historic Architectural), Transportation and Circulation, Air Quality, Noise, Wind, and Shadow; all other topics were covered within the initial study (see EIR Appendix B).

All impacts of the proposed project and associated mitigation measures and improvement measures identified in this EIR are summarized under their own subsection in **Table S.1: Summary of Impacts of Proposed Project Identified in the EIR**. Under each topic, impacts follow the order of the corresponding impact discussion in Chapter 4, Environmental Setting and Impacts, of this EIR. For the topics evaluated in the EIR, the levels of significance of impacts are identified as:

- **No Impact** – No adverse changes (or impacts) to the environment are expected.

- **Less Than Significant** – Impact that does not exceed the defined significance criteria or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations.
- **Less Than Significant with Mitigation** – Impact that is reduced to a less-than-significant level through implementation of the identified mitigation measures.
- **Significant and Unavoidable with Mitigation** – Impact that exceeds the defined significance criteria and can be reduced through compliance with existing local, state, and federal laws and regulations and/or implementation of all feasible mitigation measures, but cannot be reduced to a less-than-significant level.
- **Significant and Unavoidable** – Impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations and for which there are no feasible mitigation measures.

Where applicable, this table identifies the level of significance for impacts after implementation of the identified mitigation measure(s) in the column labeled “Level of Significance after Mitigation.” All mitigation measures and improvement measures are applicable to the proposed project and the variant.

Table S.1 should not be relied upon for a thorough understanding of the proposed project or its variant and their associated impacts and mitigation needs, but is presented for the reader as an overview of impacts, mitigation measures, and improvement measures of the proposed project and variant. Please see the environmental topic sections in Chapter 4, Environmental Setting and Impacts, of this EIR and Section E, Evaluation of Environmental Effects, in the initial study (EIR Appendix B) for a thorough discussion and analysis of project-level and cumulative environmental impacts and the mitigation measures identified to address those impacts, as well as the basis for any proposed improvement measures.

As described below in Table S.1, this EIR identifies three significant and unavoidable impacts related to, respectively, demolition of the existing buildings at 10 South Van Ness Avenue, a historical resource for the purposes of CEQA; cumulative construction traffic; and cumulative wind effects. Table S.1 also identifies improvement measures that could be implemented by the project sponsor to further reduce the less-than-significant transportation impacts of the proposed project.

As shown in **Table S.2: Summary of Significant Impacts of Proposed Project and Variant Identified in the Initial Study**, beginning on p. S.40, the initial study identified five significant impacts related to cultural resources (historic architectural) and geology and soils that would be mitigated to less-than-significant levels with measures identified in that table.

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
Cultural Resources (Historic Architectural)			
CR-1: The proposed demolition of the building at 10 South Van Ness Avenue would cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines.	S	Mitigation Measure M-CR-1a: Documentation Prior to demolition or the issuance of site permits for the 10 South Van Ness Avenue project, the project sponsor shall undertake Historic American Building Survey (HABS)–level documentation of the property. The documentation shall be funded by the project sponsor and undertaken by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth in the Secretary of the Interior’s Professional Qualification Standards (Code of Federal Regulations title 36, part 61). Before beginning work on any aspect of the documentation, the professional overseeing the documentation shall meet with the preservation staff of the Planning Department for review and approval of a coordinated documentation plan. The documentation package created shall consist of the items listed below. <ul style="list-style-type: none"> • Measured Drawings: A set of measured drawings that depict the existing size, scale, and dimensions of the property. The Planning Department’s preservation staff will accept the original architectural drawings or an as-built set of architectural drawings (e.g., plan, section, elevation). The preservation staff will assist the consultant in determining the appropriate level of measured drawings. • HABS-Level Photography: Digital photographs of the interior and exterior of the property. Large-format negatives are not required. The scope of the digital photographs shall be reviewed by the Planning Department’s preservation staff for concurrence, and all digital photography shall be conducted according to current National Park Service standards. The photography shall be undertaken by a qualified professional with demonstrated experience in HABS photography. 	SUM

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<ul style="list-style-type: none"> • HABS Historical Report: A written historical narrative and report, per the HABS Historical Report Guidelines. • Video Recordation: The project sponsor shall undertake a video documenting the affected historical resource and its setting. The documentation shall be conducted and narrated by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth in the Secretary of the Interior's Professional Qualification Standards (Code of Federal Regulations title 36, part 61). The documentation shall include as much information as possible—using visuals in combination with narration—about the materials, construction methods, current condition, historic use, and historic context of the historical resource. • Print-on-Demand Book: The project sponsor shall make the content from the historical report, historical photographs, HABS photography, measured drawings, and field notes available to the public through a pre-existing print-on-demand book service. This service will print and mail softcover books containing the aforementioned materials to members of the public who have paid a nominal fee. The sponsor shall not be required to pay ongoing printing fees once the book has been made available through the service. <p>The professional(s) shall submit the completed documentation for review and approval by a member of the Planning Department's preservation staff before demolition or site permits are issued. Documentation may be used in the interpretive display or signage described in Mitigation Measure M-CR-1b. The final approved documentation shall be provided to the planning department and offered to repositories including but not limited to the History Room of the San Francisco Public Library; the Environmental Design Library at the University of</p>	

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<p>California, Berkeley; the Northwest Information Center; San Francisco Architectural Heritage; and the California Historical Society. The Planning Department will make electronic versions of the documentation available to the public at no charge.</p> <p>Mitigation Measure M-CR-1b: Interpretation</p> <p>The project sponsor shall install and maintain a permanent interpretive display commemorating the historical significance of the Fillmore West and Bill Graham. Interpretive display(s) shall develop a connection between the general public and the subject building's history. These installations may include, for example, interactive sound or video installations showcasing historic performances at Fillmore West or booths designed to record or play oral histories (see below), and historically oriented programming for a publicly accessible space. The interpretive program may also include more traditional interpretive materials such as commemorative markers and plaques, displays of photographs, and news articles. Emphasis shall be placed on the many posters advertising concerts that took place at the subject building during its period of significance. The high-quality interpretive displays shall be installed within the project site boundaries, made of durable, all-weather materials, and positioned to allow for high public visibility and interactivity.</p> <p>To assist in the collection of information that will inform and direct the historical interpretation, the sponsor shall fund a historical study prepared by the qualified historic consultant preparing the interpretative program to identify significant trends and events associated with the music of the 1960s counterculture in San Francisco, as well as identify associated buildings and sites throughout San Francisco. The project sponsor, at his or her election, may also incorporate the art and culture of the 1960s counterculture in San Francisco into this study. The objective of this study is to provide background information that will enrich the</p>	

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<p>historical contexts that have already been established for the subject building and to place the subject building within the wider context of 1960s counterculture, for the benefit of the general public.</p> <p>Additionally, the sponsor shall retain the services of a qualified historian to undertake an oral history of the Fillmore West. This oral history project will consist of interviews and recollections of people present at the concerts performed during the period of significance, including performers, organizers, and concertgoers, to the extent feasible. The success of this effort will depend primarily on the ability of the project sponsor to locate such persons, and on their willingness/ability to participate. Therefore, the project sponsor shall make a good-faith effort to publicize the oral history project, conduct public outreach, and identify a wide range of potential interviewees. To accomplish this, the sponsor shall employ a range of measures that may include hosting a commemorative concert or event, installing booths that allow participants to record their recollections, and/or hosting a website that allows interviewees to contribute remotely. Prior to undertaking this effort, the scope and methodology of the oral history project shall be reviewed and approved by the Environmental Review Officer, in consultation with preservation staff.</p> <p>In addition to potentially being utilized for the on-site interpretive program, the recordings made as part of the oral history project shall be transcribed, indexed, and made available to the public at no charge through the Planning Department and other archives and repositories in order to allow for remote, off-site historical interpretation of the subject building.</p> <p>A general plan that will lay out the various components of the interpretive program shall be developed in consultation with an architectural historian who meets the Secretary of the Interior's Professional Qualification Standards, and approved by Planning Department staff prior to issuance of a site permit or demolition permit.</p>	

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<p>This plan shall include the historical study and the oral history program described above.</p> <p>The substance, media, and other characteristics of the interpretive display shall be developed by a consultant experienced in urban architectural interpretive displays. Prior to finalizing the display, the sponsor and consultant shall attempt to convene a community group consisting of local preservation organizations and other interested parties to receive feedback on the adequacy of the interpretive display.</p> <p>A detailed final design showing the substance and appearance of the interpretive displays, as well as maintenance plans, shall be approved by Planning Department preservation staff before the final certificate of occupancy can be issued.</p> <p>Mitigation Measure M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse</p> <p>Prior to demolition of the subject building, the project sponsor shall either use salvaged architectural materials on the site as part of the interpretive program or make such architectural materials from the site available to museums, archives, curation facilities, the public, and nonprofit organizations to preserve, interpret, and display the history of the historical resource. The project sponsor shall provide representatives of these groups the opportunity to salvage materials for public information or reuse in other locations. No materials shall be salvaged or removed until HABS recordation and documentation are completed and an inventory of key exterior and interior features and materials is completed by Secretary of the Interior-qualified professionals.</p>	
CR-2: Demolition and new construction on the project site or variant would not have a	LTS	None necessary.	NA

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend: NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable</i>			
substantial adverse effect on any offsite historical resource, as defined in section 15064.5 of the CEQA Guidelines.			
C-CR-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would not substantially contribute to cumulative impacts related to historical resources.	LTS	None necessary.	NA
Transportation and Circulation			
TR-1: The proposed project, the variant, or the straight-shot streetscape option would not cause substantial additional VMT or substantially induce automobile travel.	LTS	None necessary.	NA
TR-2: The proposed project, the variant, or the straight-shot streetscape option would not cause major traffic hazards.	LTS	Improvement Measure I-TR-2a: Monitoring and Abatement of Queues The owner/operator of any off-street parking facility with more than 20 parking spaces (excluding loading and car-share spaces) will be responsible for ensuring that recurring vehicle queues do not occur on the public right-of-way. A recurring vehicle queue is defined as one or more vehicles (destined for the parking facility) blocking any portion of any public street, alley, or sidewalk for 3 consecutive	NA

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		<p>minutes or longer on a daily or weekly basis.</p> <p>If a recurring vehicle queue occurs, the owner/operator of the parking facility will employ methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, and the characteristics of the parking facility, the street(s) to which the facility connects, and the associated land uses (if applicable).</p> <p>Suggested abatement methods include but are not limited to the following:</p> <ul style="list-style-type: none"> • Redesigning the facility to improve vehicular circulation and/or onsite queue capacity • Employing parking attendants • Installing “LOT FULL” signs with active management by parking attendants • Using valet parking or other space-efficient parking techniques • Using offsite parking facilities or shared parking with nearby uses • Using parking occupancy sensors and signage to direct drivers to available spaces • Employing travel demand management strategies such as additional bicycle parking, customer shuttles, or delivery services • Implementing parking demand management strategies such as parking time limits, paid parking, time-of-day parking surcharge, or validated parking <p>If the planning director, or his or her designee, suspects that a recurring queue is present, the planning department will notify the property owner in writing. Upon</p>	

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		<p>request, the owner/operator will hire a qualified transportation consultant to evaluate site conditions for no less than seven days. The consultant will prepare a monitoring report to be submitted to the planning department for review. If the planning department determines that a recurring queue does exist, the facility owner/operator will have 90 days from the date of the written determination to abate the queue.</p> <p>Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management</p> <p>The project sponsor/property owner will install active parking management controls at the project site at the driveway of the off-street parking garage, within the off-street garage area, and at the curbside loading zones on the east side of 12th Street. The goals of this measure will be to reduce the potential for queuing of project-related vehicular traffic along 12th Street; reduce and/or eliminate potential conflicts between vehicles entering and exiting the site driveway and other roadway users along 12th Street (e.g., motorists, cyclists, pedestrians); and reduce potential conflicts between large delivery vehicles using the curbside loading zones on the east side of 12th Street and other roadway users.</p> <p>Sensors will be installed at the gated parking garage's ramp and at the driveway entrance/exit lane at 12th Street to detect any outbound vehicles on the driveway and in the ramp area. Vehicles traveling up the garage ramp and approaching the exit gate would then trigger a sensor that would activate an electronic sign, signal, or audible devices at the driveway entrance to warn any vehicles, pedestrians, or bicyclists of the presence of the exiting vehicle.</p> <p>Large delivery and move-in/move-out vehicles will be required to coordinate and schedule use of the curbside loading spaces on the east side of 12th Street through building management and SFMTA's 311 reservation system.</p>	

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		Additional traffic calming and safety treatments will be installed in the parking driveway area. Specifically, signage will be installed to advise drivers exiting the parking driveway to slow, stop, and yield to any pedestrians in the sidewalk on 12th Street (e.g., “Caution: Pedestrians Crossing,” “Watch for Pedestrians,” “Exit Slowly,” “STOP”). Diagonal mirrors will be installed so that motorists exiting the parking garage and pedestrians in the sidewalk can see each other. The project sponsor will also install rumble strips or similar devices to maintain slow speeds for vehicles exiting the parking garage.	
TR-3: The proposed project or variant would not cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity such that unacceptable levels of transit service could result, nor would they cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels would result.	LTS	None necessary.	NA
TR-4: The proposed project, the variant, or the straight-shot streetscape option would not create potentially hazardous conditions for bicyclists or otherwise substantially	LTS	None necessary.	NA

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interfere with bicycle accessibility to the site or adjoining areas.			
TR-5: The proposed project, the variant, or the straight-shot streetscape options would not result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.	LTS	None necessary.	NA
TR-6: The proposed project, the variant, or the straight-shot streetscape options would not result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed onsite loading facilities or within convenient on-street loading zones, and would not create potentially hazardous conditions affecting traffic, transit, bicycles, or pedestrians or significant	LTS	<p>Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities</p> <p>To reduce the potential for delivery vehicles to park in the travel lane adjacent to the project frontage on 12th Street (if on- and off-street loading spaces are occupied or truck size exceeds 45 feet in length), residential move-in/move-out activities and larger deliveries will be scheduled and coordinated through building management. For retail uses, appropriate delivery times will be scheduled and restricted to before 7 a.m., between 10 a.m. and 4 p.m., and after 8 p.m. No deliveries will occur between 4 p.m. and 8 p.m., to avoid conflicts with peak-period commute traffic and with bicyclists on adjacent streets and pedestrians in adjacent sidewalk areas.</p> <p>The project sponsor will enforce strict regulations governing the size of trucks using the off-street loading spaces in the proposed freight loading area. Trucks</p>	NA

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delays affecting transit.		<p>more than 45 feet long will be prohibited from entering the parking garage and will use existing and proposed on-street loading spaces along 12th Street adjacent to the project site. Appropriate signage will be posted at the parking garage entrance to notify truck operators of the truck size regulations and the presence of on-street loading spaces on 12th Street. The project sponsor will notify building management (and related staff) and retail tenants regarding the imposed truck size limits for the proposed freight loading area.</p> <p>Building management staff will notify operators of large trucks regarding the proper loading procedures to follow upon entering the off-street parking garage. Because trucks will be required to move into and out of a 24-foot driveway, building management will require a person (i.e., spotter) to safely guide the truck driver and assist in maneuvering the truck within the public right-of-way and into the parking garage, as needed.</p> <p>Appropriate move-in/move-out and loading procedures will be enforced to avoid blockages of streets adjacent to the project site over an extended period of time, and to reduce potential conflicts with other roadway users along adjacent streets, including movers and pedestrians walking along 12th Street or South Van Ness Avenue. Curb parking for movers on 12th Street or South Van Ness Avenue will be reserved through SFMTA or by directly contacting the local 311 service. Residential move-in/move-out activities will be scheduled during weekday midday hours between 10 a.m. and 4 p.m. and/or on weekends to avoid any potential conflicts with peak-period commute traffic and all users of adjacent roadways.</p> <p>In addition, the project sponsor will coordinate with Recology and enforce strict garbage pick-up periods. Such pick-up times will be restricted to before 7 a.m. and/or between 10 a.m. and 2 p.m. No garbage pick-up activities will occur after 3 p.m., to avoid conflicts with vehicular traffic and pedestrians on 12th Street, Market Street, or South Van Ness Avenue. Specific loading procedures (as</p>	

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		described above) will also be enforced for Recology vehicles during garbage pick-up periods.	
TR-7: The proposed project, the variant, or the straight-shot streetscape options would not result in inadequate emergency access to the project site or adjoining areas.	LTS	None necessary.	NA
TR-8: The duration and magnitude of temporary construction activities for the proposed project or the variant would not result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas that could create potentially hazardous conditions.	LTS	None necessary.	NA
C-TR-1: The proposed project, the variant, or the straight-shot streetscape option, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to	LTS	None necessary. For less-than-significant cumulative traffic hazard impacts: implementation of Improvement Measure I-TR-2a: Monitoring and Abatement of Queues , Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management , and Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities .	NA

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significant cumulative impacts related to VMT or traffic hazards.			
C-TR-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on transit.	LTS	None necessary.	NA
C-TR-3: The proposed project or variant, or the straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on bicycle travel.	LTS	For the less-than-significant impacts on bicycle travel, implementation of Improvement Measure I-TR-2a: Monitoring and Abatement of Queues, Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management, and Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities.	NA
C-TR-4: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of	LTS	For the less-than-significant impacts on pedestrians, implementation of Improvement Measure I-TR-2a: Monitoring and Abatement of Queues, Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management, and Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities.	NA

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the project site, would not contribute considerably to significant cumulative impacts on pedestrians.			
C-TR-5: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on loading.	LTS	For the less-than-significant cumulative impacts from loading, implementation of Improvement Measure I-TR-2a: Monitoring and Abatement of Queues, Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management, and Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities.	NA
C-TR-6: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on emergency vehicle access.	LTS	None necessary.	NA
C-TR-7: The duration and magnitude of temporary construction activities for the	S	Mitigation Measure M-C-TR-7a: Cumulative Construction Coordination: The project sponsor or its contractor(s) shall consult with City departments such as the SFMTA and Public Works through ISCOTT, and other interdepartmental	SUM

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<p>proposed project, the variant, or the straight-shot streetscape option, in combination with construction of past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in a significant cumulative impact from potentially hazardous conditions to which the proposed project or variant would contribute considerably.</p>		<p>meetings as deemed necessary by the SFMTA, Public Works, and the San Francisco Planning Department, to develop a Coordinated Construction Management Plan that shall address construction-related vehicle routing, detours, and maintaining transit, bicycle, vehicle, and pedestrian movements in the vicinity of the construction area for the duration of the cumulative construction period overlap. Key coordination meetings would be held jointly between project sponsors and contractors of other projects for which the relevant City departments determine impacts could overlap. The Coordinated Construction Management Plan shall consider other ongoing construction in the project vicinity, including development and transportation infrastructure project, and shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Restricted Construction Truck Access Hours – Limit construction truck movements to the hours between 9:00 a.m. and 4:00 p.m., or other times if approved by the SFMTA, to minimize disruption to vehicular traffic, including transit during the AM and PM peak periods. • Construction Truck Routing Plans – Identify optimal truck routes between the regional facilities and the project site, taking into consideration truck routes of other development projects and any construction activities affecting the roadway network. • Coordination of Temporary Lane and Sidewalk Closures – The project sponsor shall coordinate lane closures with other projects requesting concurrent lane and sidewalk closures through the ISCOTT and interdepartmental meetings process above, to minimize the extent and duration of requested lane and sidewalk closures. Lane closures shall be minimized especially along transit and bicycle routes, so as to limit the impacts to transit service and bicycle circulation and safety. 	

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		<ul style="list-style-type: none"> • Maintenance of Transit, Vehicle, Bicycle, and Pedestrian Access – The project sponsor/construction contractor(s) shall meet with Public Works, SFMTA, the San Francisco Fire Department, Muni Operations and other City agencies to coordinate feasible measures to include in the Coordinated Construction Management Plan to maintain access for transit, vehicles, bicycles and pedestrians. This shall include an assessment of the need for temporary transit stop relocations or other measures to reduce potential traffic, bicycle, and transit disruption and pedestrian circulation effects during construction of the project. • Carpool, Bicycle, Walk and Transit Access for Construction Workers – The construction contractor shall include methods to encourage carpooling, bicycling, walk and transit access to the project site by construction workers (such as providing transit subsidies to construction workers, providing secure bicycle parking spaces, participating in free-to-employee ride matching program from www.511.org, participating in emergency ride home program through the City of San Francisco (www.sferh.org), and providing transit information to construction workers). • Construction Worker Parking Plan – The location of construction worker parking shall be identified as well as the person(s) responsible for monitoring the implementation of the proposed parking plan. The use of on-street parking to accommodate construction worker parking shall be discouraged. All construction bid documents shall include a requirement for the construction contractor to identify the proposed location of construction worker parking. If on-site, the location, number of parking spaces, and area where vehicles would enter and exit the site shall be required. If off-site parking is proposed to accommodate construction workers, the location of the off-site facility, number of parking spaces 	

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		<p>retained, and description of how workers would travel between off-site facility and project site shall be required.</p> <ul style="list-style-type: none"> Project Construction Updates for Adjacent Businesses and Residents – To minimize construction impacts on access for nearby institutions and businesses, the project sponsor shall provide nearby residences and adjacent businesses with regularly-updated information regarding project construction, including construction activities, peak construction vehicle activities (e.g., concrete pours), travel lane closures, and lane closures. At regular intervals to be defined in the Coordinated Construction Management Plan, a regular email notice shall be distributed by the project sponsor that shall provide current construction information of interest to neighbors, as well as contact information for specific construction inquiries or concerns. <p>Mitigation Measure M-C-TR-7b: Construction Truck Deliveries During Off-Peak Periods: Any construction traffic occurring between 7:00 a.m. and 9:00 a.m. or between 3:30 p.m. and 6:00 p.m. would coincide with peak hour traffic and could temporarily impede traffic and transit flow, although it would not be considered a significant impact. Limiting truck movements to the hours between 9:00 a.m. and 3:30 p.m. (or other times, if approved by SFMTA) would further minimize disruption of the general traffic flow on adjacent streets during the a.m. and p.m. peak periods.</p> <p>As required, the Project Sponsor and construction contractor(s) shall meet with the Sustainable Streets Division of the SFMTA, the San Francisco Fire Department, Muni, and the San Francisco Planning Department to determine feasible measures to reduce traffic congestion, including potential transit disruption, and pedestrian circulation impacts during construction of the project. To minimize cumulative traffic impacts due to project construction, the Project Sponsor shall coordinate</p>	

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		<p>with construction contractors for any concurrent nearby projects that are planned for construction or which later become known.</p> <p>Mitigation Measure M-C-TR-7c: Construction Management Plan: In addition to items required in the Construction Management Plan, the project sponsor shall include the following:</p> <ul style="list-style-type: none"> • Carpool, Shuttle, and Transit Access for Construction Workers – As an improvement measure to minimize parking demand and vehicle trips associated with construction workers, the construction contractor shall include methods to encourage carpooling, shuttle use, and transit use to the project site by construction workers in the Construction Management Plan contracts. • Project Construction Updates – As an improvement measure to minimize construction impacts on nearby businesses, the project sponsor shall provide regularly-updated information (typically in the form of website, news articles, on-site posting, etc.) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns. 	

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Noise			
<p>NO-1: Proposed project or variant construction would generate noise levels in excess of standards and would result in substantial temporary increases in ambient noise levels.</p> <p><i>Daytime and Nighttime Construction Noise Impacts</i></p>	S	<p>Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan</p> <p>The project sponsor shall prepare a construction noise plan for review and approval by Planning Department and Department of Building Inspection before permit issuance, demonstrating that daytime and nighttime construction noise resulting from the proposed project or variant will not exceed applicable limits of the noise ordinance and will not cause a temporary increase in ambient noise levels greater than 10 dBA L_{eq}. The plan shall include, and project sponsor's construction contractor(s) shall implement, the following features:</p> <ul style="list-style-type: none"> • Stage Concrete Pump Trucks during Daytime along South Van Ness Avenue or Attenuate Truck Noise at Noise Sensitive Receptors <p>The project sponsor shall (through the construction contractor) stage the use of concrete pump trucks along South Van Ness Avenue adjacent to the project site during daytime construction activities. If it is undesirable to stage concrete pump trucks along South Van Ness Avenue, the project sponsor shall install noise attenuation features around the staging area of the concrete pump trucks in order to attenuate construction noise at the</p>	LTSM

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		<p>closest sensitive receptor at 20 12th Street.</p> <ul style="list-style-type: none"> Prohibit Use of Concrete Pump Trucks at Night at Any Locations that Analysis Shows Fail to Meet Established Noise Levels at Sensitive Receptors <p>The project sponsor shall (through the construction contractor) prepare a site-specific noise analysis, including measurements at the closest sensitive receptor site, the Civic Center Hotel at 20 12th Street, of noise from concrete pump trucks, showing that use of concrete pump trucks at various locations on or around the project site including along South Van Ness Avenue would not result in interior noise levels above 45 dBA during nighttime hours (8 p.m. to 7 a.m.) at the receptor site. A report presenting the results of this analysis shall be provided to the Department of Building Inspection prior to authorization to conduct nighttime construction activities that would involve the use of any concrete pump trucks, and concrete pump trucks shall be authorized only at the locations on or adjacent to the project site that are shown in the report to meet the 45 dBA interior noise level at the sensitive receptor site.</p> Telephone Hotline for Noise Complaint Reporting <p>The project sponsor (through the construction contractor) shall establish a telephone hotline for use by the public to report any perceived adverse noise conditions associated with construction of the proposed project or variant. If the telephone is not staffed 24 hours per day, the contractor shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This hotline telephone number shall be posted at the project site during construction in a manner and at a location visible to passers-by. This telephone number shall be maintained until the proposed project or variant has been</p> 	

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		<p>considered commissioned and is ready for occupancy.</p> <ul style="list-style-type: none"> Investigate and Respond to Noise Complaints The project sponsor (through the construction contractor) shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The contractor or authorized agent shall implement all of the following measures: <ul style="list-style-type: none"> - Use a noise complaint resolution form to document and respond to each noise complaint. - Contact the person(s) making the noise complaint within 24 hours. - Conduct an investigation to attempt to determine the source of noise related to the complaint. - Take reasonable measures to reduce noise at its source (or abate the noise along the direct sound path between the source and the receptor of concern) if the source of the noise that has generated the complaint is associated with construction of the proposed project or variant and is found to involve any of the following: <ul style="list-style-type: none"> o Noise from a construction activity that is causing interior noise levels at a noise-sensitive receptor to exceed 45 dBA during the nighttime hours of 8 pm to 7 am. o Noise levels that exceed 10 dBA above the ambient at noise sensitive receptors <p>To determine if any of the above are met, noise readings shall be taken at the noise sensitive receptor location with the equipment at issue in operation and again with such equipment not in operation.</p> 	

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		<ul style="list-style-type: none"> Implement Best Construction Practices To the extent practical, the construction contractor shall adopt and implement the following typical field techniques for reducing noise from construction activities, to reduce aggregate construction noise levels for nearby noise-sensitive receptors <ul style="list-style-type: none"> Unless safety provisions require otherwise, adjust audible backup alarms downward in sound level while still maintaining an adequate signal-to-noise ratio for alarm effectiveness. Consider signal persons, strobe lights, or alternative safety equipment and/or processes as allowed to reduce reliance on high-amplitude sonic alarms/beeps. Place stationary noise sources, such as generators and air compressors, on the project site as far away from nearby noise-sensitive receptors as possible. Place non-noise-producing mobile equipment, such as trailers, in the direct sound pathways between suspected major noise-producing sources and noise-sensitive receptors. Implement Measures to Reduce Equipment Noise Generation To the extent practical, the construction contractor shall implement one or more of the following measures for construction equipment selection (or preferences) and expected functions to help reduce noise: <ul style="list-style-type: none"> Provide impact noise-producing equipment (i.e., jackhammers and pavement breaker[s]) with noise-attenuating shields, shrouds, or portable barriers or enclosures, to reduce operating noise. Line or cover hoppers, storage bins, and chutes with sound-deadening material (e.g., apply wood or rubber liners to metal bin 	

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		<p>impact surfaces).</p> <ul style="list-style-type: none"> - Provide upgraded mufflers, acoustical lining, or acoustical paneling for other noisy equipment, including internal combustion engines. - Use alternative procedures of construction and select a combination of techniques that generates the least overall noise and vibration. - Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as the following: <ul style="list-style-type: none"> o Electric equipment instead of diesel-powered equipment o Hydraulic tools instead of pneumatic tools o Electric saws instead of air- or gasoline-driven saws <p>If insufficient space exists or the construction contractor lacks available resources (such as semi-truck trailers, bulk material storage containers, or field office trailers) to create a noise barrier using non-noise-producing equipment in use at an active construction site as suggested above under Best Construction Practices, the contractor also may employ field-erected temporary noise barriers. Options for such onsite barriers may include using appropriately thick wooden panel walls (at least 0.5 inch thick) that are high enough to block the line of sight from the dominant construction noise source(s) such as the concrete pump trucks to the noise-sensitive receptors. Depending on factors such as barrier height, barrier extent, and distance between the barrier and the noise-producing equipment or activity, such barriers may reduce construction noise by 3–15 dBA at the locations of nearby noise-sensitive receptors.</p> <p>Alternately, field-erected noise curtain assemblies may be installed around specific equipment sites or zones of anticipated mobile or</p>	

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		stationary activity. These techniques will be most effective and practical when the noise source for the construction activity is stationary (e.g., auger or drill operation) and the specific source locations of noise emission are near the ground and can be placed as close to the equipment/activity-facing side of the noise barrier as possible.	
<i>Construction-Related Traffic Noise</i>	LTS	None necessary.	NA
NO-2: Operation of the proposed project or variant would generate noise levels in excess of standards or result in substantial temporary increases in ambient noise levels, above levels existing without the project.			
<i>Onsite Stationary Operational Noise</i>	S	<p>Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy</p> <p>After completing installation of the HVAC equipment but before receipt of any Certificate of Occupancy, the project sponsor shall conduct noise measurements to ensure that the noise generated by stationary equipment complies with section 2909 (a) and (d) of the San Francisco Noise Ordinance.</p> <p>The noise measurements shall be conducted by persons qualified in acoustical analysis and/or engineering. The measurements shall demonstrate with reasonable certainty that the project's stationary mechanical equipment will not do either of the following:</p>	LTSM

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<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<p>(a) Cause the noise level measured inside any sleeping or living room in a dwelling unit on residential property to exceed 45 dBA with windows open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed</p> <p>(b) Result in an increase in ambient noise levels of 5 dBA or more at the property plane</p> <p>On completion of such testing, the acoustical consultant/acoustical engineer shall submit a memorandum summarizing test results to the San Francisco Planning Department. If measured noise levels are found to exceed these standards, the project sponsor shall be responsible for implementing stationary equipment noise-control measures or other acoustical upgrades such as additional noise insulation in mechanical rooms, until similar measurements of interior sound levels in sleeping or living rooms in residential units after installation of these upgrades demonstrate compliance with the noise ordinance standards above.</p> <p>No Certificate of Occupancy shall be issued for any part of the structure until the standards in the Noise Ordinance are shown to be met.</p>	
<i>Transportation Noise</i>	LTS	None necessary.	NA
NO-3: The proposed project or variant would not generate or result in exposure of persons to excessive groundborne vibration.	LTS	None necessary.	NA
C-NO-1: The proposed project or variant, in combination with past, present, and reasonably	S	Implementation of Mitigation Measure M-No-1: Prepare and Implement Construction Noise Plan.	LTSM

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foreseeable future projects, would result in a considerable contribution to significant cumulative construction noise.			
C-NO-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact related to vibration.	LTS	None necessary.	NA
C-NO-3: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to significant cumulative impacts related to operational noise and vibration.	LTS	None necessary.	NA
Air Quality			
AQ-1: The proposed project or variant's construction activities would generate criteria air pollutants and fugitive dust, but would not violate an air quality	LTS	None necessary.	NA

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standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.			
AQ-2: During project operations, the proposed project or variant would result in emissions of criteria air pollutants, but not at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	None necessary.	NA
AQ-3: Construction and operation of the proposed project or variant would generate toxic air contaminants, including diesel particulate matter, at levels which would expose sensitive receptors to substantial air pollutant concentrations.			

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<i>Construction-Related PM_{2.5} Concentrations</i>	S	<p>Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions</p> <p>The project sponsor shall comply with the following requirements:</p> <p>A. Construction Emissions Minimization Plan. Before a construction permit is issued, the project sponsor shall submit a construction emissions minimization plan to the environmental review officer (ERO) or the ERO's designated representative for review and approval. The construction emissions minimization plan shall detail project compliance with the following requirements:</p> <p>(1) All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:</p> <p>(a) Where access to alternative sources of power is reasonably available, portable diesel engines shall be prohibited. Where portable diesel engines are required because alternative sources of power are not reasonably available, the portable diesel engine shall meet the requirements of section (A)(1)(b), below.</p> <p>(b) All off-road equipment shall have engines that meet either EPA or ARB tier 4 final off-road emission standards. If engines that comply with tier 4 final off-road emission standards are not commercially available, then the project sponsor shall seek a waiver from this requirement from the ERO and provide the next cleanest piece of off-road equipment as provided by the step-down schedule in Table M-AQ-3-1.</p> <p>i. If seeking a waiver from this requirement, the project</p>	LTSM

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		<p>sponsor shall demonstrate that the resulting emissions would not result in the following:</p> <ul style="list-style-type: none">• Annual average construction-related PM_{2.5} emissions in excess of 0.2 µg/m³ at off-site sensitive receptor locations and• The combined cancer risk from construction and operational emissions generated by the project do not exceed an excess cancer risk of 7 per one million persons exposed at off-site sensitive receptor locations <p>ii. For purposes of this mitigation measure, “commercially available” shall mean the availability of tier 4 final engines taking into consideration factors such as critical-path timing of construction; (ii) geographic proximity to the project site of equipment; and (iii) geographic proximity of access to off-haul deposit sites.</p> <p>TABLE M-AQ-3-1: OFF-ROAD EQUIPMENT COMPLIANCE STEP-DOWN SCHEDULE</p> <table><tr><th>Compliance Alternative</th><th>Engine Emissions Standard</th><th>Emissions Control</th></tr><tr><td>1</td><td>Tier 4 Interim</td><td>N/A</td></tr><tr><td>2</td><td>Tier 3</td><td>ARB verified diesel emissions control strategy</td></tr><tr><td>3</td><td>Tier 2</td><td>ARB verified diesel emissions control strategy</td></tr></table> <p>How to use the table: If the requirements of (A)(1)(b) cannot be met, then the project sponsor would need to meet Compliance</p>	Compliance Alternative	Engine Emissions Standard	Emissions Control	1	Tier 4 Interim	N/A	2	Tier 3	ARB verified diesel emissions control strategy	3	Tier 2	ARB verified diesel emissions control strategy	
Compliance Alternative	Engine Emissions Standard	Emissions Control													
1	Tier 4 Interim	N/A													
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		<p>Alternative 1. Should the project sponsor not be able to supply off-road equipment meeting Compliance Alternative 1, then Compliance Alternative 2 would need to be met. Should the project sponsor not be able to supply off-road equipment meeting Compliance Alternative 2, then Compliance Alternative 3 would need to be met.</p> <p>(c) Renewable diesel shall be used to fuel all diesel engines unless it can be demonstrated to the environmental review officer that such fuel is: (1) not compatible with on-road or off-road engines, (2) that emissions from the transport of fuel to the project site will offset its emissions reduction potential, or (3) the fuel is not commercially available.</p> <p>(2) The project sponsor shall require in its construction contracts that the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, and Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.</p> <p>(3) The project sponsor shall require that construction operators properly maintain and tune equipment in accordance with manufacturer's specifications.</p> <p>(4) The construction emissions minimization plan shall include estimates of the construction timeline by phase with a description of each piece of off-road equipment required for every construction phase. Off-road equipment descriptions and information may include but are not limited to equipment</p>	

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		<p>type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For verified diesel emissions control strategy installed: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date.</p> <p>(5) The project sponsor shall keep the construction emissions minimization plan available for public review onsite during working hours. The project sponsor shall post at the perimeter of the project site a legible and visible sign summarizing the requirements of the plan. The sign shall also state that the public may ask to inspect the construction emissions minimization plan at any time during working hours, and shall explain how to request inspection of the plan. Signs shall be posted on all sides of the construction site that face a public right-of-way. The project sponsor shall provide copies of the construction emissions minimization plan to members of the public as requested.</p> <p>B. Reporting. Quarterly reports shall be submitted to the ERO or the ERO's designated representative indicating the construction phase and off-road equipment information used during each phase, including the information required in A(4).</p> <p>(1) Within six months of the completion of construction activities, the project sponsor shall submit to the ERO or the ERO's designated representative a final report summarizing construction activities. The final report shall indicate the start</p>	

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		and end dates and duration of each construction phase. For each phase, the report shall include detailed information required in A(4). C. Certification Statement and Onsite Requirements. Before the start of construction activities, the project sponsor must certify that it is in compliance with the construction emissions minimization plan, and that all applicable requirements of the plan have been incorporated into contract specifications.	
<i>Operational PM_{2.5} Concentrations</i>	LTS	None necessary.	NA
<i>Cancer Risk</i>	S	Implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions , above Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Operational Diesel Generators The project sponsor shall require in applicable contracts that the operational backup diesel generator: <ul style="list-style-type: none"> (1) Comply with ARB Airborne Toxic Control Measure emissions standards for model year 2008 or newer engines; and (2) Meet tier 4 final emissions standards; and (3) Be fueled with renewable diesel. The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (regulation 2, rule 2, and regulation 2, rule 5) and the emissions standard requirement of this measure to the San Francisco Planning Department for review and approval before a permit for a	LTSM

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		<p>backup diesel generator is issued by any City agency.</p> <p>Once operational, the diesel backup generator shall be maintained in good working order for the life of the equipment and any future replacement of any diesel backup generators shall be required to be consistent with these emissions specifications. The operator of the facility at which the generator is located shall maintain records of the testing schedule for each diesel backup generator for the life of that diesel backup generator. The facility operator shall provide this information for review to the San Francisco Planning Department within three months of a request for such information.</p>	
AQ-4: The proposed project or variant would not generate emissions that create objectionable odors affecting a substantial number of people.	LTS	None necessary.	NA
AQ-5: The proposed project or variant would not conflict with or obstruct implementation of the 2017 Bay Area Clean Air Plan.	LTS	None necessary.	NA
C-AQ-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to cumulative	LTS	None necessary.	NA

Table S.1: Summary of Impacts of Proposed Project and Variant Identified in the EIR

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
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regional air quality impacts.			
C-AQ-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would contribute to cumulative health risk impacts on sensitive receptors.	S	Implementation of Mitigation Measures M-AQ-3a: Minimize Off-Road Construction Equipment Emissions and M-AQ-3b: Implement Best Available Control Technology for Operational Diesel Generators	LTSM
Wind			
WI-1: The proposed project or variant would not alter wind in a manner that would substantially affect public areas in the vicinity of the project site.	LTS	None necessary.	NA
C-WI-1: The proposed project or variant, in combination with other past, present, and reasonably foreseeable future projects, would alter wind in a manner that would make a cumulatively considerable contribution to a significant cumulative wind impact.	S	Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts The project sponsor shall retain a qualified wind consultant to prepare, in consultation with the San Francisco Planning Department (planning department), a wind impact mitigation report that identifies design measures to reduce the project's contribution to off-site wind impacts in the cumulative-plus-project setting, based on best available information ("the wind report"). Prior to the final addenda approval by the Department of Building Inspection (DBI), the project sponsor shall submit the wind report to the planning department for its review and approval. The wind report shall incorporate updated information on cumulative	SUM

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		<p>development in the area and shall contain a list of potential wind reduction design measures, along with the estimated effectiveness of each measure to reduce the identified cumulative off-site wind hazards. Such wind reduction design measures may include additional on-site landscaping, or equivalent wind-reducing features; and off-site wind reduction measures such as landscaping, streetscape improvements or other wind-reducing features, such as wind screens.</p> <p>The project sponsor shall implement as many of the design measures identified in the wind report as needed to reduce the project's contribution to identified cumulative offsite wind hazards. The planning department shall approve the final list of wind reduction measures that the project sponsor shall implement.</p>	
Shadow			
SH-1: The proposed project or variant would not alter shadows in a manner that would substantially affect public areas or outdoor recreation facilities.	LTS	None necessary.	NA
SH-2: The proposed project or variant would not substantially shade outdoor recreation facilities or other public areas, such as streets and sidewalks that are not under the jurisdiction of the San Francisco Recreation and Park	LTS	None necessary.	NA

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Commission.			
C-SH-1: The proposed project or variant in combination with past, present, and reasonably foreseeable future projects in the project area would not create new shadow in a manner that would substantially affect outdoor recreation facilities or other public areas. The proposed project would not make a cumulatively considerable contribution to a significant cumulative shadow impact.	LTS	None necessary.	NA

Table S.2: Summary of Significant Impacts of Proposed Project Identified in the Initial Study

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
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Cultural Resources			
CR-2: The proposed project or variant's construction could cause a substantial adverse change in the significance of an unknown archeological resource.	S	<p>Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring</p> <p>Based on a reasonable presumption that archeological resources may be present within the project area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list maintained by the Planning Department archeologist. The project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the qualified archeological consultants list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).</p>	LTSM

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		<p>Consultation with Descendant Communities. On discovery of an archeological site¹ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative² of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.</p> <p>Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical</p>	

¹ The term “archeological site” is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

² An “appropriate representative” of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

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		<p>resource under CEQA.</p> <p>At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:</p> <p>(A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR</p> <p>(B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.</p> <p>Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:</p> <ul style="list-style-type: none"> The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably before the commencement of any project-related soil-disturbing activities. The ERO in consultation with the archeological 	

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		<p>consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring), and site remediation shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.</p> <ul style="list-style-type: none"> • The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource. • The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits. • The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis. • If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an 	

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		<p>appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.</p> <p>Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.</p> <p>Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</p> <p>The scope of the ADRP shall include the following elements:</p> <ul style="list-style-type: none"> • Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations. 	

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		<ul style="list-style-type: none"> • Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures. • Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies. • Interpretive Program. Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program. • Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities. • Final Report. Description of proposed report format and distribution of results. • Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities. <p>Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (California Public Resources Code section 5097.98). The archeological consultant, the project sponsor, ERO, and the Most Likely Descendant shall have up to but not beyond six days of discovery</p>	

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		<p>to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept recommendations of a Most Likely Descendant. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such an agreement has been made or, otherwise, as determined by the archeological consultant and the ERO.</p> <p>Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.</p> <p>Once approved by the ERO, copies of the final archeological resources report shall be distributed as follows: California Archeological Site Inventory, Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center.</p> <p>The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the final archeological resources report along with copies of any formal site</p>	

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		recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.	
CR-3: The proposed project or variant's construction could disturb human remains, including those interred outside of formal cemeteries.	S	Implementation of Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring	LTSM
CR-4: The proposed project or variant's construction could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074.	S	<p>Implementation of Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program</p> <p>If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.</p> <p>If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or</p>	LTSM

Table S.2: Summary of Significant Impacts of Proposed Project Identified in the Initial Study

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend: NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable</i>			
		installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.	
C-CR-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in cumulative impacts to archeological resources, tribal cultural resources, and human remains.	S	Implementation of Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring and Tribal Cultural Resources Interpretive Program	LTSM
Geology and Soils			
GE-5: Construction activities for the proposed project or variant would directly or indirectly result in damage to, or destruction of, as-yet unknown paleontological resources or sites, should such resources, sites, or features exist on or beneath the project site.	S	Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find and a qualified paleontologist notified, who shall evaluate the significance. If paleontological resources are discovered during earthmoving activities, the	LTSM

Table S.2: Summary of Significant Impacts of Proposed Project Identified in the Initial Study

Impact	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with mitigation; S = Significant; SU = Significant and unavoidable; SUM = Significant and unavoidable with mitigation; NA = Not Applicable			
		<p>construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and San Francisco Planning Department. There shall be no construction work in the area to allow for the recovery of the resource in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan compliant with the standards of the Society for Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City and County of San Francisco shall determine which of the recommendations in the recovery plan are necessary and feasible, and these recommendations shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.</p>	

S.3 SUMMARY OF THE PROJECT ALTERNATIVES

As evaluated and identified in Section 4.1, Cultural Resources (Historic Architectural), for the proposed project and variant, demolition of the existing building at 10 South Van Ness Avenue would result in a significant and unavoidable impact on the historical resource. Thus, in developing the alternatives to be analyzed in this EIR, the planning department has considered a range of feasible design configurations and development programs that could avoid or lessen the significant impact on the historical resource, while optimizing the development potential on the project site.

The EIR evaluates five alternatives: the No Project Alternative – Alternative 1 (as required by CEQA Guidelines section 15126.6(e)); the Proposed Project Full Preservation Alternative – Alternative 2; the Proposed Project Partial Preservation Alternative – Alternative 3; the Variant Full Preservation Alternative – Alternative 4; and Variant Partial Preservation Alternative – Alternative 5. These alternatives are summarized below, and **Table S.3: Comparison of the Proposed Project and Variant to the Alternatives**, presents a comparison of the characteristics and potential significant impacts of the proposed project and variant to those of the alternatives. The environmentally superior alternative is discussed on pp. S.59–5.60. Detailed descriptions of the alternatives are given in Chapter 5, Alternatives.

As with the proposed project and variant, the straight-shot streetscape option could be implemented with any of the alternatives summarized here and studied in Chapter 5. There are no significant environmental impacts identified for the straight-shot streetscape option that would be different from, or unique to, that option. As such, no further analysis of the straight-shot streetscape option in the context of these alternatives is necessary.

Table S.3: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

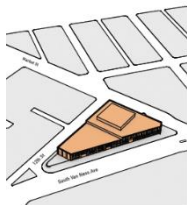
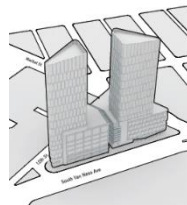
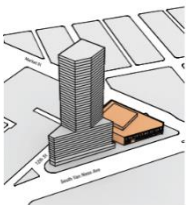
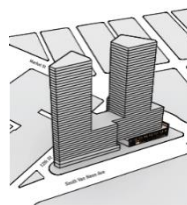
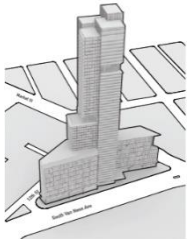
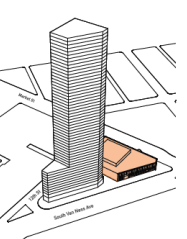
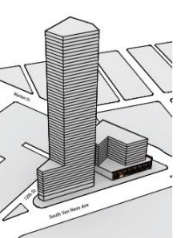
	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
							
Retail/Commercial (gsf)	91,088	30,350	64,900	31,400	30,450	64,400	28,100
Residential (gsf)	—	935,745	435,700	707,600	935,250	619,900	770,300
Parking (gsf)	—	102,000	47,900	73,500	101,992	65,000	78,400
Total gsf ¹	91,088	1,071,095	548,500	812,500	1,072,989	749,300	876,800
Residential (nsf)	—	671,380	295,700	486,200	696,468	430,100	543,700
Tower Efficiency ²	—	73% North Tower/72% South Tower	72%	72% North Tower/68% South Tower	77%	74%	73%
Net Unit Size	—	682	682	682	682	702	702
Dwelling Units							
Studio		375	166	272	347	213	270
1 Bedroom		461	203	334	449	276	349
2 Bedroom		100	44	72	166	102	129
3 Bedroom		48	21	35	22	14	17
Total Units		984	434	713	984	605	765
Parking Spaces	—	518	239	367	518	325	392
Bicycle Spaces							
Class 1		336	192	257	325	235	270
Class 2		61	33	48	61	41	49
Total		386	225	305	386	276	319

Table S.3: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
Podium Height (Max.)	–	114 Feet North Podium/120 Feet South Podium	120 Feet Podium	120 Feet Podium	139 Feet Podium/164 Feet Podium (120 Feet Average)	120 Feet Podium	120 Feet Podium
Building Height	30 – 45 Feet	400 Feet	400 Feet	400 Feet	590 Feet	590 Feet	590 Feet
Stories	2	41	41	41	55	55	55
Existing GSF Retained	91,088 plus All Façades	–	59,400 plus North Façades	North Façades	–	59,400 plus North Façades	North Façades
Excavation Required (yd ³)	–	100,000 (Full Site)	50,000 (Partial Site ³)	70,000 (Full Site)	100,000 (Full Site)	60,000 (Partial Site ³)	80,000 (Full Site)
Ability to Meet Project Sponsor's Objectives?	No	Yes	Most	Most	Yes	Most	Most
Comparison of Significant Impacts							
<i>Cultural Resources (Historic Architectural)</i>							
CR-1: The proposed demolition of the building at 10 South Van Ness Avenue would cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines.	None	SUM	LTS	SUM	SUM	LTS	SUM

Table S.3: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
<i>Transportation and Circulation – Cumulative Construction Impacts</i>							
C-TR-7: The duration and magnitude of temporary construction activities for the proposed project, the variant, or the straight-shot streetscape option, in combination with construction of past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in a significant cumulative impact from potentially hazardous conditions to which the proposed project or variant would contribute considerably.	None	SUM	SUM	SUM	SUM	SUM	SUM
<i>Noise</i>							
NO-1: Proposed project or variant construction would generate noise levels in excess of standards and would result in substantial temporary increases in ambient noise levels.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM

Table S.3: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
NO-2: Operation of the proposed project or variant would generate noise levels in excess of standards or result in substantial temporary increases in ambient noise levels, above levels existing without the project.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
C-NO-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative construction noise.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
<i>Air Quality</i>							
AQ-3: Construction and operation of the proposed project or variant could generate toxic air contaminants, including diesel particulate matter, exposing sensitive receptors to substantial air pollutant concentrations. (Less than significant with mitigation)	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM

Table S.3: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
C-AQ-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would contribute to cumulative health risk impacts on sensitive receptors.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
<i>Wind</i>							
C-WI-1: The proposed project or variant, in combination with other past, present, and reasonably foreseeable future projects, would alter wind in a manner that would make a cumulatively considerable contribution to a significant cumulative wind impact.	None	SUM	SUM	SUM	SUM	SUM	<i>SUM</i>

Notes:

- ¹ Total gsf includes parking gsf and excludes rooftop mechanical.
- ² A typical residential tower has an efficiency factor of 70–80%, assuming a typical residential core.
- ³ Size and geometry of basement levels create highly inefficient layouts and may not be able to accommodate parking, bicycle parking, and necessary infrastructure.

Source: Page & Turnbull, Inc., *10 South Van Ness Avenue Preservation Alternatives Report*, Revised Final, January 30, 2018, prepared for 10 SVN, LLC.

No Project Alternative – Alternative 1

Under the No Project Alternative, the existing structure and use of the project site would not change and the existing physical conditions, as described in detail for each environmental topic in Chapter 4, Environmental Setting and Impacts, would remain the same. The existing building would remain along with the existing ingress and egress points, and the proposed project or variant would not be constructed. As such, the proposed housing units, commercial square footage, parking, and streetscape improvements would not be implemented.

Under the No Project Alternative, none of the impacts associated with the proposed project or variant, as described in Chapter 4, would occur. The No Project Alternative would have no significant and unavoidable impacts related to historical resources, or cumulative impacts related to transportation (during construction) or wind; would have no impacts related to transportation and circulation, air quality, noise, or shadow; would have no impacts related to topics determined in the initial study to be either less than significant or less than significant with mitigation under the proposed project or variant; and would not require mitigation measures. However, development and growth would continue in the vicinity of the project site as reasonably foreseeable future projects are approved, constructed, and occupied. These projects could contribute to cumulative impacts in the vicinity, but under the No Project Alternative, land use activity on the project site would not contribute to these cumulative impacts beyond existing levels.

Proposed Project Full Preservation Alternative – Alternative 2

Under the Proposed Project Full Preservation Alternative (Alternative 2), the existing building at 10 South Van Ness, a historical resource, would undergo some changes but it would retain all of its exterior and interior character-defining features. The single-tower design of Alternative 2 would preserve the adjacent historical resource by maintaining the historically significant ballroom on the northern portion of the project site, including its concrete construction, orientation, footprint, massing, facades, windows, and detailing. The non-contributing southern garage addition portion of the existing building would be demolished and a new mixed-use building would be constructed in its place. The new building would include an approximately 548,500-gross-square-foot, 41-story single tower (400-feet-tall plus an additional 20 feet for roof screens and elevator penthouses) constructed with a trapezoidal footprint situated over a 120-foot-tall podium. Construction of the single tower would avoid the need for deep excavation surrounding the existing building because the existing building would be retained in place, while still adhering to the load requirements above the Bay Area Rapid Transit (BART) easement at the north end of the project site.

The Proposed Project Full Preservation Alternative would provide more retail and/or commercial space square footage than the proposed project or variant would (see Table S.3, p. S.51) because

the existing building would be devoted to retail/commercial uses (the second floor would not be suitable for residential use) and both the historic building and the new building would include active ground-floor uses.³ Overall, Alternative 2 would provide a total of about 64,900 gross square feet of retail and/or commercial space, with ground-floor access along Market Street, South Van Ness Avenue, 12th Street, and the newly created mid-block passage that would be aligned south of the historical resource building. The historic building would provide a total of about 59,400 gross square feet of retail and/or commercial space, with no residential uses. The new building would include approximately 435,700 gross square feet of residential use on the upper floors of the tower, with a total of 434 residential units (166 studio, 203 one-bedroom, 44 two-bedroom, and 21 three-bedroom).

By retaining the existing historic building, the Proposed Project Full Preservation Alternative would avoid the significant and unavoidable impact related to demolition of a historical resource that would occur with the proposed project. Therefore, there would be no significant impact related to historic architectural resources, and Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse, identified for the proposed project, would not apply.

As with the proposed project, the alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, and less-than-significant impacts (with mitigation where required) related to air quality, noise, other transportation subtopics, and shadow.

Proposed Project Partial Preservation Alternative – Alternative 3

The purpose of the Proposed Project Partial Preservation Alternative is to consider a project that would lessen the significant impacts of the proposed project on the existing historical resource while accommodating more of the land development program than the Proposed Project Full Preservation Alternative would. The Proposed Project Partial Preservation Alternative would retain historically significant portions of the existing building at 10 South Van Ness Avenue and adapt the property for residential use by adding two new buildings. Although all interior character-defining features would be removed, the only main exterior character-defining feature that would be partially compromised is the massing. The majority of the exterior character-defining features would be retained, including the concrete walls, orientation, footprint, façades, windows, and detailing.

³ The second floor of the historic building would not be suitable for residential use because the potential reuse of the ballroom as a performance venue would be incompatible with residential use. Additionally, the floor plate dimension of the historic building (approximately 150 feet by 200 feet wide) is unsuitable for residential layout, as there would need to be major penetration with a light well in the structure to provide required light and air for residential use. This would involve the loss of interior character-defining features of the historic building.

The Proposed Project Partial Preservation Alternative would involve the construction of two new towers (the north tower and the south tower) and would partially retain the historic building on site. The two new towers would both be 41 stories and 400 feet tall (420 feet total, including roof screens and elevator penthouses) constructed above a 120-foot-tall podium. The north tower would incorporate the historic façades portion of the historical resource and would have a much smaller trapezoidal footprint that would be situated above the southeastern portion of the podium. The south tower would have a podium with a triangular footprint and a tower with a smaller triangular footprint situated above the southern wedge portion of the podium. The north and south podiums would be separated by the mid-block passage at the ground and second floors and connected on the upper podium floors.

The Proposed Project Partial Preservation Alternative would have a total of approximately 812,500 gross square feet (including parking and excluding rooftop mechanical). The two new buildings under the Proposed Project Partial Preservation Alternative would have a total of about 31,400 gross square feet of retail and/or commercial space on the ground floor with access along Market Street, South Van Ness Avenue, 12th Street. There would be about 707,600 gross square feet (486,200 net square feet) of residential uses across both buildings on the upper floors (also including residential lobbies on the ground floor), with a total of 713 residential units (272 studio, 334 one-bedroom, 72 two-bedroom, and 35 three-bedroom units).

Below grade, the buildings would be connected via a two-level parking garage/basement, accessed from 12th Street, with about 73,500 gross square feet of parking with 367 parking spaces (in stackers) and 257 class 1 bicycle parking spaces. Forty-eight class 2 bicycle parking spaces would also be provided on the sidewalk. As with the proposed project and variant, the garage/basement would include off-street loading spaces.

Like the proposed project, the Proposed Project Partial Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, and less-than-significant impacts related to noise, other transportation subtopics, air quality, and shadow (with mitigation where mitigation is identified).

Alternative 3 would also not avoid the significant and unavoidable impact on historical resources, since the historic interior, including the ballroom, the southeast wall, and the roof of the historic north portion of the resource, would be demolished, resulting in a significant and unavoidable impact with mitigation. If Alternative 3 is chosen, mitigation measures for this alternative would be tailored to ensure that the Secretary of the Interior's Standards for documentation of historical resources are met.

Variant Full Preservation Alternative – Alternative 4

The purpose of Alternative 4 is to consider a plan that would lessen the significant impacts of the proposed variant on the existing historical resource. Alternative 4 would retain the significant

portions of the existing historic building at 10 South Van Ness Avenue and adapt the property for residential use by adding a new building on the southern portion of the site. The alternative would retain all character-defining features of the historic building. Alternative 4 would include a 55-story single tower (590-feet-tall plus an additional 20 feet for roof screens and elevator penthouses) constructed with a trapezoidal footprint situated over a 120-foot-tall podium with a triangular footprint. The single tower design would preserve the adjacent historical resource, since construction of the single tower avoids the need for deep excavation surrounding the existing building while still adhering to the BART easement at the north end of the site. The façades of the new building would be clad in modern materials, such as steel and glazing.

The Variant Full Preservation Alternative would provide more retail and/or commercial space square footage than the variant (see Table S.3, p. S.51) because the existing building would be devoted to retail/commercial uses (the second floor would not be suitable for residential use) and both the historic building and the new building would include active ground-floor uses. Overall, Alternative 4 would provide a total of about 64,400 gross square feet of retail and/or commercial space, with ground-floor access along Market Street, South Van Ness Avenue, 12th Street, and the newly created mid-block passage that would be aligned south of the existing historical resource. The historic building would be used for retail and/or commercial space, with no residential uses. Under the Variant Full Preservation Alternative, the new building would include approximately 619,900 gross square feet of residential use on the upper floors of the tower, with a total of 605 residential units (213 studio, 276 one-bedroom, 102 two-bedroom, and 14 three-bedroom).

By retaining the existing historic building, the Variant Full Preservation Alternative would avoid the significant and unavoidable impact related to the demolition of this historical resource. Unlike the variant, there would be no significant impact related to historic architectural resources, and Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse would not apply.

As with the variant, the Variant Full Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, and less-than-significant impacts related to air quality, noise, other transportation subtopics, and shadow (with mitigation where measures are identified).

Variant Partial Preservation Alternative – Alternative 5

The purpose of the Variant Partial Preservation Alternative is to consider a project that would lessen the significant impacts of the variant on the existing historical resource. It would partially retain the historic building on site while accommodating more of the land development program than the Proposed Project Partial Preservation Alternative. Although all interior character-defining features would be removed, the character-defining features of the building's exterior

would be partially retained, including the concrete walls, orientation, footprint, façades, windows, and detailing.

With the Variant Partial Preservation Alternative, a new tower would be constructed on the southern portion of the project site. The new tower would be 55 stories and 590 feet tall (610 feet including roof screens and elevator penthouses) constructed above a 120-foot-tall podium, with a triangular footprint. In the northern portion of the project site, the podium would be retained and would incorporate the historic façades of the historical resource. The north and south podiums would be separated by a mid-block passage.

The Variant Partial Preservation Alternative would have a total of approximately 876,800 gross square feet (including parking and excluding rooftop mechanical). The new building would have a total of about 28,100 gross square feet of retail and/or commercial space on the ground floor with access along Market Street, South Van Ness Avenue, and 12th Street. There would be about 770,300 gross square feet (543,700 net square feet) of residential use across both buildings on the upper floors (also including residential lobbies on the ground floor), with a total of 765 residential units (270 studio, 349 one-bedroom, 129 two-bedroom, and 17 three-bedroom units).

Below grade, the building would include a two-level parking garage/basement, accessed from 12th Street, with about 78,400 gross square feet of parking with 392 parking spaces (in stackers) and space for 270 Class 1 bicycle parking spaces. Forty-nine Class 2 sidewalk bicycle parking spaces would also be provided on the sidewalk. As with the variant, the garage/basement would include off-street loading spaces.

Like the variant, the Variant Partial Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic), and cumulative wind conditions, and less-than-significant impacts related to noise, other transportation subtopics, air quality, and shadow (with mitigation measures where identified).

Alternative 5 would not avoid the significant and unavoidable impact on historical resources, since the historic interior, including the ballroom, the southeast wall, and the roof of the historic north portion of the resource, would be demolished, thus resulting in a significant and unavoidable impact with mitigation measures. If Alternative 5 is chosen, mitigation measures for this alternative would be tailored to ensure that the Secretary of the Interior's Standards for documentation of historical resources are met.

Environmentally Superior Alternative

Pursuant to CEQA Guidelines section 15126.6(e)(2), an EIR is required to identify the environmentally superior alternative (the alternative that has the fewest environmental impacts) from among the alternatives evaluated if the proposed project or variant has significant impacts that cannot be mitigated to a less-than-significant level.

The No Project Alternative would not result in any change to existing environmental conditions. This alternative is considered the overall environmentally superior alternative, because the significant impacts associated with implementation of the proposed project or variant would not occur with the No Project Alternative. If the No Project Alternative is found to be the environmentally superior alternative, CEQA requires selection of the “environmentally superior alternative other than the no project alternative” from among the other alternatives.

Here, Alternative 2, the Proposed Project Full Preservation Alternative, would be the environmentally superior alternative to the proposed project. Alternative 4, the Variant Full Preservation Alternative, would be the environmentally superior alternative to the variant. Either of these full preservation alternatives would avoid a significant impact resulting from the demolition of the 10 South Van Ness historical resource. They would also result in the least intensive trip generation among all of the remaining alternatives, and would create the least shadow on public spaces. However, Alternatives 2 and 4 would still contribute to cumulatively considerable wind and construction transportation impacts.

S.4 AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

On the basis of public comments on the Notice of Preparation of an EIR (Appendix A to this EIR), and initial study (Appendix B to this EIR) potential areas of controversy for the proposed project include the following:

- Vehicular access
- Transportation impact study
- Encroachment permit
- Parking
- Public transportation
- Building height
- Open space
- Wind
- Unit mix
- Design options
- Loading and transportation network companies
- Vehicle miles traveled
- Cumulative impacts
- Bicycle transportation
- Access to public scoping meeting
- Pedestrian transportation mode and safety
- Loading and transportation network companies
- Housing supply and affordability
- Traffic and private shuttle buses
- Parking garage hours

- Truck traffic
- Housing supply and demand
- Cultural resources mitigation

See **Chapter 1, Introduction**, pp. 1.4-1.6, for a list of issues raised by comments on the NOP/IS and where those issues are addressed in the EIR.

1. INTRODUCTION

1.1 PROJECT SUMMARY

This environmental impact report (EIR) analyzes the potential environmental effects associated with the 10 South Van Ness Avenue Mixed-Use Project (proposed project). 10 SVN, LLC, the project sponsor, proposes to redevelop the property located on the southwest corner of the intersection of Van Ness Avenue and Market Street in central San Francisco. The project site is privately owned by 10 SVN, LLC, (the project sponsor) and totals approximately 1.17 acres. The proposed project would involve construction of two 400-foot-tall,¹ 41-story-over-podium buildings containing a total of 984 dwelling units, retail space on the ground floor, and two levels of underground parking. The project site would be developed in a single phase and would also include open space uses.

A variant is proposed in addition to the proposed project. The variant would involve construction of one 590-foot-tall,² 55-story tower over a podium structure, which would contain 984 dwelling units, ground-floor retail space, and two levels of underground parking. Either the proposed project or the variant would include a mid-block alley. The alley would be open air and accessible to the public and would serve as a pedestrian connection across the site (from South Van Ness Avenue to 12th Street under the proposed project or from Market Street to 12th Street under the variant).

Both the proposed project and the variant would involve improvements to 12th Street that are consistent with the base requirements of the Better Streets Plan. In addition, the project sponsor is considering an alternate set of improvements to 12th Street (referred to as the “straight-shot streetscape option” in this EIR) for both the proposed project and variant that would extend the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 to 40 feet in width on 12th Street. Under this option, the western sidewalk on 12th Street would be expanded to a width of 18 feet. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. Both proposed 12th Street options (the base option and the straight-shot streetscape option) were developed in coordination with 10 SVN, LLC, the San Francisco Planning Department (planning department), the San Francisco Municipal Transportation Agency, and the project sponsor for the adjacent 1629 Market Street Project and 30 Otis Street

¹ Including roof screens and elevator penthouses, the two buildings constructed under the proposed project would each be a total of 420 feet tall.

² Including roof screens and elevator penthouses, the building constructed under the variant would be a total of 610 feet tall.

Project, to create a “*living street*.”³ It would be located on 12th Street between Market Street and South Van Ness Avenue. (See Chapter 2, Project Description, for a complete project description.)

1.2 PURPOSE OF THIS EIR

This EIR for the proposed project was prepared in accordance with, and complies with, all criteria, standards, and procedures of the California Environmental Quality Act (CEQA), as amended (California Public Resources Code section 21000 et seq.); the CEQA Guidelines (California Code of Regulations title 14, section 15000 et seq.); and chapter 31 of the San Francisco Administrative Code. In accordance with CEQA section 21067 and sections 15367 and 15050–15053 of the CEQA Guidelines, the City and County of San Francisco (City) is the lead agency under whose authority this document has been prepared.

As described by CEQA and in the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, where feasible. In undertaking this duty, a public agency has an obligation to balance a proposed project’s significant effects on the environment with its benefits, including economic, social, technological, legal, and other nonenvironmental characteristics.

As defined in CEQA Guidelines section 15382, a “significant effect on the environment” is:

... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

CEQA states that before a discretionary decision can be made to approve a project that may cause a significant effect on the environment that cannot be mitigated, an EIR must be prepared. The EIR is a public information document for use by governmental agencies and the public to identify and evaluate the potential environmental impacts of a project, to identify mitigation measures to lessen or eliminate significant adverse impacts, and to examine feasible alternatives to the project. The City must consider the information in this EIR and make certain findings with respect to each significant effect identified. The decision-makers will review and consider the information in this EIR, along with other information available during the public review process, before they decide to approve, disapprove, or modify the proposed project, or to adopt an alternative to the proposed project.

³ A “living street” or “living alley” is an alley into which special paving, traffic calming, lighting, seating, greening, and other elements are introduced to create a shared space that prioritizes pedestrian access over vehicle use. More information is available at <http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/> (accessed June 23, 2017).

1.3 TYPE OF EIR

This document is a project-level EIR pursuant to CEQA Guidelines section 15161. A project-level EIR focuses on the changes in the environment that would result from construction and operation of a specific development project.

Furthermore, this EIR is a focused EIR pursuant to CEQA Guidelines section 15063(c). An initial study was prepared for the proposed project in accordance with section 15128 (see Appendix B of this EIR) and issued for public review on May 2, 2018. The initial study identified the topics for which the proposed project would result in less-than-significant impacts and therefore do not require further analysis, and the topics warranting more detailed environmental analysis in the EIR. Thus, this EIR focuses the environmental analysis on those topics identified in the initial study with the potential to have significant environmental impacts.

An EIR is an informational document used by a lead agency (in this case, the City) when considering approval of a project. The purpose of an EIR is to provide public agencies and members of the public with detailed information regarding the environmental effects of implementing a proposed project. An EIR should analyze a project's environmental consequences, identify ways to reduce or avoid the project's potential environmental effects, and identify alternatives to the project that can avoid or reduce impacts. This EIR provides information to be used in the planning and decision-making process. It is not the purpose of an EIR to recommend approval or denial of a project.

Before it can approve the project, the City, as the lead agency and decision-making entity, must certify that this EIR has been completed in compliance with CEQA, that the information in the EIR has been considered, and that the EIR reflects the City's independent judgment. CEQA requires decision-makers to balance the benefits of a project against its unavoidable environmental consequences. If environmental impacts are identified as significant and unavoidable, the City may still approve the project if it finds that social, economic, or other benefits outweigh the unavoidable impacts. The City would then be required to state in writing the specific reasons for approving the project, based on information in the EIR and other information sources in the administrative record. This reasoning is called a "statement of overriding considerations" (Public Resources Code section 21081; CEQA Guidelines section 15093).

In addition, the City must adopt a mitigation monitoring and reporting program describing the measures that were made a condition of project approval to avoid or mitigate significant effects on the environment (Public Resources Code section 21081.6; CEQA Guidelines section 15097). The mitigation monitoring and reporting program is adopted at the time of project approval and is designed to ensure compliance with the project description and EIR mitigation measures during and after project implementation. If the City decides to approve the project, it will be responsible

for verifying that the mitigation monitoring and reporting program for this project is implemented.

The EIR will be used primarily by the City during approval of future discretionary actions and permits.

1.4 CEQA ENVIRONMENTAL REVIEW PROCESS

Notice of Preparation and Public Scoping Process

In accordance with sections 15063 and 15082 of the CEQA Guidelines, the San Francisco Planning Department sent a Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting (NOP) regarding the proposed project to responsible and trustee agencies and interested entities and individuals on July 12, 2017, thus beginning the formal CEQA scoping process. The purpose of the scoping process is to allow the public and government agencies to comment on the issues and provide input on the scope of the EIR. The mailing list for the NOP included federal, state, and local agencies; regional and local interest groups; and property owners within 300 feet of the project site.

Pursuant to section 15083 of the CEQA Guidelines, the planning department held a public scoping meeting on August 2, 2017, starting at 6 p.m. at 1 South Van Ness Avenue in San Francisco. Attendees were given an opportunity to provide comments and express concerns about the potential effects of the project. four people spoke at the scoping meeting. The scoping period began on July 12, 2017, and ended on August 11, 2017.

Comments on the Notice of Preparation

Twelve comment letters, comment cards, and emails were received during the public scoping period. **Table 1.1: Summary of EIR Scoping Comments** summarizes the environmental concerns raised in these written communications. The table also cross-references the applicable EIR sections that address these comments.

Table 1.1: Summary of EIR Scoping Comments

Commenter	Comment Topic(s)	Coverage in the EIR
California Department of Transportation	Vehicular access Transportation impact study Encroachment permit	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation
San Francisco Transit Riders	Parking Public transportation	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation
Jim Warshell (one letter and one email)	Parking Building height Open space Wind Unit mix Design options	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind • Appendix B (initial study)
Robert Anderson	Wind Loading and transportation network companies Vehicle miles traveled	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind
Jason Henderson	Vehicle miles traveled Wind Loading and transportation network companies Cumulative impacts	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind
Shirley Johnson	Parking Vehicle miles traveled Bicycle transportation Wind Access to public scoping meeting	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind • Appendix A (notice of preparation)
Anna Sojourner	Parking Public transportation Bicycle transportation Pedestrian transportation mode and safety	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation
Elizabeth Creely	Parking Public transportation Bicycle transportation Pedestrian transportation mode and safety	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation
Ben Zotto	Loading and transportation network companies Public transportation Pedestrian transportation mode and safety Housing supply and affordability	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Appendix B (initial study)
Katherine Roberts	Parking Public transportation Bicycle transportation Pedestrian transportation mode and safety Wind	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind

Table 1.1: Summary of EIR Scoping Comments

Commenter	Comment Topic(s)	Coverage in the EIR
Sue Hestor	Wind Cumulative analysis Traffic Shuttle buses Parking E-commerce deliveries Housing demand Transit	<ul style="list-style-type: none"> • Section 4.5, Wind • Chapter 4, Environmental Setting and Impacts • Chapter 5, Alternatives • Section 4.2, Transportation and Circulation
James Dyer	Parking Traffic Transit	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation

Source: Compiled by AECOM in 2017

Initial Study

The planning department published an initial study for the proposed project on May 2, 2018 (the initial study is shown in Appendix B). The initial study was prepared to determine whether any aspect of the project, either individually or cumulatively, would cause a significant effect on the environment. The initial study narrowed the focus (or scope) of the environmental analysis by identifying which impacts would be less than significant (with or without mitigation) and therefore were adequately analyzed in the initial study, and which impacts require further study in the EIR. The initial study included the following findings:

- Impacts related to aesthetics and parking are not applicable to the project.⁴
- The project would result in less-than-significant impacts related to land use planning; aesthetics; population and housing; greenhouse gas emissions; recreation; utilities and service systems; public services; biological resources; geology and soils; hydrology and water quality; hazards and hazardous materials; and mineral and energy resources. These topics are not evaluated further in this EIR.
- The project would result in no impact related to agriculture and forestry resources.

⁴ Senate Bill 743 was signed into law on September 27, 2013; became effective on January 1, 2014; and amends CEQA by adding Public Resources Code section 21099 regarding analysis of aesthetics, parking, and transportation impacts for urban infill projects. Section 21099(d) provides that “aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.” Thus, aesthetics and parking are no longer to be considered in determining whether a project has the potential to result in significant environmental effects for projects that meet the following three criteria: (1) is located in a transit priority area; (2) is located on an infill site; and (3) is residential, mixed-use residential, or an employment center. Both the proposed project and the variant meet each of these three criteria: They are located near major transit routes and on an infill site that has been previously developed with industrial and commercial uses and surrounded by areas of either recently completed or planned urban development. Further, the proposed project and variant are both considered mixed-use residential use projects. Thus, this EIR does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

The initial study also found that the project would result in potentially significant impacts related to the topics of cultural resources, transportation and circulation, noise, air quality, wind, and shadow. All of these topics are included in this EIR. The analysis and conclusions of the initial study are incorporated into this EIR by reference.

Four written communications were received during the Initial Study public scoping period, which began on May 2, 2018, and ended on June 4, 2018. **Table 1.2: Summary of Comments on the Initial Study** summarizes the environmental concerns raised in these communications. The table cross-references the applicable EIR sections that address these comments.

Table 1.2: Summary of Comments on the Initial Study

Commenter	Comment Topic(s)	Coverage in the EIR
Jason Henderson Hayes Valley Neighborhood Assoc.	Vehicle miles travelled and traffic E-commerce loading demand and transportation network companies Wind Impacts Cumulative transportation and wind Impacts	<ul style="list-style-type: none"> • Section 4.2, Transportation and Circulation • Section 4.5, Wind
Mike Buhler San Francisco Heritage	Cultural resources mitigation	<ul style="list-style-type: none"> • Section 4.1 Cultural Resources (Historic Architectural)
Dennis Wong	Support for project	<ul style="list-style-type: none"> • Not Applicable

Source: Compiled by SWCA in 2018

Assembly Bill 900

On October 8, 2018, the Governor certified this project as an environmental leadership development project under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (Assembly Bill 900 or AB 900, as updated to comply with Senate Bill 734 and Assembly Bill 246).⁵ The planning department issued a public notice pursuant to CEQA sections 21092(b)(3) and 21178 on October 17, 2018.

AB 900⁶ provides streamlining benefits under CEQA for environmental leadership development projects and defines an environmental leadership development project as the following:

- the project is residential, retail, commercial, sports, cultural, entertainment, or recreational in nature;

⁵ State of California, Governor Edmund G. Brown, Jr., Governor's Recertification Granting Streamlining for the 10 South Van Ness Project in the City of San Francisco, October 8, 2018.

⁶ California Public Resources Code 21178 et. seq. and Governor's Office of Planning and Research, California Jobs (AB 900), *Governor's Guidelines for Streamlining Judicial Review Under the California Environmental Quality Act Pursuant to AB 900, Updated to Comply with Senate Bill 734 and Assembly Bill 246*. Available online at <http://opr.ca.gov/ceqa/california-jobs.html>, accessed September 6, 2018.

- the project, upon completion, will qualify for Leadership in Energy and Environmental Design (LEED) gold certification or better;
- the project will achieve at least 15 percent greater transportation efficiency than comparable projects;
- the project is located on an infill site and in an urbanized area; and
- for projects within a metropolitan planning organization's jurisdiction for which a sustainable communities strategy or alternative planning strategy is in effect, the infill project is consistent with the general use designation, density, building intensity and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, for which the California Air Resources Board has accepted that the strategy would achieve the greenhouse gas emission reduction targets.⁷

In order for the Governor to certify a leadership project, the project (or project applicant) must: (1) result in a minimum investment of \$100 million dollars in California upon completion of construction; (2) create high-wage, highly skilled jobs that pay prevailing wages and living wages and provide construction jobs and permanent jobs for Californians, and help reduce unemployment; (3) not result in any net additional greenhouse gas emissions; (4) comply with requirements for commercial and organic waste recycling; (5) have a binding agreement with the lead agency establishing the requirements set forth in Public Resources Code sections 21183(e) and (g); and (6) agree to pay the costs of the Court of Appeal in hearing and deciding any case.^{8,9} Multifamily residential projects certified as environmental development leadership projects are also required to provide unbundled parking, such that private vehicle parking spaces are priced and rented or purchased separately from dwelling units.

On December 18, 2017, the California Air Resources Board determined the proposed project would not result in any net additional greenhouse gas emissions for purposes of certification under AB 900.¹⁰

In accordance with the requirements of AB 900, the planning department has provided a record of proceedings for the proposed project that can be accessed and downloaded from the following website: <https://www.ab900record.com/10svn>. The record of proceedings includes the EIR and all other documents and materials submitted to, or relied upon by, the lead agency in the preparation of the EIR or the approval of the project. In addition, a document prepared by the lead agency or submitted by the applicant after the date of the release of the draft EIR that is a part of

⁷ California Public Resources Code Section 21180(b).

⁸ California Public Resources Code Section 21183.

⁹ Adam Tartakovsky, Vice President, 10 SVN, LLC, Letter agreeing to obligations under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (California Public Resources Code Section 21178 et seq., as amended by SB763 and AB 734), December 5, 2017.

¹⁰ California Air Resources Board, Executive Order G-17-081 Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for 10 South Van Ness Project. December 18, 2017.

the record of proceedings, and comments received on the draft EIR, will be made available to the public on this same website in a readily accessible electronic format within the timeframes specified by this act. Comments on this draft EIR should be emailed to CPC.10SouthVanNess@sfgov.org.

Within 10 days of the Governor certifying the proposed project as an environmental leadership development project, the planning department is required to issue a public notice stating that the applicant has elected to proceed under chapter 6.5 (commencing with section 21178) of the Public Resources Code, which provides, among other things, that any judicial action challenging the certification of the EIR or the approval of the project described in the EIR is subject to the procedures set forth in sections 21185 to 21186, inclusive, of the Public Resources Code. The planning department issued a public notice pursuant to CEQA sections 21092(b)(3) and 21178 on October 17, 2018.

As required by section 21185 of the Public Resources Code, the Judicial Council adopted rules of court that establish procedures applicable to actions or proceedings brought to attack, review, set aside, void, or annul the certification of the environmental impact report for an environmental leadership development project (certified by the Governor pursuant to this act) or the granting of any project approvals that require the actions or proceedings, including any potential appeals therefrom, be resolved, to the extent feasible within 270 days of the filing of the certified record of proceedings with the court. This creates an accelerated timeframe for CEQA litigation. The procedures can be found in California Rules of Court rules 3.2220 to 3.2231.

The provisions of AB 900 apply to projects that have been certified by the Governor as environmental leadership development projects by January 1, 2020. This act remains in effect until January 1, 2021.

Public Review

The City filed the notice of completion with the State Clearinghouse, indicating that this draft EIR has been completed and is available for review. The notice of availability of the EIR has been published concurrently with distribution of this document. This draft EIR is being circulated for a 45-day public review and comment period.

How to Comment on the Draft EIR

This draft EIR was published on October 17, 2018. There will be a public hearing before the San Francisco Planning Commission (planning commission) during the public review and comment period for this EIR to solicit public comment on the adequacy and accuracy of information presented in this draft EIR. The public comment period for this EIR is October 18, 2018 to December 11, 2018. The public hearing before the planning commission has been scheduled for December 6, 2018, in Room 400, City Hall, 1 Dr. Carlton B. Goodlett Place, San Francisco,

beginning at 1 p.m. or later. Please call (415) 558-6422 the week of the hearing for a recorded message that will identify the specific time of the public hearing.

During the public review and comment period for the draft EIR, comments from the general public, organizations, and agencies regarding environmental issues identified in the EIR and concerning the EIR's accuracy and completeness may be submitted to the lead agency at the following address:

Rachel Schuett
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Or

CPC.10SouthVanNess@sfgov.org

In addition, this draft EIR and all related technical appendices are available for review during the public review and comment period in the planning department office at 1650 Mission Street, Suite 400, San Francisco, CA 94103. Copies of this draft EIR are also available at the following location:

San Francisco Public Library
100 Larkin Street
San Francisco, CA 94102

Comments may also be made on this draft EIR in writing before the end of the comment period. The City will prepare written responses to all comments made at the public hearing and in writing. Upon completion of the public review and comment period, a final EIR will be prepared. The final EIR will include the comments on this draft EIR received during the formal public review period and responses to those comments.

Final EIR and EIR Certification

Following the close of the public review and comment period, the City will prepare and publish the final EIR, which will contain all written and recorded oral comments on this draft EIR and written responses to those comments, along with copies of the letters or emails received, and any necessary revisions to the draft EIR. Not less than 10 days before the San Francisco Planning Commission's hearing to consider certification of the final EIR, the final EIR will be made available to the public and to any board(s), commission(s), or department(s) that will carry out or approve the proposed project or variant.

The planning commission hearing will consider the documents and, if found adequate, will certify that the final EIR: (1) has been completed in compliance with CEQA; (2) was presented to the planning commission and the planning commission reviewed and considered the information contained in the final EIR before approving the proposed project or variant; and (3) reflects the lead agency's independent judgment and analysis. CEQA requires that agencies shall neither approve nor implement a proposed project unless the project's significant environmental impacts have been reduced to a less-than-significant level, essentially eliminating, avoiding, or substantially lessening the potentially significant impacts, except when certain findings are made. If an agency approves a project that would result in the occurrence of significant adverse impacts that cannot feasibly be mitigated to less-than-significant levels (that is, significant and unavoidable impacts), the agency must state the reasons for its action in writing, demonstrate that mitigation is infeasible based on the EIR or other information in the record, and adopt a statement of overriding considerations, as described above.

1.5 DOCUMENT ORGANIZATION

This EIR is divided into the following chapters and appendices:

- The **Summary** chapter provides a concise overview of the project, the environmental impacts that would result from the proposed project or variant, mitigation and improvement measures identified to reduce or eliminate these impacts, project alternatives and their comparative environmental effects, and areas of controversy and issues to be resolved.
- **Chapter 1, Introduction**, provides introductory information, including the history of the project, and identifies the lead agency for the project.
- **Chapter 2, Project Description**, presents a detailed discussion of the location, setting, and characteristics of the project site, the project objectives, project features, and environmental review requirements and approvals.
- **Chapter 3, Plans and Policies**, describes specific plans and policies that are relevant to the proposed project and variant.
- **Chapter 4, Environmental Setting and Impacts**, addresses the following topics: cultural resources (historic architectural); transportation and circulation; noise; air quality; wind; and shadow. Each topic section includes a description of existing conditions with respect to the particular environmental topic (environmental setting); the regulatory framework by topic; the approach to analysis, when appropriate; identification and evaluation of project-specific and cumulative impacts; and mitigation measures and improvement measures, when appropriate.
- **Chapter 5, Alternatives**, presents and analyzes alternatives to the proposed project and compares their environmental effects to those of the proposed project and variant. Four alternatives are described and evaluated: the No Project Alternative (Alternative 1), the Proposed Project Full Preservation Alternative (Alternative 2), the Proposed Project Partial Preservation Alternative (Alternative 3), the Variant Full Preservation Alternative (Alternative 4), and the Variant Partial Preservation Alternative (Alternative 5). This chapter also identifies the environmentally superior alternative and discusses alternatives considered but rejected as infeasible.

- **Chapter 6, Other CEQA Considerations**, describes the project's significant and unavoidable environmental impacts and the significant irreversible environmental changes that would result from project implementation.
- **Chapter 7, List of Preparers**, identifies City staff members and consultants who helped prepare the EIR and the persons and organizations consulted during the preparation of the EIR.
- **Appendix A** provides a copy of the Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting that was prepared for the project.
- **Appendix B** provides a copy of the Notice of Availability/Initial Study that was prepared for the project.

2. PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The project sponsor, 10 SVN, LLC, proposes to redevelop a 51,150-square-foot (1.17-acre) triangle-shaped property at the southwest corner of South Van Ness Avenue and Market Street, in the South of Market (SoMa) neighborhood of San Francisco, with a large residential complex with ground-floor retail. The northern end of the project site is occupied by the San Francisco Honda Dealership, a two-story, 30- to 45-foot-high building, and the southern end of the site encompasses a small, undeveloped area. The proposed 10 South Van Ness Avenue Mixed-Use Project would involve the demolition of the existing building and the construction of two 41-story towers. The towers would be 400 feet tall (420 feet total, including roof screens and elevator penthouses) and would contain a total of 984 dwelling units and retail space on the ground floor. Below grade, the two structures would be connected by two basement parking levels. New publicly accessible open space would be provided in the form of a new pedestrian-oriented right-of-way (or alley) that would run from South Van Ness Avenue to 12th Street under the proposed project or from Market Street to 12th Street under the variant, as discussed below.

The project sponsor is considering a variant to the proposed project that would include construction of a single 55-story tower over a podium structure. Under the variant, the tower would be up to 590 feet in height (610 feet total, including roof screens and elevator penthouses). The variant would be similar to the proposed project in that it would provide 984 dwelling units, ground-floor retail space, two levels of underground parking, and a pedestrian-oriented right-of-way through the project site.

Both the proposed project and variant would involve improvements to 12th Street that are consistent with the base requirements of the Better Streets Plan. In addition, the project sponsor is considering an alternate set of improvements to 12th Street (referred to as the “straight-shot streetscape option” in this EIR) for both the proposed project and variant that would extend the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 to 40 feet in width on 12th Street. The western sidewalk on 12th Street would be expanded to a width of 18 feet. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. In addition, both the proposed project and variant may include a street-level elevator to provide access to the San Francisco Municipal Railway (Muni) Metro station at Market Street and South Van Ness Avenue.

2.2 PROJECT SPONSOR OBJECTIVES

The project sponsor seeks to achieve the following objectives by undertaking the 10 South Van Ness Avenue Mixed-Use Project:

- Redevelop a large, underused site at a prominent location with a residential development that will serve as an iconic addition to the City’s skyline demarking the Market Street and Van Ness Avenue intersection and including a range of residential unit types and neighborhood-serving retail uses.
- Provide the maximum number of dwelling units on a site that currently has no housing, and was designated through community planning processes for higher density due to its proximity to downtown and accessibility to local and regional transit, in order to increase the city’s supply of housing, contribute to the City’s General Plan Housing Element goals, and the Association of Bay Area Governments’ Regional Housing Needs Allocation for San Francisco.
- Implement the objectives and policies of the Market & Octavia Area Plan and the proposed Market Street Hub Plan by activating a key site along the Van Ness Avenue and Market Street transit corridors, providing small business and employment opportunities, building housing that is affordable to a range of incomes, improving the quality and safety of the open space and streetscape, and providing other public benefits that would strengthen the mixed-use character of the neighborhood.
- Promote transit ridership by constructing a substantial number of new housing units at a major transit hub at the development density and building heights anticipated by the Market & Octavia Area Plan and the proposed Market Street Hub Plan.
- Encourage pedestrian activity and increase connectivity to the proposed Brady Park by creating a welcoming mid-block passageway that connects either South Van Ness Avenue to 12th Street under the proposed project or Market Street to 12th Street under the single-tower variant.
- Construct a project that qualifies as an Environmental Leadership Development Project (as defined by the California Jobs and Economic Improvement Through Environmental Leadership Act [AB 900], as amended) to promote environmental sustainability, transportation efficiency, greenhouse gas reduction, stormwater management using green technology, substantial economic investment, and job creation.
- Encourage and enliven pedestrian activity by improving 12th Street with wider sidewalks, street trees, special sidewalk paving, and bulb-outs, and developing ground-floor retail and public amenity space that serves neighborhood residents and visitors and responds to future users who will be accessing the site and future Bus Rapid Transit (BRT) stations in the area.
- Improve the architectural and urban design character of the project site by replacing the existing utilitarian structures with a prominent residential tower or towers that provide a transition between two planning districts and increase building heights at the corner of Market Street and Van Ness Avenue to demarcate the significance of this intersection.
- Provide publicly accessible open space on a site that would be privately owned by the project sponsor.

- Provide well-designed parking, loading, and other transportation facilities and amenities with adequate access to serve the needs of the project's residents, employees, and guests, and respond to the neighborhood context and location.
- Construct a high-quality project with enough residential floor area to produce a return on investment sufficient to attract private capital and construction financing.

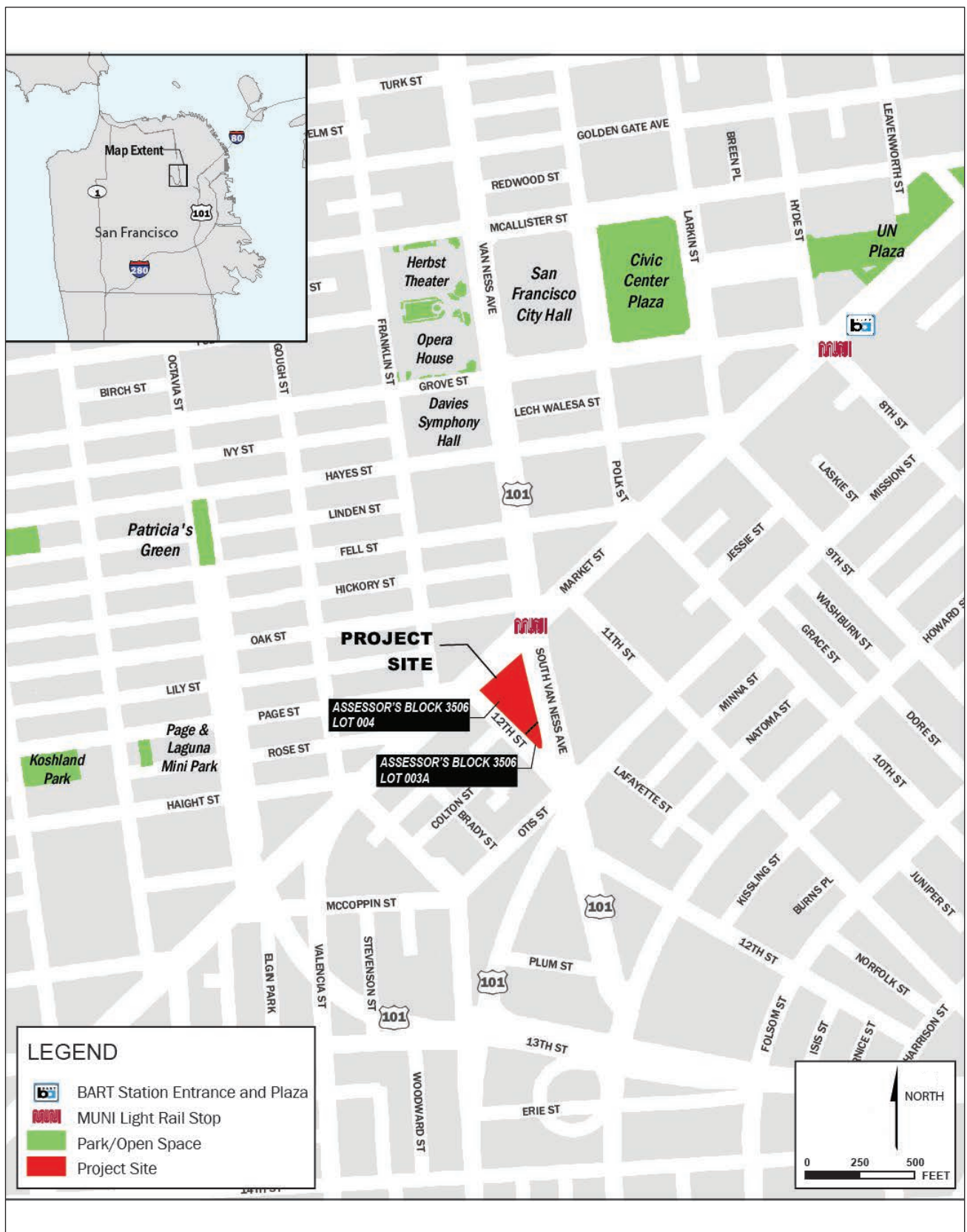
2.3 PROJECT LOCATION AND EXISTING CONDITIONS

Project Location

The 51,150-square-foot parcel is located at the southwest corner of Market Street and South Van Ness Avenue and comprises the entire block bounded by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west (see **Figure 2.1: Project Location** and **Figure 2.2: Project Site**). The project site comprises Assessor's Block 3506, Lots 004 and 003a, and is roughly triangular in shape.

Both South Van Ness Avenue and Market Street are major roadways through the Downtown/Civic Center and SoMa neighborhoods. South Van Ness Avenue, which becomes Van Ness Avenue north of Market Street, is a major north-south arterial through San Francisco and is considered U.S. Highway 101 (U.S. 101) between the Lombard Street and the Central Freeway portions of U.S. 101. Adjacent to the project site, South Van Ness Avenue has three travel lanes in each direction and parallel parking on both sides of the street. Market Street is a major east-west roadway through San Francisco that connects The Embarcadero to the Twin Peaks neighborhood. Market Street operates as a two-way roadway, generally with two travel lanes, for motorized modes of travel. Adjacent to the project site, eastbound Market Street has one mixed-flow travel lane, one dedicated-transit/taxi lane, and a bicycle lane. In the westbound direction, Market Street has two mixed-flow travel lanes and a bicycle lane.

The regional roadways that serve the project site are U.S. 101, Interstate 80, and Interstate 280. U.S. 101 provides access to and from the site via the adjacent South Van Ness Avenue, an on-ramp at South Van Ness Avenue and Division Street, and an off-ramp at Mission Street and Duboce Avenue. The intersection of South Van Ness Avenue and Market Street is also connected to the transit network via the subsurface San Francisco Municipal Railway (Muni) station at Market Street and South Van Ness Avenue, which is accessible from an entrance located along the Market Street frontage of the project site. This Muni station is served by the J, KT, L, M, and N Muni Metro light rail lines, and the aboveground Market Street and South Van Ness Avenue Muni bus and streetcar stops. These stops are served by the K Owl, L Owl, N Owl, 6, 7, 7R, 14, 47, 49, and 90 bus routes and the historic F line streetcar. The Civic Center Bay Area Rapid Transit (BART) station is also located 0.4 mile east of the project site on Market Street.



Source: AECOM (2017)

10 SOUTH VAN NESS MIXED-USE PROJECT

2015-004568ENV

FIGURE 2.1: PROJECT LOCATION



Source: Handel Architects (2016)

10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT

2015-004568ENV

FIGURE 2.2: PROJECT SITE

Existing Conditions

Project Site

The project site slopes gently downward to the south. The ground surface elevation of the project site is approximately 40 feet above mean sea level along Market Street and approximately 32 feet above mean sea level at the southern boundary of the site.

The project site is occupied by a 91,088-square-foot, two-story building, ranging from 30 to 45 feet in height, at the northern end of the site (Lot 004), and a small, undeveloped area at the southern end of the site (Lot 003A). The building was constructed in 1927. It is the former home of the Fillmore West concert venue and is considered to be a historic resource.¹ The building is currently occupied by the San Francisco Honda auto dealership (a former automobile service center on the project site was relocated in 2017, but the dealership remains open).

Surrounding Uses

The Muni Metro light rail tunnel and Van Ness station are located beneath Market Street approximately 30 feet north of the property line. The northern third of the project site includes a subsurface easement for the existing BART tunnel, the top of which is located 19.62 feet below grade. The bottom of the BART tunnel (also referred to as the “invert”) is approximately 85 feet below ground surface.² Six curb cuts and associated driveways are located along the perimeter of the project site: three curb cuts along South Van Ness Avenue, and three along 12th Street. There are no curb cuts along Market Street.

Along the west side of South Van Ness Avenue, there are six metered vehicle parking spaces, with five spaces subject to restricted hours for street cleaning (the no parking restriction is in effect between 12:01 a.m.–6:00 a.m.). The east side of 12th Street along the project site’s frontage has 10 general metered parking spaces, and one metered commercial loading space with restricted loading hours. On the west side of 12th Street, across from the project site, there are five general metered parallel parking spaces, 16 angled general metered parking spaces, three metered commercial loading spaces with restricted loading hours, one passenger loading space, and one parking space with Americans with Disabilities Act (ADA) access. Improvements to Van Ness and South Van Ness avenues between Aquatic Park and Mission Street are currently underway as part of the Van Ness Improvement Project. The Van Ness Improvement Project includes

¹ See EIR Section 4.1, Cultural Resources (Historic Architectural).

² Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation, 10 Van Ness Avenue*, March 16, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2015.004568ENV.

replacement of the water and sewer networks and infrastructure improvements to support the Van Ness Bus Rapid Transit system, which is currently under construction.³

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height and bulk districts) range from 40 to 400 feet. Several large, mixed-use commercial, office, and residential buildings are located along Van Ness and South Van Ness avenues and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses. The scale of the built environment generally increases in height traveling eastward along Market Street from the project site.

Class I and II bicycle facilities currently run along Market Street in both directions. The nearest San Francisco Bike Share station is approximately 120 feet to the east of the project site on the east side of South Van Ness Avenue, directly across the street from the project site.

Existing Zoning/Height and Bulk Requirements

The project site is within the South of Market neighborhood of San Francisco, which borders the Civic Center neighborhood. The project site is also within the Market & Octavia Area Plan area, the Downtown-General (C-3-G) zoning district, and the Van Ness and Market Downtown Residential Special Use District (SUD). The northern portion of the site is in the 120-R-2 height and bulk district, and the southern portion is in the 120/400-R-2 height and bulk district (see **Figure 2.3: Zoning Districts and Height and Bulk Districts**). These height and bulk districts allow for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower, or towers, of up to 400 feet in height on the southern portion of the site. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in San Francisco Planning Code (planning code) section 270(e)(2).

Per planning code section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gross square feet. Per planning code section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate, unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the controls for the R-2

³ San Francisco Municipal Transportation Agency, Van Ness Improvement Project, Spring 2017, https://www.sfmta.com/sites/default/files/projects/2017/VN_Newsltr_17.02_170502.pdf, accessed July 5, 2017.

bulk district. The permitted floor area ratio (FAR) in the C-3-G zone is 6:1.⁴ The existing FAR of the project site is approximately 2:1.

2.4 PROJECT CHARACTERISTICS

With the proposed project, the existing San Francisco Honda dealership on the project site would relocate and the existing 91,088-square-foot, two-story, 30- to 45-foot-tall building would be demolished. The proposed project would result in the construction of a new 1,071,095-gross-square-foot, 984-unit development consisting of two 41-story, 400-foot-tall (420 feet including roof screens and elevator penthouses) mixed-use residential towers which would be connected below grade by a parking garage.

Proposed Project Site Plan

The two tower volumes would be separated by a mid-block alley running from 10 South Van Ness Avenue to 12th Street, defining a north tower and a south tower. Each tower would have its own central building entrance lobby along the west side of South Van Ness Avenue (see **Figure 2.4: Proposed Project – Ground Floor Plan**).

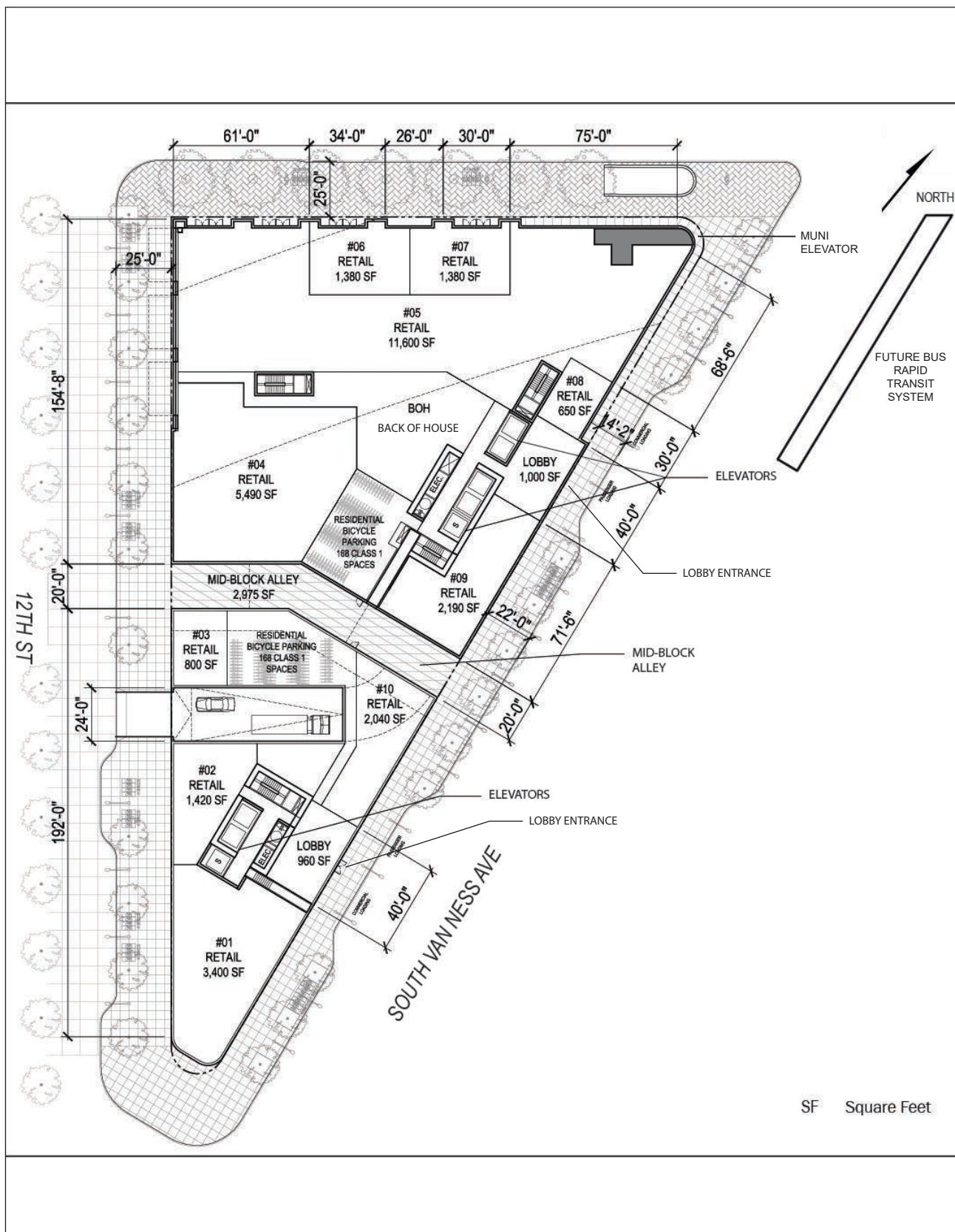
Proposed Project Development Program

The proposed development program is summarized in **Table 2.1: Summary of Proposed Project Uses**, p. 2.11.

Residential Use

As shown in Table 2.1, the proposed project would include a total of 984 units totaling 935,745 gross square feet of residential uses. The proposed project would include the following mix of unit sizes: 375 studios, 461 one-bedroom units, 100 two-bedroom units, and 48 three-bedroom units. The north tower would include approximately 267 studios, 294 one-bedroom units, 51 two-bedroom units, and 19 three-bedroom units. The south tower would include approximately 108 studios, 167 one-bedroom units, 49 two-bedroom units, and 29 three-bedroom units.

⁴ FAR is the gross floor area of a building or buildings on a zoning plot divided by the area of such zoning plot. FAR is calculated to determine whether the mass and scale of a structure is compatible with zoning district requirements. In the Van Ness and Market Downtown Residential SUD FAR greater than 6:1 is allowed with payment of development impact fees (the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee).



Source: Handel Architects (2016)

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FIGURE 2.4: PROPOSED PROJECT - GROUND FLOOR PLAN

Table 2.1: Summary of Proposed Project Uses

BUILDING AREAS	Gross Square Feet
TOTAL	1,071,095
Residential Space	935,745
Residential Parking	102,000
Retail/Restaurant	30,350
Rooftop Mechanical	3,000
DWELLING UNITS	No. of Units
TOTAL	984
Studio	375
One Bedroom	461
Two Bedroom	100
Three Bedroom	48
PARKING, LOADING, AND BICYCLE SPACES	No. of Spaces
Residential Parking	491
Retail Parking	14
Carshare	6
Off Street Freight Loading	7
Bicycle Spaces	
Class 1	336
Class 2	61
OPEN SPACE	Square Feet
Publicly Accessible	2,975
Common Residential	45,176
Private Residential	0

Source: 10 South Van Ness LLC, One Oak Owner, LLC, 2018

Retail Use

The proposed retail spaces, totaling 30,350 gross square feet, would include 10 retail spaces ranging in size from 800 to 11,600 square feet. The retail uses would front onto South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The retail spaces would all have a minimum floor-to-ceiling height of 19 feet.

Proposed Project Upper-Floor Plans

The north tower and south tower would each consist of a podium base surmounted by a tower form.

At Level 2, a passageway bridge would connect the two tower podiums and would feature openings to the mid-block alley below. Shared residential amenities for project residents would be located at Level 2 (see **Figure 2.5: Proposed Project – Level 2 Floor Plan**).

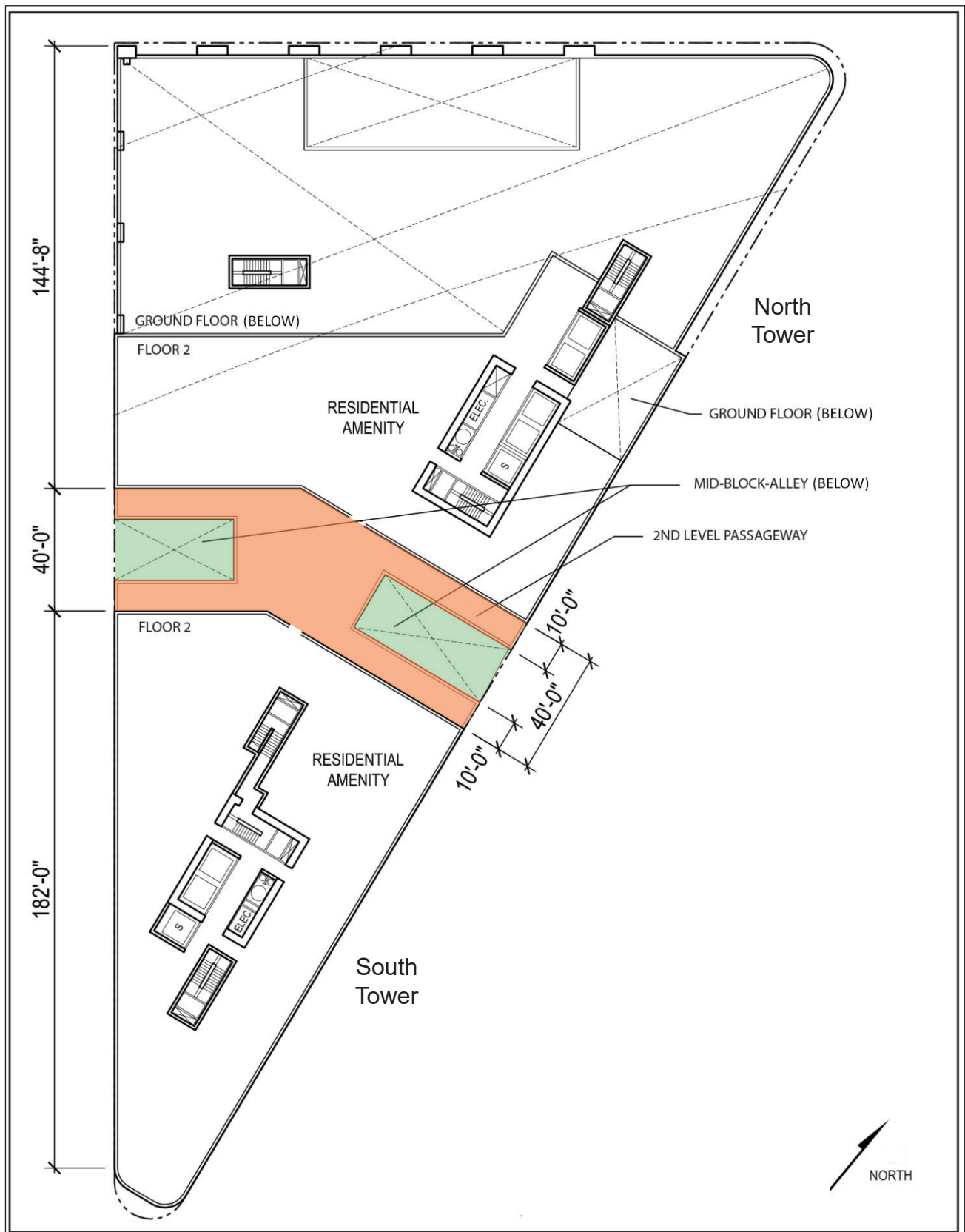
Levels 3 through 12 would include residential units within the podium levels of each tower (see **Figure 2.6: Proposed Project – Levels 3 through 12 Representative Floor Plan**).

Levels 13 through 22 of the north tower would be stepped back from Market Street, 12th Street, and the mid-block alley to form a residential tower feature atop the north tower podium (see **Figure 2.7: Proposed Project – Levels 13 through 22 Representative Floor Plan**). The northern corner of the north tower would be blunted with a “chamfer” feature extending each floor successively northward, from the 13th floor through the 22nd floor.

Levels 13 through 22 of the south tower would be stepped back from the mid-block alley to the north to form a residential tower feature atop the south tower podium. The minimum tower separation between the north tower and the south tower at these levels would be 115 feet. As at Level 2, at Level 13 a passageway bridge would span the north tower and south tower podiums and would feature openings to the mid-block alley below.

Levels 23 through 41 would be similar to Levels 13 through 22, except that these tower floors would be above the chamfer feature and would therefore be uniform from floor to floor (see **Figure 2.8: Proposed Project – Levels 23 through 41 Representative Floor Plan**).

The roof level of the north tower would include a roof terrace at the northern end of the roof. Mechanical enclosures and an elevator penthouse would occupy the southern end of the north tower roof (see **Figure 2.9: Proposed Project – Roof Plan**). The roof level of the south tower would include a roof terrace at the southern end of the roof. Mechanical enclosures and an elevator penthouse would occupy the northern end of the south tower roof.



Source: Handel Architects (2016)

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**FIGURE 2.5: PROPOSED PROJECT -
LEVEL 2 FLOOR PLAN**

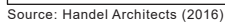


Source: Handel Architects (2016)

10 SOUTH VAN NESS MIXED-USE PROJECT

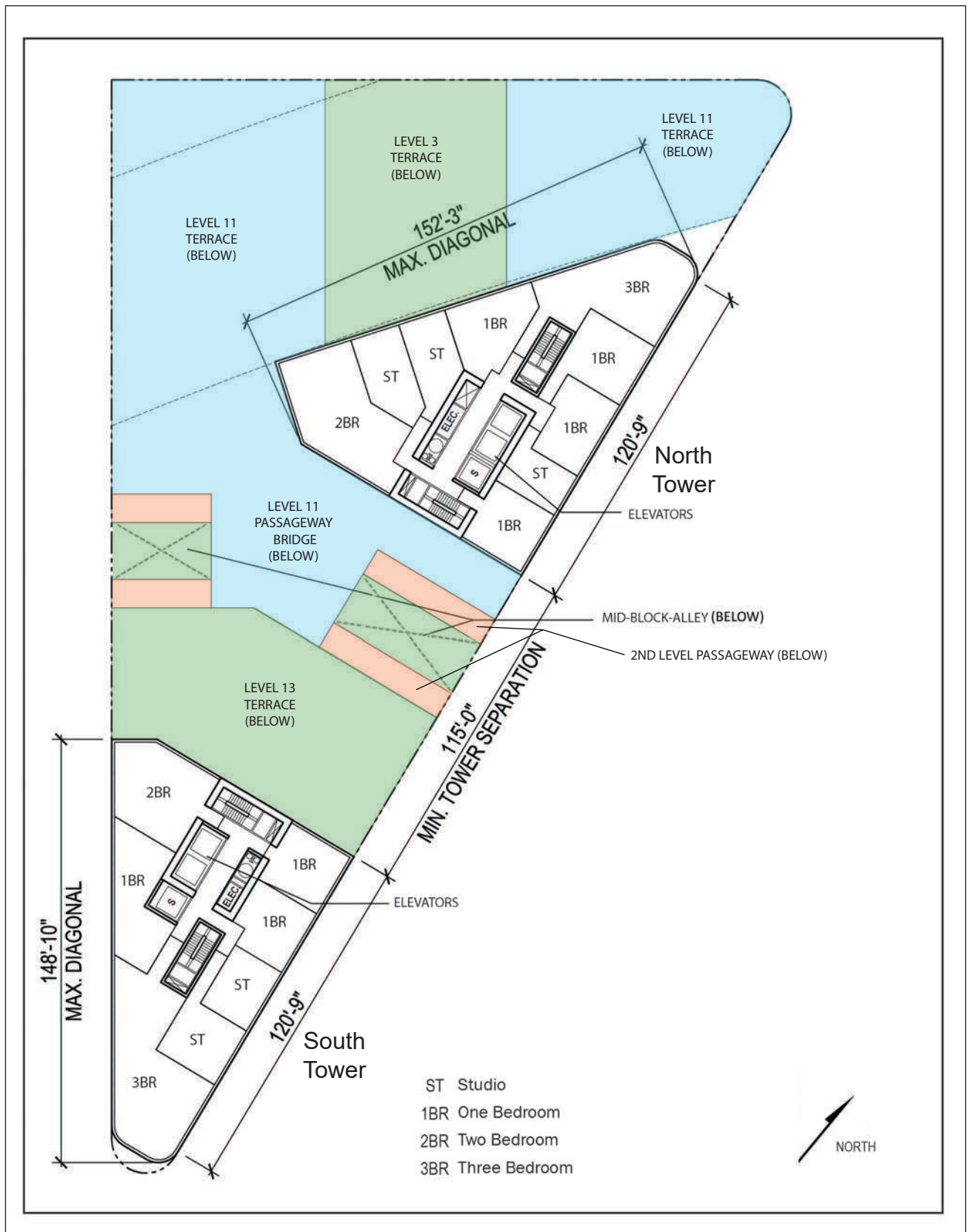
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FIGURE 2.6: PROPOSED PROJECT - LEVELS 3 THROUGH 12 REPRESENTATIVE FLOOR PLAN



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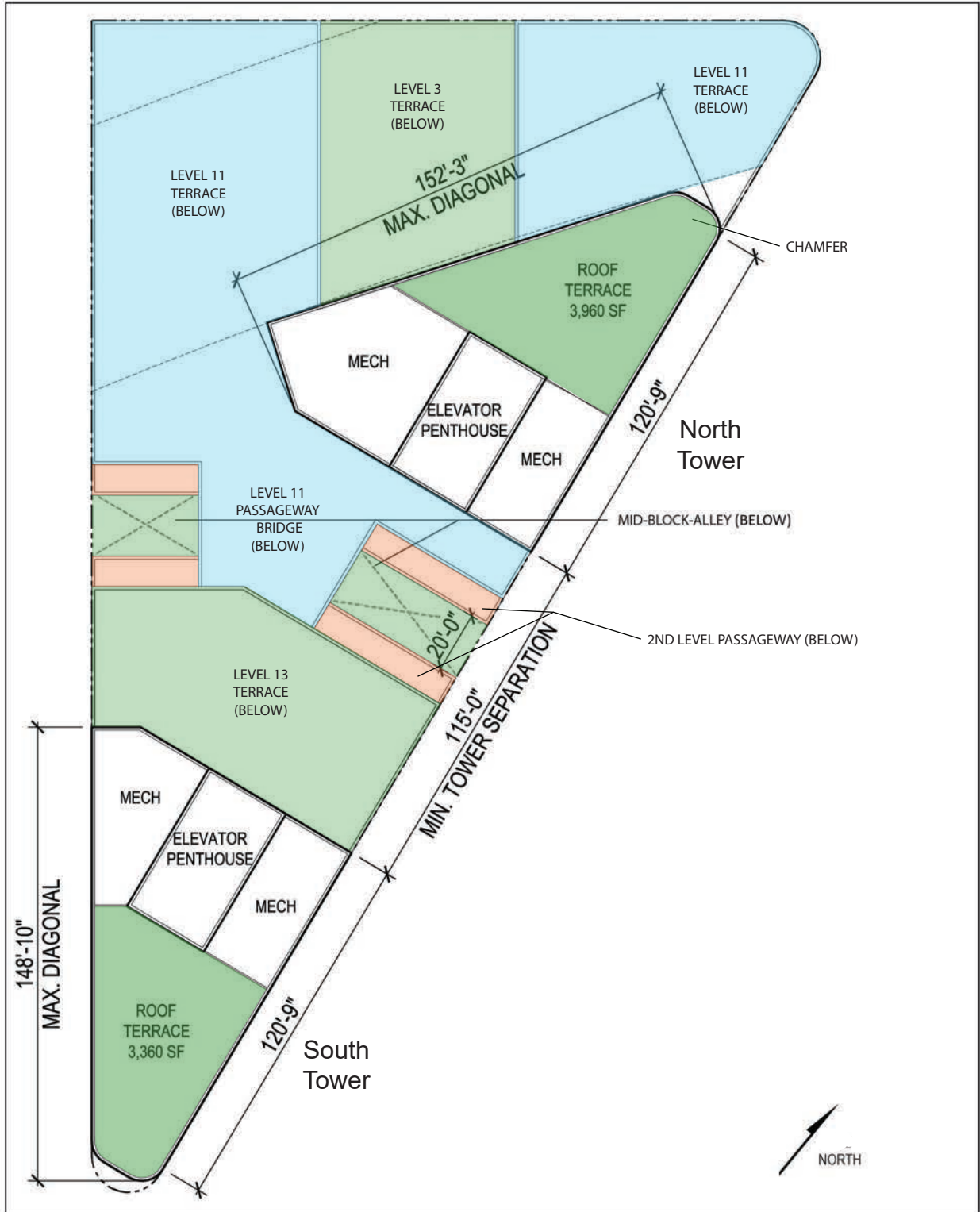


Source: Handel Architects (2016)

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FIGURE 2.8: PROPOSED PROJECT - LEVELS 23 THROUGH 41 REPRESENTATIVE FLOOR PLAN



Source: Handel Architects (2016)

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FIGURE 2.9: PROPOSED PROJECT - ROOF PLAN

Proposed Project Elevations and Renderings

Each tower would have a maximum height of 400 feet (420 feet total, including roof screens and the elevator penthouse on each tower).⁵ The tower podiums would contain the ground floor through Level 12, and the towers would contain Levels 13–41. The towers would be separated by a minimum of 115 feet. The north tower podium would be 114 feet in height, and the south tower podium would be 120 feet in height.⁶ (See **Figure 2.10: Proposed Project – Building Elevation South Van Ness Avenue (East) Façade**; **Figure 2.11: Proposed Project – Building Elevation Market Street (North) Façade**; and **Figure 2.12: Proposed Project - Rendering Looking East from Market Street**.)

Site Access and Circulation

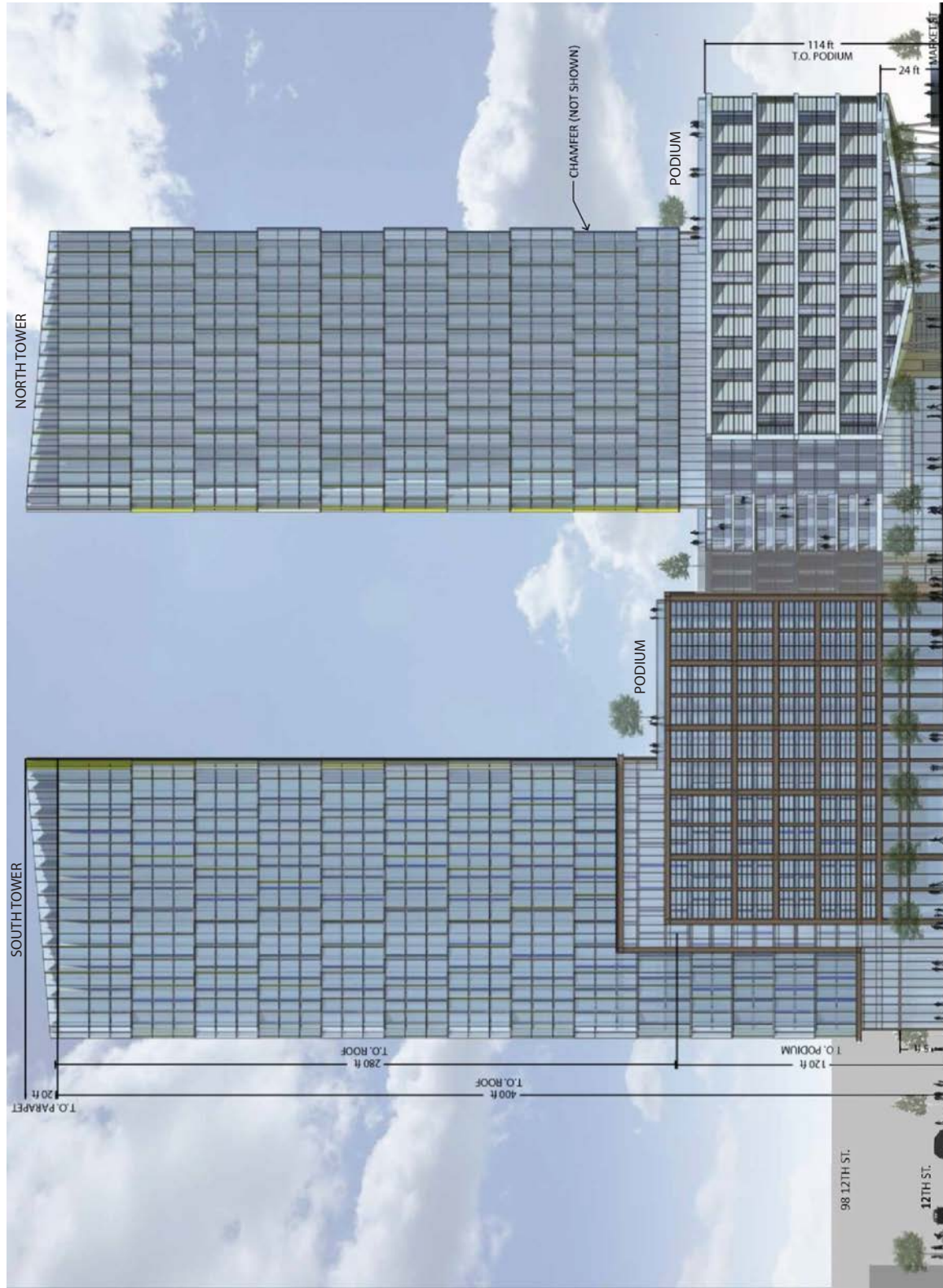
The proposed project would remove the existing curb cuts along South Van Ness Avenue and 12th Street and replace them with a single, new 24-foot-wide curb cut along 12th Street. This would provide vehicle access (two 10-foot-wide lanes for two-way, bi-directional traffic) to the parking garage for residents and retail visitors, as shown in Figure 2.4, p. 2.10. In addition to stairs, two elevators would provide access to the residential lobbies from the parking garage/basement. From the residential lobbies, a second elevator would provide access to each tower. Elevator access would also be available between the below-grade parking garage/basement and the ground-floor retail spaces. As described above, two street-level residential entrances, one for each tower, would be located along South Van Ness Avenue. Pedestrian access to the retail spaces would be from South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The proposed mid-block alley would also provide public access through the project site between South Van Ness Avenue and 12th Street.

Bicycle Parking

The proposed project would provide 336 class I bicycle parking spaces in two secure bicycle rooms on the north and south tower podiums' ground floor: 332 for residential use and four for retail use, as shown on Figure 2.4. On-street bicycle parking would include 61 class II bicycle parking spaces, 49 for residential use and 12 for retail use.

⁵ Pursuant to planning code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the planning code height limits, but are considered in the context of environmental review.

⁶ A height of 114 feet and 120 feet for the north and south tower podiums, respectively, is consistent with the height and bulk district for the site (120-R-2).

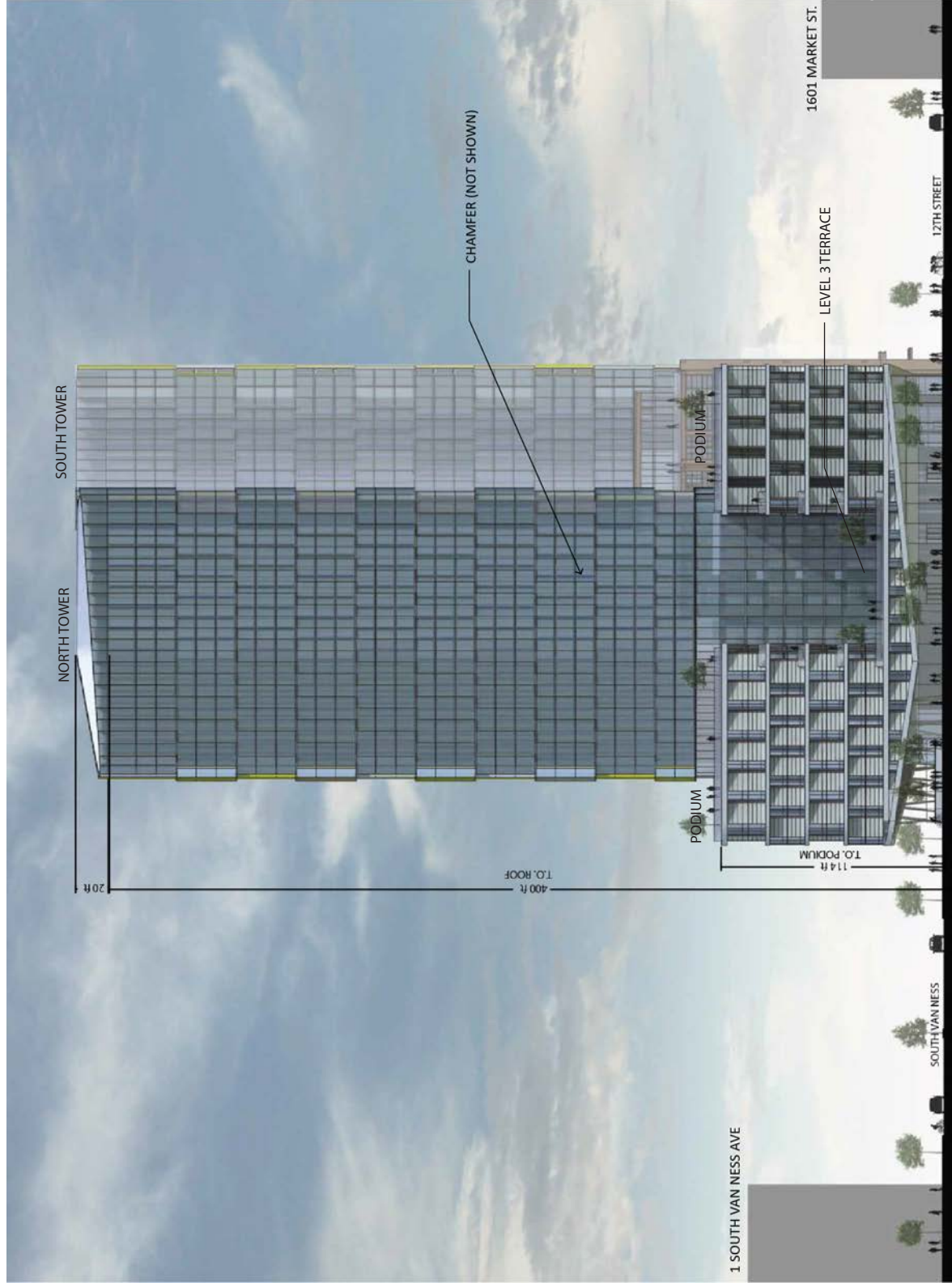


Source: 10 SVN LLC (2017)

10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT

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FIGURE 2.10: PROPOSED PROJECT - BUILDING ELEVATION
SOUTH VAN NESS AVENUE (EAST) FAÇADE

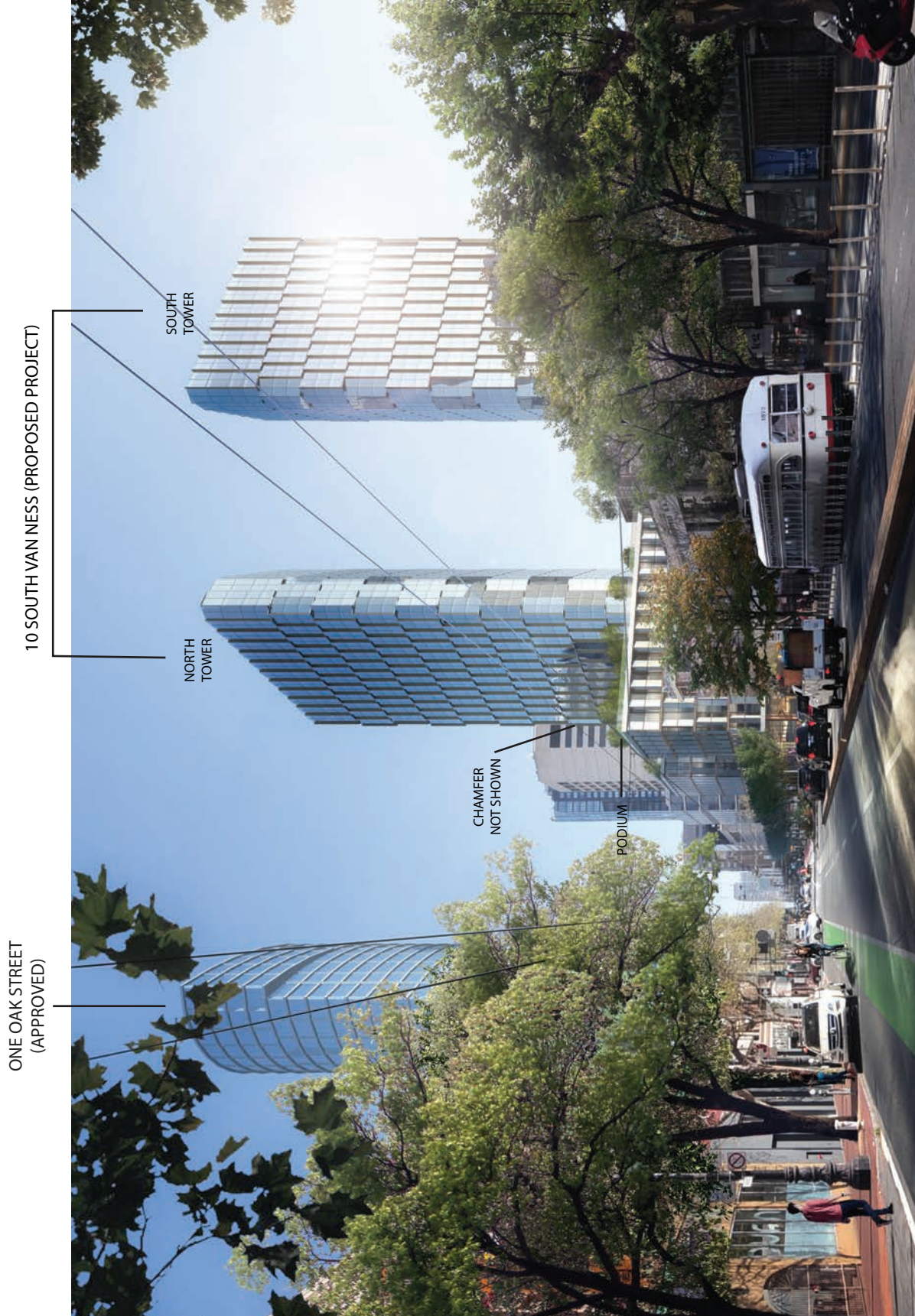


Source: 10 SVN LLC (2017)

10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT

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FIGURE 2.11: PROPOSED PROJECT - BUILDING ELEVATION
MARKET STREET (NORTH) FAÇADE



Source: KPF Associates (2018)

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FIGURE 2.12: PROPOSED PROJECT - RENDERING
LOOKING EAST FROM MARKET STREET

Access to the proposed class I bicycle parking spaces would be provided via a secured doorway to the bicycle room on the mid-block alleyway near 12th Street. The class I bicycle parking spaces would be for residents and retail visitors and the bicycle storage room would also be connected to the building's lobby. The on-site class I bicycle parking would be accessible to the Market Street bike lane via 12th Street and the mid-block alley. A bicycle repair station would be located within the building. The class II bicycle parking spaces would be located along Market Street, 12th Street, and South Van Ness Avenue within the sidewalk areas.

Parking and Loading

The proposed project would include 102,000 gross square feet of parking and building services, with up to 518 accessory vehicle parking and loading spaces, in two basement levels, as shown in **Figure 2.13: Proposed Project – Parking Garage / Basement Plan**. Ingress and egress for the secured garage would be provided via a single curb cut on 12th Street. The proposed project would include 491 spaces for residential use, 14 spaces for retail use, and 6 spaces for car-share vehicles. In addition, a total of seven off-street freight-loading spaces would be located in the two basement levels: three standard freight-loading spaces and four service vehicle spaces. One freight-loading space would accommodate up to a 45-foot-long vehicle.

The majority of the parking spaces would be provided in stackers and would not be independently accessible. The garage would be staffed 24 hours per day, seven days per week by a valet service, via a valet station within the garage. The valet would serve residents, visitors, and car-share users. Valet staff would also direct delivery and moving trucks.

Trash storage would also be located in the garage/basement, adjacent to an accessible loading area. The garage/basement would be secured, and would be accessible only to residents and retailers.

Transportation Demand Management

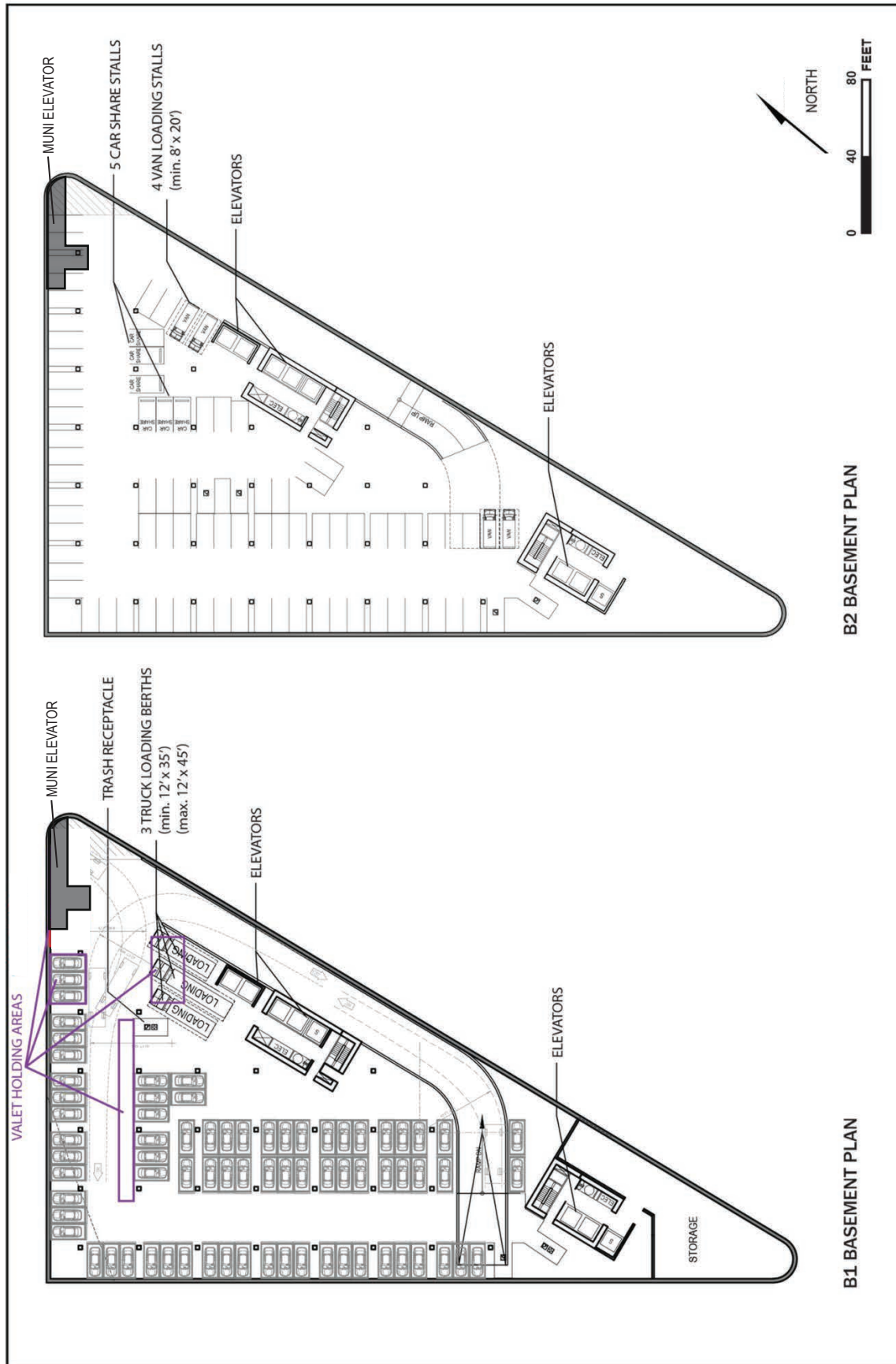
The proposed project would result in more than 10 dwelling units and thus would be required to comply with San Francisco Planning Code section 169, Transportation Demand Management Program (added by Ordinance 34-17, approved February 2017). As required under planning code section 169, the project sponsor is required to develop a transportation demand management (TDM) plan that includes measures that would be implemented by the property owner to reduce single-occupancy driving to and from the project site. Compliance with the project's TDM plan

Source: Handel Architects (2016), SITELAB Urban Studio (2017)

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FIGURE 2.13: PROPOSED PROJECT - PARKING GARAGE/BASEMENT PLANS



would be included as a Condition of Approval for the proposed project and would be subject to monitoring by the San Francisco Planning Department (planning department) for the life of the project.⁷

The TDM plan for the proposed project would be comprised of the following TDM measures:

PKG-1: Unbundle Parking. Unbundle⁸ parking in transportation analysis zone 578, where the project site is located.

PKG-4: Parking Supply. Provide parking at a rate that is less than or equal to 80 percent and greater than 70 percent of the neighborhood residential parking rate.

ACTIVE-1: Improve Walking Conditions. Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by: widening the sidewalk along the east side of 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed.

The streetscape improvements would meet TDM ordinance criteria by providing the following 10 streetscape elements defined in Table 1 of planning code section 138.1:⁹

- High-visibility crosswalks
- Special crosswalk treatments
- Mid-block crosswalks
- Raised crosswalks
- Extended bulb-outs¹⁰
- Mid-block bulb-outs
- Reuse of “pork chop islands”¹¹ and excess right-of-way
- Shared public ways
- Pedestrian-only streets
- Aboveground landscaping

⁷ According to planning code section 169, a property owner must facilitate a site inspection by the planning department before issuance of a certificate of occupancy, and must document implementation of applicable aspects of the TDM plan, maintain a TDM coordinator, allow for department inspections, and submit periodic compliance reports throughout the life of the project.

⁸ Where the cost of a parking space is separated from the cost of rent, lease, or ownership.

⁹ Table 1: Pedestrian and Streetscape Elements per the Better Streets Plan (section 138.1), [http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$sync=1](http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sync=1).

¹⁰ A bulb-out is a [traffic calming](#) measure, which reduces the crossing distance for pedestrians by extending the sidewalk.

¹¹ Pork chop islands are irregularly shaped, raised islands placed between a right-turn slip lane and through-travel lanes.

ACTIVE-2: Bicycle Parking. Provide class I and class II bicycle parking spaces as required by the planning code. The proposed project would provide 332 class I and 49 class II bicycle spaces for the residential use, and four class I and 12 class II bicycle spaces for the retail use.

ACTIVE-5A: Bicycle Repair Station. Provide on-site tools and space for bicycle repair. The proposed project would provide this repair station within the class I bicycle parking area on the building's ground floor.

CSHARE-1: Car-Share Parking. Provide car-share space parking spaces as required by the planning code. The proposed project would provide six car-share spaces, to be located on Level B2.

DELIVERY-1: Delivery Supportive Amenities. The proposed project would facilitate delivery services by providing a staffed reception area for receipt of deliveries and offering one of the following: (1) clothes lockers for delivery services, or (2) temporary storage for package deliveries, laundry deliveries, and other deliveries. These amenities would be provided on Level B1.

FAMILY-1: Family TDM Amenities. The proposed project would provide an onsite secure location on Level B1 for storage of personal car seats, strollers, and cargo bicycles or other large bicycles.

INFO-1: Multimodal Wayfinding Signage. The proposed project would provide multimodal wayfinding signage in key locations to support access to transportation services and infrastructure, including transit, bike share, car-share parking, bicycle parking and amenities (including repair stations and fleets), showers and lockers, taxi stands, and shuttle/carpool/vanpool pick-up/drop-off locations.

INFO-2: Real Time Transportation Information Displays. The proposed project would provide real time transportation information on displays in prominent locations on the project site and within the buildings to highlight sustainable transportation options and support informed trip-making.

INFO-3: Tailored Transportation Marketing Services. The property owner would provide promotions and welcome packets to all new residents/employees, personal consultation for each new resident/employee, and request commitment to try new transportation options.

Streetscape Improvements

The proposed streetscape plan, called the "Market Octavia Streetscape Plan," would conform to Market & Octavia Area Plan and the Better Streets Plan and is shown in **Figure 2.14: Proposed Project–Market Octavia Streetscape Plan and 12th Street Section**. Under the Market Octavia Streetscape Plan, the eastern and western sidewalks along 12th Street would be expanded from 15 feet to a width of 21 feet (4 feet of frontage, 8 feet of pedestrian throughway, and 9 feet of pedestrian furnishing space). Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets. A raised crosswalk would be installed at the intersection of 12th and

Stevenson streets. The “pedestrian island” at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection.

Two 60-foot-long white and yellow loading zones¹² are proposed along the South Van Ness Avenue frontage, near the entrances to the residential lobbies, to provide an area for passenger drop-off and pick-up, and commercial loading activities. Proposed changes to the right-of-way are described below. Four passenger and commercial loading zones are proposed on 12th Street, one 100-foot-long loading zone and one 40-foot-long loading zone on each side of 12th Street. Each 100-foot loading zone would include one ADA loading space, one ADA parking space, one passenger loading space, one commercial loading space, and one regular parking space. Each 40-foot loading zone would include one passenger loading space and one commercial loading space.

In addition to the streetscape improvements described above, 33 net new street trees would be planted along the perimeter of the project site frontage. Class II bicycle racks, with capacity for 61 bicycles, would be installed along South Van Ness Avenue, Market Street, and 12th Street, in compliance with the City’s Better Streets Plan.

Muni Elevator

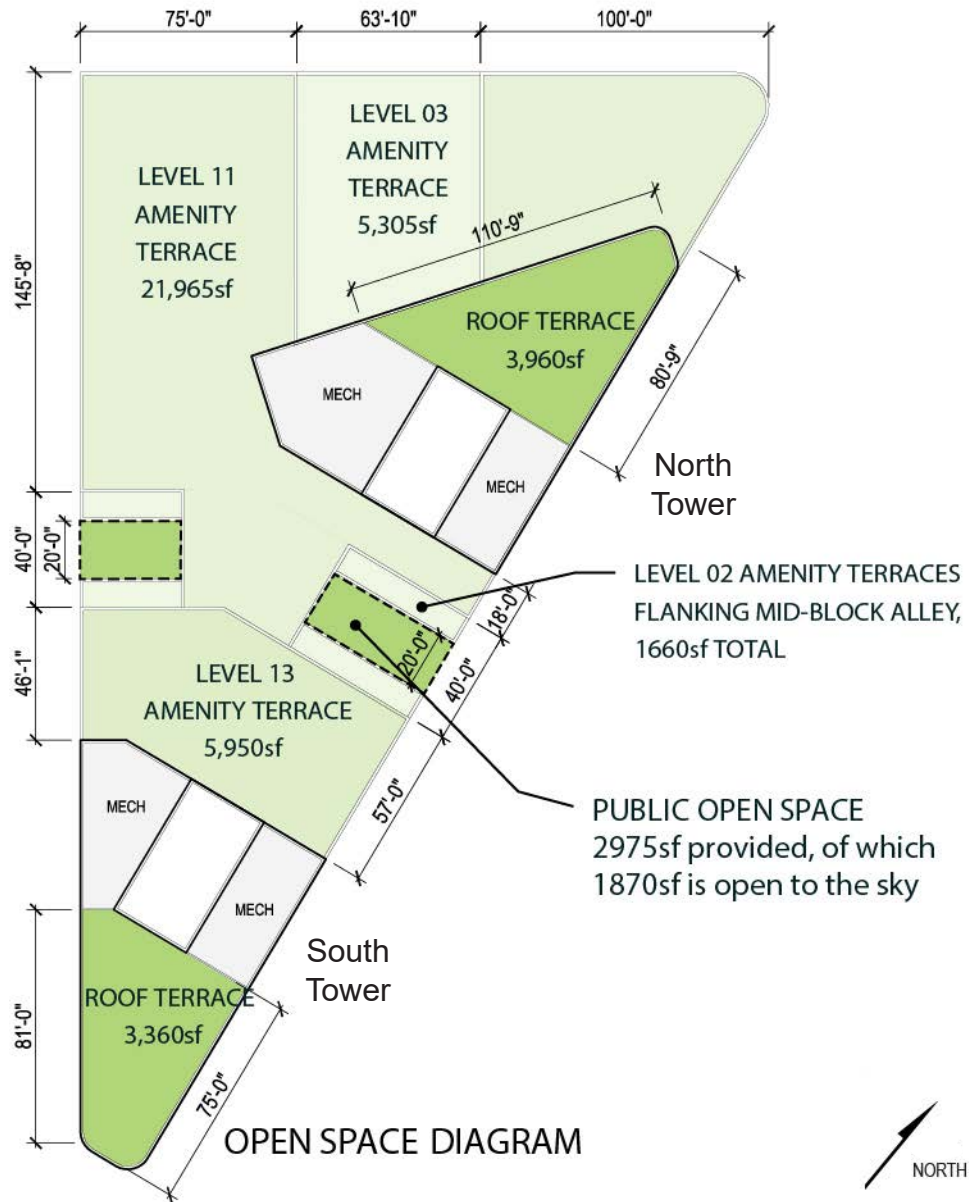
The proposed project may include construction of a new station entrance to the Muni Metro station at Market Street and South Van Ness Avenue, via a new elevator, in order to enhance ADA accessibility to the station. The specific location of the proposed elevator is not known at this time, but it would be located within a short distance from the intersection of Market Street and South Van Ness Avenue. The subterranean areas necessary to accommodate the Muni station elevator would likely require the relocation of certain structural elements of the 10 South Van Ness Avenue building to an area beneath the 12th Street right of way and could result in changes to the basement level plan.

Open Space

The proposed project would include 48,150 square feet of usable open space per planning code section 135, which would be provided through a combination of publicly accessible open spaces and common open spaces for residents. Publicly accessible open space would include the 2,975-square-foot mid-block alley between the two tower podiums, which would provide a pedestrian connection between South Van Ness Avenue and 12th Street. Privately accessible common open spaces would include amenity terraces on Level 2 of both tower podiums, Levels 3 and 11 of the north tower, Level 13 of the south tower, and on the roofs of both towers, as shown in

Figure 2.15: Proposed Project – Open Space Diagram.

¹² White zones are for passenger loading and unloading during certain hours, with a time limit of five minutes. Yellow zones are for commercial loading activities.



Source: 10 SVN LLC (2017)

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FIGURE 2.15: PROPOSED PROJECT - OPEN SPACE DIAGRAM

Sustainability

The San Francisco Building Code includes a chapter on requirements for green buildings; these requirements establish either Leadership in Energy and Environmental Design (LEED)¹³ certification levels or Green Point Rated¹⁴ system points for types of proposed residential and commercial buildings. The proposed project would seek LEED Gold certification, which includes measures applicable to both construction and operation of the proposed project. The proposed project would incorporate a number of sustainability features, including stormwater and rainwater collection features and a wastewater treatment system. The wastewater treatment system would be sized to treat and utilize recycled water from the proposed building for nonpotable uses in the building, including flushing toilets, irrigation, and cooling tower water for the HVAC system. The proposed project would remove the existing 28 trees along the perimeter of the project site frontage on all three sides of the property. In compliance with Public Works Code section 806(c)(2), the proposed project would install 61 new street trees, with one tree every 20 feet along the perimeter of the project site frontage, for a total of 33 net new street trees.

The project sponsor has obtained a certification from the Governor's Office which qualifies the proposed project as an environmental leadership development project pursuant to Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, and the California Environmental Quality Act (CEQA) section 21178 et seq. An environmental leadership development project does not result in any net increase in greenhouse gas (GHG) emissions and achieves a 15 percent higher standard for transportation efficiency than comparable projects. The California Air Resources Board (ARB) provided a letter of determination on December 18, 2017, stating that the proposed project would not result in any net additional GHG emissions and authorized the governor to certify the project. The governor's signature was received on December 21, 2017, certifying that the project is an environmental leadership development project.^{15, 16}

¹³ LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which involves third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, indoor air quality, use of recycled materials, and proximity to public transportation.

¹⁴ Green Point Rated is a program of Build it Green, established for evaluating residential building performance in the areas of resource conservation, indoor air quality, water conservation, energy efficiency, and livable communities (infill development, increased density, diversity of land uses).

¹⁵ The certification process for environmental leadership development projects is separate from the environmental review process conducted for the proposed project.

¹⁶ On August 7, 2018, the project sponsor applied to the Governor's Office for recertification as an environmental leadership development project. ARB confirmed on August 13, 2018 that it continues to concur with its GHG analysis for the proposed project, dated as of December 18, 2017. The governor's recertification of the project is anticipated in October 2018.

Wind-Reducing Features

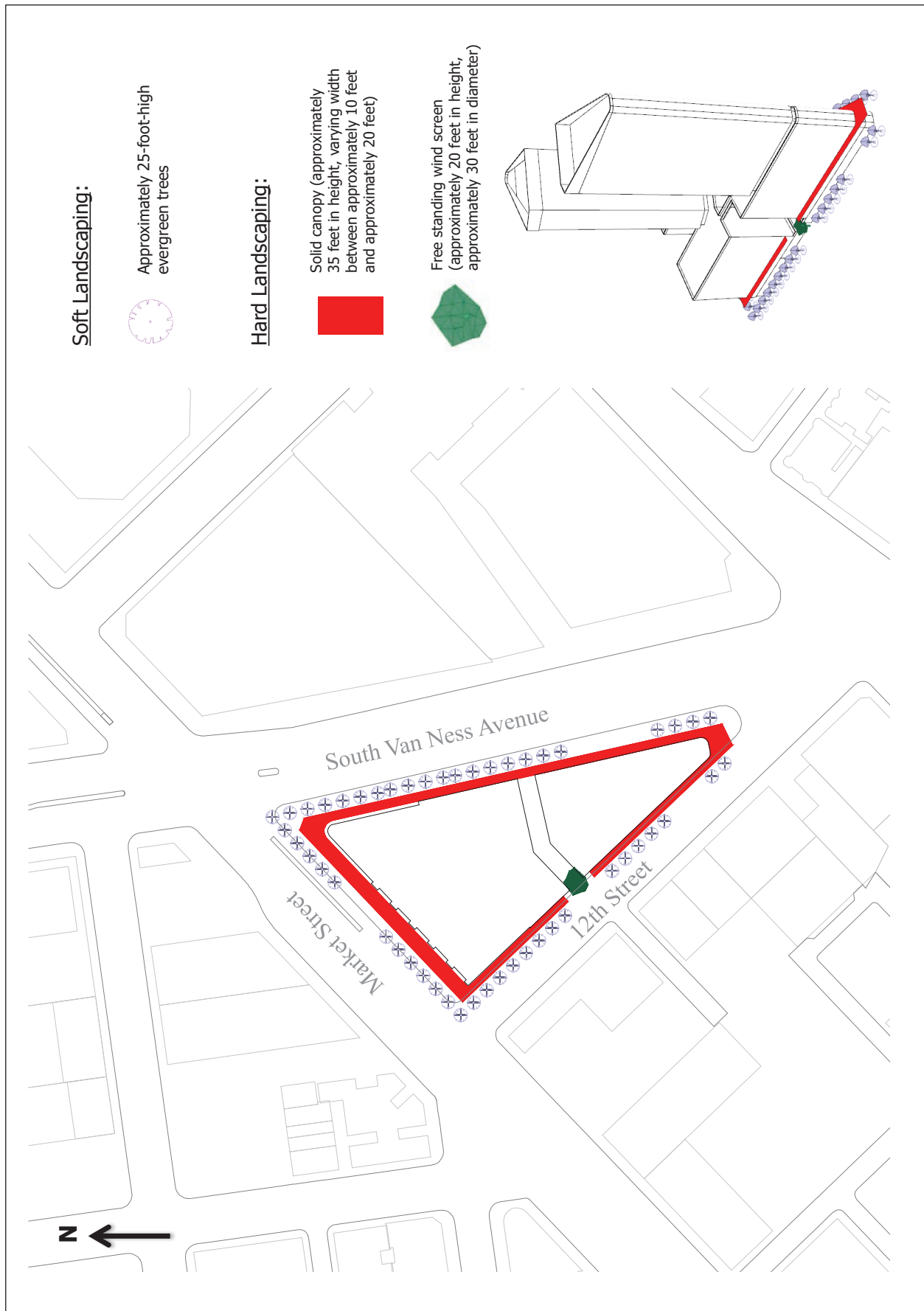
The proposed project incorporates building massing features (including the podium, building articulation, and the north tower chamfer) that were developed through wind tunnel testing in order to improve the building's performance with respect to wind safety and comfort impacts.

The proposed project would include canopy and landscape features that are intended to further reduce ground-level wind speeds and enhance pedestrian safety and comfort, specifically 25-foot-tall evergreen street trees lining the adjacent sidewalks, a 35-foot-tall attached wind canopy or canopies (varying in width between 10 and 20 feet) around the perimeter of the building's podium, and a 20-foot-tall free-standing wind screen (approximately 30 feet in diameter) at the 12th Street entrance to the mid-block passage under the proposed project. (See **Figure 2.16: Proposed Project - Wind-Reducing Features.**) These features would be subject to further design refinement during implementation of mitigation measure M-C-WI-1: Design Measures to Reduce Cumulative Wind Impacts based on further analysis to identify design measures that may reduce the project's contribution to off-site wind impacts in the cumulative-plus-project setting (see p. 4.5.15), and for aesthetic reasons.

In addition, the proposed project includes 25-foot-tall evergreen trees that would be planted along the east side of South Van Ness Avenue (along the 1 South Van Ness Avenue frontage), consistent with those to be planted along the east side of South Van Ness Avenue as part of the 1500 Mission Street project that is currently under construction.

Construction

This section describes the construction activities associated with the proposed project. Construction is anticipated to occur over approximately 36 months and would include the following phases: (1) demolition; (2) shoring and excavation; (3) foundation and podium construction; (4) towers/superstructure/skin; and (5) interior work. Construction hours would typically be from 7 a.m. to 8 p.m., Monday through Thursday; and 7 a.m. to 5 p.m. on Fridays and Saturdays. Limited evening work (8 p.m. to 7 a.m.) and work on weekends (7 a.m. to 5 p.m.) would be required for phases 3 and 4.



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FIGURE 2.16: WIND-REDUCING FEATURES

As discussed on p. 2.6, a subsurface BART easement runs underneath the northern portion of the project site, as shown in Figure 2.2, p. 2.5. In this portion of the site, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnel. The northern portion of the project site is within the BART zone of influence (ZOI, the area outside of, but adjacent to, the BART tunnel superstructure, where BART review and approval of plans are required to ensure that construction within the ZOI would not adversely affect BART facilities).¹⁷ The portion of the structure within the BART easement would be supported by a concrete mat foundation, which would ensure that the existing load imposed on the BART tunnel is maintained. Outside of the easement, but within the BART ZOI, the tower and podium structures would be supported by a deep foundation consisting of double-cased, drilled cast-in-place piers. The installation of drilled cast-in-place piers involves digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving would be required. Outside of the BART easement and ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation.¹⁸ Construction methods for the proposed project, including construction depth, techniques, and approval processes, are discussed in detail in the Geology and Soils section of the initial study for this project.¹⁹

Construction activities would require temporary sidewalk and parking-lane closures for the entire construction period. The proposed project would develop and implement a construction management plan to anticipate and minimize transportation-related impacts of various construction activities associated with the proposed project. The construction management plan would ensure that overall circulation in the project area is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle access and connectivity. The program would supplement and expand, rather than modify or supersede, any manual, regulations, or provisions set forth by the San Francisco Municipal Transportation Agency (SFMTA), the San Francisco Public Works Department or other City departments and agencies, and the California Department of Transportation.

2.5 VARIANT COMPONENTS

The project sponsor is considering a variant to the proposed project that consists of a single, taller tower and a podium. With the variant, the building would be 590 feet tall and would have 55

¹⁷ While there are no legislated requirements related to construction noise or vibration near the Bay Area Rapid Transit (BART) subway structures, the agency requires that design and construction documents be submitted for review and approval, that dewatering monitoring and recharging plans be submitted if applicable, and that steel-lined BART tunnels be monitored for vibration effects (movement and deformation) during construction.

¹⁸ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation, 10 Van Ness Avenue, San Francisco California*, March 16, 2017.

¹⁹ San Francisco Planning Department, *Notice of Availability of the Initial Study for the 10 South Van Ness Avenue Mixed Used Project: Planning Department Case No. 2015-004568ENV; State Clearinghouse No. 2017072018* (Appendix B to this EIR).

stories.²⁰ Similar to the proposed project, the variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 610 feet.²¹

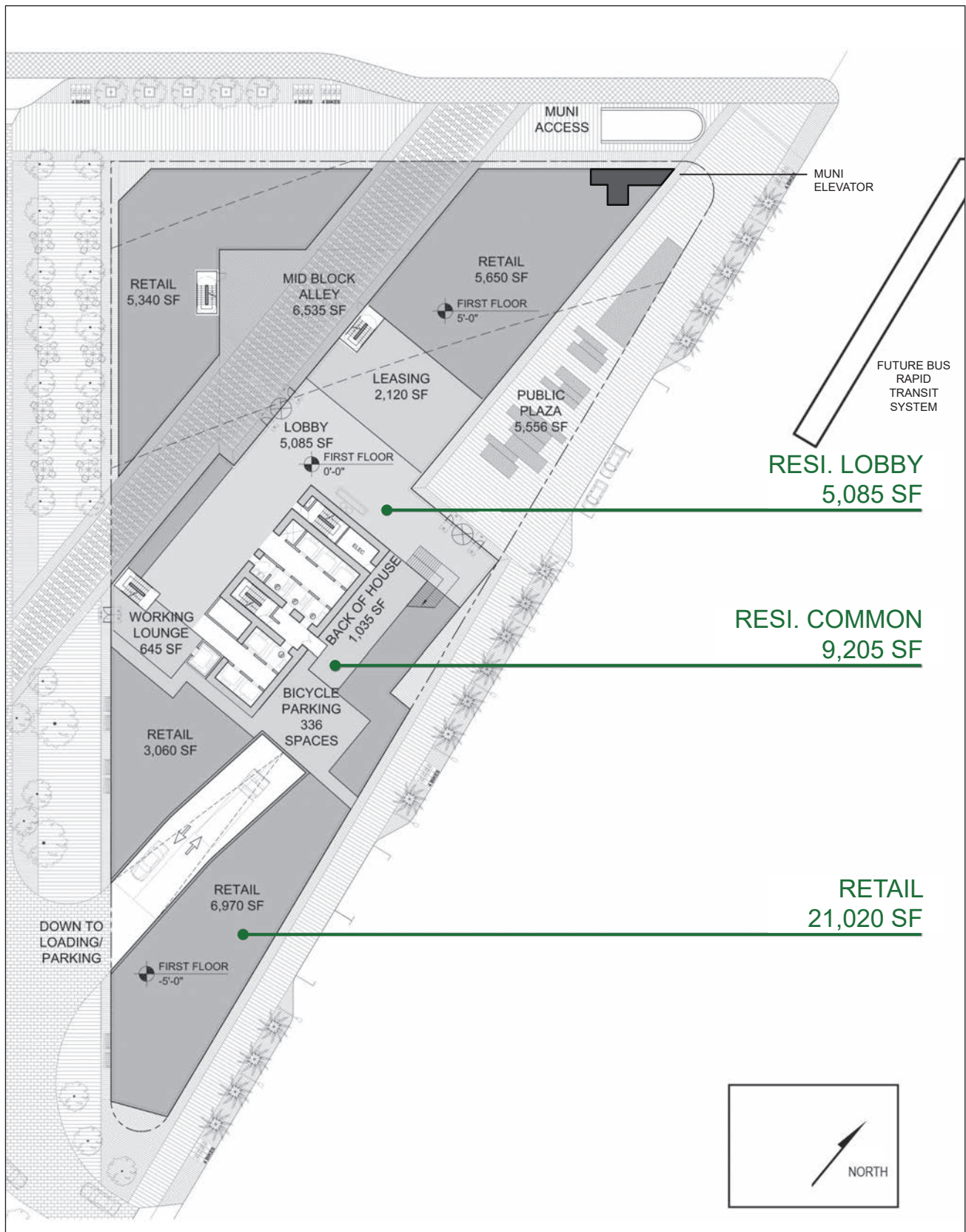
Variant Site Plan

Like the proposed project, the variant would require relocation of existing uses and demolition of existing structures on the project site. The ground floor would contain the same uses as the proposed project, including retail uses (see **Figure 2.17: Variant – Ground Floor Plan**) and a single residential lobby. The pedestrian entrances to the residential lobby would be located on South Van Ness Avenue and on the mid-block alley. One elevator from the parking garage/basement would provide access to the residential lobby. From the residential lobby, a second elevator would provide access to the tower. Elevator access may also be available between the below-grade parking garage/basement and the retail spaces.

As with the proposed project, 336 class I bicycle spaces would be provided on the ground floor for project residents and ground-floor retail spaces, and 61 class II bicycle spaces would be provided on the sidewalks adjacent to the project site, to meet planning code requirements. The variant would also include a mid-block alley running from Market Street to 12th Street and a public plaza along South Van Ness at the northeast corner of the site. The mid-block alley would serve as a pedestrian connection and public open space.

²⁰ The Van Ness and Market Downtown Residential SUD encourages transit-oriented, high-density, mixed-use residential neighborhood development around the intersections of Market Street and Van Ness Avenue and Mission Street and Van Ness Avenue. The current height limit for building towers ranges from 250 to 400 feet. The variant is intended to reflect the potential changes to the existing height limits proposed by the Market Street Hub Project. The Hub Project is expected to propose changes to existing height limits on certain parcels, including the project site, to provide greater variation in the heights of buildings proposed at the intersection of Market Street and Van Ness Avenue and to better ensure that the area's growth supports the City's goals for housing, transportation, the public realm, and the arts. The specific changes to the existing height limits proposed by the Hub Project have not yet been established.

²¹ Pursuant to planning code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the planning code height limits, but are considered in the context of environmental review.



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FIGURE 2.17: VARIANT - GROUND FLOOR PLAN

Variant Development Program

The variant development program is summarized and compared to that of the proposed project in **Table 2.2: Summary of Variant Uses Compared to Proposed Project.**

Table 2.2: Summary of Variant Uses Compared to Proposed Project

	Proposed Project	Variant
BUILDING AREAS	Gross Square Feet	
TOTAL	1,071,095	1,072,989
Residential Space	935,745	935,242
Residential Parking	102,000	102,000
Retail/Restaurant	30,350	30,450
Rooftop Mechanical	3,000	5,297
DWELLING UNITS	No. of Units	
TOTAL	984	984
Studio	375	347
One Bedroom	461	449
Two Bedroom	100	166
Three Bedroom	48	22
PARKING, LOADING, AND BICYCLE SPACES	No. of Spaces	
Residential Parking	491	491
Retail Parking	14	14
Carshare	6	6
Off-Street Freight Loading	7	7
Bicycle Spaces		
Class 1	336	336
Class 2	61	61
OPEN SPACE	Square Feet	
Publicly Accessible	2,975.	12,091
Common Residential	45,176	25,565
Private Residential	0	9,550
<i>Source: 10 South Van Ness LLC, One Oak Owner, LLC, 2017</i>		

Residential Use

As shown in Table 2.2, like the proposed project, the variant would include a total of 984 units, totaling 935,242 gross square feet of residential uses. The variant would include the following mix of unit sizes: 347 studios, 449 one-bedroom units, 166 two-bedroom units, and 22 three-bedroom units.

Retail Use

The variant retail spaces would total 30,450 gross square feet and would include four retail spaces ranging in size from 3,060 to 6,970 square feet. The retail uses would front onto South Van Ness Avenue, Market Street, 12th Street, and the mid-block alley.

Variant Upper Floor Plans

Most of the Level 2 space would be occupied by the double-height volume of the ground-floor lobby and retail uses. Multipurpose amenity space for use by building residents would be located at the southern portion of Level 2. Residential units and ancillary residential uses would be provided on Levels 3-55.

The podium would range from 13 stories (139 feet, 9 inches) at the north end and 15 stories (164 feet, 10 inches) at the south end (see **Figure 2.18: Variant - Representative Podium Floor Plan**). Above the podium, a tower form would rise from the center of the site (see **Figure 2.19: Variant – Representative Tower Floor Plan**).

Variant Elevations and Renderings

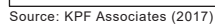
As shown on **Figure 2.20: Variant – Building Elevations**, the proposed variant would be composed of a central tower form rising from a podium of varied heights. The design is intended to articulate the overall massing of the building into a varied composition of smaller-scaled horizontally and vertically oriented forms. (See also **Figure 2.21: Variant - Rendering Looking South from Van Ness Avenue**.)

Site Access and Circulation

The proposed variant would include the same circulation and access as the proposed project, with the exception of the location of lobby entrances and the configuration of the mid-block alley. For the proposed variant, there would be two entrances to the single residential lobby, one from the mid-block alley and one from South Van Ness Avenue. The proposed mid-block alley would provide public access through the project site between Market Street and 12th Street.

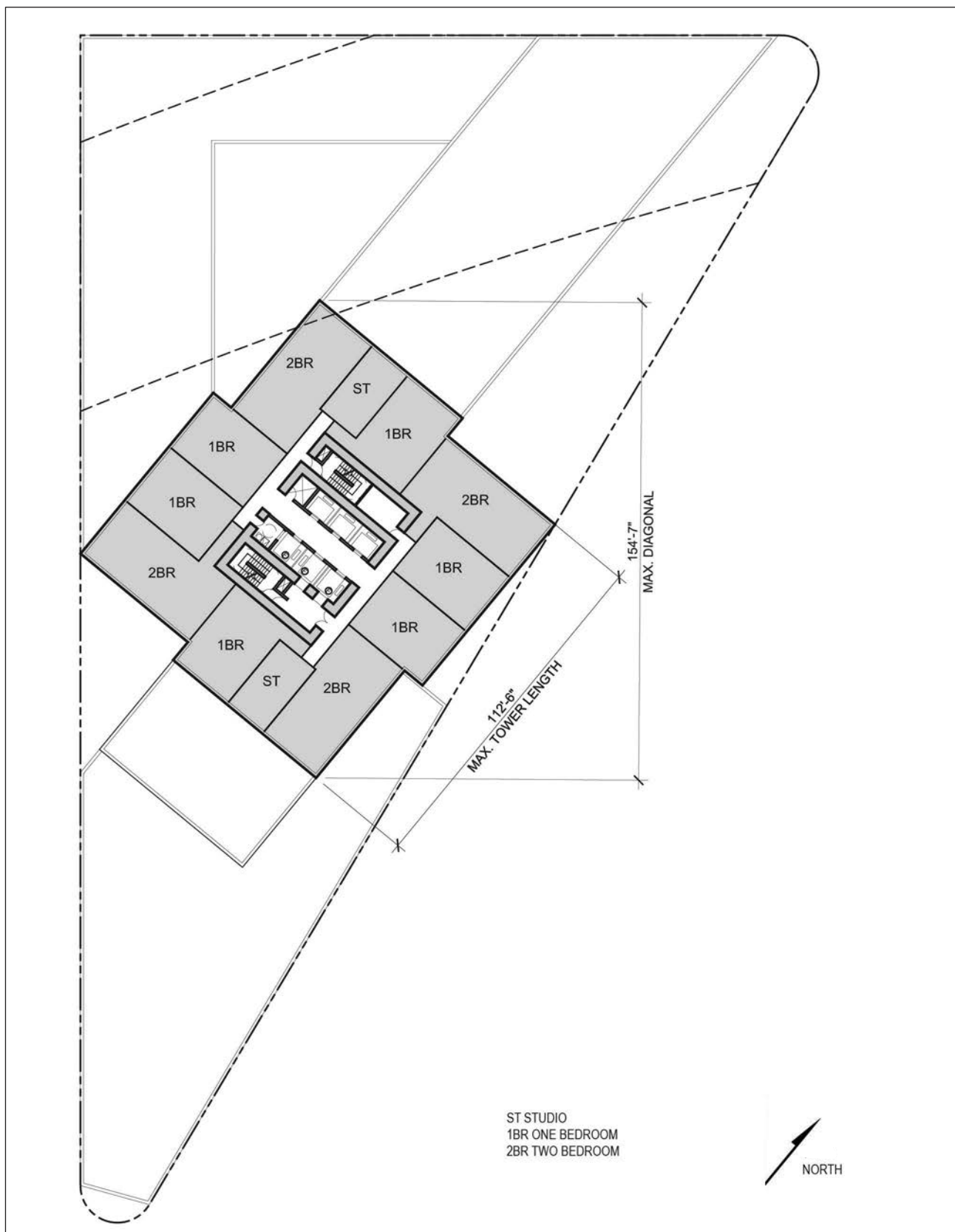
Bicycle Parking

The proposed variant would provide 336 class I bicycle parking spaces (332 for residential use and 4 for retail use) in secure bicycle rooms, accessible from entrances along each right-of-way, on the ground floor and potentially the first basement level. On-street bicycle parking would include 61 class II bicycle parking spaces, 49 for residential use and 12 for retail use, which would be located within the public right-of-way along Market Street, 12th Street, and South Van Ness Avenue.



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October 17, 2018

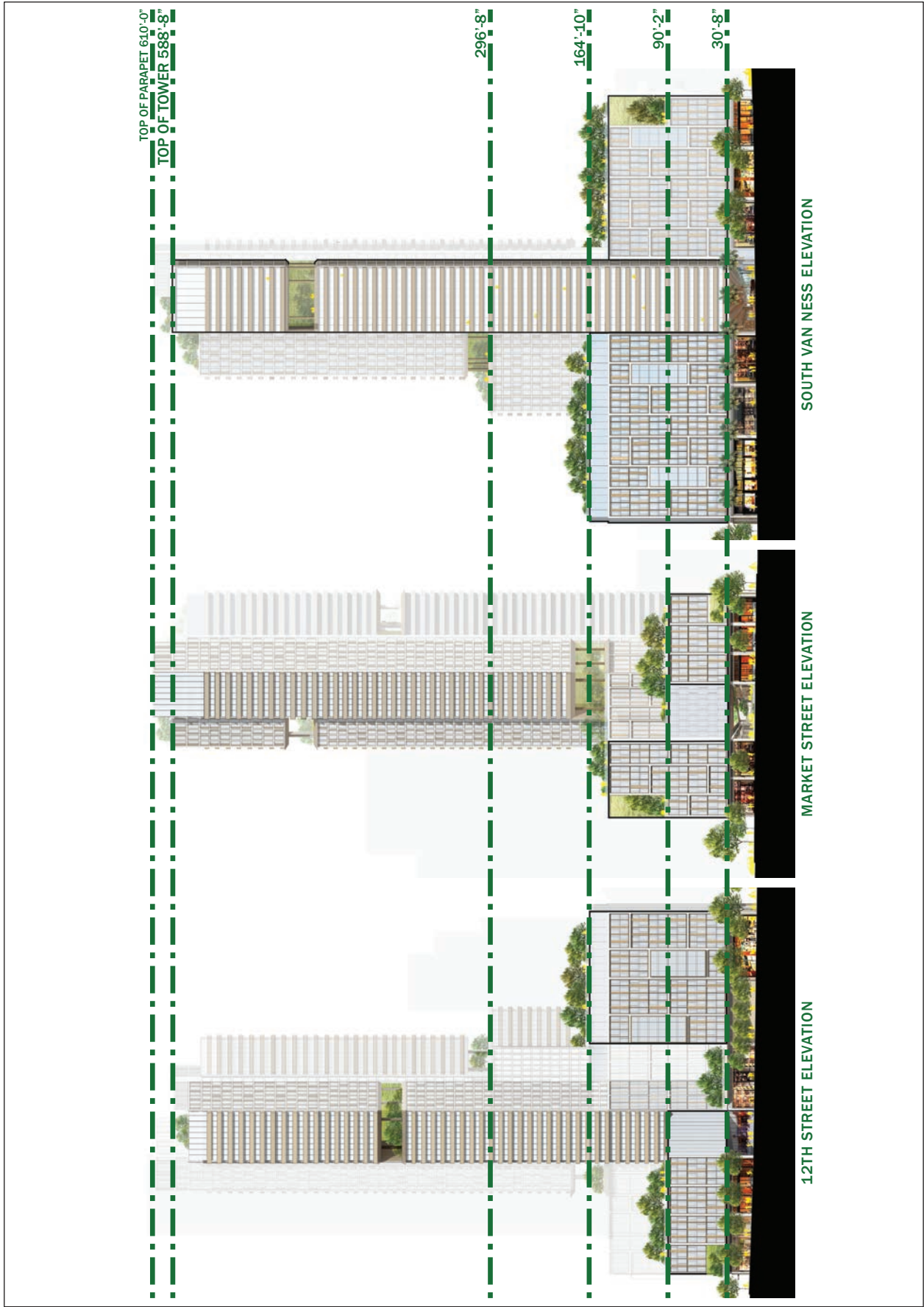


Source: KPF Associates (2017)

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**FIGURE 2.19: VARIANT - REPRESENTATIVE
TOWER FLOOR PLAN**

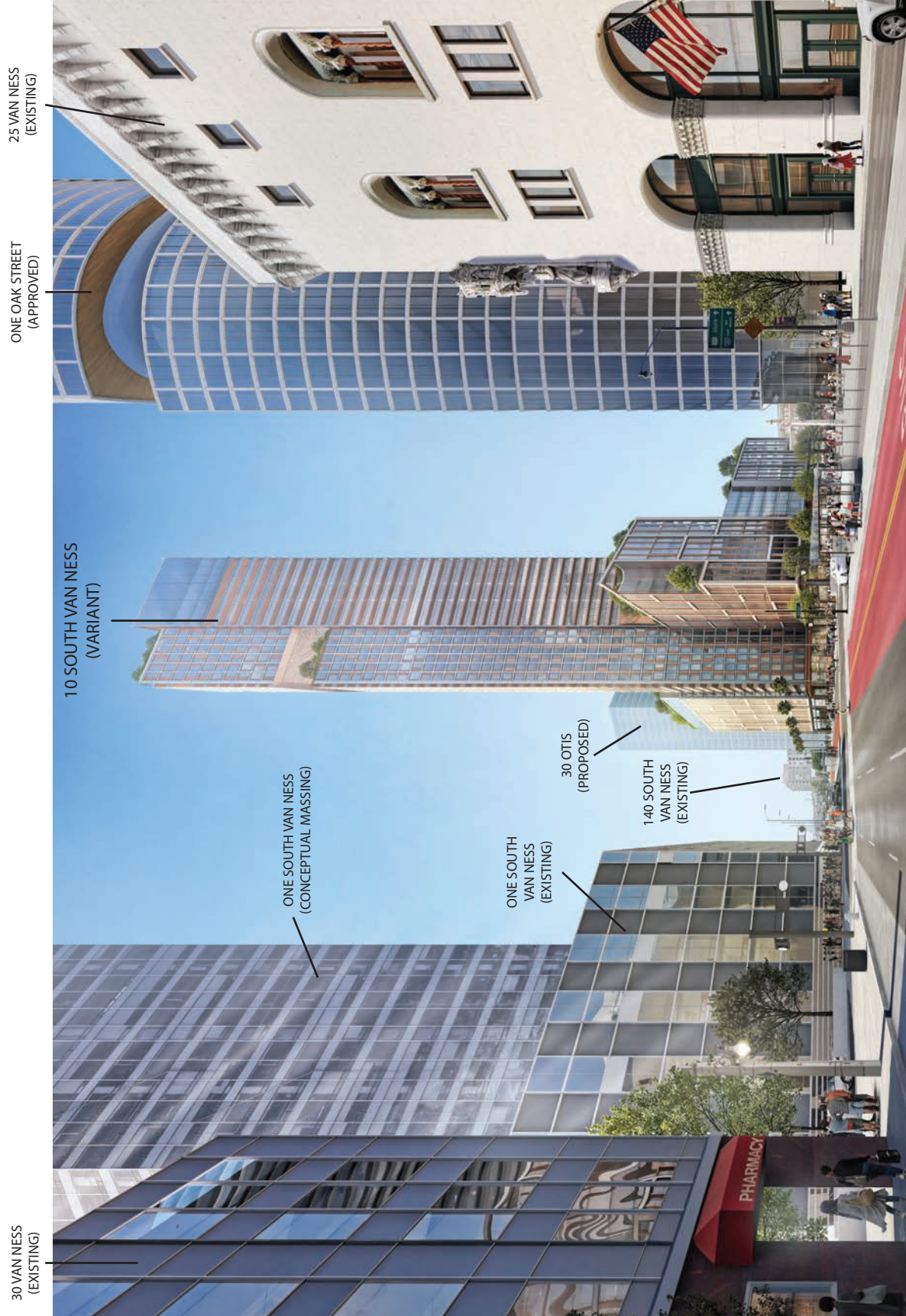


Source: KPF Associates (2017)

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FIGURE 2.20: VARIANT - BUILDING ELEVATIONS



Source: KPF Associates (2018)

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FIGURE 2.21: VARIANT - RENDERING LOOKING SOUTH FROM VAN NESS AVENUE

Parking/Loading

Vehicle parking would be the same as for the proposed project, with 518 vehicle parking and loading spaces provided in a two-level subgrade parking garage/basement with an entrance from 12th Street (see **Figure 2.22: Variant – Parking Garage / Basement Plans**).

Transportation Demand Management

The proposed variant would include the same TDM plan as the proposed project, as described above on pp. 2.22-2.25.

Streetscape Improvements

The proposed variant would include substantially the same streetscape improvements and on-street parking and loading as the proposed project, as shown on Figure 2.14 on p. 2.26.

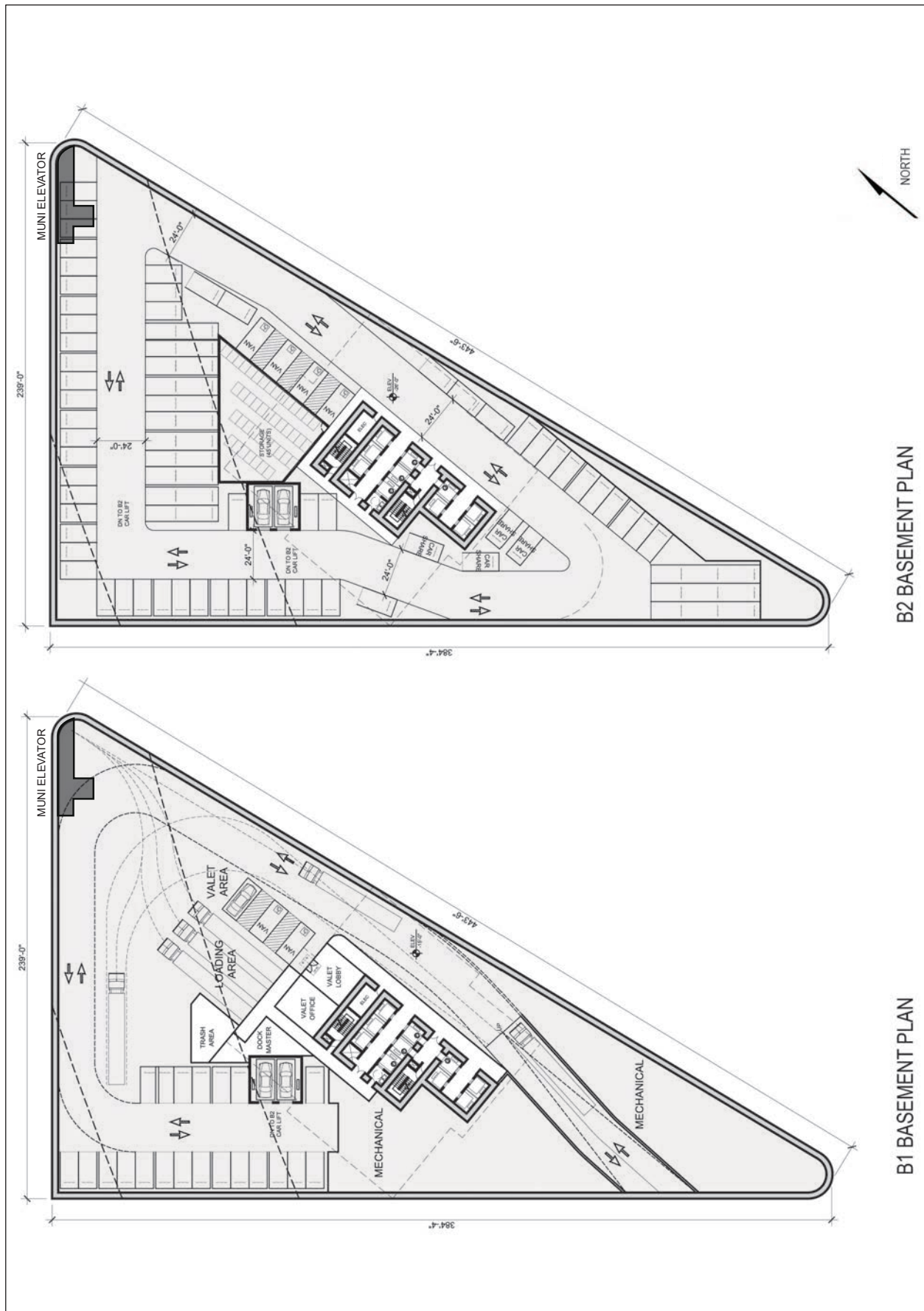
Muni Elevator

The variant may include construction of a new station entrance to the Muni Metro station at Market Street and South Van Ness Avenue, via a new elevator, in order to enhance ADA accessibility to the station. The design of the Muni elevator would be the same as under the proposed project.

Open Space

The proposed variant would include usable open space in a combination of publicly accessible open space (12,091 square feet), common open space for project residents (25,565 square feet), and private open space (9,550 square feet) for a total of 47,206 square feet.²² The open space would be dispersed throughout the building, as depicted in **Figure 2.23: Variant – Open Space Diagram**. The publicly accessible open space would consist of a mid-block alley connecting Market Street to 12th Street and a pedestrian plaza along the northeastern corner of the project site along South Van Ness Avenue. The common open space would be provided on Levels 14, 16, 29, and 53.

²² Living streets convert standard streets and alleys “into shared spaces that prioritize the use of the space for pedestrians and open space – often by claiming street space to create enhanced and active places for landscaping and seating. Living alleys typically include special paving, traffic calming, lighting, seating, greening, and other elements to indicate that vehicles are visitors and pedestrians have primacy across the full width of the right-of-way.” Source: SF Better Streets, available online at <http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/>

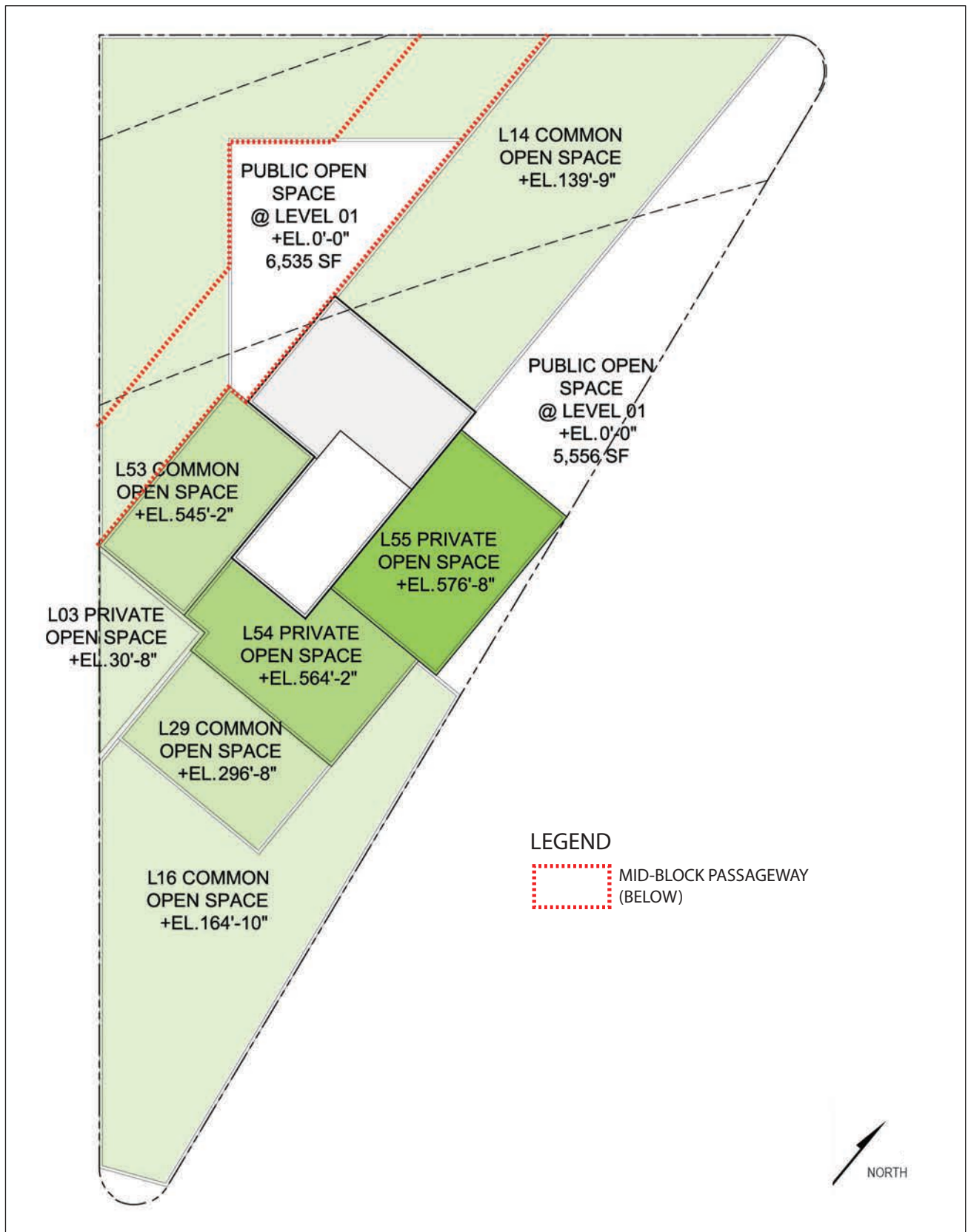


Source: KPF Associates (2017)

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FIGURE 2.22: VARIANT - PARKING GARAGE/BASEMENT PLANS



Source: KPF Associates (2017)

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FIGURE 2.23: VARIANT - OPEN SPACE DIAGRAM

Sustainability

The proposed variant would incorporate the same sustainability features as the proposed project. As with the proposed project, the variant has also been certified as an environmental leadership development project. The proposed variant would also remove the existing 28 trees along the perimeter of the project site's frontage on all three sides of the property, and would install 61 new street trees in compliance with Public Works Code section 806(c)(2), for a total of 33 net new street trees.

Wind-Reducing Features

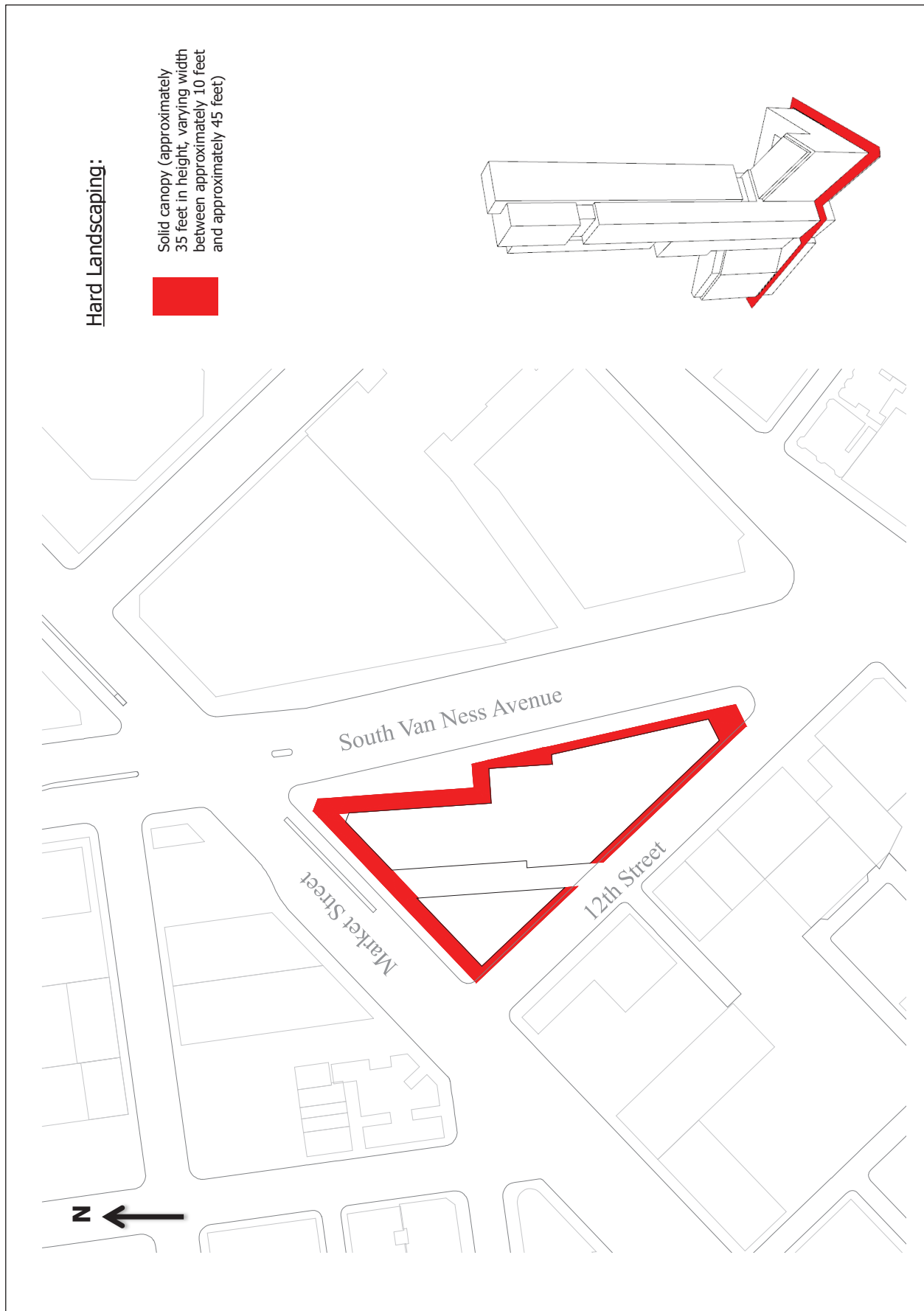
The variant incorporates building massing features (including the podium, building articulation, and the single tower placement and configuration) that were developed through wind tunnel testing in order to improve the building's performance with respect to wind safety and comfort impacts.

The variant would include an attached canopy, or canopies, intended to further reduce ground-level wind speeds and enhance pedestrian safety and comfort. The canopy, or canopies, would be 35 feet tall (varying in width between 10 and 45 feet) around the perimeter of the building's podium. (See **Figure 2.24: Variant – Wind-Reducing Features.**) These features would be subject to further design refinement during implementation of Mitigation Measure M-C-WI-1; Design Measures to Reduce Cumulative Wind Impacts based on further analysis to identify design measures that may reduce the project's contribution to off-site wind impacts in the cumulative-plus-project setting (see p. 4.5.15), and for aesthetic reasons.

In addition, the variant includes 25-foot-tall evergreen trees that would be planted along the east side of South Van Ness Avenue (along the 1 South Van Ness Avenue frontage), consistent with those to be planted along the east side of South Van Ness Avenue as part of the 1500 Mission Street project that is currently under construction.

Construction

Construction activities for the variant would be the same as those for the proposed project in terms of phasing, duration, and potential for temporary sidewalk and roadway closures. The proposed 55-story single-tower variant would fundamentally have the same foundation type and design methodology as the 41-story double-tower construction under the proposed project. Both are anticipated to be constructed with a combination of a mat foundation and deep foundation piers. In both cases, the tower columns and shear walls would be founded on a common pier cap. This pier cap would be supported by drilled piers extending below the BART ZOI, or up to approximately 80 feet below ground surface, but not to the depth of the underlying bedrock. The proposed variant, with one tower, would require fewer columns, shear walls, and piers compared to the proposed project, with two towers. As under the proposed project, the variant would not require pile driving.



Source: BMT (2018)

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FIGURE 2.24: VARIANT - WIND-REDUCING FEATURES

2.6 STRAIGHT-SHOT STREETSCAPE OPTION

The straight-shot streetscape plan option could be included with either the proposed project or variant (see **Figure 2.25: Straight-Shot Streetscape Option for the Proposed Project (12th Street Right-of-Way and Section)** and **Figure 2.26: Straight-Shot Streetscape Option for the Variant (12th Street Right-of-Way and Section)**).

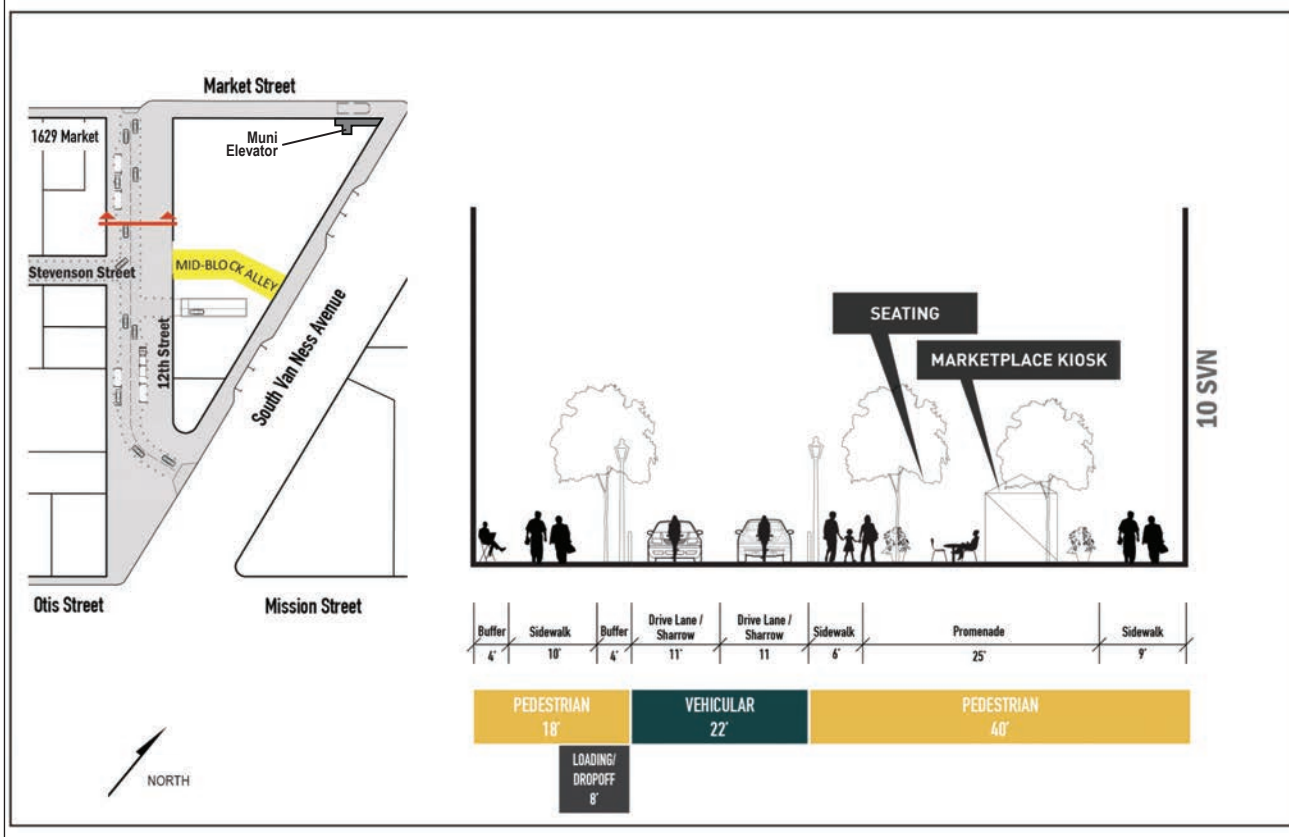
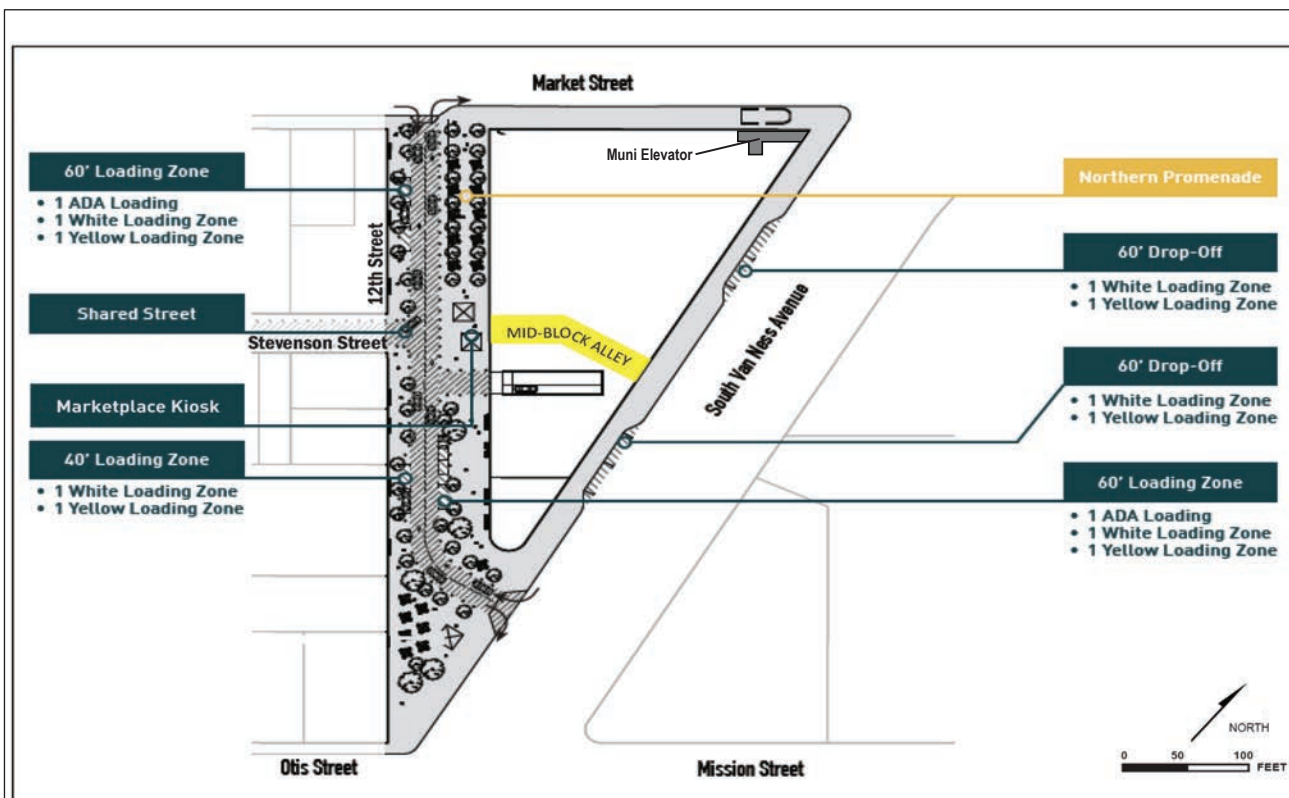
The straight-shot streetscape plan would create a pedestrian promenade on 12th Street. On 12th Street, the eastern sidewalk would be expanded to a width of 40 feet (9 feet of pedestrian throughway, 25 feet for a pedestrian plaza, and an additional 6 feet of pedestrian throughway), while the western sidewalk would be expanded to a width of 18 feet (4 feet of buffer, 10 feet of pedestrian throughway, and an additional 4 feet of buffer). There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction.

On the west side of 12th Street, the straight-shot streetscape design would include one 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space, and one 40-foot-long loading zone with one commercial loading space and one passenger loading space. One 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space would be included on the east side of 12th Street. The two loading zones on the west side of South Van Ness Avenue, and the pedestrian plaza on the southwest corner of the project site would be included as proposed under the Market Octavia Streetscape Plan.

As under the Market Octavia Streetscape Plan, this option would include 61 class II bicycle spaces along the project frontage sidewalks, with 32 spaces on 12th Street, 21 spaces on Market Street, and 8 spaces on South Van Ness Avenue. Under both streetscape design options, the three existing curb cuts on South Van Ness Avenue and the three existing curb cuts on the east side of 12th Street would be removed, and a 20-foot-long curb cut would be created on the east side of 12th Street for access to and from the proposed underground parking garage.

Under the proposed streetscape plan and straight-shot streetscape option, new streetscape features would be consistent with the Better Streets Plan within the sidewalk areas along Market Street and South Van Ness Avenue.

The design of the straight-shot streetscape option would be similar to the proposed streetscape design; the primary difference is that the straight-shot streetscape option would remove all 37 on-street parking spaces along 12th Street and instead include wider sidewalks, allowing more room for pedestrian amenities such as a promenade along the east side of 12th Street and additional street furniture for sitting and marketplace kiosk space. The straight-shot streetscape option does not include the raised intersection at Stevenson Street and the mid-block alley proposed by the project. This option would be based on a shared-street concept that would incorporate elements of a living street.

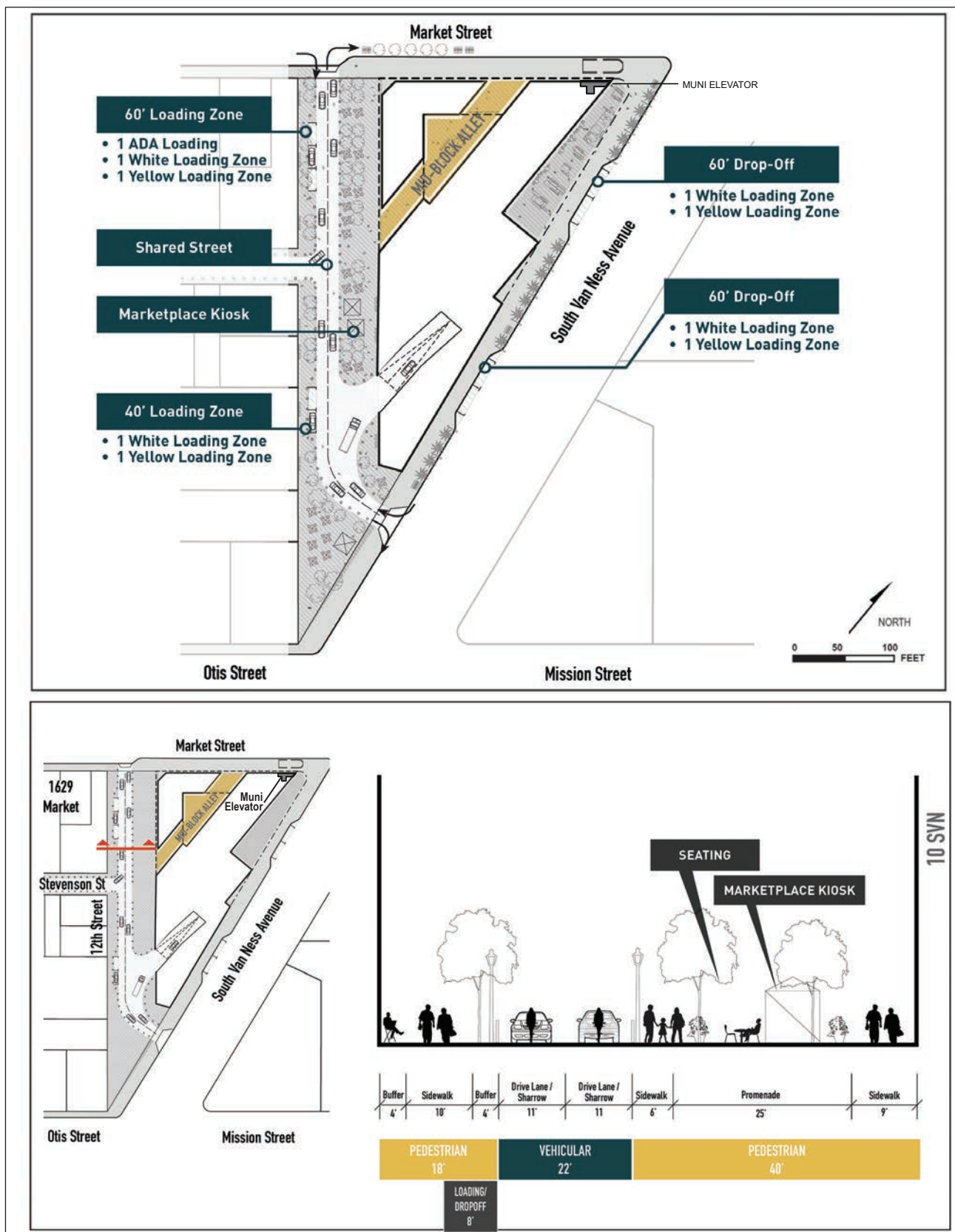


Source: SITELAB Urban Studio (2017)

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FIGURE 2.25: STRAIGHT-SHOT STREETScape OPTION FOR THE PROPOSED PROJECT (12TH STREET RIGHT-OF-WAY AND SECTION)



Source: SITELAB Urban Studio (2017)

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FIGURE 2.26: VARIANT - STRAIGHT-SHOT STREETScape OPTION AND 12TH STREET RIGHT-OF-WAY AND SECTION

The straight-shot streetscape option would only involve changes to traffic and circulation, and would not affect the proposed project or variant's development programs or the configuration of the buildings. Therefore, the option is analyzed only in Section 4.2, Transportation and Circulation, of this EIR.

2.7 DISCRETIONARY ACTIONS AND APPROVALS

The proposed project or variant would require approvals from several authorities, including those listed below.

Actions by the Planning Commission

- Approval of a Downtown Project Authorization pursuant to planning code section 309 for new construction or substantial alteration of structures in C-3 Districts, with exceptions to the requirements of Sunlight Access on Certain Streets (Section 146(a)); Reduction of Ground-Level Wind Currents in C-3 Districts (Section 148); and Reduction of Shadows on Certain Public or Publicly Accessible Open Spaces in C-3 Districts (Section 147).
- Approval of an in-kind improvements agreement under planning code section 424.3(c) for community improvements for the neighborhood infrastructure portion of the Van Ness and Market Downtown Residential SUD neighborhood infrastructure fee.

Actions by Other City Departments

- Planning Department and Department of Building Inspection (DBI) – Approval of the site permit and addenda thereto. Approval of demolition, grading, and building permits for the demolition of the existing buildings and construction of the new building. Permit for underpinning of adjacent structures. Night noise permit for nighttime construction.
- SFMTA Board of Directors – Approval of the proposed curb modifications, parking space removal, and bicycle corrals on South Van Ness Avenue, Market Street, and 12th Street.
- SFMTA Department of Parking and Traffic – Approval of a special traffic permit for use of a public street space during project construction; approval of foundation, shoring, and dewatering systems as they relate to the Muni ZOI.
- SFMTA Color Curb Program – Approval of a request for on-street loading spaces on South Van Ness Avenue and 12th Street.
- SFMTA Commission – Approval of the Muni elevator design.
- Bureau of Streets and Mapping, San Francisco Department of Public Works – Subdivision and condominium map approval and encroachment permits for sidewalk underground vaults. Permit for removal and planting of street trees; approval of a street space permit for use of a public street space during project construction (including construction of the proposed wind canopies); street and sidewalk permits for any modifications to public streets, sidewalks, or curb cuts.
- San Francisco Public Works – Street encroachment permit, to be approved by the director of public works, and by the San Francisco Board of Supervisors (board of supervisors) if required by the director, for a wind canopy to be located in the public right-of-way.

- San Francisco Public Works – Approval of Street Improvement Permits (engineering drawings). Approval of a Parcel Map if new parcels are created for the Muni elevator, which would occur if a portion of 12th Street is vacated. Approval of a Public Improvement Agreement for construction of the Muni elevator.
- San Francisco Public Utilities Commission – Approval of any changes to sewer laterals. Approval of an erosion and sediment control plan before commencing construction, and compliance with post-construction stormwater design guidelines, including a stormwater control plan.
- San Francisco Department of Public Health – Approval of a dust control plan because the site is in excess of 0.5 acre (article 22B). Approval of a ventilation plan, in compliance with San Francisco Health Code, article 38, because the proposed project site is located within an area that is identified in the Air Pollutant Exposure Zone Map. Approval of a site mitigation plan under the Maher Ordinance (article 22A), because the proposed project is located within the Maher Ordinance Area.
- San Francisco Board of Supervisors – Approval of sidewalk widening. Approval of a street vacation ordinance, if the land under 12th Street is transferred to the project sponsor.
- Recreation and Parks Commission – Joint determination with the San Francisco Planning Commission that the project complies with the requirements of planning code section 295.

Actions by Other Agencies

- Bay Area Air Quality Management District – Issuance of permits for the installation and operation of an emergency generator.
- BART – Plan review and approval of shoring and foundation work and elevator within the BART ZOI (engineering division), and issuance of a permit to work within or adjacent to the right-of-way.

Additional Approvals Required for the Variant

Actions by the Planning Commission

- Recommend to the board of supervisors approval of Planning Code Amendments for Height District Reclassification: The building height of the variant would exceed the height limit of the existing 120/400 R-2 and 400-R-2 Height and Bulk District. The board of supervisors would need to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to planning code section 302 to permit construction of a 590-foot-tall building.
- Recommend to the board of supervisors approval of planning code amendments to create the Market and 12th Street Special Use District, which would supersede the project site's current Van Ness & Market Downtown Residential Special Use District to create new building bulk requirements, permit off-street accessory parking in excess of 0.25 space per dwelling unit, permit the proposed mid-block passageway to extend between Market and 12th Street (rather than between South Van Ness and 12th Street), and to establish affordable housing requirements.

- Recommend to the board of supervisors approval of a General Plan Amendment: Approval of General Plan Amendment to Downtown Area Plan and the Market & Octavia Area Plan to permit construction of a building that is 590 feet tall.

Actions by the Board of Supervisors

- Planning code amendments for height district reclassification: The building height of the variant would exceed the height limit of the existing 120/400 R-2 and 400-R-2 Height and Bulk District. The board of supervisors would need to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to planning code section 302.
- Planning code amendments to create the Market and 12th Street Special Use District, which would supersede the project site's current Van Ness & Market Downtown Residential Special Use District to create new building bulk requirements, permit off-street accessory parking in excess of 0.25 space per dwelling unit, permit the proposed mid-block passageway to extend between Market and 12th Street (rather than between South Van Ness and 12th Street), and to establish affordable housing requirements.
- General Plan Amendment: Approval of General Plan Amendment to Downtown Area Plan and the Market & Octavia Area Plan to permit construction of a building that is 590 feet tall.

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3. PLANS AND POLICIES

3.1. OVERVIEW

Pursuant to section 15125(d) of the CEQA Guidelines, Chapter 3, Plans and Policies, provides a general description of land use plans applicable to the 10 South Van Ness Avenue Mixed-Use Project. Policy conflicts do not indicate a significant environmental effect within the context of CEQA environmental review. Instead, the intent of CEQA is to determine physical effects associated with a project. To the extent that physical environmental impacts of a proposed project may result in conflicts with one of the goals related to a specific resource topic, such impacts are analyzed in this EIR and initial study (Appendix B) under the appropriate environmental topic.

Land use plans typically contain numerous policies emphasizing differing legislative goals, and an interpretation of consistency requires the balancing of all relevant policies. In the case of this project, the San Francisco Planning Commission (planning commission) will evaluate the proposed project in accordance with provisions of the San Francisco General Plan (general plan), including the Downtown Area Plan, and the Market & Octavia Area Plan.

The staff reports and approval motions prepared for the decision-makers will include a comprehensive project analysis and findings regarding the consistency of the proposed project with applicable plans, policies, and regulations independent of the environmental review process. Plans and policies addressed in this chapter include the following:

- San Francisco General Plan including the Housing, Urban Design, and Recreation and Open Space elements, and the Downtown Area Plan, and the Market & Octavia Area Plan¹
- San Francisco Planning Code (planning code), including the following provisions: Allowable Uses, Open Space, Height and Bulk, Vehicle and Bicycle Parking, Loading, and Priority Policies (Accountable Planning Initiative)
- San Francisco Transit First policy
- San Francisco Bicycle Plan
- San Francisco Better Streets Plan
- San Francisco Sustainability Plan
- San Francisco Climate Action Strategy

This chapter also addresses the following regional plans and policies:

- Plan Bay Area 2040, which includes the *sustainable communities strategy*, the Bay Area Air Quality Management District's 2010 Clean Air Plan, the Metropolitan Transportation Commission's *Regional Transportation Plan – Transportation 2040*, and the San Francisco Bay Plan

¹ The Market Street Hub Project is an area plan proposed within the Market & Octavia Area Plan.

- The San Francisco Regional Water Quality Control Board's Water Quality Control Plan for the San Francisco Bay Basin

3.2. SAN FRANCISCO PLANS AND POLICIES

San Francisco General Plan

The San Francisco General Plan provides the City's vision for the future of San Francisco. The general plan contains 10 elements that apply citywide: Housing, Commerce and Industry, Recreation and Open Space, Transportation, Urban Design, Environmental Protection, Community Facilities, Community Safety, Arts, and Air Quality. The general plan also includes area plans that identify objectives for specific geographic planning areas, such as the Downtown Area Plan and the Market & Octavia Area Plan. The project site is located within both of these geographic planning areas.

The San Francisco Planning Department (planning department), Zoning Administrator, planning commission, and other City decision-makers will evaluate the proposed project in the context of the general plan, and as part of the project review process will consider potential conflicts. The consideration of general plan objectives and policies will take place independent from the environmental review process. Any potential conflict not identified in this EIR will be considered in that context and will not alter the analysis of physical environmental impacts found in this EIR.

The San Francisco General Plan elements that are most applicable to planning considerations for the proposed project and variant are the Housing, Urban Design, and Open Space elements, as described below. In addition, the general plan's Transportation Element is applicable to technical aspects of the project. The proposed project's and variant's consistency with the individual policies in this more technical element is discussed in the appropriate topical sections of this EIR.

Housing Element

The 2014 Housing Element is a component of the San Francisco General Plan that establishes the City's overall housing policies. California housing element law (California Government Code section 65580 et seq.) requires local jurisdictions to adequately plan for and address the housing needs of all segments of their populations to attain the region's share of projected statewide housing goals. This law requires local governments to plan for their existing and projected housing needs by facilitating the improvement and development of housing and removing constraints on development opportunities.

San Francisco's 2014 Housing Element was required to plan for an existing and projected housing need of 28,869 new dwelling units. A particular focus of this element is on the creation and retention of affordable housing, which reflects intense demand for such housing, a growing economy (which itself puts increasing pressure on existing housing stock), and a constrained supply of land (necessitating infill development and increased density). In general, the housing element supports projects that increase the city's housing supply (both market-rate and affordable

housing), especially in areas that are close to job centers and are well-served by transit. The proposed project and variant are mixed-use projects that include new housing and would not remove existing housing. The proposed project or variant would add 984 new residential units and would comply with section 415 of the San Francisco Planning Code, the Inclusionary Affordable Housing Program, by providing the required percentage of below-market-rate units onsite or offsite, or by paying an *in-lieu fee*. The proposed project or variant would not conflict with any objectives or policies in the housing element.

Urban Design Element

The general plan's Urban Design Element addresses the physical character and order of San Francisco to maintain and, where needed, improve the relationship between people and their environment. Because of its width and unique orientation, Market Street is identified as a form element of San Francisco, giving identity to districts and order to the city structure. The urban design element notes that the scale of new development should be considered when determining the appropriateness of such development within its neighborhood and citywide context. The proposed project would fit within with the height and bulk requirements of the project site, as outlined below, which have been established to promote urban form compatible with existing and proposed uses in the project area. The variant would exceed the existing height requirements of the project site shown on map 4 of the urban design element.

The element specifically calls for centers of activity to be made more prominent through design of street features and other means (Policy 1.6). Recommended features include street landscaping, lighting, distinctive paving, furniture, and other elements that fit within the context and contribute to the identity of the area, suitable to the needs and desires of merchants, shoppers, and other people using the area. The proposed streetscape improvements would improve the pedestrian experience on the project site by widening the sidewalks along 12th Street, improving the 12th Street right-of-way to increase pedestrian access, and including a mid-block alley. The mid-block alley would connect 12th Street to either South Van Ness Avenue (proposed project) or Market Street (variant).

As discussed below, the proposed project and could be inconsistent with certain aspects of the general plan's urban design element related to conserving resources that provide a sense of continuity with the past. The proposed project and variant would include demolition of the existing building at 10 South Van Ness Avenue, which is considered a historic resource under the California Environmental Quality Act (CEQA). For these reasons, the proposed project and variant could conflict with policy 2.4 of the urban design element, which calls for the preservation of notable landmarks and areas of historic, architectural, or aesthetic value. The associated physical environmental impacts that could result from this conflict are discussed in Section 4.1, Cultural Resources (Historic Architectural), pp. 4.1.24-4.1.29, of this EIR.

Recreation and Open Space Element

The general plan's Recreation and Open Space Element, revised and updated in April 2014, addresses the character of the city's open spaces and calls for the preservation and enhancement of open spaces through community engagement. Specifically, this element calls for acquiring open space in high-needs areas (policy 2.1) and supporting the development of civic-serving open spaces (policy 2.6). The element identifies portions of the project site as a high-needs open space area. Because the project would include development of publicly accessible open space that would provide passive recreational opportunities in a high-needs open space area, the proposed project or variant would not obviously conflict with any objectives or policies in the recreation and open space element.

Market & Octavia Area Plan

The project site is located within the Market & Octavia Area Plan (area plan) boundaries.² The area plan, effective on May 30, 2008, after approval by the San Francisco Board of Supervisors (board of supervisors), promotes a mixed-use, urban neighborhood in which new and current residents enjoy a vibrant pedestrian realm and multiple transit connections.

The Market & Octavia Area Plan established the Van Ness and Market Downtown Residential *Special Use District* (SUD), which is described as a “transit-oriented, high-density, mixed-use neighborhood around the intersection of Van Ness Avenue and Market Street, adjacent to downtown.” Residential and commercial uses are principally permitted uses in the Van Ness and Market Downtown Residential SUD.

The proposed project and variant would be inconsistent with the following policies from the Market & Octavia Area Plan:

- **Policy 3.2.6:** Encourage rehabilitation and adaptive reuse of historic buildings and resources.
- **Policy 3.2.11:** Ensure that changes in the built environment respect the historic character and cultural heritage of the area, and that resource sustainability is supported.
- **Policy 3.2.14:** Apply the “Secretary of the Interior’s Standards for the Treatment of Historic Properties” for all projects that affect individually designated buildings at the local, state, or national level.
- **Policy 3.2.16:** Preserve the cultural and socio-economic diversity of the plan area through preservation of historic resources.

² San Francisco Planning Department, *Market & Octavia Area Plan*, adopted May 30, 2008, last amended 2010, http://208.121.200.84/ftp/files/Citywide/Market_Octavia/Market_and_Octavia_Area_Plan_2010.pdf, accessed May 26, 2016. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2015-004568ENV.

The area plan acknowledges that the superior transit access in the vicinity of Market Street and Van Ness Avenue—with San Francisco Municipal Railway (Muni) light rail, Muni bus, and Bay Area Rapid Transit stations being easily accessible—should encourage the siting of high-density housing and housing-supporting uses in this area. The area plan indicates that if residential towers were to be constructed, they should be clustered around the intersection of Market Street and Van Ness Avenue, with heights ranging from 160 to 400 feet. Policies also call for improvements to the circulation network in the plan area, with a focus on redesigning 12th Street for public use.

The proposed project or variant would respond to the increased development density and building scale intensity contemplated for the project site in the area plan and what is permitted for the Downtown General Commercial (C-3-G) use district, described below. As described in chapter 2.0, Project Description, either the proposed project or the variant would construct 984 residential units above ground-floor retail uses and would implement improvements to 12th Street. The proposed improvements would allow for intensified pedestrian and bicycle use while permitting continued vehicular access. The proposed project or variant would add active retail frontages to Market Street, South Van Ness Avenue, and 12th Street and would provide streetscape improvements, including landscaping, along these frontages.

The Market & Octavia Area Plan requires that residential uses be provided at a 2:1 ratio with nonresidential uses. The proposed 984 dwelling units (935,745 gross square feet) would be approximately 87 percent of the total building square footage (1,071,095 gross square feet), which would satisfy this area plan requirement.

As described in more detail in initial study Section E, Evaluation of Environmental Effects, the proposed project or variant would demolish a building considered eligible for listing in the California Register of Historical Resources. Demolition of a building considered eligible for the California register may conflict with the historic preservation policies of the Market & Octavia Area Plan. However, with the exception of historic preservation policies, the proposed project or variant would not conflict with the area plan's policies.

Market Street Hub Project

The proposed Market Street Hub Plan would amend the 2008 Market and Octavia Area Plan, for the easternmost portions of the Market and Octavia Area Plan. The objectives of the Hub Plan are to encourage housing, including affordable housing; create safer and more walkable streets as well as welcoming and active public spaces; increase transportation options; and create a neighborhood with a range of uses and services to meet neighborhood needs. The Hub Plan would pursue changes to height and bulk districts for select parcels to allow more housing, including more affordable housing, and to allow development of a taller, larger, and more diverse array of buildings and heights within the Hub Plan area.

It is anticipated that if all 17 of the sites identified for upzoning in the Hub Plan were to be developed to the proposed maximum height and bulk limits, these changes would result in

approximately 8,100 new residential units (over 15,700 new residents) in addition to new commercial and institutional space. The planning department released a notice of preparation of an environmental impact report (EIR) for the Hub Plan in May 2018 and expects to publish the draft EIR in summer 2019.

Potential development under the Market Street Hub plans is included in the cumulative projects considered in the cumulative impact analysis, where relevant for the specific environmental topics addressed in this EIR (see pp. 4.0.13-4.0.14).

San Francisco Planning Code

The San Francisco Planning Code, which incorporates by reference the City's zoning maps, governs permitted uses, densities, and building configurations in San Francisco. A permit to construct a new building (or to alter or demolish an existing building) may not be issued unless the project complies with the planning code, or an exception or variance is granted pursuant to the planning code's provisions.

The project site is also within the Van Ness and Market Downtown Residential SUD. As noted in section 249.33 of the planning code, this special use district is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence. The Van Ness and Market Downtown Residential SUD is intended to serve as a transitional zone between larger scale commercial areas downtown and lower scale residential and neighborhood commercial areas to the west.

Allowable Uses

The project site is in the Downtown General Commercial zoning district. As stated in section 210.2 of the San Francisco Planning Code, the C-3-G district:

...is composed of a variety of uses: retail, offices, hotels, entertainment, clubs and institutions, and high-density residential. Many of these uses have a citywide or regional function, although the intensity of development is lower here than in the downtown core area. As in the case of other downtown districts, no off-street parking is required for individual commercial buildings. In the vicinity of Market Street, the configuration of this district reflects easy accessibility by rapid transit.

Retail sales and service uses on the ground floor and residential uses above the ground floor, as included in the proposed project or variant, are principally permitted within this zoning district. Section 210.2, table 210.2, of the planning code defines the *floor area ratio* (FAR) in the C-3-G district as 6:1, meaning that the building area for a project cannot exceed six times its lot area. The Van Ness and Market Downtown Residential SUD allows an unlimited increase in this ratio through payment of the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee. The proposed project or variant would exceed the permitted 6:1 FAR. The project sponsor proposes to pay the fees required by the planning code to achieve the proposed ratio. The proposed project or variant would comply with San Francisco

Planning Code section 415, the Inclusionary Affordable Housing Program, by providing the required percentage of onsite or offsite below-market-rate units or paying the in-lieu fee.

Open Space

Section 135, table 135A, of the San Francisco Planning Code requires 36 square feet of open space per unit in the C-3 district if the space provided is private, or 48 square feet of open space per unit if the space provided is *common usable open space* or *publicly accessible open space*.³ Section 249.33(b)(4) requires that open space be of one or more of the following types: an unenclosed park or garden at street grade; an unenclosed plaza at street grade; an unenclosed pedestrian pathway; a terrace or roof garden; or streetscape improvements with landscaping and pedestrian amenities.

To comply with the requirements of section 135, the proposed project or variant would be required to provide approximately 47,114 square feet of common usable open space. The proposed project would provide common usable open space as terraces at the podium levels and on the rooftop (48,150 square feet), and an unenclosed mid-block alley that would serve as a pedestrian pathway (2,975 square feet). The mid-block alley would also serve as a privately owned public open space as required by San Francisco Planning Code section 138.

The variant would provide usable open space in a combination of privately owned public open space (12,091 square feet), common usable open space for project residents (25,565 square feet), and *private open space*.⁴ (9,550 square feet) for a total of 47,206 square feet. Like the proposed project, the variant would provide common usable open space consisting of terraces on the podium levels and on the roof. The proposed project or variant would provide adequate open space.

Height and Bulk

The project site falls within two separate height and bulk districts. The northern portion is in the 120-R-2 height and bulk district; the southern portion is in the 120/400-R-2 district. The 120-R-2 district allows a 120-foot-tall building on the northern portion of the project site and a podium up to 120 feet in height. The 120/400-R-2 district allows a tower up to 400 feet tall. The R-2 bulk district does not set bulk restrictions for buildings less than 120 feet tall. For buildings more than 120 feet tall, all portions of structures above the podium height are subject to the bulk restrictions in planning code section 270(e)(2).

³ As defined in planning code section 135, common usable open space includes open space that is easily accessible from a dwelling unit or from a common area of a building or lot. Common usable open space is accessible to building occupants only, but, as opposed to private usable open space, is accessible to all building occupants rather than a select group of units. In C-3 districts, new buildings are required to provide privately owned public open spaces meeting the requirements of planning code section 138. These open spaces must be accessible to the general public.

⁴ Private open space is open space that is accessible only to one unit or a certain group of units.

In accordance with San Francisco Planning Code section 270(e)(2)(D), buildings between 351 and 550 feet tall may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gross square feet. Planning code section 270(e)(2)(F) specifies that to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures more than 120 feet tall at all levels above 120 feet in height, as required by the R-2 bulk district.

The proposed project would conform to the existing height and bulk requirements applicable to the project site. The variant would exceed the height limit of the existing 120/400-R-2 district. To permit the development of the variant, the board of supervisors would need to approve an amendment to the zoning map height and bulk districts (sheet HT07) pursuant to planning code section 302.

Vehicle and Bicycle Parking

San Francisco Planning Code section 151.1 does not require the provision of off-street parking in the C-3-G District or the Van Ness and Market Downtown Residential SUD. The planning code sets maximum limits for off-street parking in these districts. As shown in table 151.1, the maximum number of off-street parking spaces permitted for dwelling units in the Van Ness and Market Downtown Residential SUD is 0.25 space per dwelling unit, with 0.5 space per dwelling unit conditionally permitted.

However, on December 12, 2017, the San Francisco Board of Supervisors passed Resolution No. 448-17,⁵ which established interim zoning controls for off-street parking in the Hub Project area, where the project is located, which limit off-street parking for new development projects to the principally permitted accessory parking ratios established under the planning code, except for projects that dedicate 25 percent or more of the total number of residential units as inclusionary units and provide those units on-site. The interim zoning controls are effective for a period of 18 months.⁶

If the proposed project or variant includes 25 percent or more on-site below-market-rate units, then the interim zoning controls will not apply. However, because the proposed project or variant may comply with the Inclusionary Affordable Housing Program by providing these below-market-rate units off site or paying an in-lieu fee, it has not yet been determined whether the interim zoning controls apply to the proposed project or variant.

Either the proposed project or the variant would include 984 residential dwelling units, which would principally permit up to 246 parking spaces for the residential uses. Up to 492 parking

⁵ San Francisco Planning Department, *Interim Zoning Controls – Off-Street Parking in the “Hub” Area*, http://default.sfplanning.org/legislative_changes/new_code_summaries/171015.pdf.

⁶ The interim zoning controls for off-street parking in the Hub Project area will expire on June 22, 2019.

spaces would be permitted with a conditional use authorization approved by the San Francisco Planning Commission if the interim zoning controls do not apply. In accordance with planning code section 167, the cost of residential parking would be unbundled from the cost of rent.

For retail uses, up to one parking space for every 1,500 square feet of occupied floor area is permitted, and nonresidential parking shall not exceed 7 percent of gross floor area for nonresidential uses. The proposed project or variant would include approximately 30,350 or 30,450 gross square feet of commercial space, respectively, and approximately 3,000 or 5,297 gross square feet of mechanical space, respectively. Consistent with the Van Ness and Market Downtown Residential SUD, the proposed project or variant would include up to 2,335 or 2,503 gross square feet of permitted parking space, respectively, or up to approximately 15 parking spaces (proposed project) or 16 parking spaces (variant). Thus, the proposed project or variant's 14 retail parking spaces would comply with the planning code.

San Francisco Planning Code section 155.2 requires the following for provision of bicycle parking spaces:

- One hundred class I spaces plus one class I space for every four dwelling units over 100 for buildings containing more than 100 dwelling units, located in a bicycle locker or secure room (321 spaces for the proposed project or variant).
- One class II space per 20 dwelling units (49 spaces for the proposed project or variant).
- One class I space for every 7,500 square feet of occupied floor area for retail and service uses (four spaces for the proposed project or variant).
- One class II space for every 2,500 square feet of occupied floor area for retail and service uses (12 spaces for the proposed project or variant).

The proposed project or variant would provide 336 class I bicycle parking spaces (332 for residential use, 4 for retail use) in a secured room in the proposed lobby, and 61 class II bicycle parking spaces (49 for residential use, 12 for retail use), which would be consistent with the requirements of planning code section 155.2.

Loading

San Francisco Planning Code section 152.1 requires two freight-loading spaces for retail spaces in the C-3-G District between 30,001 and 50,000 gross square feet. For residential uses over 500,000 gross square feet, three freight-loading spaces plus one space for each additional 400,000 gross square feet are required. Section 153(a)(6) allows the substitution of two service vehicle

spaces for each required off-street freight loading space in the C-3-G District, provided that a minimum of 50 percent of the required number of spaces are provided for freight loading.⁷

In compliance with planning code requirements, the proposed project includes seven freight-loading spaces (three of which would be standard freight-loading spaces and four of which would be service vehicle spaces). One loading space would accommodate up to a 45-foot-long vehicle in the below-grade parking garage. The four service vehicle loading spaces located at basement level would be 8 feet wide and 20 feet long with 8½ feet of vertical clearance, one truck loading berth would be 12 feet wide and 45 feet long with 14 feet of vertical clearance, and two truck loading berths would be 12 feet wide and 35 feet long with 14 feet of vertical clearance. The proposed project or variant would be consistent with the planning code's loading requirements.

Priority Policies

The Accountable Planning Initiative added section 101.1 to the San Francisco Planning Code and established eight priority policies. These policies are as follows (the sections of the EIR or initial study [Appendix B] that address the environmental issues associated with the policies, if any, are included in parenthesis):

- (1) Preservation and enhancement of neighborhood-serving retail uses
- (2) Protection of neighborhood character (see the initial study in Appendix B, Topic E.1[a-c], Land Use and Land Use Planning)
- (3) Preservation and enhancement of affordable housing (see the initial study in Appendix B, Topic E.2[b], Population and Housing, with regard to housing supply and displacement issues)
- (4) Discouragement of commuter automobiles (see Section 4.2, Transportation and Circulation)
- (5) Protection of industrial and service land uses from commercial office development and enhancement of residents' employment and business ownership (see the initial study in Appendix B, Topic E.1[a-c], Land Use and Land Use Planning)
- (6) Maximization of earthquake preparedness (see the initial study in Appendix B, Topic E.14[a-d], Geology, Soils, and Seismicity)
- (7) Landmark and historic building preservation (see Section 4.1, Cultural Resources)
- (8) Protection of open space (see Section 4.5, Wind; Section 4.6, Shadow; and the initial study in Appendix B, Topic E.10[a and c], Recreation)

Before issuing a permit for any project requiring an initial study under CEQA or for any demolition, conversion, or change of use, and before taking any action that requires a finding of

⁷ As set forth in San Francisco Planning Code section 154(b), off-street freight loading spaces must have minimum dimensions of 12 feet × 35 feet (width × length) and a minimum vertical clearance (including entry and exit) of 14 feet, except for the first space, which may be smaller (minimum dimensions of 10 feet × 25 feet, with a minimum vertical clearance of 12 feet). Service vehicle spaces intended to serve as substitutes for off-street freight loading spaces as provided under planning code section 153(a)(6) must have minimum dimensions of 8 feet × 20 feet and a minimum vertical clearance of 7 feet.

consistency with the San Francisco General Plan, the City is required to find that the proposed project or variant or legislation would be consistent with the eight priority policies. As noted above, the consistency of the proposed project or variant with the environmental topics associated with the priority policies is discussed in this EIR and in the initial study (Appendix B).

San Francisco Transit First Policy

The City's *Transit First Policy* was adopted by the San Francisco Board of Supervisors in 1973 and amended in 1999, and is contained in section 8A.115 of the City Charter. This policy is a set of principles emphasizing the City's commitment to giving the use of public rights-of-way by pedestrians, bicyclists, and public transit priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement Transit First Policy principles in conducting the City's affairs.

The proposed project or variant would construct a mixed-use residential project adjacent to major public transit routes in an effort to increase density near transit stations. The proposed project or variant would provide approximately 397 bicycle spaces and 518 off-street vehicle parking spaces, subject to approval by the San Francisco Planning Commission. The planning commission would determine whether this proposed increase to the principally permitted parking ratio would be consistent with the Transit First Policy. The streetscape design for either the proposed project or variant would make improvements to 12th Street to enhance the use of the street for pedestrians, bicyclists, and drivers. As such, the proposed project or variant would be consistent with the City's Transit First Policy.

San Francisco Bicycle Plan

In August 2009, the board of supervisors approved the San Francisco Bicycle Plan, which is intended to provide the safe and attractive environment needed to promote bicycling as a transportation mode. In addition to identifying the existing bicycle route network and proposing short-term and long-term improvements to this network, the plan identifies goals, objectives, and policies to support these proposed improvements.

Implementation of either the proposed streetscape design would increase the connectivity between bicycle routes on Market and Mission streets, which would help improve bicycle access in the vicinity of the project site. As such, the proposed project or variant would not conflict with the San Francisco Bicycle Plan.

San Francisco Better Streets Plan

In December 2010, the San Francisco Better Streets Plan was adopted in support of the City's efforts to enhance the streetscape and the pedestrian environment. This plan carries out the intent of San Francisco's Better Streets Plan, which was adopted by the board of supervisors on

February 6, 2006. The plan classifies the city's public streets and rights-of-way, and creates a unified set of standards, guidelines, and implementation strategies that guide how the City designs, builds, and maintains its public streets and rights-of-way.

The San Francisco Better Streets Plan consists of policies and guidelines for the city's pedestrian realm. Major concepts related to streetscape and pedestrian improvements include:

- (1) Pedestrian safety and accessibility features, such as enhanced pedestrian crossings, corner or mid-block curb extensions, pedestrian countdown and priority signals, and other traffic calming features
- (2) Universal pedestrian-oriented design, with incorporation of street trees, sidewalk plantings, furnishings, lighting, efficient location of utilities for unobstructed sidewalks, shared single surfaces for small streets/alleys, and sidewalk/median pocket parks
- (3) Integrated pedestrian/transit functions using bus bulb-outs and boarding islands (bus stops in medians within the street)
- (4) Opportunities for new outdoor seating areas
- (5) Improved ecological performance with the incorporation of stormwater management techniques and urban forest maintenance

The requirements of the San Francisco Better Streets Plan are incorporated into the planning code as section 138.1.

The proposed project or variant would reconfigure the intersection of 12th Street and South Van Ness Avenue to increase pedestrian visibility and safety. Streetscape improvements along South Van Ness Avenue, Market Street, and 12th Street would include pedestrian-oriented streetlights and landscaping including street trees and sidewalk plantings. Street furniture would be provided along the project site's 12th Street frontage. These improvements would be implemented under either proposed streetscape design. The straight-shot streetscape option would extend the eastern sidewalk along 12th Street adjacent to the project site from 15 to 40 feet in width to create a pedestrian promenade. With incorporation of these streetscape improvements, the proposed project or variant would be consistent with the San Francisco Better Streets Plan.

San Francisco Sustainability Plan

In 1993, the San Francisco Board of Supervisors established the Commission on San Francisco's Environment, which is charged with, among other duties, drafting and implementing a plan for the city's long-term environmental sustainability. The goal of the sustainability plan is to enable San Francisco and its people to meet their current needs without sacrificing the ability of future generations to meet their own needs.

The San Francisco Sustainability Plan is divided into 15 topic areas. Ten of the sustainability plan's topic areas address specific environmental issues: air quality; biodiversity; energy, climate change, and ozone depletion; food and agriculture; hazardous materials; human health; parks, open spaces, and streetscapes; solid waste; transportation; and water and wastewater. The other

five topic areas are broader in scope and cover many issues: economy and economic development, environmental justice, municipal expenditures, public information and education, and risk management. Although the San Francisco Sustainability Plan became official City policy in July 1997, the board of supervisors has not committed the City to perform all of the actions addressed in the plan. The plan serves as a blueprint, with many of its individual proposals requiring further development and public comment.

The San Francisco Building Code was amended in 2008 to add chapter 13C, Green Building Requirements, which partially implements the energy provisions of the sustainability plan. The San Francisco Green Building Requirements establish either *Leadership in Energy and Environmental Design (LEED)*⁸ certification levels or *Green Point Rated*⁹ system points for types of residential and commercial buildings. The new requirements mandate that newly constructed private residential and commercial buildings include energy and water efficient features, to be implemented during both construction and operation. The California Building Standards Commission adopted a green building code as part of the California Building Standards Code (title 24 of the California Code of Regulations, paragraph 6). The provisions of the state code became effective on January 1, 2011. Local jurisdictions are allowed to adopt or continue to use their own green building ordinances as long as they are as stringent as or more stringent than those adopted by the state.

The proposed project and variant would conform with the San Francisco Sustainability Plan. The proposed project, the variant, and both streetscape design options would comply with applicable green building requirements, including those for construction and recycling; construction materials, including low-emitting materials; energy consumption; parking; and water and stormwater. The proposed project or variant would be required to be certified to at least LEED Silver in accordance with section 4.103.2.1 of the San Francisco Green Building Code. The proposed project or variant would seek LEED Gold certification in connection with its status as an environmental leadership development project pursuant to Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, and the California Environmental Quality Act (CEQA) section 21178 et seq., and would therefore be consistent with the San Francisco Sustainability Plan.

San Francisco Climate Action Strategy

In 2013, the City adopted the San Francisco Climate Action Strategy, which updates the climate action plan adopted by the City in 2004. The actions at the core of the strategy is to source 100

⁸ LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which provides third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, reduction of carbon dioxide emissions, improved indoor environmental quality, stewardship of resources, and sensitivity to impacts on resources.

⁹ Green Point Rated is a program of Build it Green, established for evaluating residential building performance in the areas of resource conservation, indoor air quality, water conservation, energy efficiency, and livable communities (infill development, density, diversity).

percent of residential and 80 percent of commercial electricity from renewable sources, coupled with usage improvements to promote energy efficiency; make 50 percent of all trips by modes other than personal vehicles; and achieve San Francisco's zero waste goal, which targets reducing emissions from waste generation and disposal to zero.

Key strategies focus on energy use in buildings, transportation, waste, urban forest, and municipal operations. Although the board of supervisors has not formally committed the City to perform the actions addressed in the San Francisco Climate Action Strategy and many of the actions require further development and commitment of resources, the climate action strategy serves as a blueprint for reduction of greenhouse gas emissions.

Recommended actions in the San Francisco Climate Action Strategy related to energy use in buildings include implementation of the existing commercial building benchmarking ordinance and requiring energy-efficient designs in new development. Recommended transportation measures include the increased use of public transit as an alternative to driving and increased urban infill closer to transit service. The strategy also promotes mode shift from driving to bicycling and walking.

As discussed in Topic E.18, Mineral and Energy Resources, in the initial study (Appendix B), the proposed project or variant would implement energy-efficient design measures in buildings and features intended to reduce water usage. Either the proposed project or the variant would include a wastewater treatment system that would be sized to treat and use recycled water from the proposed building(s) for nonpotable uses in the building, including flushing toilets, irrigation, and cooling tower water for the heating, ventilation, and air conditioning system. The project sponsor has sought certification of the proposed project or variant as an environmental leadership development project pursuant to CEQA Guidelines section 21178, which would require the project to result in no additional greenhouse gas emissions over the lifetime of the project. Considering these project features, the proposed project or variant would not conflict with the climate action plan.

3.3. REGIONAL PLANS AND POLICIES

There are several regional planning agencies whose environmental, land use, and transportation plans and policies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policies are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project are discussed below.

Plan Bay Area 2040 and Regional Housing Needs Plan

In July 2017, the Metropolitan Transportation Commission and Association of Bay Area Governments (ABAG) adopted *Plan Bay Area 2040*, a long-range integrated transportation, land use, and housing strategy through 2040 for the San Francisco Bay Area that was an update from

the plan adopted in 2013.¹⁰ The plan also serves as the sustainable community strategy mandated by Senate Bill 375. *Plan Bay Area* will continue to be updated every four years to analyze current regional growth patterns, develop strategies for addressing housing and transportation needs, and prioritize environmental and socioeconomic equity. The current *plan* identifies a number of priority development areas where growth and development would be focused. These are existing neighborhoods that are well served by public transit and are considered to be appropriate locations for additional compact development.

The project site is located in the Market-Octavia/Upper Market Priority Development Area of *Plan Bay Area 2040*.¹¹

In July 2013, ABAG projected regional housing needs in its *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022*. According to this plan, San Francisco’s projected housing need from 2014 to 2022 is 28,869 residential units, consisting of 6,234 within the very-low-income level (0–50 percent of area median income); 4,639 within the low-income level (51–80 percent of area median income); 5,460 within the moderate-income level (81–120 percent of area median income); and 12,536 within the above-moderate-income level (120 percent plus of area median income).¹² The jurisdictional allocation for San Francisco translates into an average annual need for approximately 4,124 net new residential units.

The proposed project or variant would add 984 new residential units and would comply with section 415 of the San Francisco Planning Code, the Inclusionary Affordable Housing Program. Therefore, the proposed project or variant would contribute to the city’s housing stock, including affordable housing stock, thereby helping to meet the city’s overall housing demands. The proposed project or variant would be required to pay an affordable housing in-lieu fee or to provide the required percentage of onsite or offsite below-market-rate units.

Neither the proposed project nor the variant would result in inconsistencies with the Metropolitan Transportation Commission and ABAG’s *Plan Bay Area 2040* and ABAG’s *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022*. The physical impacts of the proposed project or variant related to population and housing are discussed in the initial study checklist, Topic E.2, Population and Housing (see Appendix B). Impacts of the proposed project and variant relating to transportation are discussed in the initial study checklist, Topic E.5, Transportation and Circulation, and are addressed further in Section 4.2 of this EIR.

¹⁰ Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area 2040*, Final, July 26, 2017, http://2040.planbayarea.org/sites/default/files/2017-07/Plan%20Bay%20Area%202040_Adopted_07.26.17.pdf, accessed August 4, 2017.

¹¹ Association of Bay Area Governments, *Priority Development Area Showcase*, <http://gis.abag.ca.gov/website/PDAShowcase/>, accessed August 4, 2017.

¹² Association of Bay Area Governments, *Projections 2013*, December 2013.

Bay Area Clean Air Plan

The Bay Area Air Quality Management District's Bay Area 2017 Clean Air Plan requires implementation of "all feasible measures" to reduce ozone and to provide a control strategy to reduce emissions of ozone, particulate matter, toxic air contaminants, and greenhouse gases. The 2017 Clean Air Plan describes the status of local air quality and identifies emission control measures to be implemented. Consistency with this plan is the basis for determining whether the proposed project or variant would conflict with or obstruct implementation of an applicable air quality plan. Their compliance with the Bay Area Clean Air Plan is analyzed in Section 4.4, Air Quality, of this EIR.

Water Quality Control Plan for the San Francisco Bay Basin

The San Francisco Bay Regional Water Quality Control Board's Water Quality Control Plan for the San Francisco Basin (basin plan) is a master water quality control planning document. The basin plan designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.

The proposed project is generally consistent with these plans. Implementation of high-density residential development at the site would result in a land use pattern that concentrates population in an area well-served by transit and infrastructure, in close proximity to jobs and services, and in an efficient manner that could reduce reliance on personal automobile trips.

4. ENVIRONMENTAL SETTING AND IMPACTS

4.0 CHAPTER INTRODUCTION

Overview

Chapter 4, Environmental Setting and Impacts, provides a project-level analysis of the physical environmental impacts of implementing the proposed project or variant as described in Chapter 2, Project Description. This chapter describes the environmental setting, assesses impacts (offsite, onsite, construction-related, operational, direct, indirect, and cumulative impacts), and identifies mitigation measures that would reduce or avoid identified significant environmental impacts.

Scope of Analysis

The environmental setting discussion describes the current physical conditions, or baseline conditions, in the project area. The baseline used for environmental impacts analysis under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the notice of preparation for this EIR was published. As discussed in Chapter 1, Introduction, the project's notice of preparation was published on July 12, 2017, and an initial study was published on May 2, 2018. The initial study (Appendix B) concluded that many of the physical environmental impacts of the proposed project or variant would result in no impact or less-than-significant impacts, and that mitigation measures agreed to by the project sponsor and required as conditions of approval would reduce significant impacts to a less-than-significant level. CEQA does not require further assessment of a project or variant's less-than-significant impacts, which were identified in the initial study for the following environmental topics:

- Land use and land use planning (all topics)
- Population and housing (all topics)
- Cultural resources (archeological resources, human remains, tribal cultural resources)
- Greenhouse gas emissions (all topics)
- Recreation (all topics)
- Utilities and service systems (all topics)
- Public services (all topics)
- Biological resources (all topics)
- Geology and soils (all topics)
- Hydrology and water quality (all topics)
- Hazards and hazardous materials (all topics)
- Mineral and energy resources (all topics)
- Agriculture and forestry resources (all topics)

The initial study determined that the proposed project or variant could result in potentially significant impacts in the following topic areas, which are addressed in this EIR:

- Cultural resources (historic architectural resources)
- Transportation and circulation (all topics)
- Noise (all topics)
- Air quality (all topics)
- Wind (all topics)
- Shadow (all topics)

As described in Chapter 2, Project Description, as an addition to the proposed project or variant, the project would include a “straight-shot streetscape option.” This option could be applied to either the proposed project or the variant. The design of the straight-shot streetscape option would be similar to the proposed streetscape design, with the primary difference being the width of the proposed sidewalks. Additionally, under this option, there would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. The straight-shot streetscape option is not discussed for most topics in this EIR, because there would be no difference in impacts between the straight-shot streetscape option and the proposed streetscape design under either the proposed project or the variant. The straight-shot streetscape option is analyzed in Section 4.2, Transportation and Circulation, because it could have potential impacts on traffic flow and pedestrian access that would be different from those of the proposed project or variant.

Specific Approaches to the CEQA Analysis

Aesthetics and Parking Analysis (Senate Bill 743 and CEQA Section 21099)

CEQA section 21099(d) provides that “aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”¹ Accordingly, aesthetics and parking are not considered when determining whether a project that meets all of the following three criteria has the potential to result in significant environmental impacts:

¹ See section 21099(d)(1) of the CEQA statute.

- The project is in a *transit priority area*.²
- The project is on an *infill site*.³
- The project is residential, mixed-use residential, or an *employment center*.⁴

The proposed project and variant meet the first, second, and third criteria; therefore, this EIR does not consider aesthetics or the adequacy of parking in determining the significance of project impacts under CEQA.

CEQA section 21099(e) states that a lead agency maintains the authority to consider aesthetics impacts pursuant to local design review ordinances or other discretionary powers and that aesthetics impacts do not include impacts on historical or cultural resources. As such, the San Francisco Planning Department (planning department) does consider aesthetics for design review and to evaluate effects on historical or cultural resources.

The planning department recognizes that the public and decision-makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project, and may desire that such information be provided as part of the environmental review process. Therefore, some of the information that otherwise would have been provided in an aesthetics section of this EIR (such as visual simulations of the proposed project) is included in Chapter 2, Project Description. However, this information is provided solely for informational purposes and is not used to determine the significance of the environmental impacts of the project pursuant to CEQA.

Similarly, the planning department acknowledges that parking conditions may be of interest to the public and the decision-makers. Therefore, this EIR presents parking demand information in Section 4.2, Transportation and Circulation, for informational purposes and considers any secondary physical impacts associated with constrained parking supply as applicable in the transportation, air quality, greenhouse gas emissions, noise, and pedestrian safety analyses.

² CEQA section 21099(a)(7) defines a transit priority area as an area within 0.5 mile of an existing or planned *major transit stop*. A major transit stop is defined in CEQA section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

³ CEQA section 21099(a)(4) defines an infill site as a lot located in an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

⁴ CEQA section 21099(a)(1) defines an employment center as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and is located in a transit priority area.

Automobile Delay and Vehicle Miles Traveled Analysis

CEQA section 21099(b)(1) requires the Governor’s Office of Planning and Research to develop revisions to the CEQA Guidelines that establish criteria for determining the significance of transportation impacts of projects that promote the “reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” CEQA section 21099(b)(2) states when the revised CEQA Guidelines for determining transportation impacts have been certified pursuant to CEQA section 21099(b)(1), automobile delay, as described solely by *level of service* or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, the Governor’s Office of Planning and Research published for public review and comment a *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*.⁵ These proposed transportation impact guidelines recommended measuring the transportation impacts of projects using the metric of vehicle miles traveled. Vehicle miles traveled measures the amount and distance that a project might cause people to drive, accounting for the number of passengers in a vehicle.

The transportation impact guidelines proposed by the Governor’s Office of Planning and Research provide substantial evidence that vehicle miles traveled is an appropriate standard to use in analyzing transportation impacts to protect environmental quality, and that vehicle miles traveled is better than automobile delay at indicating impacts related to greenhouse gas emissions, air quality, and energy. Acknowledging this, San Francisco Planning Commission Resolution 19579, adopted on March 3, 2016:

- Found that automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall no longer be considered a significant impact on the environment pursuant to CEQA, because it does not measure environmental impacts, and therefore, does not protect environmental quality.
- Directed the environmental review officer to remove automobile delay as a factor in determining significant impacts pursuant to CEQA for all guidelines, criteria, and lists of exemptions, and to update the *Transportation Impact Analysis Guidelines for Environmental Review and Categorical Exemptions from CEQA* to reflect this change.
- Directed the environmental planning division and environmental review officer to replace automobile delay with vehicle miles traveled criteria that promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses, and that are consistent with proposed and forthcoming changes to the CEQA Guidelines by the Governor’s Office of Planning and Research.

⁵ Governor’s Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA: Implementing Senate Bill 743 (Steinberg, 2013)*, January 20, 2016.

Resolution 19579 became effective immediately for all projects that have not received a CEQA determination, and for projects that have previously received CEQA determinations but require additional environmental analysis.

Accordingly, this EIR does not discuss automobile delay impacts. Instead, Section 4.2, Transportation and Circulation, presents an analysis of vehicle miles traveled and induced automobile travel impacts. Nonetheless, decision-makers may consider automobile delay, independent of the environmental review process, as part of their decisions to approve, modify, or disapprove the proposed project or variant.

Environmental Analysis Format

Each environmental topic analyzed in this chapter includes the following subsections.

Introduction

The Introduction subsection includes a brief description of the types of impacts analyzed and a summary of the impacts that were focused out in the initial study (that is, impacts that were determined to result in a less-than-significant impact).

Environmental Setting

The Environmental Setting subsection describes the existing, baseline physical conditions of the project site and surroundings (e.g., existing land uses, transportation conditions, noise environment) with respect to the environmental topic at the time the notice of preparation was issued. Conditions are described in sufficient detail and breadth to allow a general understanding of the environmental impacts of the proposed project and variant.

Regulatory Framework

The Regulatory Framework subsection describes the relevant federal, state, and regional and/or local regulatory requirements that are directly applicable to the environmental topic being analyzed.

Approach to Analysis

The Approach to Analysis subsection describes the methodology used to analyze potential environmental impacts for each environmental topic under the identified significance thresholds. Some evaluations (e.g., vehicle miles traveled and transit capacity in transportation and circulation) are quantitative, while those for other topics (e.g., cultural resources) are qualitative.

Impacts and Mitigation Measures

The Impacts and Mitigation Measures subsection evaluates the potential for the proposed project and variant to result in direct or indirect adverse impacts on the existing physical environment, with consideration of both short-term and long-term impacts. The analysis covers all project phases, including construction and operation. The significance thresholds for environmental impacts are defined at the beginning of this subsection, and the discussion of the approach to the analysis explains how the significance thresholds have been applied to evaluate the impacts of the proposed project and variant.

Both project-level and cumulative impacts are analyzed. Project-level impacts could result from actions related to implementation of the proposed project or the variant. Cumulative impacts could result from implementation of the proposed project or variant in combination with other cumulative projects in the study area (for a discussion of these projects, see “Cumulative Impacts” on pp. 4.0.8-4.0.14).

SIGNIFICANCE THRESHOLDS AND DETERMINATIONS

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The guidelines implementing CEQA direct that this determination be based on scientific and factual data, including the entire record for the project, and not on argument, speculation, or unsubstantiated evidence. The significance thresholds (or criteria) used in this EIR to determine the severity of impacts are those established by the San Francisco Planning Department’s Environmental Planning Division. The Environmental Planning Division’s guidance is based on CEQA Guidelines Appendix G, with procedures as set forth in chapter 31.10 of the San Francisco Administrative Code. The significance thresholds are presented in each environmental topic section of this chapter before the discussion of impacts.

The impacts of the proposed project or variant are organized into separate categories based on the significance thresholds for that topic. Project-specific impacts are discussed first, followed by the cumulative analysis. Impacts are numbered and shown in boldface type. Impacts are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., “CR”). The following abbreviations are used for individual topics:

- CR: Cultural Resources
- TR: Transportation and Circulation
- NO: Noise
- AQ: Air Quality
- WI: Wind
- SH: Shadow

Each impact statement describes the impact that would occur without mitigation. The level of significance of the impact, indicated in parentheses at the end of the impact statement, is based on the following terms:

- **No Impact.** This determination applies if no potential exists for an impact or if the environmental resource does not occur in the project area or the area of potential impacts.
- **Less-than-Significant Impact.** This determination applies if the impact would not exceed the defined significance threshold or would be eliminated or reduced to a less-than-significant level through compliance with existing federal, state, and local laws and regulations. No mitigation is required for impacts determined to be less than significant.
- **Less-than-Significant Impact with Mitigation.** This determination applies if the project would result in a significant impact, exceeding the established significance threshold, but feasible mitigation is available that would reduce the impact to a less-than-significant level.
- **Significant and Unavoidable Impact.** This determination applies if the project would result in an adverse impact that exceeds the established significance threshold, and no feasible mitigation is available to reduce the impact to a less-than-significant level. Therefore, the residual impact would be significant and unavoidable.
- **Significant and Unavoidable Impact with Mitigation.** This determination applies if the project would result in an adverse impact that exceeds the established significance threshold, and although feasible mitigation would lessen the impact, the residual impact would be significant, rendering the impact unavoidable.

MITIGATION MEASURES

CEQA Guidelines section 15126.4 states that an EIR “shall describe feasible measures which could minimize significant adverse impacts.” CEQA requires that mitigation measures have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The project sponsor is required to implement mitigation measures identified in this chapter, and the lead agency (in this case, the City and County of San Francisco) is responsible for overseeing the project sponsor’s implementation of such mitigation measures.

Pursuant to CEQA Guidelines section 15126.4, mitigation measures are not required for environmental impacts that are not found to be significant. Therefore, in cases where this EIR finds the physical environmental impact of the proposed project or variant to be less than significant, but the San Francisco Planning Department has identified one or more measures that would further lessen the project’s already less-than-significant impact, these measures have been identified as “improvement measures.” The project sponsor has indicated that if the project is approved, it would incorporate all improvement measures identified in this EIR as part of the project.

The mitigation measures, where identified, are numbered and indented, and follow the impact statements. Each mitigation measure is numbered according to its corresponding impact statement and has an “M” in front to signify it is a mitigation measure (e.g., Mitigation Measure M-TR-1 for a mitigation measure that corresponds to Impact TR-1). If there is more than one mitigation measure for the same impact statement, the mitigation measures are numbered with a lowercase letter suffix (e.g., Mitigation Measures M-TR-1a and M-TR-1b).

CUMULATIVE IMPACTS

Cumulative impacts, as defined in CEQA Guidelines Section 15355, refer to two or more individual effects that, when taken together, are “considerable” or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts taking place over time. If the analysis determines that the potential exists for the proposed project or variant, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project’s incremental contribution to any significant cumulative impact is itself significant (i.e., “cumulatively considerable”).

- An EIR shall discuss cumulative impacts of a project when the project’s incremental effect is “cumulatively considerable” (e.g., the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current, and probable future projects, including those outside the control of the agency, if necessary).
- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- A project’s contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The discussion of impact severity and likelihood of occurrence need not be as detailed as for effects attributable to the project alone.
- The focus of analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

Approach to Cumulative Impacts

Two approaches to a cumulative impact analysis are provided in CEQA Guidelines Section 15130(b)(1): the analysis can be based on a list of past, present, and reasonably foreseeable probable future projects producing closely related impacts that could combine with those of a proposed project; or a summary of projections contained in a general plan or related planning document can be used to determine cumulative impacts. The factors described below were used to determine the appropriate level for cumulative analysis in this EIR.

To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following:

- **Similar Environmental Impacts.** A relevant project contributes to effects on resources that are also affected by the proposed project or variant. A relevant future project is defined as one that is “reasonably foreseeable,” such as a proposed project for which an application has been filed with the approving agency or has approved funding.
- **Geographic Scope and Location.** A relevant project is located within the geographic area within which effects could combine. The geographic scope varies on a resource-by-resource basis. For example, the geographic scope for evaluating cumulative effects to air quality consists of the affected air basin.
- **Timing and Duration of Implementation.** Effects associated with activities for a relevant project (e.g., short-term construction or demolition, or long-term operations) would likely coincide in timing with the related effects of the proposed project.

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project and the variant, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and to determine whether the project itself would cause a cumulatively considerable incremental contribution to any such cumulatively significant impacts. The analyses in this EIR employ both the list-based approach and a projections approach, depending on which approach best suits the individual resource topic being analyzed. For instance, the cumulative analysis of cultural resources impacts (for historical architectural resources only) considers individual projects that are anticipated in the vicinity of the project site that may affect historical architectural resources also affected by the proposed project. By comparison, the cumulative transportation and circulation analysis relies on a projection of overall citywide growth and other reasonably foreseeable projects, which is the typical methodology the San Francisco Planning Department applies to analyses of transportation impacts.

The cumulative impact analysis for each individual resource topic is presented in each resource section of this chapter immediately after the description of the direct project impacts and identified mitigation measures.

Cumulative Setting

Table 4.0.1: Cumulative Projects lists the past, present, and reasonably foreseeable relevant projects within 1,500 feet of the project site that, in conjunction with the proposed project or variant, are considered in the analysis of cumulative environmental impacts. These projects are shown on **Figure 4.0.1: Cumulative Projects**, p. 4.0.11.

Table 4.0.1: Cumulative Projects¹

Address	Case File No.	Dwelling Units	Uses (gross square feet)			
			Retail	Commercial	Office	Institutional
98 Franklin Street	2016-014802ENV	345	3,100			75,000
1629 Market Street (1601–1637 Market Street and 53 Colton Street)	2015.005848ENV	584	13,100		27,300	
1700 Market Street	2013.1179E	48		1,500		
1740 Market Street	2014.0409E	110	7,600			
1601 Mission Street	2014.1121ENV	220	7,336			
30 Otis Street	2015.010013ENV	416	2,199			15,947
42 Otis Street	2016-005406ENV	24 ²		2,000		
1 Oak Street	2009.0159E	320	1,300			
30 Van Ness Avenue ³	2017-008571ENV	610	21,000		350,000	
200–214 Van Ness Avenue	2015.012994ENV	113	5,000			54,000
Parcels M and N— 300 Octavia Street	2014.002330ENV	12		800		
Parcel O— 455 Fell Street	2015.002837ENV	108	1,200		2,000	2,900 ⁴
Parcels R and S	2014.1322ENV	56	7,500			
Parcel T	2014.1509ENV	26				
Total		2992	69,335	4,300	379,300	147,847

Notes:

gsf = gross square feet; No. = number

1. The cumulative projects list was identified at the time of the publication of the Notice of Preparation of an Environmental Impact Report (July 12, 2017). This list was updated in April 2018, July 2018, and August 2018.
2. These dwelling units will be single-room occupancy units.
3. The existing building is expected to be replaced with a high-rise residential tower, with a proposed Hub height increase to 520/120 feet.
4. Community activities space.

Source: Compiled by AECOM in 2017, updated in April 2018, July 2018 and August 2018.

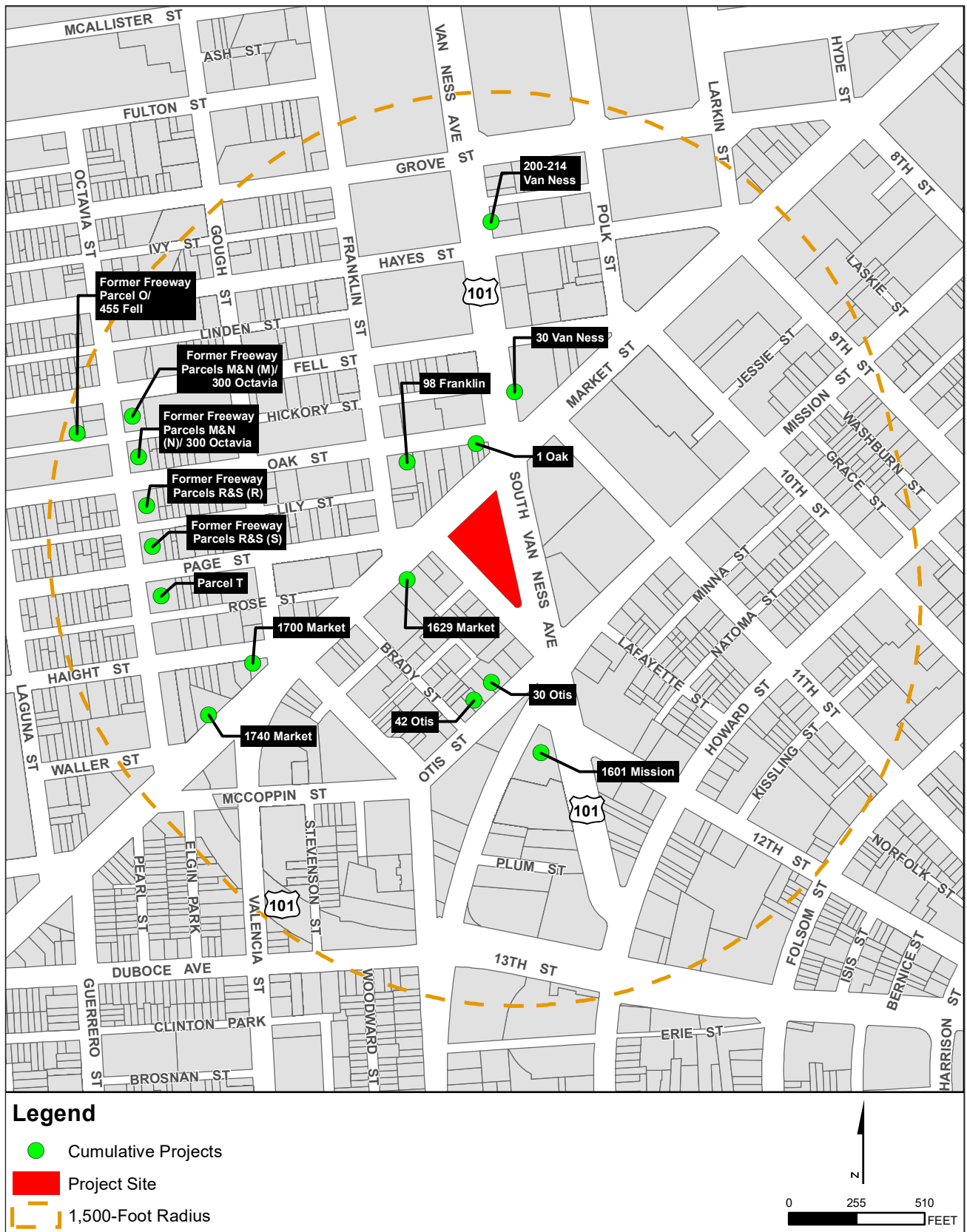


FIGURE 4.0.1 CUMULATIVE PROJECTS

The cumulative projects list was initially compiled when the Notice of Preparation of an Environmental Impact Report was released in July 2017. The list was revised in April 2018, prior to the release of the initial study, to remove the projects at 22-24 Franklin Street, 1532 Howard Street, 1546-1564 Market Street, 1699 Market Street, and 1500 Mission Street⁶, because construction had begun on each of them. The projects at 1563 Mission Street and parcels K and L were also removed, as all work had been completed. Those projects are considered part of the existing conditions.

The proposed projects at 98 Franklin Street and 30 Van Ness Avenue were added to the cumulative projects list based on environmental evaluation applications submitted after July 2017.

In July 2018, the cumulative project list was further revised to remove the projects at 33 Gough Street and 1390 Market Street, because those applications were withdrawn and are therefore no longer considered reasonably foreseeable. The proposed project at 42 Otis Street was added to the cumulative project list.

An explanation of why the changes to the cumulative project list do not affect the accuracy of the technical studies completed for the cumulative analysis of topics in this EIR is provided in the respective impact sections, where applicable.

In addition to the cumulative projects listed in Table 4.0.1, the following transportation improvement plans and areas plans are considered in the cumulative environmental analysis.

Van Ness Bus Rapid Transit—State Clearinghouse Number 2007092059. This project proposes operational and physical improvements to facilitate improved San Francisco Municipal Railway bus service along Van Ness Avenue between Mission and Lombard streets. Operational improvements include designating bus-only lanes to allow buses to travel with fewer impediments; adjusting traffic signals to give buses more green light time at intersections; and providing real-time bus arrival and departure information to passengers to allow them to manage their time more efficiently. Physical improvements include building high-quality, well-lit bus stations to improve passenger safety and comfort, and providing streetscape improvements and amenities to make the street safer and more comfortable for pedestrians and bicyclists who access the transit stations. Improvements to stations in the vicinity of the Van Ness Bus Rapid Transit project site include locating the bus rapid transit station in the northbound direction of South Van Ness Avenue at Market Street and discontinuing the existing curbside bus stop on South Van Ness Avenue north of Mission Street.

⁶ The 1500 Mission Street project includes the buildings currently under construction at both 1500 Mission Street and 49 South Van Ness Avenue.

Better Market Street Project—Case Number 2014.0012E. The goal of this project is to make improvements to Market Street to reestablish the street as the premier cultural, civic, and economic center of San Francisco. The proposed Better Market Street Project is a coordinated multicity agency effort led by San Francisco Public Works, the San Francisco Planning Department, and the San Francisco Municipal Transportation Agency to redesign and implement transportation and streetscape improvements to Market Street. The project would make improvements to the 2.2-mile segment of Market Street between Octavia Boulevard and The Embarcadero, and potentially to Mission Street between Valencia Street and The Embarcadero. The project envisions a new Market Street that is more beautiful and green, has enlivened public plazas and sidewalks full of cafés, showcases public art and performances, provides dedicated bicycle facilities, and delivers efficient and reliable transit. The proposed Better Market Street Project would include transportation and streetscape improvements, including changes to the roadway configuration and private vehicle access; traffic signals; surface transit improvements, such as transit-only lanes and changes to stop spacing, service, stop locations, stop characteristics, and infrastructure; bicycle facilities; pedestrian facilities; streetscapes; commercial and passenger loading; vehicular parking; plazas; and utilities.

Market & Octavia Area Plan—Case Number 2003.0347. As part of the San Francisco General Plan, the Market & Octavia Area Plan serves to respond to the need for housing, to repair the fabric of the neighborhood, and to support transit-oriented development. The area plan includes zoning for residential and commercial uses, prescribes streetscape and open space improvements, and locates high-density land uses close to transit. The Market & Octavia Area Plan established the Van Ness & Market Downtown Residential Special Use District, in which the project site is located, which is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence.

Western South of Market (SoMa) Area Plan—Case Number 2008.0877. This area plan is an adopted element of the San Francisco General Plan. The plan area occupies approximately 298 acres in the western portion of the SoMa area, with its northwestern boundary approximately 0.5 mile southeast of the project site. The Western SoMa Area Plan establishes new height and bulk districts, changes to zoning districts, and new density restrictions for the area. The area plan also includes streetscape improvements along designated streets and intersections, including installation of signalized pedestrian crossings; sidewalk extensions and corner bulb-outs; gateway treatments such as signage and lighting; physical roadway features such as enhanced hardscape area, landscaped islands, and colored textured pavement; public realm greening amenities (street trees and planted medians); and other pedestrian enhancements (street furniture and public restrooms).

The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (Hub) Project—Case Numbers 2015-000940ENV, 2017-008051ENV, and 2016-014802ENV. The proposed Hub Plan would amend the easternmost portions of 2008

Market and Octavia Area Plan of the San Francisco General Plan. The overarching objectives of the Hub Plan are to encourage housing, including affordable housing; create safer and more walkable streets, as well as welcoming and active public spaces; increase transportation options; and create a neighborhood with a range of uses and services to meet neighborhood needs.⁷ The Hub Plan would pursue this vision through changes to current zoning controls in the area to meet plan objectives. This would include changes to height and bulk districts for select parcels to allow more housing, including more affordable housing. Modifications to land use zoning controls would also allow more flexibility for development of nonresidential uses, specifically office, institutional, art, and public uses. The plan also calls for public-realm improvements to streets and alleys within and adjacent to the Hub Plan area.

In addition to analyzing the Hub Plan at a programmatic level, the Hub Plan EIR will evaluate two individual development projects within the Hub Plan area (i.e., the 30 Van Ness Avenue Project and 98 Franklin Street Project), and the designation of portions or all of the Hub Plan area as a housing sustainability district (HSD) at a project-specific level. A notice of preparation of an EIR for the Hub Plan EIR was released in May 2018 and a public scoping meeting was held in June 2018 to receive oral comments concerning the scope of the EIR. The draft EIR is expected to be published in summer 2019.

It is anticipated that if all 17 of the sites identified for upzoning in the Hub Plan were to be developed to the proposed maximum height and bulk limits, these changes would result in approximately 8,100 new residential units (over 15,700 new residents) in addition to new commercial and institutional space.

The Central SoMa Area Plan—Case Number 2011.1356E. The Central SoMa Area Plan is a comprehensive plan for the area surrounding much of the southern portion of the Central Subway transit line. The area encompassed by the plan includes roughly 230 acres that comprises 17 city blocks, as well as the streets and thoroughfares that connect SoMa to its adjacent neighborhoods: Downtown, Mission Bay, Rincon Hill, and the Mission District. The plan seeks to encourage and accommodate housing and employment growth within the Plan Area by: (1) removing land use restrictions (i.e., amending use districts) to support a greater mix of uses while also emphasizing office uses in portions of the Plan Area; (2) amending existing height and bulk districts; (3) modifying the system of streets and circulation within and adjacent to the Plan Area to meet the needs and goals of a dense, transit-oriented, mixed-use district; and (4) creating new, and improving existing, open spaces. The Plan also includes street network changes to Folsom, Howard, Harrison, Bryant, Brannan, Third, and Fourth streets, as well as new planning policies and controls for land use; urban form (bldg. height and design); street network/circulation changes; open space; historical preservation; and sustainability.

⁷ A draft plan was released in March 2017. See <http://sf-planning.org/market-street-hub-project>. Accessed April 21, 2018.

4.1 CULTURAL RESOURCES (HISTORIC ARCHITECTURAL)

Section 4.1, Cultural Resources (Historic Architectural), assesses project impacts on “historical resources,” as defined by CEQA Guidelines section 15064.5.¹ A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (CEQA Section 21084.1).

This section has three main subsections. The “Environmental Setting” subsection identifies the potential for the presence of historic architectural resources within the project site. The “Regulatory Framework” discussion identifies the pertinent federal, state, and local laws and regulations that pertain to the identification and regulation of historic architectural resources. The “Impacts and Mitigation Measures” discussion evaluates the direct, indirect, and cumulative impacts of the proposed project or project variant on the historical resources identified in the Environmental Setting discussion.

The information and analysis in this section are based on the *10 South Van Ness Avenue Mixed-Use Project Historic Resource Evaluation Part I* (HRE) prepared by SWCA Environmental Consultants.² The San Francisco Planning Department (planning department) has reviewed the HRE and concurs with its conclusions.³

Environmental Setting

The project site spans 10–50 South Van Ness Avenue and 1535–1599 Market Street (blocks/lots 3506/004 and 3506/003A) and is located at the southwest corner of Market Street and South Van Ness Avenue. The block’s only building fronts Market Street, 12th Street, and South Van Ness Avenue, and its physical address is 10 South Van Ness Avenue. The existing building is used as a car dealership. The southern half of the building has a rooftop parking lot that is open to the sky.

The building was originally constructed between 1926 and 1927. See **Figure 4.1.1: 10 South Van Ness Avenue – 1933 Photograph Facing South**. Several months after the property’s construction, a two-story concrete garage addition was added to the southern elevation. Since its construction, the storefronts, spaces, and offices on the project site have undergone a variety of alterations. See **Figure 4.1.2: 10 South Van Ness Avenue – 2016 Photograph Facing South**.

¹ The term “historic architectural resources” is used in this section to distinguish this type of historical resource from archeological resources, which are also historical resources under CEQA. Archeological resources are covered in the Initial Study (Appendix B to the EIR).

² SWCA Environmental Consultants, *10 South Van Ness Avenue Mixed-Use Project Historic Resource Evaluation Part I*, prepared by SWCA Environmental Consultants, September 2016. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2015-004568ENV.

³ City and County of San Francisco Planning Department, Preservation Review Team Form, November 16, 2016.



Source: San Francisco Architectural Heritage

Figure 4.1.1: 10 South Van Ness Avenue – 1933 Photograph Facing South



Source: SWCA Environmental Consultants

Figure 4.1.2: 10 South Van Ness Avenue – 2016 Photograph Facing South

Property Description

EXTERIOR

The stucco-clad, reinforced concrete building is primarily two stories tall, with a double-height second-floor ballroom volume. The subject building is built out to the property line, capped with a flat roof, and trimmed with a shallow cornice line and a low parapet. Remnants of Spanish Colonial Revival façade detailing are visible behind the large metal screens that were attached to the façade circa 1985.

The current main entrance to the auto showroom at the northeast corner of the site consists of paired, steel-framed glass doors, surrounded by single-pane sidelights and a transom window. Above the entrance, a large, curved screen mounted to the building's exterior is visible on the second story. This screen covers the original transom window openings on the first story and the original window openings on the second story. These original window openings appear to have been infilled. The recessed ballroom volume has a plain stucco wall, with a flat roof and a shallow coping along the eave line.

Although most of the façade detail has been removed, some is still visible. Along Market Street, a progression of piers spans the façade, with Spanish Colonial Revival-style ornamentation accenting the second story and cornice line. The piers divide this long elevation into 11 bays. All but four bays on the first story display large storefront windows. The third bay from the north corner of the elevation, the center bay, and the westernmost bay exhibit paired steel-framed doors with sidelights and transom windows. The fourth bay, the original main entry to the upper story, is infilled and covered with stucco. Above the bay, along the roofline, is a curvilinear Spanish Colonial Revival-style parapet that marks the former entrance of the El Patio Ballroom/Carousel Ballroom/Fillmore West.

The features and materials of the second story along Market Street are visually obscured by a series of large screens, one in each bay, which are attached to the building and cover the original transom windows on the first story and the original multiple-light casement windows and decorative railings on the second story.

The east elevation along Van Ness Avenue is almost identical to the Market Street elevation along the original two-story portion. The east elevation is composed of seven bays, all but one of which displays the same large, multiple-light windows. The one distinct bay toward the south has a large garage door opening to allow for customer parking for the auto showroom. To the south, the shorter, two-story garage section has simplified bays with various configurations of infilled windows, single personnel doors, multiple-light casement windows, and large garage door openings. In each bay, the large screens attached to the second story cover a set of three multiple-light casement windows.

The south elevation faces the corner of Van Ness Avenue and 12th Street. This elevation is divided into three bays by simple, attached piers. First-story bays are clad in smooth stucco. The upper floor displays two multiple-light casement windows in each bay. A single rectangular screen attached to the wall covers the upper story of all three bays.

On the west elevation, only the two northernmost bays have full-length piers; the rest extend from the second story to the roof cornice. The northernmost bay continues the use of large multiple-light windows on the first story. The other bays feature openings in a variety of configurations, including large garage door openings, a set of three infilled window openings, a metal personnel door, and two wood-framed double doors with transoms. The second story is covered by large screens, which cover original multiple-light casement windows (except in the southernmost bay, where the window has been replaced by a vent). The addition on the south continues the simplified pier pattern of the west elevation.

Through the building's history, the most visible changes have been the result of changes to signage and storefront elements. The installation of metal screens along the north, east, and south elevations was also significant, although a number of original features remain unaltered behind the screens. Although no permit specifically identifies the date when the metal screens were added, research and historic photographs suggest that they were added circa 1985.

INTERIOR

The first floor of the original portion of the building is currently a car showroom with an open plan and structural columns. See **Figure 4.1.3: Existing Ground-Floor Auto Showroom**. The space inside of the former main entrance to the El Patio Ballroom/Carousel Ballroom/Fillmore West space along Market Street has been converted into a staff room. The former ticket sales window in this room appears extant, although it has been glazed with fixed glass. Just beyond the former main entrance is a large arched opening leading to a wide staircase with a decorative metal banister. The stone steps are covered with a carpet runner.

At the top of the stairs is a large landing with two doors, one leading to offices and the other leading to the former service department (now closed). The offices have new finishes, including carpet, paint, and light fixtures. The automobile service department, formerly the El Patio Ballroom/Carousel Ballroom/Fillmore West dance and concert hall, consists of a large, open area with a concrete floor surrounded by decorative arched openings. Along three of the walls, there are decorative vents above the arches. The stage area appears to have been removed and the light fixtures have been replaced with fluorescent lights. Automobile service equipment, including two-post lifts and various jacks, have been installed throughout the space along with additional mechanical vents. **Figure 4.1.4: Existing Second-Floor Ballroom Space** provides a view of the second-floor ballroom space as it appears today, showing the decorative arches and grilles that were part of the ballroom setting.

4. Environmental Setting and Impacts
1. Cultural Resources (Historic Architectural)



Source: SWCA Environmental Consultants

Figure 4.1.3: Existing Ground-Floor Auto Showroom



Source: SWCA Environmental Consultants

Figure 4.1.4: Existing Second-Floor Ballroom Space

Historic Context

By the time the original owners of 10 South Van Ness Avenue developed the lot as an investment property in the 1920s, Market Street at Van Ness Avenue had become a viable location for the shops, automobile dealerships, and the ballroom dance venue at 10 South Van Ness Avenue.

10 SOUTH VAN NESS AVENUE BUILDING HISTORY

Developer and Architects

The original 1926-1927 building permit called for a two-story concrete building for “stores and a dancehall.” As described below under “Historic Uses,” the building housed a variety of retail uses, with the storefront spaces along Market Street used mainly for automobile-related businesses such as repair shops, parts distributors, and an automobile dealership on the first floor. The dance hall was on the second floor. The new property, commissioned by B. F. Schlesinger and Herbert and Mortimer Fleishhacker, was described as follows by the *San Francisco Chronicle* on November 20, 1926:

Accommodations for eight stores are planned for the Market Street frontage, three others will face Van Ness and one will face Twelfth Street. A large additional area at the rear will be planned to accommodate a garage or some similar enterprise. Samuels has already closed a lease with out-of-town capital known as the Van Ness Amusement Company for a ten-year lease on the entire upper floor of the building, which will have a ceiling elevation of twenty-one feet and will contain approximately 30,000 square feet of floor space. Exceptional attention has been given to the design of this floor, which will have a dance area...surrounded by a wide promenade, lounging rooms and other conveniences of the modern dance hall type.

The original portion of the building was designed by local architect Clarence C. Tantau (1884–1943), a San Francisco native and a member of the American Institute of Architects. Tantau became known primarily for his residential work for the exclusive millionaire colony at Pebble Beach and the Del Monte Hotel, designed in tandem with Louis Hobart. Based in San Francisco, he was best known for his Spanish style residences and commercial buildings. During his career, Tantau completed numerous commissions throughout the extended Bay Area, including residences in Atherton, Berkeley, Burlingame, Hillsborough, Monterey, Moss Beach, Piedmont, and Santa Cruz. Other notable projects include 1675 California Street (Du Broy Motor Car Company, 1917), 2090 Vallejo Street (residence, 1919), the Monterey Peninsula Country Club (1925), and the San Francisco Building at the Golden Gate International Exposition (1939).

Approximately one month after the original building permit was issued for construction, Schlesinger and the Fleishhacker brothers commissioned Perseo Righetti to design an attached two-story garage addition south of the original building. Perseo Righetti was a local architect whose practice focused on work for members of San Francisco’s Italian-American community.

Righetti partnered with H. P. Kuhl before 1909 and with A. Headman from 1909 to 1914. He is best known for his design of 414 Mason Street (Native Sons of the Golden West Building #2, 1911–1912) and 1239 Main Street, Angels Camp (Calaveras County Bank, 1900).

Historic Uses

First-Floor Retail

The ground floor of the 10 South Van Ness Avenue building has housed a wide variety of shops, automobile dealerships, and offices since its construction in the 1920s. The ground-floor tenants along Market Street evolved along with broader technological and economic shifts, and ranged from a furniture store to restaurant uses. As of 1929, Harry J. Lee sold Durant automobiles from the property. In 1930, El Patio Golf Greens advertised its grand opening. From 1931 until 1933, Gus and Edward Lachman used the ground floor for Lachman Bros. Home Furnishings. Additional tenants included the Fur Doctor in 1935, Lindy's Café in 1937, and Gilbert Finance Co. in 1939. For almost 90 years, a portion of the building has been used as an automobile showroom, including the current use. In 1935, Les Vogel Chevrolet Co. established a showroom that operated at the site until at least the mid-1960s. In the 1960s, Waters Buick also operated in the space.

Although numerous tenants have occupied 10 South Van Ness Avenue over the years, the building remained in the hands of Mortimer Fleishhacker's family foundation until 1970. Honda dealerships have occupied the building since the mid-1980s.

Second-Floor Ballroom

10 South Van Ness Avenue was built with a large, open-plan dance hall on the second story. Initially listed as the El Patio Dancing Academy, the El Patio Ballroom was open for business by 1930. Billing itself as "America's Finest Ballroom," El Patio was one of the better known clubs in San Francisco. Under the direction of John L. Wolohan, the house orchestra played both current music and the waltzes of prior years for patrons.

Although San Francisco had about four ballrooms at any one time during the 1930s, the number dipped to just one by 1941; El Patio appears to have been the only ballroom operating in San Francisco during World War II. After the war, dance halls and ballrooms saw a renaissance, reaching peak popularity in 1951, with a total of 11 in San Francisco through the decade. Dance hall and ballroom popularity began to decline in the 1960s. By 1963, El Patio had become the Carousel Ballroom, which operated under the Civic Center Ballrooms of California Inc. and City Center Ballroom. The Carousel Ballroom continued the ballroom tradition of music and dancing until 1968.

Fillmore West

By March 1968, the venue's ballroom days ended when a consortium of San Francisco musicians, including members of the Grateful Dead and Jefferson Airplane, took over the lease and began staging rock concerts in the hall. Within six months, however, the venue's new operators accumulated significant debt and went out of business. San Francisco music promoter and impresario Bill Graham was looking for an alternative site for his Fillmore Auditorium (located at Fillmore Street and Geary Boulevard in the Western Addition since 1966). In late 1968 Graham took over management of the Carousel Ballroom and rechristened it "Fillmore West" (although the name "Carousel Ballroom" remained on the building's exterior and continued to appear in concert posters for the Fillmore West)

Fillmore West occupied 10 South Van Ness Avenue for less than three years, closing in July 1971. During its tenure, the Fillmore West became as much a community center as it was a performance venue, hosting weekly games, audition nights, and recording sessions. By the time the Fillmore West closed, the venue had hosted, according to Graham, more than 1,200 shows attended by 4 million customers, and the *Los Angeles Times* called the venue "rock's most famous concert hall."

OWNERS AND OCCUPANTS OF 10 SOUTH VAN NESS AVENUE

B. F. Schlesinger and the Fleishhacker Brothers

As mentioned above, the building was commissioned by B. F. Schlesinger and Herbert and Mortimer Fleishhacker. Schlesinger, a native of the Midwest, hailed from a long line of department store owners; when he arrived in San Francisco, shortly after the 1906 earthquake, he became the assistant general manager of the Emporium department store. By 1923, Schlesinger became the store's general manager; subsequently, he established B. F. Schlesinger and Sons, Inc., based in Union Square.

The Fleishhacker brothers belonged to a prominent family of business and civic leaders in San Francisco, as well as a pioneering family of Jewish-American merchants. Mortimer Fleishhacker, Sr. (1866–1953) was a banker and entrepreneur who participated in many philanthropic institutions and activities throughout the Bay Area. He was a founder of Community Chest, the precursor of the United Way, and served as a University of California trustee. Herbert Fleishhacker, Sr. (1872–1957), the younger brother, was an entrepreneur and civic leader best known for his many philanthropic investments and projects throughout San Francisco. Among the most famous was the 1924–1925 establishment of Fleishhacker Pool, near the Pacific Ocean and the San Francisco Zoo (originally called Fleishhacker Zoo). When it opened, Fleishhacker Pool became the largest outdoor saltwater pool in the United States. Fleishhacker's endeavors included serving as president of the San Francisco Parks Commission and of Anglo California National Bank, which became Crocker First National Bank in 1955. As

of the late 1930s, Herbert was “generally regarded as the West Coast’s No. 2 financier”; however, legal troubles were said to have damaged his career in banking. Until 1970, the building at 10 South Van Ness Avenue was owned by the Fleishhacker Foundation, which used rent revenues to invest in causes of interest to the foundation.

Bill Graham

Bill Graham was one of the most influential and controversial figures in the annals of American rock music. As *Rolling Stone* writer Ben Fong-Torres wrote (following Graham’s 1991 death), “When in the mid-Sixties San Francisco came to represent nothing left to lose, there was a handful of identifiable pioneers that changed the face, the sound and the style of pop culture. The changers included...Bill Graham.”

After attending City College of New York, where he studied business administration, Graham made a visit to San Francisco just as the flower child/hippie movement was emerging. During that visit, Graham saw a performance of the San Francisco Mime Troupe in Lafayette Park, which prompted him to move to San Francisco. Once in San Francisco, after holding a number of jobs, Graham worked as the regional office manager for Allis-Chalmers, a manufacturer of industrial machinery. Graham soon moved on to become the business manager for the San Francisco Mime Troupe. Although his time there was short, it paved the way for Graham to begin producing music and live events under the “Bill Graham Presents” label that remained his brand throughout his career.

Graham staged his first rock concert in December 1965 at the Fillmore Auditorium, the precursor to the Fillmore West located at 1805 Geary Boulevard; the venue quickly served as an important stage for the most influential and innovative bands of the late 1960s. Graham’s Fillmore Auditorium and Fillmore West regularly staged performances by the Grateful Dead, Santana, Quicksilver Messenger Service, Boz Scaggs, and Hot Tuna and its predecessor, Jefferson Airplane. About three years after opening the original Fillmore, with the popularity of the shows growing and the venue limited in size, Graham moved the Fillmore West to the subject building.

The reputation of the Fillmore grew to the point that in late 1968, the *New York Times* noted that “the Fillmore (is) now what the Savoy, the Paramount and the Apollo used to be—great stages on which anyone who counts appears; to make it on them is to make it with the whole youth market. Graham’s talent as a promoter had much to do with his interest in staging diverse groups, to expose new audiences to a range of performers. As Graham told San Francisco reporter Belva Davis, in a CBS interview in 1969:

We don’t just run a dancehall, I don’t think we’re in the ballroom business only. We’re in the business of changing the taste of the public, introducing different types of acts, creating an environment... we don’t just put an act on the stage. ...we’re very much concerned with what happens to Joe and Jane date when they come in here...what happens to them, not just in relation to the talent on the

stage. But in relation to the place and the other people here...[s]ubconsciously you're dropping your inhibitions, which will make it more conducive for you to listen freely and be affected freely, and you to affect others.

In subsequent years, the 1971 closing of the Fillmore West coincided with the end to San Francisco's flower power era and heyday of the psychedelic music scene. Fillmore West occupied 10 South Van Ness Avenue for less than three years, closing in July 1971. Graham's Fillmore Auditorium (located at Fillmore Street and Geary Boulevard) continues to operate today.

Graham helped popularize an approach for staging music that remains the norm by dispensing with seating and providing a more participatory experience, similar to the atmosphere of outdoor venues. Through the Fillmore West, Graham exposed concertgoers not only to rock's new sound but also to its roots. He understood the appetite of young audiences for the new "San Francisco sound," and the relevance of a wide range of musicians. Graham-created lineups at the Fillmore West were masterful and eclectic, providing San Francisco and America a crash course in the history of American popular music.

In October 1991, 20 years after the closure of the Fillmore West, Graham died in a helicopter crash at the age of 60. More than 300,000 people attended Graham's memorial concert, held on the Golden Gate Park Polo Fields. Three months after his death, Graham was inducted into the Rock & Roll Hall of Fame.

Existing Status under Historical Resource Registers⁴

SAN FRANCISCO PLANNING CODE ARTICLE 10

The project site does not contain any San Francisco Planning Code (planning code) article 10 landmarks or structures of merit, nor is the project site located in an article 10 historic district.

A contributor to the discontinuous Market Street Masonry Historic District⁵ is located approximately 115 feet from the northwest corner of 10 South Van Ness Avenue at 1580–1598 Market Street.

⁴ The status codes listed here were retrieved from the San Francisco Planning Department's San Francisco Property Information Map database for block/lot 3506/004, <http://propertymap.sfplanning.org>, accessed January 30, 2018.

⁵ The Market Street Masonry Historic District is a noncontiguous landmark district comprising seven buildings on Market Street between 12th and Valencia streets and an eighth structure at Franklin and Fell streets.

SAN FRANCISCO PLANNING CODE ARTICLE 11

The existing building at 10 South Van Ness Avenue is not within any conservation district as designated by article 11 of the San Francisco Planning Code.

SAN FRANCISCO DEPARTMENT OF CITY PLANNING ARCHITECTURAL QUALITY SURVEY, 1976

This 1976 survey was a citywide reconnaissance (“windshield”) survey that identified and rated properties deemed to be architecturally significant. The survey did not include contextual or building-specific research. Given the limited scope and date of completion, the 1976 survey was not officially recognized by the San Francisco Planning Department as a valid local register of historical resources for the purposes of CEQA. The 1976 survey did not rate the 10 South Van Ness Avenue building as significant.

SAN FRANCISCO ARCHITECTURAL HERITAGE SURVEY, 1978

This survey, led by San Francisco Architectural Heritage in 1977–1978, considered properties throughout the downtown area, assigning status codes ranging from A (highest importance) to D (minor or no importance). In 1984, the survey area was expanded from downtown, to include the South of Market area. 10 South Van Ness Avenue was documented in the 1978 survey and assigned a status code of C (contextual importance).⁶

MARKET & OCTAVIA AREA PLAN HISTORIC RESOURCE SURVEY EVALUATION, 2006/2007

Following the adoption of the Market & Octavia Area Plan in 2007, the community, in partnership with the planning department, hired Page & Turnbull Associates to complete a historic survey of the plan area. In February 2009, the survey was adopted and the remainder of the year was dedicated to integrating the results of the survey into the area plan.

The survey found that the subject building does not appear eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), but that it does appear eligible for local listing or designation due to its continuous use by businesses within the same industry and role as an anchor at the prominent intersection of Market Street and South Van Ness Avenue. The survey, accordingly, assigned the subject building a California Historical Resource Status Code of 5S3 (eligible for local listing or designation).

⁶ Category C. Contextual Importance: Building which are distinguished by their scale, materials, compositional treatment, cornice and other features. They provide the setting for more important buildings and they add visual richness and character to the downtown area. Many C-group buildings may be eligible for the NRHP as part of historic districts. Cited from Foundation for San Francisco Architectural Heritage, *Splendid Survivors: San Francisco Downtown Architectural Heritage*, 1979, p. 13.

The survey did not reach any conclusion as to the property's significance with respect to its association with Bill Graham and Fillmore West. However, it acknowledged that with further future study, the building could potentially be found eligible for listing in the CRHR for its association with Bill Graham's Fillmore West.⁷ Therefore the survey recommends that, "with the passage of time," the building be reevaluated for listing on the CRHR.⁸

The HRE for the current 10 South Van Ness Project undertakes the reevaluation of the property as recommended by the Market & Octavia Area Plan Historic Resource Survey.

AUTOMOTIVE SUPPORT STRUCTURES HISTORIC RESOURCE SURVEY, 2009/2010

This survey was completed to identify significant themes and properties related to Van Ness Avenue's remarkable concentration of automobile-related properties. As part of the survey, more than 100 properties were considered. The findings of this survey are presented in *Van Ness Auto Row Support Structures – A Survey of Automobile-Related Buildings along the Van Ness Avenue Corridor*, which was adopted by the San Francisco Planning Commission in 2010.

As part of the Van Ness Auto Row Support Structures historic context statement and survey, 10 South Van Ness Avenue was evaluated under CRHR criterion 3 (architecture) for its potential eligibility as a longtime automobile-related property. The building was found ineligible for national, state, or local listing, both individually and as part of a district (status code 6Z). The survey concluded that alterations to the 10 South Van Ness property had rendered it ineligible due to a lack of integrity resulting from the application of screens that obscured the façade and the removal of the building's original ornament.

Evaluation of the Property as an Historical Resource

UNDER CALIFORNIA REGISTER

According to Public Resources Code section 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

⁷ Page & Turnbull, Inc., *12 South Van Ness Avenue, Department of Parks and Recreation Primary Record*, Series 523A Form; August 11, 2006; Page & Turnbull, Inc., *12 South Van Ness Avenue, Department of Parks and Recreation Building, Structure, and Object Record*, Series 523B Form, March 2007. On file with the San Francisco Planning Department.

⁸ Ibid.

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Criterion 1 (Events)

The 2016 historic resources evaluation prepared for the proposed project concluded that the subject building appears eligible for the CRHR under criterion 1 (events), for its association with the internationally celebrated and iconic Fillmore West. This venue embodied the counterculture art and spirit of San Francisco in the 1960s and early 1970s. The legacy and importance of this venue continues to be reflected in the now-iconic, psychedelic Fillmore West concert posters. The Fillmore West's legacy also lives on in the many "Live at the Fillmore West" recordings, which have become highly significant in the annals of American music.

Criterion 2 (Persons)

The property also appears eligible under CRHR criterion 2 (persons) for its direct association with music promoter, and impresario Bill Graham. As discussed above, Bill Graham was one of the most influential and controversial figures in the annals of American rock music. The period of significance is 1968 to 1971.

Criterion 3 (Design/Construction)

The Historic Resource Evaluation for the proposed project did not revisit the conclusion of the earlier 2009/2010 Automotive Support Structures Historic Resource Survey. That survey concluded that the property did not appear to be eligible for inclusion in the CRHR under criterion 3 (Design/Construction) because the building was obscured by screens and most of its ornament had been obscured or removed. As such, the property lacks sufficient integrity of design to convey its significance under criterion 3.

Criterion 4 (Information Potential)

Criterion 4 is commonly understood to apply primarily to archeological resources. Information in the historical record about such resources may be unavailable or sparse. Such resources may lack physical integrity or physical accessibility (they may be buried or submerged) to describe their features and evaluate their significance. As such, the significance of archeological resources under CEQA is premised on their potential to yield important historical or scientific information.

Archeological research and physical investigative methods are necessary to realize the information potential of such resources.

The surface architectural resources within the project site are from a relatively recent historic era that is well documented in the historic record. These resources are therefore unlikely to yield important scientific or historical information under CRHR Criterion 4 that is not already documented and available in the historic record.

The potential for the presence of subsurface pre-historic and historic archeological resources within the project site that predate the existing development is addressed in the initial study, Topic E.3. Cultural Resources (see EIR Appendix B).

INTEGRITY

In addition to meeting these criteria, a property must retain historic integrity, which is defined in National Register Bulletin 15 as the ability of a property to convey the reasons for its significance. To assess integrity, the National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR. To retain integrity, a property must possess several, if not all, of these seven qualities:

1. Location: The place where the historic property was constructed or the place where the historic event occurred.
2. Design: The combination of elements that create the form, plan, space, structure, and style of a property.
3. Setting: The physical environment of a historic property.
4. Materials: The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6. Feeling: A property's expression of the aesthetic or historic sense of a particular period of time.
7. Association: The direct link between an important historic event or person and a historic property.

Overall, the property retains sufficient integrity of location, design, setting, and association to enable it to convey its significance under CRHR criterion 1 (Events) and criterion 2 (Persons). This finding is based on a consideration of the resource's rareness and sociocultural (rather than architectural) significance, as the location of the Fillmore West and in direct association with Bill Graham. The retention of integrity under CRHR criterion 1 (Events) and criterion 2 (Persons) is also based on the presence of extant (though currently covered) character-defining features on the exterior and interior, and the reversibility of a number of alterations (such as the auto-lifts in the

interior ballroom space), the removal of which would reinforce the property's association with historical events and persons. The significance of 10 South Van Ness is not premised on its possessing an intact and cohesive visual or functional relationship with nearby properties, or by the importance of the building's architectural features. Each of the seven qualities in relation to the 10 South Van Ness property is discussed below.

1. **Location: Fillmore West retains integrity of location.** The venue's prominent location at the corner of South Van Ness Avenue and Market Street is particularly critical in conveying its sociocultural significance.
2. **Design: Fillmore West retains integrity of design.** The property displays several visible changes in design that reflect its ongoing evolving uses over time. These include the removal of the original Fillmore West blade sign and marquee atop the Market Street entrance, as well as the removal of the marquee over the 10 South Van Ness Avenue entrance. In addition, the original deeply recessed theater entrance of the Fillmore West is currently covered by concrete slabs. Overall, however, the property retains sufficient integrity of design to convey its significance under CRHR criterion 1 (Events) and criterion 2 (Persons).

Extant exterior character-defining features that express the building's design include the overall symmetrical design composition and decorative pilasters and ornament; the rhythmic bays and fenestration pattern; and the decorative Spanish Colonial Revival-style parapet. Some of these features are obscured by metal screens on the north, east, and south elevations; if the metal screens were removed, the essential form of the building and these character-defining features remain intact.

Character-defining features on the interior include the open plan, with few walls or divisions, overall spatial relationships of the open plan to the arcaded spaces along the periphery, and the incorporation of decorative arches. On the interior, a number of steel automobile lifts were bolted to the concrete floor of the ballroom. If the automobile-lifts were removed, the essential form of the ballroom (its open-plan and relationship to the arcaded spaces and decorative arches) would remain intact. In this way, the interior space appears to retain its original dimensions, as designed in 1926 to serve as an open ballroom. The main design motif in the ballroom is a series of distinctive, elaborately curved arches that a concertgoer from 1970 would recognize.

By the time Bill Graham opened the Fillmore West, the elements of the building that conveyed its overall design included not just the building's ornamental detailing and style, but also the distinctive triangular plan of the 1926-1927 building (which anticipated the eventual planned extension of South Van Ness through the lot in 1931).

3. **Setting: Fillmore West retains integrity of setting.** The significance of the property under CRHR criterion 1/A (Events) and criterion 2/B (Persons) is not premised on its possessing a cohesive visual, architectural, or functional relationship with surrounding properties. Its setting at the corner of South Van Ness Avenue and Market Street, in an area of the Market & Octavia Area Plan area known for its eclectic development history and uses, remains sufficiently intact to convey significance.
4. **Materials: Fillmore West does not retain integrity of materials.** There have been enough alterations to the ballroom exterior, entrance, and interior facilities (alterations that would have reflected its use as a concert hall) that the property does not retain integrity of materials.

5. **Workmanship: Fillmore West does not retain integrity of workmanship.** Similarly, there have been enough alterations to the ballroom facilities overall, as a concert hall, that the property does not retain integrity of workmanship.
6. **Feeling: Fillmore West does not currently retain integrity of feeling,** because of the extensive changes to the building's interior and exterior.
7. **Association: Fillmore West has integrity of association.** It was the home of the now-legendary music venue, Fillmore West, established by the nationally significant San Francisco music promoter and impresario, Bill Graham.

Based on these findings, the Fillmore West at 10 South Van Ness Avenue retains integrity such that it is able to convey its significance under CRHR criteria 1 and 2, and therefore qualifies as an historical resource under CEQA.

CHARACTER-DEFINING FEATURES

The character-defining features of 10 South Van Ness are as follows:

Exterior Features (Building Overall)

- Reinforced, concrete construction
- Corner siting and orientation, facing intersection of Market Street and Van Ness
- Set flush to the sidewalk
- Irregularly shaped building plan
- Spanish Colonial Revival-influenced ornament and detailing
- Decorative pilasters, dividing bays
- Symmetrical design composition
- Varied massing, primarily two stories, with a three-story pop-out on the west and a one-story block on the south
- Repeating, rhythmic bays, separated by attached piers with ornamental detailing
- Metal-framed, grouped, and multilight windows, casements, and transoms

Interior Features (Ballroom)

- Interior circulation from downstairs to ballroom entrance (original)
- Open plan of the ballroom
- Concrete floors
- Doubled-back stairway
- Decorative metal banister leading upstairs to the venue
- Elaborate, decorative arch motif encircling the ballroom
- Office spaces, accessed off stairwell via single wood doors

Nearby Historical Resources

One article 10 historic district (the Market Street Masonry Historic District, adopted in April 2013), three article 11 properties, and several other properties that are eligible for the CRHR and considered historical resources under CEQA are located within 500 feet of 10 South Van Ness Avenue, as discussed below.

ARTICLE 10

The following article 10 property is located in the vicinity of the project site. It is one of eight contributors to the Market Street Masonry Historic District, adopted in April 2013.

- 1580–1598 Market Street, approximately 120 feet to the northwest of 10 South Van Ness Avenue (also designated under article 11 as discussed below).

ARTICLE 11

The following article 11 properties located in the vicinity of the project site have been designated significant or contributory under article 11 of the planning code:

- 1580–1598 Market Street, approximately 120 feet to the northwest of 10 South Van Ness Avenue (also designated under article 10 as discussed above);
- 11 Van Ness Avenue, approximately 260 feet to the north of 10 South Van Ness Avenue;
- 50 Oak Street, approximately 325 feet to the northwest of 10 South Van Ness Avenue.

MARKET & OCTAVIA AREA PLAN HISTORIC RESOURCE SURVEY EVALUATION

The Market & Octavia Area Plan Historic Resource Survey identified the following properties as eligible for inclusion in the California Register of Historical Resources:

- 1601 Market Street, across 12th Street to the west of 10 South Van Ness Avenue
- 40 12th Street, across 12th Street to the west of 10 South Van Ness Avenue
- 42 12th Street, across 12th Street to the west of 10 South Van Ness Avenue
- 68 12th Street, across 12th Street to the west of 10 South Van Ness Avenue
- 30 Otis, Street, approximately 140 feet to the south of 10 South Van Ness Avenue
- 14–18 Otis Street, approximately 210 feet to the south of 10 South Van Ness Avenue
- 1629 Market Street, approximately 475 feet to the southwest of 10 South Van Ness Avenue

Regulatory Framework

Federal

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places is the nation's master inventory of cultural resources worthy of preservation. It is administered by the National Park Service, which is represented at the state level by the state historic preservation officer. The NRHP includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the federal, state, or local level. The NRHP includes four evaluative criteria to determine eligibility of a historic property, as described below in Section 4.1.4,¹⁰ South Van Ness Avenue Significance Evaluation.

Although there are exceptions, certain kinds of resources are not usually considered for listing in the NRHP: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that are less than 50 years old. In addition to qualifying for listing under at least one of the evaluative criteria of the NRHP, a property must possess sufficient integrity to be considered eligible for inclusion. According to *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, integrity is defined as “the ability of a property to convey its significance.”⁹ The National Register Bulletin defines seven characteristics of integrity as described below in Section 4.1.4, 10 South Van Ness Avenue Significance Evaluation. According to National Register Bulletin 15, “[t]o retain historic integrity a property will always possess several, and usually most, of the aspects.”

State

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR, established in Public Resources Code section 5024.1, is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The register helps government agencies identify and evaluate California's historical resources, and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change.¹⁰ Any resource listed in, or eligible for listing in, the CRHR is to be considered during the CEQA process. A cultural resource is evaluated under four CRHR criteria to determine its historical significance. To be considered significant, a resource must meet one or more of the four criteria as described above on pp. 4.1.13–4.1.14.

⁹ National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, 1997, p. 44.

¹⁰ Public Resources Code section 5024.1(a).

In addition, sufficient time must have passed to allow a “scholarly perspective on the events or individuals associated with the resource.” Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource.¹¹ To protect potential resources, the California Office of Historic Preservation recommends documenting, and taking into consideration in the planning process, any cultural resource that is 45 years or older.¹²

The CRHR also requires that significant resources possess integrity, defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.”¹³ These seven aspects of integrity are described above on p. 4.1.14.

Local

SAN FRANCISCO GENERAL PLAN

The following objectives and policies in the general plan’s Urban Design Element are applicable to historic preservation:

- **Objective 2:** Conservation of resources which provide a sense of nature, continuity with the past, and freedom from overcrowding.
 - **Policy 2.4:** Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.
 - **Policy 2.5:** Use care in remodeling of older buildings, in order to enhance rather than weaken the original character of such buildings.
 - **Policy 2.6:** Respect the character of older development nearby in the design of new buildings.

The Market & Octavia Area Plan, an area plan within the San Francisco General Plan, contains the following objective and supporting policies that address historic preservation:

- **Objective 3.2:** Promote the preservation of notable historic landmarks, individual historic buildings, and features that help to provide continuity with the past.

¹¹ California Code of Regulations title 14, section 4852(d)(2).

¹² California Office of Historic Preservation, *Instructions for Recording Historical Resources*, March 1995, <http://www.ohp.parks.ca.gov/pages/1054/files/manual95.pdf>, accessed July 18, 2017. The 45-year criterion is in place to account for a projected 5-year interval between resource identification and planning decisions. The criterion ensures that resources that will reach the age requirement in the interim are fully considered during the environmental review and decision-making processes.

¹³ California Office of Historic Preservation, *California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register)*, Technical Assistance Series #6, N.D., 2011, <http://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>, accessed July 18, 2017.

- **Policy 3.2.5:** Preserve landmark and other buildings of historic value as invaluable neighborhood assets.
- **Policy 3.2.6:** Encourage rehabilitation and adaptive reuse of historic buildings and resources.
- **Policy 3.2.8:** Protect and preserve groupings of cultural resources that have integrity, convey a period of significance, and are given recognition as groupings through the creation of historic or conservation districts.
- **Policy 3.2.9:** Preserve resources in identified historic districts.
- **Policy 3.2.11:** Ensure that changes in the built environment respect the historic character and cultural heritage of the area, and that resource sustainability is supported.
- **Policy 3.2.12:** Encourage new building design that respects the character of nearby older development.
- **Policy 3.2.14:** Apply the “Secretary of the Interior’s Standards for the Treatment of Historic Properties” for all projects that affect individually designated buildings at the local, state, or national level.
- **Policy 3.2.16:** Preserve the cultural and socioeconomic diversity of the plan area through preservation of historic resources.
- **Policy 3.2.17:** To maintain the City’s supply of affordable housing, historic rehabilitation projects may need to accommodate other considerations in determining the level of restoration.

As set forth in Chapter 3, Plans and Policies, of this draft EIR, the Accountable Planning Initiative (Proposition M of 1986) added eight priority policies to the planning code and to the preamble to the general plan that “shall be the basis upon which inconsistencies in the General Plan are resolved” (San Francisco Planning Code section 101.1). Priority policy 7 is “that landmarks and historic buildings be preserved.” As noted in Chapter 3, demolition of the building on the project site could be inconsistent with this priority policy.

City decision-makers, in consideration of the proposed project’s general plan consistency, will evaluate all relevant general plan objectives and policies, including, for example, those that address providing affordable housing and promoting neighborhood-serving retail uses, and that discourage the use of commuter automobiles. City decision-makers will evaluate whether, on balance, the project would be consistent with the general plan, including the eight priority policies added by the Accountable Planning Initiative. Inconsistency with a particular general plan policy does not indicate that a project is inconsistent with the general plan as a whole. Further, such a policy conflict, in and of itself, does not represent a significant adverse effect on the environment, although it may serve as an indicator that such an effect could arise.

SAN FRANCISCO PLANNING CODE

Article 10 Landmarks

San Francisco Planning Code Article 10, Preservation of Historical, Architectural and Aesthetic Landmarks, provides for official designation of landmarks and historic districts that have “a special character or special historical, architectural or aesthetic interest or value.” Landmarks can be buildings, sites, or landscape features. Landmark status provides the greatest level of protection for historic resources in San Francisco; in general, alteration of a landmark requires approval by the Historic Preservation Commission in the form of a Certificate of Appropriateness.

Article 11, Buildings and Conservation Districts

San Francisco Planning Code Article 11, Preservation of Buildings and Districts of Architectural, Historical, and Aesthetic Importance in the C-3 Districts, governs downtown buildings. There are five ratings for buildings under article 11. Category I and II buildings (“Significant Buildings”) are the most important. Contributory Buildings have a lesser level of significance and are classified as category III or category IV, depending on whether they are within an identified conservation district. Buildings in categories I through IV are considered historical resources under CEQA. Unrated or noncontributory buildings are assigned to category V.

An important provision of article 11 is the establishment of *conservation districts*, defined as “substantial concentrations of buildings that together create subareas of special architectural and aesthetic importance.”

SAN FRANCISCO PLANNING DEPARTMENT CEQA REVIEW PROCEDURES FOR HISTORICAL RESOURCES

The San Francisco Planning Department’s CEQA Review Procedures for Historic Resources provides guidance for the CEQA review process with regard to historic resources. As a certified local government and the lead agency in CEQA determinations, the City has instituted guidelines and a system for initiating CEQA review of historical resources. The planning department’s CEQA review procedures for historical resources incorporate the CEQA guidelines into the City’s existing regulatory framework. To facilitate the review process, the planning department has organized some 27 criteria into three major categories that classify properties based on their evaluation and inclusion in specified registers or surveys, as outlined in San Francisco Preservation Bulletin 1677 and summarized here (category A is divided into two subcategories):¹⁴

¹⁴ San Francisco Planning Department, *Preservation Bulletin No. 16, CEQA Review Procedures for Historic Resources*, Draft, March 31, 2008.

- **Category A.1: Resources Listed on or Formally Determined to Be Eligible for the California Register of Historical Resources.** These properties are historical resources.
- **Category A.2: Adopted Local Registers, and Properties That Have Been Determined to Appear or May Become Eligible for the California Register.** These properties are presumed to be historical resources for purposes of CEQA, unless a preponderance of the evidence demonstrates that the resource is not historically or culturally significant.
- **Category B: Properties Requiring Further Consultation and Review.** Properties that do not meet the criteria for listing in categories A.1 or A.2, but for which the City has information indicating that further consultation and review will be required to evaluate whether a property is a historical resource for the purposes of CEQA.
- **Category C: Properties Determined Not to Be Historical Resources or Properties for Which the City Has No Information Indicating That the Property Is a Historical Resource.** Properties that have been affirmatively determined not to be historical resources, properties less than 50 years of age, and properties for which the City has no information indicating that the property qualifies as a historical resource.

The San Francisco Planning Department considers a listing of historical resources approved by ordinance or resolution of the San Francisco Board of Supervisors or the San Francisco Planning Commission to be a local register of historical resources for purposes of CEQA evaluation. These lists include articles 10 and 11 of the San Francisco Planning Code, as well as other adopted historical resource surveys, including the Here Today survey, the 1977–78 Downtown Survey (Splendid Survivors), the Dogpatch Survey, the Central Waterfront Survey, and the North Beach Survey. Other historical resource surveys, such as the Architectural Heritage surveys, and the 1990 Unreinforced Masonry Building survey, are not approved by ordinance or resolution, but contain useful initial information as the basis for further study.

Even if a property is not listed in any federal, state or local register of historical resources, a lead agency may still determine a property is an historical resource for the purposes of CEQA provided that the lead agency's determination is supported by substantial evidence in light of the whole record (see CEQA Guidelines, Section 15064.5(a)(3))

Impacts and Mitigation Measures

Significance Thresholds

The significance thresholds in this analysis are consistent with the environmental checklist in CEQA Guidelines Appendix G, which was adopted and modified by the San Francisco Planning Department. The project would have a significant effect on a historic architectural resource if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code.

A “substantial adverse change” is defined by CEQA Guidelines section 15064.5 as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.” The significance of a historical resource is “materially impaired,” according to CEQA Guidelines section 15064.5(b)(2), when a project “demolishes or materially alters in an adverse manner those physical characteristics” of the resource that do any of the following:

- (A) Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources
- (B) Account for its inclusion in a local register of historical resources pursuant to Public Resources Code section 5020.1(k) or its identification in a historical resources survey meeting the requirements of Public Resources Code section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
- (C) Convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA

CEQA Guidelines section 15126.4(b)(2) states, “In some circumstances, documentation of a historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.” In such cases, the impact on the environment from demolition or substantial alteration of a historical resource would be significant and unavoidable even after the historical documentation has been completed.

Approach to Analysis

This section identifies impacts on historical resources and considers direct and indirect impacts on historic architectural resources based on the definitions set forth in CEQA Guidelines section 15064.5. Either the proposed project or the variant would demolish the existing structure on the project site. Because the impacts would be similar, the proposed project and variant are discussed together.

Once a resource has been identified as significant, it must be determined whether the project would cause a “substantial adverse change” that would materially impair the significance of the resource. Material impairment occurs when there is demolition or alteration of the resource’s physical characteristics such that it can no longer convey its historical significance and justify its inclusion in the CRHR or other applicable listing. Mitigation of effects on historical architectural resources may involve avoiding demolition of the resource, revising a proposed project to minimize the effect, or, where avoidance or minimization is not feasible, documenting the resource. As noted above, documentation may not reduce significant effects on a historical architectural resource to a less-than-significant level.

Project Features

Implementation of the proposed project or variant would include demolition of the existing buildings (consisting of the 1926-1927 building at the north portion of the project site and a concrete garage addition constructed shortly thereafter) on the project site (a historical resource for the purposes of CEQA) and construction of a mixed-use development that would include residential, commercial, parking, and open space uses. No existing building features would be incorporated into the proposed new structure(s) on the project site. A complete project description is included in Chapter 2.0, Project Description.

Impact Analysis

Impact CR-1: The proposed demolition of the building at 10 South Van Ness Avenue would cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines. (*Significant and Unavoidable with Mitigation*)

Implementing the proposed project or variant would require demolishing the existing building at 10 South Van Ness Avenue. As discussed previously, the building is individually eligible for listing in the CRHR under Criterion 1 (events) for its association with the Fillmore West concert venue and under Criterion 2 (persons) for its association with Bill Graham. Demolishing the existing 10 South Van Ness Avenue building would materially impair the significance of the historical resource and, as such, would cause a substantial adverse impact on a historical resource. This would be considered a significant impact under CEQA.

Implementing Mitigation Measures CR-1a, CR-1b, and CR-1c would lessen the impact of the proposed demolition of the existing historic building at 10 South Van Ness Avenue through documentation, salvage, and public outreach through interpretive display. The documentation and outreach would highlight the resource's individual importance and the building's historical context as the internationally celebrated and iconic Fillmore West founded by Bill Graham. However, these mitigation measures cannot reduce this impact to a less-than-significant level. As a result, this impact would be significant and unavoidable.

Mitigation Measure M-CR-1a: Documentation

Prior to demolition or the issuance of site permits for the 10 South Van Ness Avenue project, the project sponsor shall undertake Historic American Building Survey (HABS)–level documentation of the property. The documentation shall be funded by the project sponsor and undertaken by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth in the Secretary of the Interior's Professional Qualification Standards (Code of Federal Regulations title 36, part 61). Before beginning work on any aspect of the documentation, the professional overseeing the documentation shall meet with the preservation staff of the Planning Department for review and approval of a coordinated documentation plan. The documentation package created shall consist of the items listed below.

- **Measured Drawings:** A set of measured drawings that depict the existing size, scale, and dimensions of the property. The Planning Department's preservation staff will accept the original architectural drawings or an as-built set of architectural drawings (e.g., plan, section, elevation). The preservation staff will assist the consultant in determining the appropriate level of measured drawings.
- **HABS-Level Photography:** Digital photographs of the interior and exterior of the property. Large-format negatives are not required. The scope of the digital photographs shall be reviewed by the Planning Department's preservation staff for concurrence, and all digital photography shall be conducted according to current National Park Service standards. The photography shall be undertaken by a qualified professional with demonstrated experience in HABS photography.
- **HABS Historical Report:** A written historical narrative and report, per the HABS Historical Report Guidelines.
- **Video Recording:** The project sponsor shall undertake a video documenting the affected historical resource and its setting. The documentation shall be conducted and narrated by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth in the Secretary of the Interior's Professional Qualification Standards (Code of Federal Regulations title 36, part 61). The documentation shall include as much information as possible—using visuals in combination with narration—about the materials, construction methods, current condition, historic use, and historic context of the historical resource.
- **Print-on-Demand Book:** The project sponsor shall make the content from the historical report, historical photographs, HABS photography, measured drawings, and field notes available to the public through a pre-existing print-on-demand book service. This service will print and mail softcover books containing the aforementioned materials to members of the public who have paid a nominal fee. The sponsor shall not be required to pay ongoing printing fees once the book has been made available through the service.

The professional(s) shall submit the completed documentation for review and approval by a member of the Planning Department's preservation staff before demolition or site permits are issued. Documentation may be used in the interpretive display or signage described in Mitigation Measure M-CR-1b. The final approved documentation shall be provided to the planning department and offered to repositories including but not limited to the History Room of the San Francisco Public Library; the Environmental Design Library at the University of California, Berkeley; the Northwest Information Center; San Francisco Architectural Heritage; and the California Historical Society. The Planning Department will make electronic versions of the documentation available to the public at no charge.

Mitigation Measure M-CR-1b: Interpretation

The project sponsor shall install and maintain a permanent interpretive display commemorating the historical significance of the Fillmore West and Bill Graham. Interpretive display(s) shall develop a connection between the general public and the subject building's history. These installations may include, for example, interactive sound or video installations showcasing historic performances at Fillmore West or booths designed to record or play oral histories (see below), and historically oriented

programming for a publicly accessible space. The interpretive program may also include more traditional interpretive materials such as commemorative markers and plaques, displays of photographs, and news articles. Emphasis shall be placed on the many posters advertising concerts that took place at the subject building during its period of significance. The high-quality interpretive displays shall be installed within the project site boundaries, made of durable, all-weather materials, and positioned to allow for high public visibility and interactivity.

To assist in the collection of information that will inform and direct the historical interpretation, the sponsor shall fund a historical study prepared by the qualified historic consultant preparing the interpretative program to identify significant trends and events associated with the music of the 1960s counterculture in San Francisco, as well as identify associated buildings and sites throughout San Francisco. The project sponsor, at his or her election, may also incorporate the art and culture of the 1960s counterculture in San Francisco into this study. The objective of this study is to provide background information that will enrich the historical contexts that have already been established for the subject building and to place the subject building within the wider context of 1960s counterculture, for the benefit of the general public.

Additionally, the sponsor shall retain the services of a qualified historian to undertake an oral history of the Fillmore West. This oral history project will consist of interviews and recollections of people present at the concerts performed during the period of significance, including performers, organizers, and concertgoers, to the extent feasible. The success of this effort will depend primarily on the ability of the project sponsor to locate such persons, and on their willingness/ability to participate. Therefore, the project sponsor shall make a good-faith effort to publicize the oral history project, conduct public outreach, and identify a wide range of potential interviewees. To accomplish this, the sponsor shall employ a range of measures that may include hosting a commemorative concert or event, installing booths that allow participants to record their recollections, and/or hosting a website that allows interviewees to contribute remotely. Prior to undertaking this effort, the scope and methodology of the oral history project shall be reviewed and approved by the Environmental Review Officer, in consultation with preservation staff.

In addition to potentially being utilized for the on-site interpretive program, the recordings made as part of the oral history project shall be transcribed, indexed, and made available to the public at no charge through the Planning Department and other archives and repositories in order to allow for remote, off-site historical interpretation of the subject building.

A general plan that will lay out the various components of the interpretive program shall be developed in consultation with an architectural historian who meets the Secretary of the Interior's Professional Qualification Standards, and approved by Planning Department staff prior to issuance of a site permit or demolition permit. This plan shall include the historical study and the oral history program described above.

The substance, media, and other characteristics of the interpretive display shall be developed by a consultant experienced in urban architectural interpretive displays. Prior to finalizing the display, the sponsor and consultant shall attempt to convene a community group consisting of local preservation organizations and other interested parties to receive feedback on the adequacy of the interpretive display.

A detailed final design showing the substance and appearance of the interpretive displays, as well as maintenance plans, shall be approved by Planning Department preservation staff before the final certificate of occupancy can be issued.

Mitigation Measure M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse

Prior to demolition of the subject building, the project sponsor shall either use salvaged architectural materials on the site as part of the interpretive program or make such architectural materials from the site available to museums, archives, curation facilities, the public, and nonprofit organizations to preserve, interpret, and display the history of the historical resource. The project sponsor shall provide representatives of these groups the opportunity to salvage materials for public information or reuse in other locations. No materials shall be salvaged or removed until HABS recordation and documentation are completed and an inventory of key exterior and interior features and materials is completed by Secretary of the Interior-qualified professionals.

Impact CR-2: Demolition and new construction on the project site or variant would not have a substantial adverse effect on any offsite historical resource, as defined in section 15064.5 of the CEQA Guidelines. (*Less than Significant*)

Construction Vibration Impacts on Offsite Historic Resources

Offsite historical resources are physically separated from the project site. Groundborne vibration generated during construction of the proposed project would not result in a direct physical impact on offsite historic resources. As stated in Section 4.3, Noise, of this draft EIR, construction activities under the proposed project or variant would not result in physical damage to adjacent offsite historical resources. None of the predicted project construction-related vibration levels listed in Table 4.3.15 in Section 4.3, Noise, p. 4.3.36, would exceed the building damage risk threshold of 0.12 in/sec for the most sensitive of buildings, based on Federal Transit Administration guidance. Based on these estimates, construction vibration impacts on offsite historic resources would be less than significant. Additionally, project operation under either the proposed project or the variant would be unlikely to create sources of enduring vibration that would result in damage to offsite historic structures (Section 4.3, Noise), and this impact would be less than significant.

Impact of Demolition on Offsite Historic Resources

The project site is not located within any identified or potential historic district and is physically separated from any offsite historical resources. As such demolition and new construction under the proposed project or variant would have no direct physical impact on nearby historic architectural resources.

The proposed project or variant could have an indirect visual impact on offsite resources by altering their immediate visual setting. However, the integrity and historic significance of nearby offsite historic architectural resources is not premised on their possessing an intact and cohesive

visual for functional relationship with the project site. The proposed project would not destroy historic features and materials that characterize nearby historic architectural resources. New construction within the project site would be contemporary in design and materials and would not convey a false sense of historic development. The character-defining features and form of nearby historic architectural resources would continue to be clearly evident.

For these reasons, the indirect visual impacts of the Proposed Project are not those of a project that “demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by the lead agency for purposes of CEQA.” (CEQA Guidelines Section 15064.5(b)(2)(C)). No mitigation measures are necessary.

Cumulative Impacts

Impact-C-CR-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would not substantially contribute to cumulative impacts related to historical resources. (*Less than Significant*)

As described above, the Fillmore West building at 10 South Van Ness Avenue is individually eligible for listing in the CRHR under Criterion 1 (events) and Criterion 2 (persons).

Cumulative projects are identified in Table 4.0.1: Cumulative Projects, on EIR p. 4.0.10, and in Figure 4.0.1: Cumulative Projects, on EIR p. 4.0.11. The impacts of foreseeable projects on identified historical resources in the vicinity of the project site (like 30 Otis Street and 1500 Mission Street) would not combine with impacts of the proposed project. The significance of 10 South Van Ness is not premised on its possessing an intact and cohesive visual or functional relationship with nearby properties. Likewise, and reciprocally, the significance of nearby offsite historical resources is not premised on their having an intact and cohesive visual or functional relationship with the project site. As such, the proposed project’s or variant’s impact on the significance of the 10 South Van Ness historical resource is independent of the impacts of nearby foreseeable projects on the significance of nearby historical resources. Such impacts would not combine to result in a significant cumulative impact.

There is no substantial evidence in the record that the proposed project or variant would make a cumulatively considerable contribution to a significant impact resulting from a broader collective loss of historical resources associated with Bill Graham or the counterculture of 1960’s San Francisco. Unlike contributors to a contiguous historic district, the integrity and collective historical significance of such related, but discontinuous, resources throughout San Francisco is not premised on their possessing an intact and cohesive visual or functional relationship with each other or with the existing building on the project site. With demolition of the existing historical resource at 10 South Van Ness Avenue, the proposed project or variant would not contribute to a material impairment of the ability of remaining sites to continue to convey their individual and

collective significance and their association with the 1960's counterculture music scene in San Francisco.

For these reasons, the impact of the proposed project or project variant on historical resources would not combine with those of past, present, and reasonably foreseeable future projects to result in a significant cumulative impact on historical resources. No mitigation measures are required. Note however, that implementation of Mitigation Measure M-CR-1b: Interpretation, presented above as mitigation for the significant impact resulting from the demolition of the 10 South Van Ness historical resource, would increase public awareness of the significance of the project site as an iconic 1960's countercultural music venue. It would thereby enhance the association of the site with other sites throughout San Francisco associated with the countercultural music scene of the 1960's.

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4.2 TRANSPORTATION AND CIRCULATION

Section 4.2, Transportation and Circulation, describes the existing environmental and regulatory setting related to transportation and circulation, and addresses the potential transportation and circulation-related impacts of the proposed project, the variant, and the straight-shot streetscape option when its operation could be different from the proposed project and might result in impacts related to traffic hazards, truck and passenger loading, bicycle travel, emergency access, and on-street parking. The initial study (EIR Appendix B) found that implementation of the proposed project or variant could have potentially significant impacts related to transportation and circulation thresholds. As such, the transportation analysis in this EIR considers impacts related to vehicle miles traveled (VMT),¹ traffic hazards, transit, pedestrians, bicycles, loading, emergency vehicle access, and automobile parking, as well as the transportation-related impacts of construction activities. All of these transportation topics are addressed in the discussions of existing conditions, existing plus project conditions, and cumulative (year 2040) conditions.

The impact discussion in this section is supported primarily by the *10 South Van Ness Avenue Final Transportation Impact Study* prepared for the proposed project and the straight-shot streetscape option, and a supplemental technical memorandum that analyzes the variant.²

Summary of Market and Octavia Neighborhood Plan Final EIR Transportation and Circulation Section

Market and Octavia Neighborhood Plan Final EIR Setting

The Market and Octavia Neighborhood Plan Final EIR described existing transportation conditions in the vicinity of the project site including the existing roadway network, intersection operating conditions, the transit network, parking supply and occupancy, pedestrian conditions, and bicycle conditions. The assessment of cumulative impacts was based on a comparison of the 2025 with Central Freeway Parcels/Near-Term Transportation Improvements and 2025 with Plan conditions against the 2025 Without Plan conditions. Significance criteria included level of service, increases in transit demand, potential secondary effects of parking (such as cars circling), substantial overcrowding on public sidewalks, the creation of hazardous conditions for bicyclists, increase in loading demand during the peak hour of loading activities, and construction-related impacts.

¹ VMT measures the amount and distance that a project might cause people to drive, accounting for the number of passengers in a vehicle.

² CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV; and CHS Consulting Group, *10 South Van Ness Avenue Single-Tower Project Variant – Final Memorandum*, December 21, 201.

Market and Octavia Neighborhood Plan Final EIR Impacts and Mitigation Measures

Under the 2025 with Plan conditions, 12 of the 32 study intersections were anticipated to operate at an unsatisfactory level of service E or F, 3 more than in 2025 without implementation of the plan. Under the project-level conditions for 2025 with Central Freeway Parcels/Near Term Transportation Improvements, 11 of the study intersections would operate at unsatisfactory levels. Several mitigation measures were identified to lessen impacts at these intersections in 2025 under both the with Plan and the Project-Level with Central Freeway Parcels/Near Term Transportation scenarios:

- Mitigation Measure 5.7A, Traffic Mitigation Measure for Hayes and Gough Streets Intersection, to re-establish the westbound travel lane on Hayes Street, eliminating the Plan's proposal to provide an eastbound lane between Gough Street and Van Ness Avenue.
- Mitigation Measure 5.7B, Traffic Mitigation Measure for Hayes and Franklin Street Intersection, to re-establish the westbound travel lane, as for Measure 5.7A.
- Mitigation Measure 5.7C, Traffic Mitigation Measure for Laguna / Market / Hermann / Guerrero Streets Intersection, to adjust signal timing to provide protected left turns for northbound Guerrero and southwest bound Market streets.
- Mitigation Measure 5.7D, Traffic Mitigation Measure for Market/Sanchez/Fifteenth Streets Intersection, to make minor changes in signal timing and add a right-turn pocket on the westbound approach on Fifteenth Street.
- Mitigation Measure 5.7E, Traffic Mitigation Measure for Market/Church/Fourteenth Streets Intersection, to make minor changes in signal timing.
- Mitigation Measure 5.7F, Traffic Mitigation Measure for Mission Street/Otis Street/South Van Ness Avenue Intersection, to make minor changes in signal timing and add right-turn pockets on the southbound approach on Mission Street and the northbound approach on South Van Ness Avenue.
- Mitigation Measure 5.7G, Traffic Mitigation Measure for Hayes Street/Van Ness Avenue Intersection, to either re-establish the westbound travel lane on Hayes and provide no eastbound lane, or retain the proposed two-way Hayes Street configuration and redistribute westbound traffic to Fell Street via southbound Van Ness Avenue.

However, the Market and Octavia Neighborhood Plan Final EIR concluded that there would still be potential for significant and unavoidable impacts with mitigation, based mainly on the fact that to maintain acceptable levels of service along Hayes Street, the Plan could not be implemented in that location and that the feasibility of signal timing changes could not be fully assessed.

Implementation of the Market and Octavia Plan was not found to result in a significant impact on transit capacity. However, implementation of the proposed change from one-way to two-way travel on Hayes Street was found to cause delays to San Francisco Municipal Railway (Muni)

service on the 21 Hayes route that were identified as a significant impact. Implementing Mitigation Measures 5.7A and 5.7B would eliminate that impact. Mitigation Measure 5.7H, Transit Mitigation Measure, was also identified to address the impact related to degradation of transit service from the increase in delays at the intersections of Hayes Street with Van Ness Avenue, Franklin Street, and Gough Street during the p.m. peak hour. This mitigation measure would reroute the 21 Hayes bus line to avoid the intersections of Hayes/Franklin streets and Hayes/Gough streets. This measure was determined to be infeasible, as it would require adding new overhead wires along the new portions of the route and the rerouting could result in other delays on this transit route.

Environmental Setting

The transportation study area generally encompasses a two-block radius around the project site, and is bounded by Fell Street to the north, 13th Street to the south, 10th Street and Howard Street to the east, and the Central Freeway and Octavia Boulevard to the west. Data was collected at the following intersections within the study area:

1. Market Street/Van Ness Avenue (U.S. Highway 101)
2. Market Street/Franklin Street/Page Street/12th Street
3. Mission Street/South Van Ness Avenue/Otis Street/12th Street
4. Mission Street/11th Street
5. Gough Street/Market Street/Haight Street
6. Gough Street/Otis Street/McCoppin Street
7. Market Street/Octavia Boulevard/U.S. 101 on- and off-ramps
8. 11th Street/Howard Street
9. Van Ness Avenue/Fell Street
10. South Van Ness Avenue/13th Street/U.S. 101 on-ramp
11. Mission Street/Otis Street/Duboce Avenue/U.S.101 off-ramp.

The study area and intersections counted are shown in **Figure 4.2.1: Transportation Study Area**.



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FIGURE 4.2.1: TRANSPORTATION STUDY AREA

Roadway Network

REGIONAL ACCESS

The study area is served by three regional roadways:

- **U.S. Highway 101 (U.S. 101)** connects San Francisco with the Peninsula/South Bay and the North Bay. South of the project site, U.S. 101 follows the Central Freeway east to an interchange with Interstate 80 (I-80) approximately 0.75 mile southeast of the project site, then continues south through the southeastern neighborhoods of San Francisco to the Peninsula/South Bay as the Bayshore Freeway. Between the study area and the Presidio in the northwestern part of San Francisco, U.S. 101 leaves the Central Freeway (which terminates at Market Street/Octavia Boulevard) and follows major local streets including Mission Street/South Van Ness Avenue and Van Ness Avenue.

Access to and from the Peninsula/South Bay is provided by the northbound off-ramp at Mission Street/13th Street/Duboce Avenue/Otis Street (or, alternatively, the northbound off-ramp from the Central Freeway at Market Street/Octavia Boulevard) and by the southbound on-ramp at South Van Ness Avenue/13th Street. Access to and from the North Bay is provided by the major local streets described above and by other connecting local streets.

- **Interstate 80 (I-80)** connects San Francisco with the East Bay via the San Francisco–Oakland Bay Bridge and provides additional access to portions of the North Bay in Solano, Napa, and Sonoma counties via the Carquinez Bridge. Access to and from I-80 is provided by U.S. 101 and the U.S. 101/I-80 interchange approximately 0.75 mile southeast of the project site. Alternative access is provided by the westbound off-ramp at Eighth Street/Harrison Street and the eastbound on-ramp at Eighth Street/Bryant Street.
- **Interstate 280 (I-280)** provides regional access between San Francisco and the Peninsula/South Bay. I-280 terminates at Sixth Street/Brannan Street in the Central South of Market (SoMa) area, with additional ramps at Fifth Street/King Street in China Basin and 18th Street/Mariposa Street in Potrero Hill/Dogpatch/Mission Bay. However, the closest access to and from the project site is provided by U.S. 101, which connects with I-280 at the Alemany Maze interchange in southeastern San Francisco.

LOCAL ACCESS

Local roadway access to the project site is provided by the local street network, which includes the key roadways described below.³

³ The descriptions include a general characterization of the function and cross-section of each street, as well as relevant classifications under the Better Streets Plan and the San Francisco General Plan. The latter specifically defines several different types of functions and hierarchies for streets and other components of the transportation network serving San Francisco, including the regional freeway network; vehicular streets, including Congestion Management Program (CMP) streets and other streets; the Metropolitan Transportation System (MTS); transit preferential streets, including primary transit streets (transit-oriented streets and transit-important streets), secondary transit streets, and transit centers; rail transit; the citywide pedestrian network; neighborhood pedestrian streets, including neighborhood commercial streets and neighborhood network connection streets; the bicycle route network; and freight traffic routes.

Market Street

Market Street is downtown's primary multimodal thoroughfare and is oriented in a northeast-southwest direction at the confluence of the finer-grained, roughly cardinal (north, south, east, west) street grid to the north and the diagonal, larger-spaced street grid in the SoMa area.⁴ Designated as a *Ceremonial* street in the Better Streets Plan,⁵ Market Street serves only a minor function for vehicular traffic, but is a major corridor for transit, bicycle, and pedestrian circulation, both locally and at a citywide level.⁶ Market Street is downtown's most important transit corridor, with multiple bus and streetcar lines at street level and local and regional rail service provided underground in the Market Street Subway.

Through downtown, Market Street generally features two travel lanes in each direction, with the center lanes designated as transit-only lanes at all times (eastbound from 12th Street to Third Street and westbound from Third Street to Van Ness Avenue/South Van Ness Avenue). The curbside lanes operate as general-purpose lanes, shared by private vehicle traffic, transit vehicles, and bicycles.

In the vicinity of the project site, Market Street features *class II* bikeways (bicycle lanes) from west of Eighth Street to Valencia Street (westbound) or Gough Street (eastbound). Market Street also features an enhanced pedestrian realm, with widened sidewalks and *curb cut* restrictions east of 12th Street to accommodate high-volume pedestrian activity, streetscape and landscape features, subway station entrances, and public open spaces. On-street parking is generally prohibited along Market Street east of Octavia Boulevard, but on-street passenger and commercial loading bays are provided in multiple locations. Various traffic restrictions are also in effect along Market Street, including left-turn restrictions at multiple intersections and forced eastbound right-turn movements at 10th Street and Sixth Street.

⁴ The SoMa street grid consists of streets that are parallel and perpendicular to Market Street, but the street grid is usually defined in the east-west direction for simplicity, with Market Street and parallel streets defined as east-west streets and numbered streets (e.g., 10th Street, 11th Street, 12th Street) and other perpendicular streets defined as north-south streets.

⁵ The Better Streets Plan states that Ceremonial (or Civic) streets are "grand civic places which serve as major gathering spots for marches, parades, and rallies, and serve as world renowned public spaces and attractions. Ceremonial streets should be uniquely designed in each case; they should exhibit a high degree of design consistency, formality, and care."

⁶ The San Francisco General Plan defines Market Street in the vicinity of the project site as a CMP transit conflict street (east of 12th Street/Franklin Street/Page Street) and CMP major arterial and MTS street (west of 12th Street/Franklin Street/Page Street); a transit-oriented street (east of Gough Street/Haight Street) and transit-important street (west of Gough Street/Haight Street); a citywide pedestrian network street; a neighborhood commercial street; a part of the bicycle route network; and a major arterial for freight traffic (west of 12th Street/Franklin Street/Page Street).

Mission Street

Mission Street is a major multimodal thoroughfare that parallels Market Street through downtown, before turning south and continuing through the Mission and southern San Francisco neighborhoods into Daly City and beyond. At its intersection with South Van Ness Avenue adjacent to the project site, the westbound/southbound lanes of Mission Street become Otis Street, a one-way southbound four-lane street, for two blocks. The southbound Otis Street travel lanes become the southbound lanes of Mission Street at Duboce Avenue/13th Street under the elevated Central Freeway (see Figure 4.2.1). Between Duboce Avenue/13th Street and the intersection of South Van Ness Avenue/12th Street, Mission Street is one way northbound/eastbound and provides four travel lanes. Mission Street both east of and south of the South Van Ness Avenue/12th Street/Mission Street intersection generally has two travel lanes in each direction in the vicinity of the project site, with curbside lanes generally designated as transit-only lanes.⁷ In the study area, Mission Street is designated as a *Downtown Commercial* street under the Better Streets Plan, and Otis Street is designated as a *Neighborhood Commercial* street. Mission Street in the vicinity of the project site is a major transit corridor and accommodates some key functions for vehicular traffic (serving as a portion of northbound U.S. 101) and other modes.⁸ On-street parking is generally provided on both sides of the street.

Van Ness Avenue and South Van Ness Avenue

Van Ness Avenue is a major north-south arterial roadway that runs along the western edge of downtown. This roadway generally has three travel lanes in each direction, with left-turn pockets at intersections, although ongoing construction related to the Van Ness Bus Rapid Transit (BRT) project has reduced vehicular traffic to two travel lanes in each direction and eliminated most left-turn movements between Market Street and Bay Street except northbound at Lombard Street and southbound at Broadway, plus northbound at Hayes Street on a temporary basis. South of Market Street, Van Ness Avenue becomes South Van Ness Avenue, which continues south (parallel to Mission Street) through the Mission District and is also defined as a major arterial, ending at Cesar Chavez Street and its connection to the U.S. 101 freeway.

Together, Van Ness Avenue and South Van Ness Avenue serve an important role for vehicular circulation (accommodating a key portion of the U.S. 101 route between the Central Freeway and

⁷ In the project vicinity, transit-only lanes in the westbound/southbound direction are in effect Monday through Friday from 4 p.m. to 6 p.m., east of 11th Street and at all times west/south of 11th Street. In the eastbound direction, transit-only lanes are provided east of 11th Street, in effect Monday through Friday from 4 p.m. to 6 p.m.

⁸ The San Francisco General Plan defines Mission Street in the vicinity of the project site as a CMP transit conflict street; a transit-oriented street (including Otis Street); a citywide pedestrian network street; a neighborhood commercial street (including Otis Street); and a part of the bicycle route network (including Otis Street from 11th Street westbound to Gough Street, continuing along McCoppin Street).

the Golden Gate Bridge for most of its length) and is also a major transit corridor.⁹ In the immediate vicinity of the project site, the Better Streets Plan designates Van Ness Avenue and South Van Ness Avenue as *Downtown Commercial* streets.

12th Street

12th Street is a minor north-south collector roadway through The Hub Plan Area and the Western SoMa neighborhood, but is discontinuous at the intersection with South Van Ness Avenue. Northbound vehicular traffic must turn right onto northbound South Van Ness Avenue (no access is provided onto 12th Street toward Market Street), while southbound vehicular traffic must merge onto South Van Ness Avenue, then turn left onto the continuing segment of 12th Street after crossing Otis Street and Mission Street. The Better Streets Plan designates the segment of 12th Street adjacent to the project site between Market Street and South Van Ness Avenue as a *Downtown Residential* street. This street segment features one travel lane in each direction, with on-street parking (in a combination of parallel and perpendicular spaces) on both sides of the street.

There are no existing transit services or bikeways on 12th Street. The street primarily provides local access for motorists, bicyclists, and pedestrians.

Other Key Streets in the Project Vicinity

Other key streets near the project site include Octavia Boulevard, Duboce Avenue/13th Street; the Fell Street/Oak Street, Franklin Street/Gough Street, Ninth Street/10th Street, and Howard Street/Folsom Street couplets for vehicular traffic;¹⁰ and Hayes, Haight, and 11th streets for transit service.

VEHICLE MILES TRAVELED

Table 4.2.1: Average Daily Vehicle Miles Traveled per Capita—Existing Conditions

summarizes average daily VMT per capita by land use for the Bay Area and for the *transportation analysis zone* (TAZ)¹¹ that contains the project site (TAZ 578), which is bounded

⁹ The San Francisco General Plan defines Van Ness Avenue and South Van Ness Avenue in the vicinity of the project site as CMP major arterials; MTS streets; transit important streets (for South Van Ness Avenue only to Mission Street); citywide pedestrian network streets (for South Van Ness Avenue only to Mission Street); neighborhood commercial streets (for South Van Ness Avenue only to Mission Street); and together as a major arterial for freight traffic.

¹⁰ A roadway couplet is a pair of one-way streets – two parallel streets that provide for one-way vehicular travel in opposite directions.

¹¹ TAZs represent geographical areas of the city in transportation planning models and can be used for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core to multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

by Market Street to the north, Otis and McCoppin streets to the south, South Van Ness Avenue to the east, and Valencia Street to the west.

As shown in Table 4.2.1, average daily VMT per capita in TAZ 578 is substantially lower than the corresponding regional average for residential and retail uses. Residential uses in TAZ 578 generate an average daily VMT per resident of 3.7, compared to 17.2 for the Bay Area as a whole. Retail uses in TAZ 578 generate an average daily VMT per employee of 8.9, compared to 14.9 for the Bay Area as a whole.

Table 4.2.1: Average Daily Vehicle Miles Traveled per Capita—Existing Conditions

Land Use	Average Daily VMT per Capita	
	San Francisco Bay Area (regional average)	TAZ 578
Residential (per resident)	17.2	3.7
Retail (per employee)	14.9	8.9

Notes: TAZ = transportation analysis zone; VMT = vehicle miles traveled

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

Transit Network

The project site is located at the southwestern edge of downtown San Francisco, and is well served by both local and regional public transit.

REGIONAL TRANSIT

Regional Transit Providers

Major regional transit providers serving San Francisco include the Bay Area Rapid Transit District (BART); Caltrain; the Alameda–Contra Costa Transit District (AC Transit); the San Mateo County Transit District (SamTrans); the Golden Gate Bridge Highway and Transportation District (Golden Gate Transit); and ferry services.

Bay Area Rapid Transit

BART provides regional light rail service between the East Bay (outer terminals at Pittsburg/Bay Point, Richmond, Dublin/Pleasanton, and Warm Springs/South Fremont), San Mateo County (outer terminals at San Francisco International Airport and Millbrae), and San Francisco. BART's Civic Center/United Nations Plaza Station is located approximately 0.4 mile to the northeast along Market Street between Seventh Street/Charles J. Brenham Place and Eighth Street/Hyde

Street/Grove Street. The BART 16th Street Station is located approximately 0.7 mile south of the project site, at the intersection of 16th and Mission streets.

Caltrain

Caltrain provides passenger rail service on the Peninsula corridor between San Francisco and San Jose, connecting San Francisco, San Mateo, and Santa Clara counties.¹² Caltrain's northern terminus at San Francisco Station, along Fourth Street between Townsend Street and King Street, approximately 1.5 miles east of the project site, is accessible via Muni service including the 47 Van Ness, N Judah, and T Third Street lines/routes.

Alameda–Contra Costa County Transit District

AC Transit operates bus service in western Alameda and Contra Costa counties, including a network of “Transbay” routes connecting the East Bay with San Francisco and San Mateo counties. AC Transit operates 27 Transbay routes between the East Bay and downtown San Francisco's Transbay Temporary Terminal.¹³ The terminal is just under 2 miles northeast of the project site in the Transbay neighborhood and is accessible by multiple Muni routes, including five Muni Metro lines in the Market Street Subway and two Muni surface lines – the 9/9R San Bruno/San Bruno Rapid along Market Street and the 14/14R Mission/Mission Rapid along Mission Street – that are adjacent to and serve the project site.

San Mateo County Transit District

SamTrans operates bus and rail service in San Mateo County. In addition to funding Caltrain service, SamTrans operates a network of local buses in the county and additional routes into adjacent portions of San Francisco and Santa Clara counties. SamTrans Routes KX and 292 serve downtown San Francisco and provide connections to and from various locations in San Mateo County. In the vicinity of the project site, these routes generally operate along Mission Street to and from the Transbay Temporary Terminal before turning south along Ninth Street/10th Street. The closest stops to the project site are at Ninth Street/Folsom Street and Mission Street/Ninth

¹² Limited additional service is available south of San Jose, serving Gilroy and other communities in southern Santa Clara County.

¹³ The Transbay Temporary Terminal is a temporary facility replacing the former Transbay Terminal and is located in the Transbay area of East SoMa, occupying the entire block bounded by Howard Street to the north, Folsom Street to the south, Main Street to the east, and Beale Street to the west. Construction is y complete on the future Transbay Transit Center, the permanent replacement for the Transbay Terminal, which extends from Main Street to just east of Second Street, between Minna Street and Natoma Street. The first phase of the Transbay Transit Center opened for bus service in August 2018; the Transbay Temporary Terminal will be decommissioned in the relatively near future, following repairs to portions of the new facility ongoing in October 2018.

Street in the inbound direction and at Mission Street/Ninth Street and 10th Street/Howard Street in the outbound direction.

Golden Gate Bridge Highway and Transportation District

The Golden Gate Bridge Highway and Transportation District operates bus and ferry service between the North Bay (Marin and Sonoma counties) and San Francisco under the Golden Gate Transit and Golden Gate Ferry brands. Golden Gate Transit operates 18 “commute” routes and four “regional” routes into and out of San Francisco across the Golden Gate Bridge.¹⁴ The closest Golden Gate Transit stops to the project site are at Hyde Street/Grove Street (inbound) and McAllister Street/Polk Street (outbound), served by regional routes and some commute routes via Van Ness Avenue or Geary Boulevard. Passengers connecting with other commute route services along Beach Street/North Point Street and Battery Street/Sansome Street transfer at the Golden Gate Bridge toll plaza, which is served by all of Golden Gate Transit’s routes in San Francisco.

Golden Gate Ferry operates ferry service connecting Larkspur, Sausalito, and Tiburon with San Francisco’s Ferry Building, accessible via multiple Muni routes including Muni Metro lines in the Market Street Subway and Muni surface lines along Market and Mission streets.

Water Emergency Transportation Authority

The Water Emergency Transportation Authority operates regional ferry service to/from nine terminals on San Francisco Bay.¹⁵ The nearest regular-service terminal to the project site is the San Francisco Ferry Building, accessible by connecting Muni service including Muni Metro lines in the Market Street Subway and Muni surface lines along Market Street and Mission Street.

Regional Transit Capacity

Regional transit service into and out of San Francisco are evaluated using *screenlines* defined by the San Francisco Planning Department in the *Transportation Impact Analysis Guidelines for Environmental Review*, known as the SF Guidelines.¹⁶ **Table 4.2.2: Regional Transit Screenlines—Existing Conditions** summarizes existing ridership and capacity utilization at the

¹⁴ An additional route, Route 93, connects the Civic Center area with the Golden Gate Bridge toll plaza.

¹⁵ Terminals are located in Alameda (Main Street and Harbor Bay), Oakland (Jack London Square), San Francisco (Ferry Building, Pier 41, and AT&T Park), South San Francisco (Oyster Point), and Vallejo (Georgia Street and Mare Island).

¹⁶ San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002. Screenlines represent a grouping of transit services, usually by a common direction or origin/destination served, reflecting the fact that multiple transit options or alternatives are generally available to transit passengers on their journeys. For downtown, for example, the planning department typically describes transit ridership and capacity in terms of three screenlines for regional transit (East Bay, North Bay, and South Bay) and four screenlines for local transit (northeast, northwest, southeast, and southwest).

maximum load point for regional transit providers on the downtown screenlines.¹⁷ For regional operators, the maximum load point is typically at the San Francisco city limit (e.g., the East Bay maximum load point would occur at the Transbay Tube and on the Bay Bridge). Data are shown for the inbound direction during the weekday a.m. peak hour and for the outbound direction during the weekday p.m. peak hour, because these are the dominant travel patterns during the respective time periods. For regional transit providers, the established *capacity utilization threshold*¹⁸ is 100 percent and equals the number of available seats, except for BART, for which the capacity utilization threshold also includes standing capacity.

Table 4.2.2: Regional Transit Screenlines—Existing Conditions

Screenline	Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹		
	Ridership	Capacity	Capacity Utilization (Inbound)	Ridership	Capacity	Capacity Utilization (Outbound)
East Bay Screenline						
BART	25,399	23,256	109%	24,488	22,784	107%
AC Transit	2,256	3,926	57%	2,256	3,926	57%
Ferries	805	1,615	50%	805	1,615	50%
<i>Subtotal</i>	<i>28,460</i>	<i>28,797</i>	<i>99%</i>	<i>27,549</i>	<i>28,325</i>	<i>97%</i>
North Bay Screenline						
Golden Gate Transit Buses	1,384	2,817	49%	1,384	2,817	49%
Ferries	968	1,959	49%	968	1,959	49%
<i>Subtotal</i>	<i>2,352</i>	<i>4,776</i>	<i>49%</i>	<i>2,352</i>	<i>4,776</i>	<i>49%</i>
South Bay Screenline						
BART	14,150	19,367	73%	13,500	12,561	107%
Caltrain	2,377	3,100	77%	2,377	3,100	77%
SamTrans	141	320	44%	141	320	44%
<i>Subtotal</i>	<i>16,668</i>	<i>22,787</i>	<i>73%</i>	<i>16,018</i>	<i>15,981</i>	100%
Total	47,480	56,360	84%	45,919	49,082	94%

Notes:

AC Transit = Alameda–Contra Costa County Transit District; BART = Bay Area Rapid Transit; SamTrans = San Mateo County Transit District

Bold indicates capacity utilization of 100 percent or greater.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

As shown in Table 4.2.2, BART currently exceeds the established capacity utilization standard on the East Bay screenline during the weekday a.m. peak hour and on the East Bay and South Bay screenlines during the weekday p.m. peak hour. Because of crowding on BART, the South Bay

¹⁷ The maximum load point for each transit route is the point along the route where the maximum number of passengers is on board.

¹⁸ The capacity utilization threshold represents the ideal maximum level of crowding, as measured by the ratio of ridership to capacity.

screenline as a whole also exceeds the established capacity utilization threshold. All other regional operators are currently within established utilization standards.

LOCAL TRANSIT

Local Transit Corridors and Routes

Primary local public transit access to and from the project site is provided by Muni, which operates bus, cable car, and light rail lines in San Francisco. On Market Street, the project site is served by surface routes (F Market & Wharves, 6 Haight/Parnassus, 7 Haight/Noriega, 9 San Bruno, 9R San Bruno Rapid) and underground light rail (Muni Metro) lines (J Church, K Ingleside, L Taraval, M Ocean View, N Judah, and T Third Street) operating in the Market Street Subway. Van Ness Avenue, South Van Ness Avenue and Mission Street are also major corridors for Muni service, carrying the 47 Van Ness and 49 Van Ness/Mission on Van Ness Avenue and South Van Ness Avenue; and the 14 Mission, 14R Mission Rapid, and 49 Van Ness/Mission on Mission Street in the project vicinity. Other Muni corridors in the vicinity of the project site include Hayes Street, Haight Street, and 11th Street.

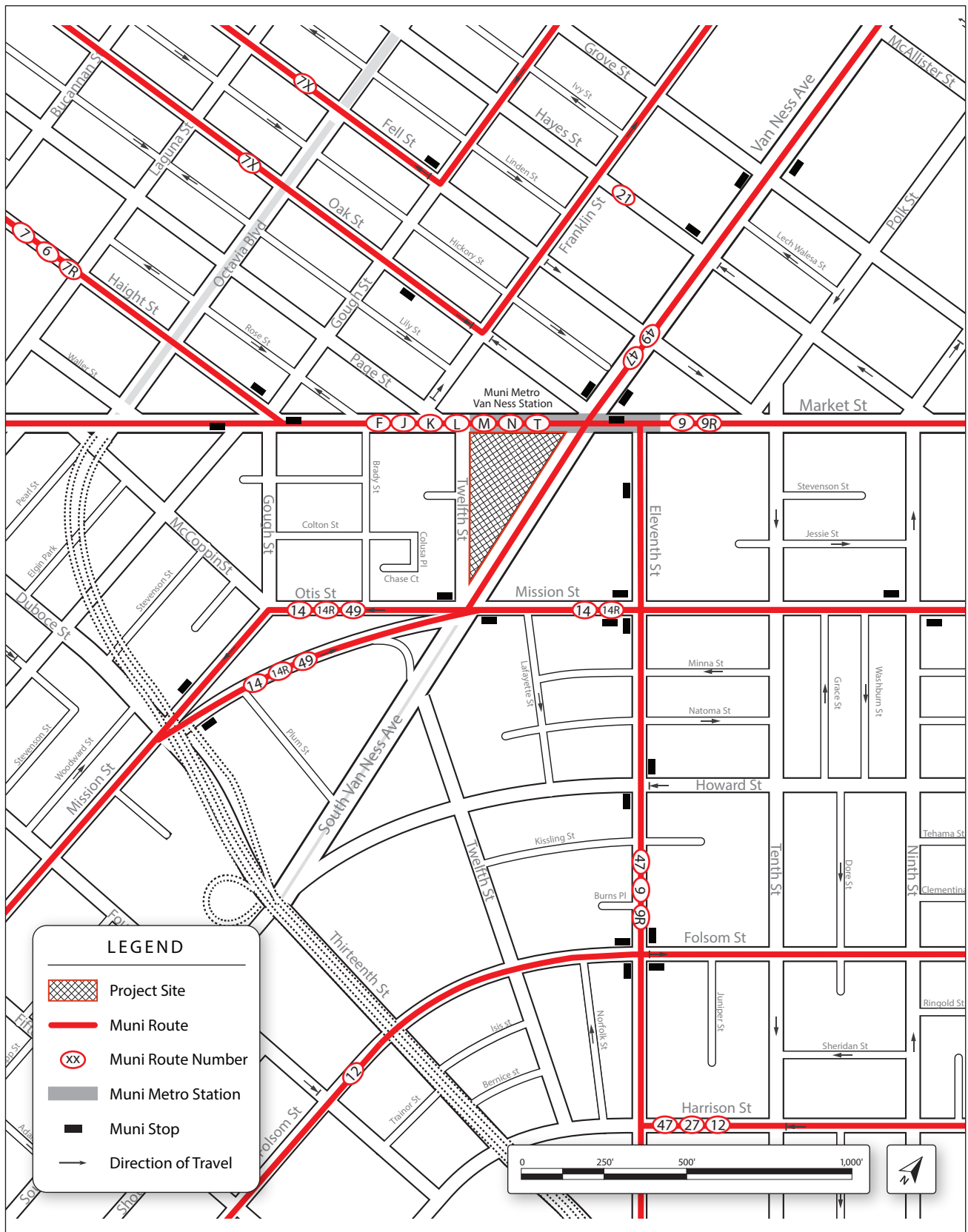
Figure 4.2.2: Existing Transit Network shows transit routes near the project site. **Table 4.2.3: Muni Service in the Project Vicinity** summarizes Muni service in the project vicinity.

Local Transit Capacity

Ridership and capacity for local transit service between the project site and downtown San Francisco are evaluated using screenlines, similar to the screenlines for regional transit. Because most of San Francisco's local transit system is arranged to carry passengers into and out of downtown, Muni service can be grouped into four screenlines that surround downtown San Francisco, as defined in the SF Guidelines.¹⁹ **Table 4.2.4: Muni Downtown Screenlines—Existing Conditions** summarizes existing ridership and capacity utilization at the maximum load point for the routes crossing the four downtown screenlines.²⁰ Data are shown for the inbound direction during the weekday a.m. peak hour and for the outbound direction during the weekday p.m. peak hour, because they are the dominant travel patterns during the respective time periods.

¹⁹ San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002.

²⁰ Ridership data are from the automated passenger-count data collected by the San Francisco Municipal Transportation Agency (SFMTA) in September and October 2013. Data regarding capacity (headways and vehicle types) from the same period, the most recent data available, were also obtained from SFMTA.



Source: SWCA (2018), CHS Consulting Group (2017)

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FIGURE 4.2.2: EXISTING TRANSIT NETWORK

Table 4.2.3: Muni Service in the Project Vicinity

Route	Weekday Headways ¹ (minutes)				Nearest Stop to the Project Site	
	A.M. Peak		P.M. Peak			
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
F Market & Wharves	8	8	7	7	Market at Van Ness/South Van Ness	
J Church	9	9	9	9	Van Ness Station	
K Ingleside	8	8	8	8		
L Taraval	8	8	8	8		
M Ocean View	9	9	9	9		
N Judah	7	7	7	7		
T Third Street	8	8	8	8		
6 Haight/Parnassus	10	10	10	10	Market at Van Ness/South Van Ness	
7 Haight/Parnassus	10	10	10	10		
7X Noriega Express	9			10	Oak between Franklin and Gough	Fell at Gough
9 San Bruno	12	12	12	12	11th at Market	
9R San Bruno Rapid	9	9	9	9		
12 Folsom/Pacific	15	15	15	15	Folsom at 11th	
14 Mission	8	8	8	8	Mission at South Van Ness	
14R Mission Rapid	8	8	8	8	Mission at 11th	
21 Hayes	6	7	9	9	Grove at Van Ness	Hayes at Van Ness
27 Bryant	15	15	15	15	11th at Harrison	Bryant at Division/13th/11th
47 Van Ness	8	8	8	8	South Van Ness at Mission Van Ness at Market/South Van Ness	Van Ness at Market/ Oak/South Van Ness
49 Van Ness/Mission	8	8	8	8	South Van Ness at Mission Van Ness at Market/South Van Ness	Van Ness at Market/ Oak/South Van Ness Mission at South Van Ness/12th

Notes:

Muni = San Francisco Municipal Railway

¹ Time period definitions (approximate): a.m. peak = 6 a.m.–10 a.m.; p.m. peak = 3 p.m.–7 p.m.

² Muni vehicles are typically defined as either traveling “inbound” (i.e., toward downtown) or “outbound” (i.e., leaving downtown).

Sources: Data compiled by AECOM in 2018.

Table 4.2.4: Muni Downtown Screenlines—Existing Conditions

Screenline	Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹		
	Ridership ²	Capacity ²	Capacity Utilization	Ridership	Capacity	Capacity Utilization
Northeast Screenline						
Kearny/Stockton	2,211	3,050	72%	2,245	3,327	68%
Other lines	538	1,141	47%	683	1,078	63%
<i>Subtotal</i>	<i>2,749</i>	<i>4,191</i>	<i>66%</i>	<i>2,928</i>	<i>4,405</i>	<i>67%</i>
Northwest Screenline						
Geary	1,821	2,490	73%	1,964	2,623	75%
California	1,610	2,010	80%	1,322	1,752	75%
Sutter/Clement	480	630	76%	425	630	68%
Fulton/Hayes	1,277	1,680	76%	1,184	1,323	90%
Balboa	758	1,019	74%	625	974	64%
<i>Subtotal</i>	<i>5,946</i>	<i>7,829</i>	<i>76%</i>	<i>5,519</i>	<i>7,302</i>	<i>76%</i>
Southeast Screenline						
Third Street	350	793	44%	782	793	99%
Mission	1,643	2,509	65%	1,407	2,601	54%
San Bruno/Bayshore	1,689	2,134	79%	1,536	2,134	72%
Other lines	1,466	1,756	83%	1,084	1,675	65%
<i>Subtotal</i>	<i>5,147</i>	<i>7,193</i>	<i>72%</i>	<i>4,810</i>	<i>7,203</i>	<i>67%</i>
Southwest Screenline						
Subway lines	6,330	6,205	102%	4,904	6,164	80%
Haight/Noriega	1,121	1,554	72%	977	1,554	63%
Other lines	465	700	66%	555	700	79%
<i>Subtotal</i>	<i>7,916</i>	<i>8,459</i>	<i>94%</i>	<i>6,435</i>	<i>8,418</i>	<i>77%</i>
<i>Total</i>	<i>21,758</i>	<i>27,671</i>	<i>79%</i>	<i>19,693</i>	<i>27,328</i>	<i>72%</i>

Notes:

Muni = San Francisco Municipal Railway

Bold indicates capacity utilization of 85 percent or greater.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

² Columns may not add to subtotals or totals due to rounding.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

The San Francisco Municipal Transportation Agency (SFMTA) Board has adopted an 85 percent performance standard for capacity utilization and has determined that this performance standard most appropriately reflects actual operations and the likelihood of “pass-ups” (vehicles not stopping to pick up more passengers).²¹ The capacity is measured as a full seated and standing load of passengers.

As shown in Table 4.2.4, most directional screenlines and corridors within the screenlines currently operate below the 85 percent performance standard, but some exceed the standard. Corridors exceeding 85 percent capacity utilization include the Subway lines during the weekday a.m. peak hour (102 percent) and the Fulton/Hayes and Third Street corridors during the weekday p.m. peak hour (90 percent and 99 percent, respectively). The Southwest screenline also exceeds 85 percent capacity utilization during the weekday a.m. peak hour (94 percent).

Bikeway Network

BIKEWAYS AND BICYCLE FACILITIES

Bikeways can typically be classified into four general categories based on the separation from motorized traffic:

- Class I bikeways provide a completely separated right-of-way for the exclusive use of bicyclists and pedestrians, with cross-flow minimized. These facilities typically consist of off-street bicycle paths or trails and are generally shared with pedestrians.
- Class II bikeways provide a striped lane for one-way bicycle travel on a street or highway. These facilities typically consist of striped bicycle lanes on roadways, providing a minimum of 4–5 feet of space for bicyclists.
- Class III bikeways provide a shared travel lane with automobile traffic. These facilities consist of designated and signed bicycle routes where bicyclists share the roadway with other vehicles, and may include other features such as pavement markings (e.g., sharrows²²) to reinforce their shared nature.
- Class IV bikeways are typically referred to as “separated bikeways” or “cycle tracks,” and provide enhanced facilities for the exclusive use of bicyclists, generally falling between class I and class II bikeways in terms of protection for bicyclists, with physical separation between the bikeway and adjacent automobile traffic.²³

²¹ San Francisco Municipal Transportation Agency, *Short Range Transit Plan Fiscal Year 2017 – Fiscal Year 2030*. 2017, p. 40, <https://www.sfmta.com/sites/default/files/agendaitems/2017/6-6-17%20Item%2011%20%20Short%20Range%20Transit%20Plan.pdf>, accessed August 8, 2017.

²² A sharrow is a pavement marking showing a bike and chevron within the travel lane to indicate that bicyclists and vehicles share the travel lane. Sharrows are used on class III bicycle facilities, and are intended to help bicyclists position themselves better within the lane (outside the door zone) and to alert motorists that bicyclists may be present.

²³ The physical separation may be achieved through grade separation, flexible posts, inflexible physical barriers, on-street parking, or raised islands.

Figure 4.2.3: Existing Bikeway Network illustrates existing bikeways in the vicinity of the project site. Key bikeways in the project vicinity include facilities along Market Street (class II/III), Valencia Street (class II), Polk Street (class II), 11th Street (class II), Howard Street/Folsom Street (class II), and McCoppin Street and Otis Street (class I/II) connecting to the class I bike route on Mission Street between South Van Ness Avenue and 11th Street. Other nearby bikeways include facilities along 14th Street (class II/III), Harrison Street (class II), Octavia Boulevard (class III), Page Street (class III), Grove Street (class II/III), and 10th Street (class III).

Market Street and Van Ness Avenue in the vicinity of the project site are identified in the *Vision Zero High Injury Network*²⁴ as *high injury corridors* for bicyclists.

The closest Ford GoBike bikeshare station is at South Van Ness Avenue and Market Street on the east side of South Van Ness Avenue, immediately south of Market Street.

BICYCLE ACTIVITY

Bicycle turning movement counts collected at the study intersections in the p.m. peak period (4 p.m. to 6 p.m.) for various proposed projects in 2015 and 2016, as well counts collected in 2017 in the a.m. peak period (7 a.m. to 9 a.m.) show that at most locations, bicycle activity is on the order of 50–100 bicycles or fewer per intersection approach per hour.²⁵ However, activity concentrations are higher at intersections along Market Street, with as many as 500–600 bicycles per hour in the eastbound direction during the weekday a.m. peak hour and in the westbound direction during the weekday p.m. peak hour. Field observations during the weekday midmorning (10 a.m. to 11 a.m.), midday/midafternoon (12 p.m. to 2 p.m.), and p.m. peak periods (4 p.m. to 5:30 p.m.) generally corroborated these conditions.

Pedestrian Network

PEDESTRIAN FACILITIES

The project site is located within an established pedestrian network with: continuous sidewalks, curb ramps, and painted, high-visibility crosswalks at intersections. Signalized intersections in the project area generally include Americans with Disabilities Act–compliant curb ramps, marked crosswalks, and pedestrian signal heads with countdown timers in all directions, although some

²⁴ The City’s adopted Vision Zero policy aims to eliminate all traffic-related fatalities by 2024. Additional information on Vision Zero is provided under the “Regulatory Framework.”

²⁵ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV, p. 40.



Source: SWCA (2018), CHS Consulting Group (2017)

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FIGURE 4.2.3: EXISTING BIKEWAY NETWORK

intersection corners or legs may lack one or more of these features. In the immediate vicinity of the project site, the Mission Street/South Van Ness Avenue/Otis Street intersection and all intersections on Market Street have pedestrian countdown timers.

The project site is currently accessed via three curb cuts on South Van Ness Avenue and four curb cuts on 12th Street. Sidewalks in the project vicinity are generally 15–25 feet wide along main streets and 5–8 feet wide along alleys. The South Van Ness and Market Street sidewalks adjacent to the project site are each 20 feet wide, and the 12th Street sidewalk is 15 feet wide. Both Market Street and South Van Ness Avenue are identified in the Vision Zero High Injury Network as high injury corridors for pedestrians, indicating that pedestrian safety is a concern in the study area.

The confluence of various distinct street grids at intersections along Market Street and in the surrounding area results in several large, irregularly shaped intersections. Field observations conducted during the weekday morning, midday/midafternoon, and evening periods noted several instances of pedestrians having difficulty completing crossings at the Mission Street/South Van Ness Avenue/Otis Street intersection during the allocated pedestrian signal phase. To avoid being stranded in the middle of the street, pedestrians must cross up to six to seven traffic lanes on South Van Ness Avenue in a single phase.

Observations at the intersection of Mission Street/South Van Ness Avenue/Otis Street/12th Street also found a notable number of pedestrians crossing Otis Street outside of the designated pedestrian signal phase. Pedestrians often do not wait for the designated crossing phase because of the long signal cycle length and generally low volumes of conflicting vehicular traffic.

There are also several stop-controlled, channelized turn movements²⁶ in the vicinity of the project site, including the right-turn movements merging from southbound 12th Street and northbound/eastbound Mission Street onto southbound South Van Ness Avenue. Although marked crosswalks are provided at these locations, field observations identified frequent violations of pedestrian right-of-way by vehicles. A lack of adequate gaps in traffic flow along South Van Ness Avenue also resulted in occasional instances of vehicle queuing within crosswalks, requiring crossing pedestrians to weave through traffic.

PEDESTRIAN ACTIVITY

Crosswalk counts conducted for several nearby projects in 2015 and 2016 during the weekday a.m. and p.m. peak periods, in addition to a.m. and p.m. peak period counts in March 2016 collected for the 10 South Van Ness project, show that the highest-activity crossings in the

²⁶ Channelized turn movements are created with painted lines or physical barriers (often concrete triangular shaped) placed in the street that separate turning vehicles from the rest of the intersection's traffic and guide drivers through the turn.

immediate vicinity of the project site are at the Market Street/Van Ness Avenue/South Van Ness Avenue intersection, with 200–450 pedestrians per hour during the weekday a.m. peak hour and 300–800 pedestrians per hour during the weekday p.m. peak hour crossing each intersection leg.²⁷ Activity was lower at the Mission Street/South Van Ness Avenue/Otis Street/12th Street intersection, with approximately 100–250 pedestrians per hour crossing each intersection leg during each of the weekday a.m. and p.m. peak hours.

Field observations conducted during the weekday late morning, midday/midafternoon, and evening periods in February 2016 corroborated these conditions, and found the highest concentrations of pedestrian activity along South Van Ness Avenue between Market Street and Mission Street and along Market Street between 10th Street and South Van Ness Avenue. Despite some concentrated pedestrian activity at some locations, sidewalks and other pedestrian facilities were observed to operate at free-flow conditions and without substantial overcrowding.

Loading Conditions

Field observations of loading activities conducted during the weekday midday/midafternoon and evening periods (1 p.m. to 5:30 p.m.) found that the four on-street commercial loading spaces along 12th Street, three on the west side and one on the east side of the street, were generally underused. No freight/delivery vehicles were observed to be double-parked in the vicinity of the project site during these periods. The two on-street loading spaces about a block away on the north side of Otis street west of South Van Ness Avenue also were generally underused by commercial vehicles. Vehicular traffic associated with the existing automobile dealership and service center on the site is also occasionally staged on adjacent sidewalks.

Passenger loading activities in the immediate vicinity of the project site included commuter shuttles using the designated commuter shuttle stop along southbound South Van Ness Avenue at Market Street adjacent to the project site.²⁸ The main passenger loading activities observed were transit riders at bus stops on Market, Mission and Otis streets.

Emergency Vehicle Access

Emergency vehicle access to the project site is currently provided along most main streets in the vicinity of the project site, including Market Street, South Van Ness Avenue, and Mission Street. Access is also provided from 12th Street southbound via Market Street and northbound via a left-turn from southbound South Van Ness Avenue. The nearest San Francisco Fire Department

²⁷ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV, p. 36.

²⁸ These commuter shuttle stops were subsequently discontinued and removed in May 2016.

station is Station 36 at 109 Oak Street at Franklin Street, approximately 0.1 mile to the northwest of the project site.²⁹

The closest hospital to the project site is California Pacific Medical Center's Davies Campus (Duboce Avenue at Noe Street), approximately 0.8 mile southwest of the project site. The California Pacific Medical Center Van Ness Campus (Van Ness Avenue at Geary Street, on Cathedral Hill) is currently under construction, approximately 0.8 mile north of the project site.

Automobile Parking Conditions

Field surveys of on-street parking in the study area were conducted on a typical weekday evening period between 8 p.m. and 10 p.m. The surveys were conducted in the area generally bounded by Oak Street and Market Street to the north, Mission Street/Otis Street to the south, 10th Street to the east, and Gough Street to the west.³⁰ As of March 2016, there were a total of 469 on-street parking spaces in this study area, generally consisting of time-limited (2-hour-limit) unmetered parking, with some areas subject to residential parking permit restrictions.³¹ Some unrestricted parking, however, is permitted on Colton Street. Overall, on-street parking occupancy during the survey period was approximately 71 percent, although some concentrated areas north of Market Street were at practical capacity (85 percent occupancy or greater).

Regulatory Framework

Federal

No federal statutes or regulations related to transportation and circulation are applicable to the proposed project, the variant, or the straight-shot streetscape option.

State

Senate Bill (SB) 743 (CEQA section 21099), effective September 2013, directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency for certification and adoption, proposed revisions to the CEQA Guidelines to establish criteria for determining the significance of transportation impacts that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." SB 743 recommended vehicle miles

²⁹ Other nearby San Francisco Fire Department stations include Station 5 (1301 Turk Street at Webster Street), 0.7 mile to the northwest; Station 6 (135 Sanchez Street at Henry Street), 0.8 mile to the southwest; and Station 7 (2300 Folsom Street at 19th Street), 0.8 mile to the southwest.

³⁰ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV, pp. 41-42.

³¹ Portions of the on-street parking survey area are within Residential Parking Permit Area S. Motorists without a valid residential parking permit are restricted to a 2-hour time limit when using designated parking spaces.

traveled (measured as the amount and distance that a project might cause people to drive, including the number of passengers in a vehicle) as an appropriate metric for establishing those criteria. In addition, SB 743 stated that upon certification of the CEQA Guidelines by the California Natural Resources Agency, “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment” pursuant to CEQA.

In January 2016, OPR published for public review and comment a *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, recommending that transportation impacts for projects be measured using a VMT metric.³² On March 3, 2016, the San Francisco Planning Commission, by Resolution No. 19579, removed automobile delay as described by level of service or similar measure of vehicular capacity or traffic congestion and adopted VMT as the principal criterion for determining significant transportation impacts based on the evidence in the January 2016 technical advisory document from OPR, and on the City’s independent review of the literature on level of service and VMT.^{33, 34}

Regional

No regional regulations related to transportation and circulation are applicable to the proposed project, the variant, or the straight-shot streetscape option.

Local

The following City plans and policies are relevant in evaluating the potential transportation and circulation impacts of the proposed project, the variant, and the straight-shot streetscape option.

³² Governor’s Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, Implementing Senate Bill 743* (Steinberg, 2013), January 20, 2016, available online at http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf, accessed June 26, 2018.

³³ San Francisco Planning Department, *Executive Summary: Resolution Modifying Transportation Impact Analysis*. Hearing date: March 3, 2016.

³⁴ On January 28, 2018, the California Natural Resources Agency published a Notice of Proposed Rulemaking to amend the CEQA Guidelines, including among other changes an amendment to add section 15064.3 determining the significance of transportation impacts using, in most cases, vehicle miles traveled. The public comment period for the proposed amendments extended through March 15, 2018. The proposed amendments to the Guidelines have not yet been adopted. See California Natural Resources Agency, Title 14, Notice of Proposed Rulemaking, Amendments and Additions to the State CEQA Guidelines, January 26, 2018, available online at <http://resources.ca.gov/ceqa/docs/update2018/notice-of-proposed-rulemaking.pdf>, accessed June 25, 2018.

SAN FRANCISCO TRANSIT FIRST POLICY

In 1998, San Francisco voters amended the City Charter (article 8A, section 8A.115) to include the *Transit First Policy*, which was first articulated as a City priority policy by the San Francisco Board of Supervisors in 1973. The Transit First Policy is a set of principles underscoring the City's commitment that travel by transit, by bicycle, and on foot be given priority over the private automobile. These principles are embodied in the policies and objectives of the general plan's *Transportation Element*. All City boards, commissions, and departments are legally required to implement transit first principles in conducting City affairs.

SAN FRANCISCO GENERAL PLAN TRANSPORTATION ELEMENT

The Transportation Element of the general plan includes objectives and policies that relate to the eight aspects of the citywide transportation system: General Regional Transportation, Congestion Management, Vehicle Circulation, Transit, Pedestrian, Bicycles, Citywide Parking, and Goods Management.³⁵ The element references San Francisco's Transit First Policy in its introduction, and contains objectives and policies that are directly pertinent to consideration of the project. Relevant objectives relate to locating development near transit investments; encouraging transit use; and timing traffic signals to emphasize transit, pedestrian, and bicycle traffic as part of a balanced multimodal transportation system. The general plan also emphasizes alternative transportation through positioning building entrances, improving the pedestrian environment, and providing safe bicycle parking facilities.

SAN FRANCISCO BICYCLE PLAN

The San Francisco Bicycle Plan,³⁶ approved by the board of supervisors in 1999 and updated in 2009, describes a City program to provide the safe and attractive environment needed to promote bicycling as a transportation mode. The bicycle plan identifies the citywide bicycle route network and establishes the level of treatment (i.e., class I, class II, class III, or class IV facility) for each route. The plan also identifies near-term improvements to be implemented within the 5 years of adoption of the bicycle plan, as well as policy goals, objectives, and actions to support these improvements. Most near-term improvement projects have been implemented. The bicycle plan also includes minor improvements and long-term improvements that would be implemented to facilitate bicycling in San Francisco.

³⁵ City and County of San Francisco, *San Francisco General Plan*, Transportation Element, amendments by Board of Supervisors Ordinance 101193 adopted on December 7, 2010.

³⁶ San Francisco Municipal Transportation Agency, *San Francisco Bicycle Plan*, June 26, 2009.

SAN FRANCISCO BETTER STREETS PLAN

The San Francisco Better Streets Plan³⁷ focuses on creating a positive pedestrian environment through measures such as careful streetscape design and *traffic calming* measures to increase pedestrian safety. The plan includes guidelines for the *pedestrian environment*, which it defines as the areas of the street where people walk, sit, shop, play, or interact. Generally speaking, the guidelines are for design of sidewalks and crosswalks; however, in some cases, the better streets plan includes guidelines for certain areas of the roadway, such as intersections.

VISION ZERO

Vision Zero is a policy adopted by both the San Francisco Board of Supervisors and SFMTA in 2014 to eliminate traffic deaths in the city by 2024. The goal of Vision Zero is also to reduce inequities in severe injuries across neighborhoods, transportation modes, and populations. Implementation of this policy has particularly focused on pedestrians and bicyclists, who are generally the most vulnerable roadway users. Example improvements include pavement markings (e.g., crosswalk striping, intersection “*daylighting*” using red zones); signal timing/phasing changes; sidewalk/curb extensions (e.g., *corner bulbs*); *road diets* (reducing the number of vehicular travel lanes or the amount of road space devoted to vehicular traffic); street conversions from one-way to two-way traffic; and bikeway facilities (e.g., bicycle lanes, cycle tracks).

CLIMATE ACTION PLAN

In response to scientific evidence suggesting that human behavior is accelerating climate change, the City adopted a *climate action plan* addressing actions it could take to reduce San Francisco’s contribution to climate change. The Climate Action Plan for San Francisco³⁸ describes the potential effects of climate change on San Francisco based on scientific research and presents an inventory of San Francisco’s contribution to greenhouse gas emissions, the leading human contributor toward accelerating climate change. The plan also recommends a greenhouse gas emissions reduction target and describes specific measures that the City could take to reach its target, including recommendations for reducing trips by automobile.

TRANSPORTATION SUSTAINABILITY PROGRAM

The Transportation Sustainability Program is an initiative aimed at improving and expanding the transportation system to help accommodate new growth. The program seeks to create a policy framework in which private development contributes to minimizing its impacts on the transportation system, including by helping to pay for the system’s enhancement and expansion.

³⁷ San Francisco Planning Department, *San Francisco Better Streets Plan*, adopted by the Mayor and Board of Supervisors in December 2010.

³⁸ San Francisco Department of the Environment and San Francisco Public Utilities Commission, *Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Gas Emissions*, September 2004.

The Transportation Sustainability Program is a joint effort by the Mayor's Office, the San Francisco Planning Department, SFMTA, and the San Francisco County Transportation Authority, and consists of the following three objectives:

- **Fund Transportation Improvements to Support Growth.** The transportation sustainability fee is assessed on new development, including residential development, to help fund improvements to transit capacity and reliability as well as bicycle and pedestrian improvements. This fee was passed by the board of supervisors and signed into law by the mayor on November 25, 2015 (Board of Supervisors File No. 150790).³⁹
- **Modernize Environmental Review.** The planning department prepared proposed revisions to its guidelines for transportation-related environmental review in accordance with SB 743 and CEQA section 21099. These revisions followed OPR's recommendations in its *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, and proposed replacing automobile delay and level of service with the VMT metric⁴⁰ when evaluating the transportation impacts of projects. On March 3, 2016, in anticipation of future certification by the California Natural Resources Agency of OPR's revised CEQA Guidelines, the San Francisco Planning Commission adopted the proposed revisions as part of Resolution 19579.
- **Encourage Sustainable Travel.** This component of the Transportation Sustainability Program would help manage demand on the transportation network through a transportation demand management program, reducing VMT from new development and making it easier for new residents, tenants, employees, and visitors of these developments to get around by sustainable travel modes such as transit, walking, and biking. Amendments to the San Francisco Planning Code (planning code) to implement the transportation demand management program, along with program standards, were approved by the San Francisco Planning Commission on August 4, 2016 (Resolutions 19715 and 19716). The Transportation Demand Management Program Standards were updated on January 17, 2017 (Resolution 19838), and the planning code amendments were adopted by the board of supervisors on February 7, 2017 (Ordinance 34-17).

MARKET & OCTAVIA AREA PLAN

The Market & Octavia Area Plan is an area plan within the San Francisco General Plan that covers portions of Hayes Valley, the Western Addition, Duboce Triangle, Upper Market/Castro, and surrounding blocks. The area plan's primary objectives are to enhance the neighborhood as a mixed-use urban neighborhood, strengthen its physical fabric and character, provide for development of infill construction throughout the plan area, preserve existing housing stock, and promote the preservation of historic buildings. The plan's transportation-related objectives include improving public transit's reliability, attractiveness, convenience, and responsiveness to increasing demand; developing and implementing parking policies that encourage public transit

³⁹ Two additional files were created at the board of supervisors regarding the transportation sustainability fee and considerations for hospitals and health services, grandfathering, and additional fees for large projects: File No. 151121 and File No. 151257.

⁴⁰ The VMT metric does not apply to the analysis of impacts on nonautomobile modes of travel such as riding transit, walking, and bicycling.

and other alternatives to private automobiles and reduce traffic congestion; eliminating or reducing the effects of parking on neighborhood character and quality; managing parking resources to maximize service and accessibility to all; establishing a safe and attractive bikeway network for local and citywide travel; and improving vehicular circulation.

Impacts and Mitigation Measures

Significance Thresholds

The significance thresholds listed below are organized by mode to facilitate the transportation impact analysis; however, the transportation significance thresholds are essentially the same as the ones in the environmental checklist in Appendix G of the CEQA Guidelines, modified to address the changes being implemented as a result of SB 743 and San Francisco Planning Commission Resolution 19579. The applicable thresholds used to determine whether implementing the proposed project, the variant, or the straight-shot streetscape option would result in a significant impact on transportation and circulation are described below.

For the purpose of this analysis, the following significance criteria were used to determine whether implementing the project would result in a significant impact on transportation and circulation. Implementation of the project would have a significant effect on transportation and circulation if the project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses;
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

As part of implementing CEQA requirements in San Francisco, the City has established the following additional criteria, organized by transportation mode to facilitate the transportation analysis. The transportation significance thresholds are similar to those in Appendix G of the CEQA Guidelines as listed above, except for the criteria related to traffic hazards and VMT. The

following criteria were used to determine whether implementing the proposed project or variant would result in a significant impact on transportation and circulation:

- **Vehicle Miles Traveled**
 - The project would have a significant effect on the environment if it would cause substantial additional VMT
 - The project would have a significant effect on the environment if it would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network
- **Traffic Hazards** – The project would have a significant adverse impact on the environment if it would cause major traffic hazards.
- **Transit**
 - The project would have a significant effect on the environment if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service
 - The project would have a significant effect on the environment if it would cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels could result
- **Pedestrians** – The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.
- **Bicycles** – The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.
- **Loading**
 - The project would have a significant effect on the environment if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed onsite loading facilities or convenient on-street loading zones
 - The project would have a significant effect on the environment if it would create potentially hazardous conditions affecting traffic, transit, bicycles, or pedestrians or significant delays affecting transit
- **Emergency Access** – The project would have a significant effect on the environment if it would result in inadequate emergency access.
- **Construction** – The project would have a significant effect on the environment if, in consideration of the project site location and other relevant project characteristics, the duration and magnitude of temporary construction activities would result in substantial

interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in potentially hazardous conditions.

- **Automobile Parking** – As explained in the “Approach to Analysis” section below, the EIR does not consider the adequacy of the parking supply in determining the significance of impacts of the proposed project. Because parking conditions may be of interest to some members of the public and decision-makers, a parking demand analysis is presented for informational purposes.

Approach to Analysis

This section presents the methodology for analyzing transportation impacts and the approach to developing travel demand forecasts for the proposed project. The analysis of the project was conducted for existing plus project conditions and 2040 cumulative conditions. The “existing plus project” conditions assess the near-term impacts of the proposed project or variant, while the “2040 cumulative” conditions assess the long-term impacts of the proposed project or variant in combination with growth forecast to occur by the year 2040 using the San Francisco Chained Activity Model Process (SF-CHAMP) that accounts for reasonably foreseeable future development. Additionally, for the cumulative analysis, some street and transit improvements near or adjacent to the project site, were also accounted for, as discussed further below under “Cumulative Impacts,” pp. 4.3.53–4.3.56. The year 2040 was selected because it is the latest year that travel demand forecasts are available from the San Francisco Transportation Authority’s SF-CHAMP model.

The straight-shot streetscape options for both the proposed project and the variant are discussed only where the differences in loading, passenger drop-off, and pedestrian facilities would affect the analysis. The options retain essentially the same vehicular access with one 11-foot-wide travel lane in each direction but a different driveway location for the proposed project and the variant. Therefore, the two options are discussed in the topics of induced automobile travel from transportation improvements (in the discussion of VMT impacts), traffic hazards, bicycles, pedestrians, loading, and emergency access.

ANALYSIS METHODOLOGY

The project’s impacts on the surrounding roadways were analyzed using the guidelines set forth in the SF Guidelines and in San Francisco Planning Commission Resolution 19579 and supporting materials, which provide direction for analyzing transportation conditions and identifying the transportation impacts of a proposed project in San Francisco.

As discussed in Section 4, Chapter Introduction, pp. 4.0.2–4.0.3, and above in the “Regulatory Framework” subsection, pp. 4.2.22–4.2.23, Senate Bill 743 amended CEQA by adding Public Resources Code section 21099(d) eliminating the analysis of parking impacts for certain urban infill projects in transit priority areas. Accordingly, parking is no longer to be considered in

determining if a project has the potential to result in significant environmental effects for projects that meet all three criteria established in the statute. The proposed project and variant meet all of the criteria, and thus the transportation impact analysis does not consider the adequacy of parking in determining the significance of project impacts under CEQA. However, the planning department acknowledges that parking conditions may be of interest to the public and the decision-makers. Therefore, this EIR presents a parking demand analysis for informational purposes at the end of this section and considers any secondary physical impacts associated with constrained supply if the project results in a substantial parking deficit (e.g., queuing by drivers waiting for on-site parking spaces that affects the public right-of-way) as applicable in the following transportation impact analysis.

Vehicle Miles Traveled

The following identifies thresholds of significance and screening criteria used to determine whether a land use project would result in significant impacts under the VMT metric:

- For residential projects, a project would generate substantial additional VMT if it would exceed the average daily regional household VMT per capita minus 15 percent.^{41,42}
- For retail projects, the San Francisco Planning Department uses a VMT efficiency metric approach. A retail project would generate substantial additional VMT if it would exceed the average daily regional VMT per retail employee minus 15 percent. This approach is consistent with CEQA section 21099 and the thresholds of significance for other land uses recommended in OPR's proposed transportation impact guidelines.
- For mixed-use projects, each proposed land use is evaluated independently, in accordance with the significance thresholds described above.

OPR's proposed transportation impact guidelines provide screening criteria to identify the types, characteristics, or locations of land use projects that would not exceed these VMT thresholds of significance. OPR states that if a project or land use proposed as part of the project meets either of the screening criteria listed below, then VMT impacts are presumed to be less than significant for that land use and a detailed VMT analysis is not required:

- **Map-Based Screening for Residential, Office, and Retail Projects.** OPR recommends mapping areas where VMT is less than the applicable threshold for that land use. Accordingly, the San Francisco County Transportation Authority has developed maps depicting existing VMT levels in San Francisco for residential, office, and retail land uses

⁴¹ OPR's proposed transportation impact guidelines state that a project would cause substantial additional VMT if it would exceed both the existing city household VMT per capita minus 15 percent and the existing regional household VMT per capita minus 15 percent. In San Francisco, the city's average VMT per capita is lower (8.4) than the regional average (17.2). Therefore, the city average is irrelevant for the purposes of the analysis.

⁴² As documented in OPR's proposed transportation impact guidelines, a 15 percent threshold below existing development is "both reasonably ambitious and generally achievable."

based on the SF-CHAMP 2012 base-year model run. The San Francisco Planning Department uses these maps and associated data to determine whether a proposed project is located in an area of the city that is below the VMT threshold.

- **Proximity to Transit Stations.** OPR recommends that residential, retail, and office projects, as well as projects that are a mix of these uses, proposed within ½ mile of an existing major transit stop (as defined by CEQA section 21064.3) or an existing stop along a high-quality transit corridor (as defined by CEQA section 21155) would not result in a substantial increase in VMT.⁴³

Induced Automobile Travel

The following identifies the thresholds of significance and screening criteria used to determine whether transportation projects would result in significant impacts by inducing substantial additional automobile travel.

According to OPR's proposed transportation impact guidelines, a transportation project would substantially induce automobile travel if it would generate more than 2,075,220 VMT per year. This threshold is based on the fair-share VMT allocated to transportation projects required to achieve California's long-term greenhouse gas emissions reduction goal of 40 percent below 1990 levels by 2030.

OPR's proposed transportation impact guidelines (and the planning department's most recent guidelines) list the types of transportation projects that would not likely lead to a substantial or measurable increase in VMT. If a project fits within the general types of projects (including combinations of types) described below, then it is presumed that VMT impacts would be less than significant and a detailed VMT analysis is not required:

- Active Transportation, Rightsizing (aka Road Diet), and Transit Projects:
 - Infrastructure projects, including safety and accessibility improvements, for people walking or bicycling
 - Creation of new or addition of roadway capacity on local or collector streets, provided the project also substantially improves conditions for people walking, bicycling, and, if applicable, riding transit (e.g., by improving neighborhood connectivity or improving safety)

⁴³ The presumption of less-than-significant VMT impacts under the Proximity to Transit Stations screening criterion would not apply if the project would have a floor area ratio of less than 0.75; provide more parking available for use by residents, customers, or employees of the project than required or allowed, without a conditional use authorization; or be inconsistent with the applicable sustainable communities strategy (i.e., would be located outside of areas that the strategy contemplates for development).

- Other Minor Transportation Projects:
 - Rehabilitation, maintenance, replacement, and repair projects that are designed to improve the condition of existing transportation assets⁴⁴ and do not add additional motor vehicle capacity
 - Installation, removal, or reconfiguration of traffic lanes that are not for through traffic⁴⁵
 - Installation, removal, or reconfiguration of traffic control devices, including transit signal priority features
 - Removal of off- or on-street parking spaces
 - Adoption, removal, or modification of on-street parking or loading restrictions⁴⁶

Transit

For the transit capacity analysis, the impact on local and regional transit providers from additional transit ridership generated by the proposed project or the variant during the weekday a.m. and p.m. peak hours was assessed by comparing projected ridership to available transit capacity. The analysis considered both Muni's downtown screenlines, and the regional transit screenlines.

A qualitative analysis of transit operations was also conducted to assess the impacts of the proposed project, variant, or straight-shot streetscape option on delays to and operating costs for transit service.

Bicycles

Similar to the existing conditions discussion under "Bikeway Network" on pp. 4.2.17–4.2.18 in Environmental Setting, the effect of the proposed project or variant on bicycle conditions in the project vicinity, including bicycle routes, safety and right-of-way issues, and conflicts with traffic, was assessed qualitatively.

Pedestrians

Similar to the existing conditions discussion under "Pedestrian Network" on pp. 4.2.18–4.2.20 in Environmental Setting, the effect of the proposed project, variant, or straight-shot streetscape options on pedestrian safety and hazards (e.g., potential conflicts with traffic) and on crowding in pedestrian facilities (e.g., the adjacent sidewalks) was evaluated qualitatively.

⁴⁴ Examples include highways, roadways, bridges, culverts, tunnels, transit systems, and bicycle and pedestrian facilities.

⁴⁵ Examples include left-, right-, and U-turn pockets, or emergency breakdown lanes that are not used as through lanes.

⁴⁶ Examples include parking meters, time limits, accessible spaces, and preferential/reserved parking permit programs.

Loading

Loading was analyzed by comparing the supply of on- and off-street loading accommodations to the projected loading demand and qualitatively evaluating whether the proposed project, variant, or straight-shot streetscape option could create hazardous conditions affecting traffic, transit, bicycles, or pedestrians or significant delays affecting transit if the projected loading demand is not met by the loading supply.

Emergency Vehicle Access

Potential effects on emergency vehicle access were assessed qualitatively.

Construction

Construction impacts were assessed qualitatively, based on the staging and duration of construction activity, estimated daily numbers of trucks and workers, and temporary street lane and/or sidewalk closures that may be required..

PROJECT TRAVEL DEMAND

Project travel demand refers to the new vehicular (including service and delivery vehicle), transit, bicycle, and pedestrian traffic that would be generated by the project. The project's estimated travel demand and freight loading/service vehicle demand are based primarily on the methodology and information presented in the SF Guidelines, supplemented by trip rates and other information published by the Institute of Transportation Engineers in *Trip Generation* (9th edition).

Although there is an existing, active use at the project site (an automobile dealership that formerly included a service center) that would be demolished with the project, trip credits for these uses were not taken, and the travel demand calculations should be considered conservative.

Trip Generation

Table 4.2.5: Trip Generation by Mode and Land Use (Proposed Project) summarizes the estimated trip generation of the proposed project. Overall, the proposed project would generate approximately 12,300 person-trips on an average weekday, including approximately 1,300 person-trips during the weekday a.m. peak hour and 1,750 person-trips during the weekday p.m. peak hour.

Table 4.2.5: Trip Generation by Mode and Land Use (Proposed Project)

Land Use	Week-day Daily Person-Trips	Weekday A.M. Peak Hour						Weekday P.M. Peak Hour					
		Person-Trips					Vehicle -Trips	Person-Trips					Vehicle -Trips
		Auto	Transit	Walk	Other	Total		Auto	Transit	Walk	Other	Total	
Residential	7,750	339	458	178	218	1,193	336	380	515	201	245	1,341	378
Retail	4,553	31	19	48	13	111	18	117	70	177	47	410	67
Total	12,303	370	477	226	231	1,304	354	497	585	377	292	1,750	445

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

The variant's land uses would be the same as those in the proposed project, but with approximately 100 additional gross square feet of retail use and a slightly different mix of studio, one-bedroom, two-bedroom and three-bedroom dwelling units (the total number of units would remain the same). These differences, however, would result in a negligible increase in the overall travel demand for the variant, which would be similar to that of the proposed project. During the weekday p.m. peak hour, for example, the variant would result in five more vehicle-trips, six more transit person-trips, three more walk person-trips, and three more bicycle person-trips than the proposed project.⁴⁷

Freight Loading/Service Vehicle Demand

Table 4.2.6: Freight Loading/Service Vehicle Demand (Proposed Project) summarizes the estimated freight loading/service vehicle demand of the proposed project. Overall, the proposed project would generate approximately 35 truck trips on an average weekday, including one to two trips during the average loading hour and two trips during the peak loading hour.⁴⁸

Table 4.2.6: Freight Loading/Service Vehicle Demand (Proposed Project)

Land Use	Daily Truck Trips	Freight Loading/Service Vehicle Demand (spaces)	
		Average Hour	Peak Hour
Residential	28.1	1.3	1.6
Retail	6.7	0.3	0.4
Total	34.8	1.6	2.0

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

⁴⁷ CHS Consulting Group, *10 South Van Ness Avenue Single-Tower Project Variant - Final Memorandum*, December 21, 2017, Case No. 2015-004568ENV.

⁴⁸ The peak loading hour is the hour with the greatest number of freight and service vehicles typically during the period between 10 a.m. and 1 p.m. The average hour is the total daily freight/service vehicle demand based on a 9-hour delivery day assuming a 25-minute stay per delivery.

As discussed previously, the variant would be similar to the proposed project with the same number of residential units and 100 gross square feet more commercial retail space. The minor differences from the proposed project would not change the estimated freight loading/service vehicle demand.⁴⁹

Project Features

The proposed project or variant would demolish the existing building on the project site and construct a mixed-use development that would include residential, commercial, parking, and open space uses. A complete project description is included in Chapter 2, Project Description. This section includes a description of project features that are pertinent to transportation and circulation. Proposed project and variant common features are described in tandem while other features are discussed separately. The differences between the proposed project and the variant and their straight-shot streetscape options are discussed in relation to induced automobile traffic, potential traffic hazards, pedestrian travel and passenger and freight loading, as only on-street loading and passenger drop-off/pickup areas, the presence or absence of on-street parking, and the width of sidewalks along 12th Street would change with these options.

PROPOSED PROJECT

Under the proposed project, the existing building on the project site would be demolished and two podiums would be constructed, with one tower above each podium. The buildings would have a maximum height of approximately 400 feet above the ground (420 feet total, including roof screens and the stair/elevator penthouse on each tower) and would have 20-foot-tall parapets. The podium portion would be approximately 120 feet tall. A pedestrian passageway/bridge would connect the two podiums at Level 2.

The project site currently has seven curb cuts, three of which are along South Van Ness Avenue and four of which are on 12th Street. The proposed project would remove all of the existing curb cuts on South Van Ness Avenue, and 12th Street. A new curb cut would be installed along 12th Street to provide vehicle access to the two-level, below-grade parking garage and loading dock for both retail and residential users.

In addition to stairs, two elevators would provide access to the residential lobbies from the parking garage/basement. From the residential lobbies, another pair of elevators would provide access to each tower. Elevator access may also be available between the below-grade parking garage/basement and the ground-floor retail space. Two street-level residential entrances, one for each tower, would be located along South Van Ness Avenue. Access to the retail spaces would be from South Van Ness Avenue, Market Street, 12th Street, and a proposed mid-block alley

⁴⁹ CHS Consulting Group, *10 South Van Ness Avenue Single-Tower Project Variant – Final Memorandum*, December 21, 2017, p. 6.

between the two podiums. The proposed mid-block alley would also provide public access through the project site between South Van Ness Avenue and 12th Street.

PROPOSED VARIANT

Under the variant, the existing building would be demolished and a single podium would be constructed, with a single tower above. The tower would be 590 feet tall. Like the proposed project, the variant would include a stair/elevator penthouse that would extend up to 20 feet above the roof height. The podium portion of the building would be approximately 164 feet tall at its tallest point.

The variant would include the same general circulation and access as the proposed project, with the exception of the location of lobby entrances and the configuration of the mid-block alley. For the variant, there would be two entrances to the single residential lobby provided, one from the mid-block alley and one from South Van Ness Avenue. The proposed mid-block alley would provide public access through the project site between Market Street and 12th Street.

PROPOSED PROJECT AND VARIANT COMMON ELEMENTS

Land Uses

Both the proposed project and variant would have the same total of 984 residential units, although the mix of studio, 1-bedroom, 2-bedroom and 3-bedroom units would be slightly different. There would be approximately the same amount of ground floor commercial retail space, with the variant having about 100 additional total square feet compared to the proposed project. Both the proposed project and variant would provide vehicular access to the basement parking and loading areas on 12th Street south of the intersection with Stevenson Street, although the access for the variant would be closer to the 12th Street/South Van Ness Avenue intersection. A mid-block alley would be provided, in different locations: the proposed project's mid-block alley would extend between South Van Ness Avenue and 12th Street at approximately the intersection of Stevenson Street and would relate to the separate podiums and towers; the variant's mid-block alley would connect Market Street to 12th Street just north of the intersection with Stevenson Street.

Vehicle and Bicycle Parking, TDM Plan

The proposed project and the variant would each include 518 vehicle parking spaces, in two basement levels. Ingress and egress to the secured garage/basement would be provided through a single curb cut on 12th Street. In addition, a total of seven off-street freight-loading spaces would be located in the two basement levels, three of which would be standard freight-loading spaces, and four of which would be service vehicle spaces. One freight-loading space would accommodate up to one 45-foot-long vehicle. On the ground floor of the podium, 336 class I bicycle parking spaces would be provided: 332 for residential use and 4 for retail use. On-street

bicycle parking would include 61 class II bicycle parking spaces: 49 for residential use and 12 for retail use located in the public rights of way surrounding the project site.

The proposed project's Transportation Demand Management Plan, described on pp. 2.22-2.25 in Chapter 2, Project Description, would be the same for the variant.

Streetscape Improvements

The proposed project and variant would each include the following improvements, shown in Figure 2.14: Proposed Project-Market Octavia Streetscape Plan and 12th Street Section on p. 2.26 in Chapter 2, Project Description:

- The eastern and western sidewalks along 12th Street would be expanded from 15 feet to a width of 21 feet (4 feet of frontage, 8 feet of pedestrian throughway, and 9 feet of pedestrian furnishing space).
- Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets.
- A raised crosswalk would be installed at the intersection of 12th and Stevenson streets.
- The “pedestrian island” at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection.
- Two 60-foot-long white and yellow loading zones are proposed along the South Van Ness Avenue frontage, near the entrances to the residential lobbies, to provide an area for passenger drop-off and pick up, and commercial loading activities.
- Four passenger and commercial loading zones are proposed on 12th Street, one 100-foot-long loading zone and one 40-foot-long loading zone on each side of 12th Street. Each 100-foot loading zone would include one ADA passenger loading space, one ADA parking space, one passenger loading space, one commercial loading space, and one regular parking space. Each 40-foot loading zone would include one passenger loading space and one commercial loading space.
- 33 net new street trees and class II bicycle racks with capacity for 61 bicycles along South Van Ness Avenue, Market Street, and 12th Street, in compliance with the City's Better Streets Plan would be installed.

PROPOSED PROJECT AND VARIANT MAIN DIFFERENCES

The proposed project towers would be shorter than the single tower proposed with the variant, and the overall tower design would be different (see Chapter 2, Project Description, Figure 2.10: Proposed Project – Building Elevation South Van Ness Avenue (East) Façade and Figure 2.11: Proposed Project – Building Elevation Market Street (North) Façade, pp. 2.19 and 2.20, showing elevations of the proposed project, and Figure 2.20: Variant – Building Elevations Along 12th Street, Market Street, and South Van Ness Avenue, p. 2.39, showing elevations of the variant).

Lobby entrances for the proposed project would be from South Van Ness Avenue for each residential tower. The variant would have two entrances to the single residential tower, from South Van Ness Avenue and from the mid-block alley that would extend between Market and 12th streets. The proposed project and variant would have a similar amount of total open space, but the variant would have larger total amount of publicly accessible open space and the proposed project would have a larger amount of common open space accessible to residents.

Straight-Shot Streetscape Options

- The straight-shot streetscape options could be implemented with either the proposed project or the variant in lieu of the base streetscape design, which is based on the Market & Octavia Area Plan and general design standards from the San Francisco Planning Department. The straight-shot streetscape options involve differences in design from the proposed streetscape changes, but no changes in land use.
- The straight-shot streetscape options both involve creating a 40-foot-wide sidewalk on the east side of 12th Street, and providing for a shared street with two 11-foot travel lanes with sharrows indicating sharing with bicyclists. The proposed project's option is shown in Figure 2.25: Straight-Shot Streetscape Option for the Proposed Project (12th Street Right-of-Way and Section in Chapter 2, p. 2.47. It would have three yellow loading zones, one less than the four yellow zones in the proposed project's 12th Street improvements; three white passenger loading zones, also one less than the proposed project; no on-street parking spaces, unlike the two regular and two ADA-compliant on-street parking spaces in the proposed project's street improvements; and the same number of ADA passenger loading areas (two). The straight-shot streetscape option for the variant is shown in Figure 2.26: Straight-Shot Streetscape Option for the Variant (12th Street Right-of-Way and Section, p. 2.48; it would have one less yellow loading zone, one less white passenger loading zone, and one less ADA-compliant passenger loading zone than the proposed project's option, a further reduction from the proposed project and variant's streetscape improvements planned for 12th Street.

Impact Analysis

As described previously under "Travel Demand," the differences in travel demand between the proposed project and the variant would be negligible. Therefore, most of the impacts of the variant would be similar to those of the proposed project.

VEHICLE MILES TRAVELED IMPACTS

Impact TR-1: The proposed project, the variant, or the straight-shot streetscape option would not cause substantial additional VMT or substantially induce automobile travel. (*Less than Significant*)

Additional Vehicle Miles Traveled

As discussed above in “Analysis Methodology,” Vehicle Miles Traveled, on pp. 4.2.30–4.2.31, for development projects in San Francisco a project would result in a significant impact related to additional VMT if it would exceed the regional VMT per capita or per employee for a particular land use minus 15 percent. **Table 4.2.7: Average Daily Vehicle Miles Traveled per Capita – Existing Conditions** summarizes the average daily VMT per capita for residential and retail uses for the TAZ containing the project site (TAZ 578) and the Bay Area (regional average) obtained from the SF CHAMP model under existing conditions.

Table 4.2.7: Average Daily Vehicle Miles Traveled per Capita—Existing Conditions

Land Use	Average Daily VMT per Capita		
	San Francisco Bay Area		TAZ 578
	Regional Average	Regional Average minus 15%	
Residential (per resident)	17.2	14.6	3.7
Retail (per employee)	14.9	12.6	8.9

Notes: TAZ = transportation analysis zone; VMT = vehicle miles traveled

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No 2015-004568ENV.

As shown, for both residential and retail land uses, the existing average daily VMT per capita for TAZ 578 is less than the corresponding Bay Area regional averages minus 15 percent:

- **Residential uses:** Existing average daily household VMT per capita for TAZ 578 is 3.7, which is 78 percent less than the existing regional average daily household VMT per capita of 17.2.⁵⁰
- **Retail uses:** Existing average daily work-related VMT per employee for TAZ 578 is 8.9, which is 40 percent less than the existing regional average daily work-related VMT per employee of 14.9.

The project or variant would generate substantial additional VMT (thus resulting in a significant VMT impact) if it would exceed the corresponding average daily regional VMT per capita minus 15 percent. The data in Table 4.2.7 show that the project site is in an area (TAZ 578) where existing VMT per capita for the proposed uses is less than the corresponding existing regional

⁵⁰ Includes the VMT generated by the households in the development.

average per capita minus 15 percent. In addition, the project would meet the screening criterion for proximity to transit stations, further indicating that the project would not cause substantial additional VMT.⁵¹

For these reasons, the project or variant would not result in substantial additional VMT, and this impact would be less than significant. No mitigation is necessary.

Induced Automobile Travel

A project would have a significant effect on the environment if it would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network. OPR's proposed transportation impact guidelines list the types of transportation projects that would not likely lead to a substantial or measurable increase in VMT. If a project fits within those general project types (including combinations of types), then it is presumed that VMT impacts would be less than significant, and a detailed VMT analysis is not required.

The proposed project or variant is not a transportation project but would include features that would alter the transportation network either with the streetscape improvements in the proposed project or variant or with the straight-shot streetscape options for 12th Street. These features would include improvements to active transportation modes, such as sidewalk widening and class II bicycle parking. They would also include other minor transportation changes, such as removal and reconfiguration of on-street parking; establishment of new on-street commercial and passenger loading zones; removal of multiple existing curb cuts and installation of one new curb cut for vehicular and freight loading access; and installation, removal, or reconfiguration of traffic lanes not used as through lanes. These changes to the transportation network fit within the general types of projects that would not substantially induce automobile travel. Further, the project would not increase the physical roadway capacity of the surrounding street network or construct new roadways. Therefore, impacts related to induced automobile travel would be less than significant. No mitigation is necessary.

TRAFFIC HAZARD IMPACTS

Impact TR-2: The proposed project, the variant, or the straight-shot streetscape option would not cause major traffic hazards. (*Less than Significant*)

Vehicular access to existing uses at the project site is provided via three curb cuts on South Van Ness Avenue and four curb cuts on 12th Street. The project or variant would remove all seven existing curb cuts and replace them with one 24-foot-wide curb cut on 12th Street that would provide access to a single driveway. This change would substantially reduce the number of

⁵¹ San Francisco Planning Department, *Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis, 10 South Van Ness Avenue*, Case No. 2015-004568ENV, 2017.

locations where conflicts between vehicles accessing driveways and vehicles (including transit vehicles) on local roadways; bicyclists; and pedestrians along the frontages of the project site.

In addition, both the proposed streetscape design and the straight-shot streetscape options would include streetscape treatments to reduce vehicle speeds and provide adequate lines of sight at the proposed driveway and curb cut. These changes would be designed according to applicable engineering and roadway safety standards established by the City and other recognized organizations (e.g., National Association of City Transportation Officials). Therefore, project impacts related to traffic hazards would be less than significant.

The San Francisco Planning Department's standard conditions of approval regarding queue abatement would also apply to the project. Implementing these conditions of approval (Improvement Measure I-TR-2a) together with active garage driveway controls and curbside management (Improvement Measure I-TR-2b) would further reduce the less-than-significant traffic safety impacts of vehicle queuing at the project driveway and curb cut and other project impacts related to traffic safety.

Improvement Measure I-TR-2a: Monitoring and Abatement of Queues

The owner/operator of any off-street parking facility with more than 20 parking spaces (excluding loading and car-share spaces) will be responsible for ensuring that recurring vehicle queues do not occur on the public right-of-way. A recurring vehicle queue is defined as one or more vehicles (destined for the parking facility) blocking any portion of any public street, alley, or sidewalk for 3 consecutive minutes or longer on a daily or weekly basis.

If a recurring vehicle queue occurs, the owner/operator of the parking facility will employ methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, and the characteristics of the parking facility, the street(s) to which the facility connects, and the associated land uses (if applicable).

Suggested abatement methods include but are not limited to the following:

- Redesigning the facility to improve vehicular circulation and/or onsite queue capacity
- Employing parking attendants
- Installing "LOT FULL" signs with active management by parking attendants
- Using valet parking or other space-efficient parking techniques
- Using offsite parking facilities or shared parking with nearby uses
- Using parking occupancy sensors and signage to direct drivers to available spaces
- Employing travel demand management strategies such as additional bicycle parking, customer shuttles, or delivery services

- Implementing parking demand management strategies such as parking time limits, paid parking, time-of-day parking surcharge, or validated parking

If the planning director, or his or her designee, suspects that a recurring queue is present, the planning department will notify the property owner in writing. Upon request, the owner/operator will hire a qualified transportation consultant to evaluate site conditions for no less than seven days. The consultant will prepare a monitoring report to be submitted to the planning department for review. If the planning department determines that a recurring queue does exist, the facility owner/operator will have 90 days from the date of the written determination to abate the queue.

Improvement Measure I-TR-2b: Active Garage Driveway Controls and Curbside Management

The project sponsor/property owner will install active parking management controls at the project site at the driveway of the off-street parking garage, within the off-street garage area, and at the curbside loading zones on the east side of 12th Street. The goals of this measure will be to reduce the potential for queuing of project-related vehicular traffic along 12th Street; reduce and/or eliminate potential conflicts between vehicles entering and exiting the site driveway and other roadway users along 12th Street (e.g., motorists, cyclists, pedestrians); and reduce potential conflicts between large delivery vehicles using the curbside loading zones on the east side of 12th Street and other roadway users.

Sensors will be installed at the gated parking garage's ramp and at the driveway entrance/exit lane at 12th Street to detect any outbound vehicles on the driveway and in the ramp area. Vehicles traveling up the garage ramp and approaching the exit gate would then trigger a sensor that would activate an electronic sign, signal, or audible devices at the driveway entrance to warn any vehicles, pedestrians, or bicyclists of the presence of the exiting vehicle.

Large delivery and move-in/move-out vehicles will be required to coordinate and schedule use of the curbside loading spaces on the east side of 12th Street through building management and SFMTA's 311 reservation system.

Additional traffic calming and safety treatments will be installed in the parking driveway area. Specifically, signage will be installed to advise drivers exiting the parking driveway to slow, stop, and yield to any pedestrians in the sidewalk on 12th Street (e.g., "Caution: Pedestrians Crossing," "Watch for Pedestrians," "Exit Slowly," "STOP"). Diagonal mirrors will be installed so that motorists exiting the parking garage and pedestrians in the sidewalk can see each other. The project sponsor will also install rumble strips or similar devices to maintain slow speeds for vehicles exiting the parking garage.

TRANSIT IMPACTS

Impact TR-3: The proposed project or variant would not cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity such that unacceptable levels of transit service could result, nor would they cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels would result. (*Less than Significant*)

TRANSIT CAPACITY

Local Transit

As reported in Table 4.2.5 above, the project would generate approximately 477 transit person-trips during the weekday a.m. peak hour and 585 transit person-trips during the weekday p.m. peak hour. The proposed project or variant would generate more transit trips during the p.m. peak hour than the a.m. peak hour. The analysis of local transit impacts therefore focuses on increase in transit trips that cross the local screenlines in an outbound direction in the p.m. peak hour, although both a.m. and p.m. peak hour ridership and capacity are presented.⁵²

Of the total new transit ridership generated by the proposed project, approximately 185 transit person-trips during the weekday a.m. peak hour and 103 trips during the weekday p.m. peak hour would cross Muni's downtown screenlines, while 68 transit person-trips during the weekday a.m. peak hour and 38 trips during the weekday p.m. peak hour would cross the regional transit screenlines.⁵³ The remainder of the transit riders would both start and complete their transit trip within the greater downtown and would not cross a screenline.

Table 4.2.8: Muni Downtown Screenlines—Existing plus Project Conditions summarizes Muni ridership and capacity on the downtown screenlines under existing plus project conditions. As shown, project-generated transit ridership would not directly cause any Muni screenline or corridor to exceed the 85 percent capacity utilization threshold. One screenline and three corridors already operate above the capacity utilization threshold under existing conditions: the Southwest screenline during the weekday a.m. peak hour and the Subway lines during the weekday a.m. peak hour and Fulton/Hayes and Third Street corridors during the weekday p.m. peak hour. This operation above the 85 percent capacity utilization threshold would continue under existing plus project conditions. However, the project's contribution to total ridership on this screenline and these corridors would be less than 1 percent. The significance threshold for transit services already operating at or above the capacity utilization threshold is a contribution of 5 percent or more, substantially greater than the project or variant would contribute. Therefore, the impact on Muni capacity on the downtown screenlines would be less than significant.

⁵² The variant would add six more transit trips during the p.m. peak hour. Therefore, it would have essentially the same effects as the proposed project.

⁵³ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV, p. 58.

Table 4.2.8: Muni Downtown Screenlines—Existing plus Project Conditions

Screenline	Existing Conditions						Existing plus Project Conditions					
	Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹			Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹		
	Rider- ship	Capa- city	Utili- zation	Rider- ship	Capa- city	Utili- zation	Ridership		Utili- zation	Ridership		Utili- zation
							Added	Total		Added	Total	
Northeast Screenline												
Kearny/Stockton	2,211	3,050	72%	2,245	3,327	68%	64	2,275	75%	36	2,281	69%
Other lines	538	1,141	47%	683	1,078	63%	63	601	53%	35	718	67%
Subtotal	2,749	4,191	66%	2,928	4,405	67%	127	2,876	69%	71	2,999	68%
Northwest Screenline												
Geary	1,821	2,490	73%	1,964	2,623	75%	4	1,825	73%	2	1,966	75%
California	1,610	2,010	80%	1,322	1,752	75%	2	1,612	80%	1	1,323	76%
Sutter/Clement	480	630	76%	425	630	68%	2	482	77%	1	426	68%
Fulton/Hayes	1,277	1,680	76%	1,184	1,323	90%	6	1,283	76%	3	1,187	90%
Balboa	758	1,019	74%	625	974	64%	6	764	75%	3	628	65%
Subtotal	5,946	7,829	76%	5,519	7,302	76%	20	5,966	76%	11	5,531	76%
Southeast Screenline												
Third Street	350	793	44%	782	793	99%	2	352	44%	1	783	99%
Mission	1,643	2,509	65%	1,407	2,601	54%	8	1,651	66%	4	1,411	54%
San Bruno/Bayshore	1,689	2,134	79%	1,536	2,134	72%	5	1,694	79%	3	1,539	72%
Other lines	1,466	1,756	83%	1,084	1,675	65%	6	1,472	84%	4	1,088	65%
Subtotal	5,148	7,192	72%	4,810	7,203	67%	22	5,170	72%	12	4,821	67%
Southwest Screenline												
Subway lines	6,330	6,205	102%	4,904	6,164	80%	12	6,342	102%	7	4,911	80%
Haight/Noriega	1,121	1,554	72%	977	1,554	63%	3	1,124	72%	2	979	63%
Other lines	465	700	66%	555	700	79%	1	466	67%	0	555	79%
Subtotal	7,916	8,459	94%	6,435	8,418	77%	16	7,932	94%	9	6,445	77%
Total	21,759	27,671	79%	19,693	27,328	72%	185	21,944	79%	103	19,796	72%

Notes:

Muni = San Francisco Municipal Railway

Bold indicates capacity utilization of 85 percent or greater.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No 2015-004568ENV.

Regional Transit

Table 4.2.9: Regional Transit Screenlines—Existing plus Project Conditions summarizes ridership and capacity on the regional transit screenlines under existing plus project conditions. As shown, transit ridership generated by the project would not directly cause any regional transit screenline to exceed the 100 percent capacity utilization threshold. Several regional screenlines and transit operators already exceed the 100 percent capacity utilization threshold under existing conditions, including East Bay BART service during the weekday a.m. and p.m. peak hours and the South Bay screenline and South Bay BART service during the weekday p.m. peak hour. However, in all of these cases, the project's contribution to total ridership on these screenlines and operators would be less than 1 percent. The significance threshold for transit services already operating at or above the capacity utilization threshold is a contribution to total ridership on a screenline of 5 percent or more. Therefore, the project's impact on regional transit capacity would be less than significant.

Table 4.2.9: Regional Transit Screenlines—Existing plus Project Conditions

Screenline	Existing Conditions						Existing plus Project Conditions					
	Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹			Weekday A.M. Peak Hour ¹			Weekday P.M. Peak Hour ¹		
	Rider- ship	Capa- city	Utili- zation	Rider- ship	Capa- city	Utili- zation	Ridership		Utili- zation	Ridership		Utili- zation
							Added	Total		Added	Total	
East Bay Screenline												
BART	25,399	23,256	109%	24,488	22,784	107%	21	25,420	109%	12	24,500	107%
AC Transit	2,256	3,926	57%	2,256	3,926	57%	6	2,262	57%	3	2,259	58%
Ferries	805	1,615	50%	805	1,615	50%	0	805	50%	0	805	50%
Subtotal	28,460	28,797	99%	27,549	28,325	97%	27	28,487	99%	15	27,564	97%
North Bay Screenline												
Golden Gate Transit Buses	1,384	2,817	49%	1,384	2,817	49%	17	1,401	49%	10	1,394	49%
Ferries	968	1,959	49%	968	1,959	49%	4	972	49%	2	970	50%
Subtotal	2,352	4,776	49%	2,352	4,776	49%	20	2,372	49%	13	2,364	49%
South Bay Screenline												
BART	14,150	19,367	73%	13,500	12,561	107%	13	14,163	73%	7	13,507	107%
Caltrain	2,377	3,100	77%	2,377	3,100	77%	3	2,380	77%	1	2,378	77%
SamTrans	141	320	44%	141	320	44%	4	145	44%	2	143	45%
Subtotal	16,668	22,787	73%	16,018	15,981	100%	20	16,688	73%	11	16,029	100%
Total	47,480	56,360	84%	45,919	49,082	94%	68	47,548	84%	38	45,957	94%

Notes:

AC Transit = Alameda–Contra Costa County Transit District; BART = Bay Area Rapid Transit; SamTrans = San Mateo County Transit District

Bold indicates capacity utilization of 100 percent or greater.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

TRANSIT OPERATIONS

The project would not introduce design features that would preclude or alter access to nearby transit facilities. In particular, no existing transit stops would be modified or relocated, and the new mid-block pedestrian passage through the project site would enhance access to and from existing stops. The project would provide a single driveway along 12th Street, and project-generated vehicular traffic at the driveway or on the surrounding streets would not generate substantial vehicle queues or conflicts with transit vehicles or existing transit operations. Therefore, project impacts on transit operations would be less than significant.

No mitigation for transit impacts would be necessary.

BICYCLE IMPACTS

Impact TR-4: The proposed project, the variant, or the straight-shot streetscape option would not create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site or adjoining areas. (*Less than Significant*)

The project site is within convenient bicycling distance of residential, retail, office, and restaurant uses in neighboring areas. As described under “Bikeway Network” in the Environmental Setting on pp. 4.2.17–4.2.18 and shown on Figure 4.2.2, multiple bikeways are available in the vicinity of the project site, along Market Street, Valencia Street, Polk Street, 11th Street, and other streets. Therefore, a portion of the “other” person-trips identified in Table 4.2.5 (231 person-trips during the weekday a.m. peak hour and 292 person-trips during the weekday p.m. peak hour) would be bicycle trips.

Based on current levels of bicycle activity in the project vicinity during the weekday a.m. and p.m. peak periods, it is expected that the existing bikeways could safely accommodate the project-related increase in bicyclists. In addition, the project would not introduce design features that would eliminate or impede access to existing bikeways near the project site.

The proposed project or variant would result in an increase in vehicular traffic in the project vicinity. Based on existing traffic levels, however, this increase would represent a very small portion of the overall vehicular traffic on the surrounding street network. The proposed project or variant would also eliminate several existing curb cuts at the project site, reducing the potential for conflicts between bicyclists and vehicles along the project site’s frontages. The straight-shot streetscape options would also reduce the potential for conflicts on 12th Street by providing for a shared-street design that emphasizes pedestrian use and traffic calming. As such, neither the proposed project nor the variant, with the proposed streetscape improvements or the straight-shot streetscape options would create potentially hazardous conditions for bicyclists or otherwise

substantially interfere with bicycle accessibility to the site and adjoining areas and impacts would be less than significant.⁵⁴ No mitigation would be necessary.

In addition, implementing the San Francisco Planning Department's standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a) and active garage driveway controls and curbside management (Improvement Measure I-TR-2b), as described under "Traffic Impacts" above, would further reduce less-than-significant bicycle impacts from vehicle queuing at the project driveway and curb cut. Further, coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6 under Impact TR-6) would further reduce less-than-significant bicycle impacts from freight loading/service vehicle activities.

PEDESTRIAN IMPACTS

Impact TR-5: The proposed project, the variant, or the straight-shot streetscape options would not result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas. (*Less than Significant*)

Pedestrian activity generated by the project would include walk trips to and from transit services and nearby complementary land uses. The project would generate approximately 703 pedestrian trips during the weekday a.m. peak hour (477 transit person-trips and 226 walk-only person-trips) and 962 pedestrian trips during the weekday p.m. peak hour (585 transit person-trips and 377 walk-only person-trips).⁵⁵ The proposed project would include multiple pedestrian access points to accommodate residents, employees, patrons, and other visitors, including retail entrances along South Van Ness Avenue, Market Street, and the proposed mid-block alley and entrances to the residential lobbies along South Van Ness Avenue. The variant would have a primary residential entrance along the proposed mid-block alley as well as one on South Van Ness Avenue.

Existing sidewalks along Market Street, South Van Ness Avenue, and 12th Street adjacent to the project site exceed the recommended sidewalk widths specified in the Better Streets Plan. The proposed streetscape design and straight-shot streetscape options would include additional sidewalk widening along 12th Street, and a realignment and redesign of the southern end of 12th Street at its intersection with South Van Ness Avenue, further increasing circulation space and safety features for pedestrians. Therefore, neither the proposed project nor the variant would result in any new hazardous conditions for pedestrians and implementation of either the proposed streetscape design or one of the straight-shot streetscape options would enhance pedestrian safety.

⁵⁴ Potential wind impacts on bicyclists are discussed separately in EIR Section 4.5, Wind, on pp. 4.5.19-4.5.20.

⁵⁵ The variant would add three additional pedestrian trips during the p.m. peak hour and therefore would have the same impacts as the proposed project.

Furthermore, neither the proposed project, the variant, nor the straight-shot streetscape options would introduce design features that would create hazards for pedestrians or interfere with pedestrian access or circulation. The east and west sidewalks along 12th Street would be widened to 21 feet, including a buffer zone adjacent to the vehicle travel lanes. An 8-foot-wide bulb-out would be provided at the intersection of 12th Street with Market Street, and a raised crosswalk (where the roadway pavement at the intersection is elevated to encourage vehicles to stop and yield to crossing pedestrians) would be provided at Stevenson Street. The existing channelization and median refuge island at the intersection with South Van Ness Avenue would be removed and replaced with wider sidewalks and a pedestrian plaza.

The straight-shot streetscape options would create a curbless “shared street” along 12th Street, where the traveled way for vehicles would function as a shared space with pedestrians and would be designed for low-speed travel with one 11-foot-wide, mixed-flow travel lane in each direction. Neither the base streetscape design nor the straight-shot streetscape options would include design features that would create hazards for pedestrians or interfere with pedestrian access or circulation. Rather, many of the streetscape changes under either design would be specifically intended to improve pedestrian safety and enhance pedestrian access and circulation.

The proposed project or variant would result in an increase in vehicular traffic in the project vicinity. Based on existing traffic levels, however, this increase would represent only a fraction of the overall vehicular traffic on the surrounding street network and would not cause new conflicts for pedestrians. The proposed project or variant would also reduce potential conflict points for pedestrians along the site frontages from the seven existing curb cuts (three along the west side of South Van Ness Avenue and four along the east side of 12th Street) by removing all of them and providing one new curb cut along the east side of 12th Street. As such, the project or variant would not create potentially hazardous conditions for pedestrians or otherwise interfere with pedestrian accessibility to the site and adjoining areas. Therefore, transportation impacts on pedestrians would be less than significant. No mitigation would be necessary.

Although pedestrian impacts would be less than significant, implementing the planning department’s standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a) and active garage driveway controls and curbside management (Improvement Measure I-TR-2), as described above under “Traffic Hazard Impacts,” would further reduce less-than-significant pedestrian impacts from vehicle queuing at the site driveway and curb cut and other less-than-significant project impacts related to pedestrian safety and access. In addition, coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6 under Impact TR-6) would further reduce less than-significant pedestrian impacts from freight loading/service vehicle activities.

LOADING IMPACTS

Impact TR-6: The proposed project, the variant, or the straight-shot streetscape options would not result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed onsite loading facilities or within convenient on-street loading zones, and would not create potentially hazardous conditions affecting traffic, transit, bicycles, or pedestrians or significant delays affecting transit. (*Less than Significant*)

As detailed in Chapter 2, Project Description, both the proposed streetscape design and the straight-shot streetscape options for 12th Street would provide on-street commercial loading (yellow curb) and passenger loading (white curb) zones, as well as Americans with Disabilities Act parking spaces (blue curb), along the west side of South Van Ness Avenue and both sides of 12th Street adjacent to the project site. These streetscape changes would replace existing on-street loading zones and would create capacity to accommodate increased demand for on-street loading generated by the proposed project and other nearby uses. Curbside loading zones are under the purview of the SFMTA, and use of the proposed zones would be subject to compliance with applicable SFMTA and City regulations and programs (e.g., Commuter Shuttle Program), including the Color Curb Program that requires review and approval by the SFMTA of a formal application for various color curb designations and payment of a fee if approved. In general, yellow zones would be available for active freight loading (e.g., tenant move-ins and move-outs, deliveries by e-commerce services and other service providers). White zones would be available for active passenger loading, such as drop-off and pick-up activities associated with paratransit, private vehicles, taxis, transportation network companies, and commuter shuttle services. The SFMTA would ultimately determine the extent and nature of the proposed curbside loading zones.

The project would generate a freight loading/service vehicle demand of one to two spaces during both the average hour and the peak hour for loading (Table 4.2.6). The below-grade garage would include three freight loading spaces and four service vehicle spaces, which would be sufficient to meet the estimated freight loading/service vehicle demand. Freight and service vehicles, as well as recycling and trash or compost collection trucks, would access the project's basement loading areas from the single new driveway on 12th Street. While all loading demand could be accommodated in the below-grade loading and service vehicle spaces, four on-street yellow (loading) zones are also proposed along 12th Street as part of the streetscape improvements, and two yellow zones are proposed along South Van Ness Avenue, increasing the likelihood that delivery vehicles would be able to locate temporary parking and reducing the potential for delivery vehicles to double park and block travel lanes.

There are currently no transit stops or transit routes on 12th Street where both off-street loading access and on-street loading spaces would be located. While there is transit service on South Van Ness Avenue, there are no southbound bus stops on the project block. The Van Ness Bus Rapid Transit facilities that are now under construction will be located in the center lanes away from the

parking/loading zones and would not be affected by vehicles pulling out into traffic from the yellow zones proposed along South Van Ness Avenue. No loading is proposed on Market Street, avoiding conflicts with the existing eastbound bicycle lane, transit services, and pedestrian crosswalks.

Residential move-in and move-out operations would be expected to occur within the off-street spaces for freight loading and service vehicles. Deliveries and other commercial loading needs for the proposed retail uses could be accommodated by the off-street spaces in the project or variant basement garage or, if involving larger vehicles such as a semi-trailer truck, by any of the proposed yellow zones adjacent to the project site. Waste collection would occur off-street, with Recology vehicles driving directly into the below-grade garage to collect waste. With the proposed streetscape improvements, freight loading/service vehicle activities would not create potentially hazardous conditions affecting traffic, bicycles, or pedestrians, or significant delays affecting transit.

There would be some differences in the proposed supply and location of on-street loading zones under the base streetscape design and the straight-shot streetscape options, with fewer yellow loading zones proposed under each of the straight-shot streetscape options on 12th Street. However, these differences would not be substantial enough to create potentially hazardous conditions affecting traffic, bicycles, or pedestrians, or substantial delays affecting transit, because the proposed loading docks and service vehicle spaces in the below-grade garage would meet loading demand from the proposed project's land uses and because there would be at least four yellow zones available under any scenario – two on the west side of South Van Ness Avenue and two or more on 12th Street.

For these reasons, project impacts related to loading would be less than significant. No mitigation would be necessary.

Although loading impacts would be less than significant, coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6) would further reduce the less-than-significant impacts of freight loading/service vehicle activities.

Improvement Measure I-TR-6: Coordination of Freight Loading/Service Vehicle Activities

To reduce the potential for delivery vehicles to park in the travel lane adjacent to the project frontage on 12th Street (if on- and off-street loading spaces are occupied or truck size exceeds 45 feet in length), residential move-in/move-out activities and larger deliveries will be scheduled and coordinated through building management. For retail uses, appropriate delivery times will be scheduled and restricted to before 7 a.m., between 10 a.m. and 4 p.m., and after 8 p.m. No deliveries will occur between 4 p.m. and 8 p.m., to avoid conflicts with peak-period commute traffic and with bicyclists on adjacent streets and pedestrians in adjacent sidewalk areas.

The project sponsor will enforce strict regulations governing the size of trucks using the off-street loading spaces in the proposed freight loading area. Trucks more than 45 feet long will be prohibited from entering the parking garage and will use existing and proposed on-street loading spaces along 12th Street adjacent to the project site. Appropriate signage will be posted at the parking garage entrance to notify truck operators of the truck size regulations and the presence of on-street loading spaces on 12th Street. The project sponsor will notify building management (and related staff) and retail tenants regarding the imposed truck size limits for the proposed freight loading area.

Building management staff will notify operators of large trucks regarding the proper loading procedures to follow upon entering the off-street parking garage. Because trucks will be required to move into and out of a 24-foot driveway, building management will require a person (i.e., spotter) to safely guide the truck driver and assist in maneuvering the truck within the public right-of-way and into the parking garage, as needed.

Appropriate move-in/move-out and loading procedures will be enforced to avoid blockages of streets adjacent to the project site over an extended period of time, and to reduce potential conflicts with other roadway users along adjacent streets, including movers and pedestrians walking along 12th Street or South Van Ness Avenue. Curb parking for movers on 12th Street or South Van Ness Avenue will be reserved through SFMTA or by directly contacting the local 311 service. Residential move-in/move-out activities will be scheduled during weekday midday hours between 10 a.m. and 4 p.m. and/or on weekends to avoid any potential conflicts with peak-period commute traffic and all users of adjacent roadways.

In addition, the project sponsor will coordinate with Recology and enforce strict garbage pick-up periods. Such pick-up times will be restricted to before 7 a.m. and/or between 10 a.m. and 2 p.m. No garbage pick-up activities will occur after 3 p.m., to avoid conflicts with vehicular traffic and pedestrians on 12th Street, Market Street, or South Van Ness Avenue. Specific loading procedures (as described above) will also be enforced for Recology vehicles during garbage pick-up periods.

EMERGENCY VEHICLE ACCESS IMPACTS

Impact TR-7: The proposed project, the variant, or the straight-shot streetscape options would not result in inadequate emergency access to the project site or adjoining areas. (*Less than Significant*)

Although the proposed streetscape design and straight-shot streetscape options would include streetscape changes along South Van Ness Avenue and 12th Street, emergency vehicles would continue to be able to access the project site and adjoining areas as they currently do via South Van Ness Avenue, Market Street, and 12th Street. Proposed streetscape changes under either the base streetscape design or the straight-shot streetscape options would be designed according to City standards (and other applicable engineering standards), and the San Francisco Fire Department would review and comment on project building permit plans to ensure adequate access for fire-fighting equipment and personnel. The San Francisco Fire Department would provide final approval of all items related to emergency access. The project would generate

additional automobile traffic in the area; however, this increase would represent only a fraction of the overall vehicular traffic on the surrounding street network, and would not impede or hinder the movement of emergency vehicles in the project area. Therefore, emergency vehicle access impacts would be less than significant and no mitigation would be necessary.

CONSTRUCTION IMPACTS

Impact TR-8: The duration and magnitude of temporary construction activities for the proposed project or the variant would not result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas that could create potentially hazardous conditions. (*Less than Significant*)

Construction of either the proposed project or the variant is anticipated to take place over a period of 36 months, with typical construction hours between 7 a.m. and 8 p.m. Monday through Thursday and between 7 a.m. and 5 p.m. Friday and Saturday. Limited work during the evening (between 8 p.m. and 7 a.m.) and on weekends (7 a.m. to 5 p.m.) would be required for foundation/podium and superstructure/skin construction. The proposed project and variant would use the same kinds of construction equipment and would have the same construction schedule.

Construction staging is expected to occur within the adjacent sidewalk and parking lane on the east side of 12th Street, and on portions of the sidewalk along Market Street and South Van Ness Avenue adjacent to the project site. Temporary sidewalk and parking lane closures would be required for construction activities, but no travel lane closures or relocation of existing Muni bus stops would be needed. The construction contractor would follow the SFMTA's *Regulations for Working in San Francisco Streets*, which includes signage, alternative routes, and other provisions governing sidewalk closures and other construction-related traffic and transportation changes.⁵⁶

In general, any sidewalk or parking lane closures would be subject to review and approval by the Transportation Advisory Staff Committee (TASC). The project would also include a construction management plan to minimize transportation-related impacts of construction activities. The TASC would review the construction management plan, which would address circulation (with a particular focus on ensuring transit, pedestrian, and bicycle access and connectivity), safety, parking, and other construction activities in the area. The contractor also would be required to meet with Muni, SFMTA Sustainable Streets, and other responsible City agencies to determine feasible traffic management measures to reduce traffic congestion during construction of the project and other nearby projects, as appropriate. In particular, the contractor would consult with SFMTA Muni Operations before construction to review potential effects on nearby transit operations.

⁵⁶ Available at https://www.sfmta.com/sites/default/files/reports-and-documents/2017/10/blue_book_8th_edition_pdf.pdf.

Throughout the construction period, construction-related trucks would flow into and out of the site. This traffic would temporarily lower the capacities of local streets because of the slower movements and larger turning radii of trucks, which may temporarily affect traffic operations, but would not cause hazardous conditions. It is anticipated that a majority of the construction-related truck traffic would use I-80, U.S. 101, and I-280 to access the project site from the East Bay and the South Bay. In general, trucks and construction workers would use Market Street, Mission Street, and South Van Ness Avenue to gain access to and from U.S. 101 and I-80.

An average of 40–450 construction workers per day are anticipated at the project site, depending on the construction phase and given expected overlapping of phases with the greatest numbers of workers. Construction activity would peak during an approximate 5-month overlap between superstructure/skin construction and interior work. The project would generate as few as eight haul truck trips per day to as many as 50 haul truck trips per day (when superstructure/skin construction and interior work overlap). This equates to approximately one to six 2-way truck trips per hour, depending on the phase. Haul trucks would be staged along the project frontage on 12th Street. Truck activity would take place outside of the weekday a.m. and p.m. peak hours to minimize potential disruptions to transit service or circulation on Market Street and South Van Ness Avenue. Combining construction worker trips and haul truck trips, project-related construction traffic would range from as few as 48 round trips (96 one-way trips) per day to as many as 500 round trips (1,000 one-way trips) per day during the peak overlap of construction phases. While the trip distribution and mode split of construction workers are not known, the impacts of worker-related vehicle-trips and transit ridership on overall transportation conditions would be similar to or less than those associated with the project (even conservatively assuming that each construction worker drives his or her own vehicle to/from the project site) and would be temporary in nature.

Based on the discussion above, the duration and magnitude of temporary construction activities for the project would not result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas. No bicycle routes or transit routes are located on 12th Street where haul trucks would be staged, and relatively few pedestrians would be expected to use the sidewalk on the east side of the street during construction. Pedestrians would be re-routed to the west side of the street during construction. That segment of 12th Street is not a major travel route for vehicles not destined to one of the buildings located there. Therefore, construction of the proposed project would not result in potentially hazardous conditions for motorists, pedestrians, bicyclists or transit vehicles. Therefore, project-related construction impacts would be less than significant and no mitigation would be necessary.

Cumulative Impacts

The cumulative conditions analysis (generally representing a 2040 horizon year) accounts for general background growth, as well as reasonably foreseeable development projects and

transportation network changes. The geographic context for the cumulative analysis is the network of local streets and sidewalks in the transportation study area shown in Figure 4.2.1, p. 4.2.4.

The cumulative conditions scenario was developed using the SF-CHAMP travel demand forecasting model. This model takes into account background growth in travel demand in the city and region, as well as future development projects and transportation network changes in the study area.

For the cumulative scenario, the SF-CHAMP model was reviewed to ensure that reasonably foreseeable future projects within the transportation study area were included in the 2040 scenario to allow for testing of these foreseeable projects in combination with the proposed project and variant.

Land Use Changes

SF-CHAMP accounts for major land use changes, citywide, in the cumulative time frame, including build-out under community plans.

The cumulative conditions analysis also considers nearby proposed development projects, where these development projects would include changes to the public right-of-way adjacent to the project site.

Transportation Network Changes

The cumulative conditions analysis also accounts for cumulative changes to the transportation network, such as the Van Ness BRT project, and SFMTA's Muni Forward program⁵⁷ (including the specific changes at the Mission Street/South Van Ness/Otis Street/12th Street intersection as part of the Mission and South Van Ness Transit Priority Project). In particular the transit improvements for the 14 Mission and 14 R Mission Rapid routes that are part of Muni Forward have been programmed for the length of Mission Street to reduce travel time along that corridor. Both the Van Ness BRT and the 14/14 R Mission route improvements would make physical changes in the street system that are estimated to result in diversions of vehicular traffic in their corridors, including in the vicinity of the project site. In addition, the SFMTA has planned various pedestrian/bicycle safety improvements at the intersection of South Van Ness Avenue/Mission Street/Otis Street/12th Street and along portions of Otis and Mission streets near that intersection,

⁵⁷ The Muni Forward program implements recommendations developed from the Transit Effectiveness Project, a comprehensive review of the City's public transit system designed to make Muni service more reliable, quicker, and more frequent. These recommendations include new routes and route extensions, service-related capital improvements, increased service on busy routes, designation of new "rapid" (formerly "limited") routes, travel time reduction proposals for major corridors, elimination or consolidation of certain low-ridership routes or route segments, and other changes.

to be implemented as part of the Van Ness BRT project improvements along South Van Ness Avenue. The cumulative analysis therefore made manual adjustments to the SF CHAMP model results to account for these vehicle trip diversions and street/sidewalk improvements in the vicinity of the project site.

Other transportation network improvements have been completed in the project vicinity or are planned, pursuant to a variety of city programs. For example, *Vision Zero*, a coordinated effort by multiple city departments to improve traffic safety for pedestrians and bicycles has multiple projects in various stages of planning, design and construction in the mid-Market area near the project site, such as new turn restrictions onto Market Street implemented in 2016 and new bike lanes on Polk Street and Golden Gate Avenue near Market Street, completed in 2016/2017. The Market and Haight Streets Transit and Pedestrian Improvement Project to improve service on the 6 Parnassus and 71/71L Haight/Noriega bus routes also included sidewalk widening and bulbouts, curb ramps and signal timing changes in the Haight/Gough/Market streets intersection, completed in 2014.

The Better Market Street project, a coordinated effort by multiple city agencies, consists of transportation and streetscape improvements on Market Street from Octavia Boulevard to The Embarcadero, with additional improvements being considered for Mission Street between Valencia Street and The Embarcadero. Three alternatives are under consideration, two of which have two design options. All are intended to restrict private automobile traffic on Market Street in favor of transit vehicles, taxis, emergency vehicles, bicycles and some commercial vehicles. Restricting private automobile use of Market Street would require some changes to streets north of Market Street to accommodate diverted traffic, including converting one-way streets to two-way configurations and restricting or eliminating commercial loading and passenger loading other than by paratransit users. Sidewalk widths along Market Street could be reduced to allow for installation of cycle tracks, and pedestrian improvements are being researched. The full scope of improvements and changes continue to be studied; therefore, the quantitative analyses of cumulative conditions in 2040 does not consider the potential features of the Better Market Street project.⁵⁸

Detailed information on the specific changes to the transportation network planned as part of each of these projects is provided in the *10 South Van Ness Mixed-Use Project Final Transportation Impact Study*.⁵⁹

In addition to the projects described above, many other development projects in the study area would be expected to implement streetscape changes on surrounding street frontages, consistent

⁵⁸ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Project Final Transportation Study*, December 2017, pp. 76-79.

⁵⁹ CHS Consulting Group, *10 South Van Ness Mixed-Use Project Final Transportation Impact Study*, December 2017, pp. 74-84.

with the Better Streets Plan and requirements specified in section 138.1 of the San Francisco Planning Code. The project’s proposed streetscape changes along 12th Street, for example, would provide a cohesive design that would improve connectivity between the project site and the adjacent projects at 1629 Market Street and 30 Otis Street and their associated streetscape changes.

Impact C-TR-1: The proposed project, the variant, or the straight-shot streetscape option, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts related to VMT or traffic hazards. (*Less than Significant*)

Vehicle Miles Traveled Impacts

Table 4.2.10: Average Daily Vehicle Miles Traveled per Capita—2040 Cumulative Conditions summarizes average daily VMT per capita for the Bay Area (regional average) and for the TAZ containing the project site (TAZ 578) for residential and retail land uses under cumulative conditions as forecast for the year 2040, based on the SF-CHAMP travel demand model. The analysis uses the same methodology as described in the Environmental Setting section on pp. 4.2.28–4.2.29 and includes growth estimates and reasonably foreseeable development projects as well as transportation improvements under construction, approved and planned in the project vicinity.

Table 4.2.10: Average Daily Vehicle Miles Traveled per Capita—2040 Cumulative Conditions

Land Use	Average Daily VMT per Capita		
	San Francisco Bay Area		TAZ 578
	Regional Average	Regional Average minus 15%	
Residential (per resident)	16.1	13.7	3.1
Retail (per employee)	14.6	12.4	9.0

Notes: TAZ = transportation analysis zone; VMT = vehicle miles traveled
Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, Case No. 2015-004568ENV, December 2017.

As shown in the table, future average daily VMT per capita or per employee for TAZ 578 is forecast to be less than the corresponding Bay Area regional averages minus 15 percent:

- **Residential uses:** Future 2040 average daily household VMT per capita in TAZ 578 is projected to be 3.1, which is 81 percent less than the existing regional average daily household VMT per capita of 16.1.⁶⁰

⁶⁰ Includes the VMT generated by the households in the development.

- **Retail uses:** Future 2040 average daily work-related VMT per employee in TAZ 578 is projected to be 9.0, which is 38 percent less than the existing regional average daily work-related VMT per employee of 14.6.

Overall, because the project site is located in an area where VMT is more than 15 percent below the projected 2040 regional average, the residential and retail uses proposed for the project or variant would not result in substantial additional VMT. As explained under Impact TR-1 on pp. 4.2.38–4.2.40, the proposed project or variant with streetscape improvements or the straight-shot streetscape options on 12th Street would alter the local transportation and circulation network, but these alterations are the type that would not induce automobile travel. Therefore, the proposed project or variant would not contribute new induced automobile travel to any reasonably foreseeable transportation projects that might result in increased VMT.

In addition, the proposed project or variant would meet the screening criterion for proximity to transit stations, further indicating that the project or variant would not cause substantial additional VMT.⁶¹

For these reasons, the project would not result in substantial additional VMT under cumulative conditions. The project would also not substantially induce automobile travel. Therefore, cumulative VMT impacts would be less than significant.

Traffic Hazard Impacts

Under cumulative conditions, land use changes would likely cause vehicular traffic in the study area to increase, but an increase in traffic alone would not be considered a traffic hazard. Transportation projects and the streetscape changes proposed by the project and other nearby development projects all would be designed according to applicable engineering and roadway safety standards established by the City and other organizations (e.g., National Association of City Transportation Officials, Federal Highway Administration). In addition, many of the changes to the transportation network would be designed primarily to improve transit operations and/or bicycle and pedestrian safety and access, and would not combine to create significant cumulative traffic hazards. The project's or variant's proposed streetscape changes would include design treatments to encourage slower vehicle speeds, which would increase safety for motorists by improving sight distance and reducing the likelihood of collisions. Therefore, cumulative impacts related to traffic hazards would be less than significant.

Although cumulative traffic hazard impacts would be less than significant, implementing the planning department's standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a), active garage driveway controls and curbside management (Improvement

⁶¹ San Francisco Planning Department, *Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis, 10 South Van Ness Avenue*, Case Number 2015-004568ENV, 2017.

Measure I-TR-2b), and coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6), as described for existing plus project conditions (Impacts TR-2 and TR-6), would further reduce these less-than-significant impacts.

Impact C-TR-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on transit. (*Less than Significant*)

The analysis of future year 2040 cumulative transit utilization considers future ridership and capacity projections provided by the SFMTA, which includes transit utilization data for all local screenlines and sub-corridors.

Transit Capacity

Local Transit

Table 4.2.11: Muni Downtown Screenlines—2040 Cumulative Conditions summarizes ridership and capacity on Muni's downtown screenlines under cumulative conditions. The Muni screenlines and corridors listed below would be expected to exceed the 85 percent capacity utilization threshold under cumulative conditions under either or both of the weekday a.m. and p.m. peak hours.

- California corridor in the Northwest screenline (weekday a.m. and p.m. peak hours)
- Sutter/Clement corridor in the Northwest screenline (weekday p.m. peak hour)
- Fulton/Hayes corridor in the Northwest screenline (weekday a.m. and p.m. peak hours)
- Northwest screenline (weekday p.m. peak hour)
- Mission corridor in the Southeast screenline (weekday a.m. and p.m. peak hours)
- San Bruno/Bayshore corridor in the Southeast screenline (weekday a.m. and p.m. peak hours)
- Other lines in the Southeast screenline (weekday a.m. peak hour)
- Subway lines in the Southwest screenline (weekday a.m. peak hour)
- Haight/Noriega corridor in the Southwest screenline (weekday a.m. peak hour)
- Southwest screenline (weekday a.m. peak hour)

All of these exceedances of the 85 percent capacity utilization threshold constitute significant cumulative impacts; however, the project or variant would contribute less than 1 percent to the total ridership on the individual screenlines and corridors that would exceed capacity. Therefore, the project or variant would not exceed the significance threshold contribution of 5 percent and would not have a considerable contribution to this significant cumulative impact.

Table 4.2.11: Muni Downtown Screenlines—2040 Cumulative Conditions

Screenline	Weekday A.M. Peak Hour ¹					Weekday P.M. Peak Hour ¹				
	Rider- ship	Capa- city	Utili- zation	Project		Rider- ship	Capa- city	Utili- zation	Project	
				Added Trips	Contri- bution				Added Trips	Contri- bution
Northeast Screenline										
Kearny/Stockton	7,394	9,473	78%	64		6,295	8,329	76%	36	
Other lines	758	1,785	42%	63		1,229	2,065	60%	35	
Subtotal	8,152	11,258	72%	127	1.1%	7,524	10,394	72%	71	0.7%
Northwest Screenline										
Geary	2,673	3,763	71%	4		2,996	3,621	83%	2	
California	1,989	2,306	86%	2	0.1%	1,766	2,021	87%	1	0.05%
Sutter/Clement	581	756	77%	2		749	756	99%	1	0.13%
Fulton/Hayes	1,962	1,977	99%	6	0.3%	1,762	1,878	94%	3	0.16%
Balboa	690	1,008	68%	6		776	974	80%	3	
Subtotal	7,895	9,810	80%	20	0.25%	8,049	9,250	87%	11	0.1%
Southeast Screenline										
Third Street	2,442	5,712	43%	2		2,300	5,712	40%	1	
Mission	3,117	3,008	104%	8	0.25%	2,673	3,008	89%	4	0.1%
San Bruno/Bayshore	1,952	2,197	89%	5	0.26%	1,817	2,134	85%	3	0.1%
Other lines	1,795	2,027	89%	6	0.3%	1,582	1,927	82%	4	
Subtotal	9,286	12,944	72%	22	0.2%	8,372	12,781	66%	12	0.14%
Southwest Screenline										
Subway lines	6,314	7,020	90%	12	0.2%	5,692	6,804	84%	7	
Haight/Noriega	1,415	1,596	89%	3	0.2%	1,265	1,596	79%	2	
Other lines	175	560	31%	1		380	840	45%	0	
Subtotal	7,904	9,176	86%	16	0.2%	7,337	9,240	79%	9	0.1%
Total	33,237	43,188	77%	185	0.4%	31,282	41,665	75%	103	0.2%

Notes:

Muni = San Francisco Municipal Railway

Bold indicates capacity utilization of 85 percent or greater.

Project contribution shown only for screenlines and corridors exceeding 85 percent capacity utilization.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case No. 2015-004568ENV.

Regional Transit

Table 4.2.12: Regional Transit Screenlines—2040 Cumulative Conditions summarizes ridership and capacity on the regional transit screenlines under cumulative conditions. BART service on the East Bay screenline would exceed the established capacity utilization threshold of 100 percent during both the weekday a.m. and p.m. peak hours. This would constitute a

significant cumulative impact. The proposed project or variant would contribute less than 1 percent to the total ridership to BART East Bay service. Therefore, the project or variant would not exceed the threshold contribution of 5 percent, and would not have a considerable contribution to this significant cumulative impact.

Table 4.2.12: Regional Transit Screenlines—2040 Cumulative Conditions

Screenline	Weekday A.M. Peak Hour ¹					Weekday P.M. Peak Hour ¹				
	Rider-ship	Capa-city	Utili-ization	Project		Rider-ship	Capa-city	Utili-ization	Project	
				Added Trips	Contri-bution				Added Trips	Contri-bution
East Bay Screenline										
BART	38,000	32,100	118%	21	0.1%	36,000	32,100	112%	12	0.0%
AC Transit	7,000	12,000	58%	6		7,000	12,000	58%	3	
Ferries	4,682	5,940	79%	0		5,319	5,940	90%	0	
Subtotal	49,682	50,040	99%	27		48,319	50,040	97%	15	
North Bay Screenline										
Golden Gate Transit Buses	1,990	2,543	78%	17		2,070	2,817	74%	10	
Ferries	1,619	1,959	83%	4		1,619	1,959	83%	2	
Subtotal	3,609	4,502	80%	20		3,689	4,776	77%	13	
South Bay Screenline										
BART	21,000	28,808	73%	13		20,000	28,808	69%	7	
Caltrain	2,310	3,600	64%	3		2,529	3,600	70%	1	
SamTrans	271	520	52%	4		150	320	47%	2	
Ferries	59	200	30%	0		59	200	30%	0	
Subtotal	23,640	33,128	71%	20		22,738	32,928	69%	11	
Total	76,931	87,670	88%	68		74,746	87,744	85%	38	

Notes:

AC Transit = Alameda–Contra Costa County Transit District; BART = Bay Area Rapid Transit; SamTrans = San Mateo County Transit District
Bold indicates capacity utilization of 100 percent or greater.

Project contribution shown only for screenlines and corridors exceeding 100 percent capacity utilization.

¹ Shows the a.m. peak hour as inbound (i.e., toward downtown) only and the p.m. peak hour as outbound (i.e., away from downtown) only.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017.

Transit Operations

Under cumulative conditions, land use changes would likely cause vehicular traffic in the study area to increase, which could increase delays for transit vehicles or result in other conflicts with transit operations. However, these effects would be balanced by improving transit operations through the Muni Forward program, Van Ness BRT project, the Better Market Street project, and other changes to the transportation network. Those improvements would include transit-only lanes, transit signal priority systems, transit islands/bulbs, and other features. The proposed project or variant, with either the streetscape improvements or the straight-shot streetscape

options, would change transportation facilities on streets adjacent to the project site. These changes would not affect local or regional transit operations on South Van Ness Avenue or Market Street (there are no transit operations on 12th Street where the majority of circulation changes are proposed). Therefore, cumulative impacts related to transit operations would be less than significant.

BICYCLE IMPACTS

Impact C-TR-3: The proposed project or variant, or the straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on bicycle travel. (*Less than Significant*)

Bicycle impacts by their nature are site-specific and generally do not combine with impacts from other development projects. There are multiple bicycle routes adjacent to and near the project site, including class II facilities on Market, Valencia, Otis, McCoppin, Polk and 11th streets.

Under cumulative conditions, vehicular traffic and bicycle activity in the study area would increase, which could increase the potential for vehicle/bicycle conflicts at intersections and driveways.

Streetscape changes that are proposed by both the project or variant and other nearby development projects include traffic calming measures that would improve safety for both bicycles and pedestrians. Bicycle safety/access improvements planned or under consideration as part of the Better Market Street project include fewer opportunities for private automobiles to travel on Market Street, an enhanced version of the existing shared bicycle and vehicle lane with sharrows where a dedicated bicycle facility does not already exist, and options to install cycle tracks on Market Street and/or Mission Street, with 7- to 8-foot wide vertically-separated bicycle lanes. Improvements at the South Van Ness Avenue/Mission Street/Otis Street/12th Street intersection, to be constructed as part of the Van Ness BRT project, would improve bicycle access at that complicated intersection adjacent to the project site. These changes would include road diets, traffic calming measures, and new or improved bikeways with enhanced protection and segregation from motorized traffic. The proposed project or variant would not interfere with any of the planned bicycle improvements on adjacent and nearby streets, and would contribute to bicycle safety with the improvements proposed for 12th Street. Therefore, cumulative impacts related to bicycle safety and access would be less than significant.

Although cumulative bicycle impacts would be less than significant, implementing the planning department's standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a), active garage driveway controls and curbside management (Improvement Measure I-TR-2b), and coordination of freight loading/service vehicle activities (Improvement Measure I-

TR-6), as described under existing plus project conditions (Impacts TR-2 and TR-6), would further reduce these less-than-significant impacts.

PEDESTRIAN IMPACTS

Impact C-TR-4: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on pedestrians. (*Less than Significant*)

Pedestrian circulation impacts by their nature are site-specific and generally do not contribute to impacts from other development projects. Under cumulative conditions, vehicle traffic and pedestrian activity in the study area would increase, which could increase the potential for vehicle/pedestrian conflicts.

Potential increases in vehicle/pedestrian conflicts would, however, be balanced by streetscape changes included in both the proposed project or variant and other nearby development projects pursuant to the Better Streets Plan that requires wider sidewalks and narrower curb cuts for driveways. In addition, pedestrian safety/access improvements are under consideration as part of the Better Market Street project, the Van Ness BRT project, Muni Forward, and other changes to the transportation network. These changes would include road diets, traffic calming measures, sidewalk widening, corner bulb-outs, raised crosswalks/intersections, pedestrian refuges, and other features. The proposed project or variant would not interfere with construction of any of these pedestrian safety projects.

Furthermore, the project proposes to widen the sidewalk on both sides of 12th Street, in coordination with the 1629 Market Street and 30 Otis Street projects, and remove seven existing curb cuts/driveways on 12th Street and South Van Ness Avenue, improving pedestrian facilities in the project vicinity, and reducing the number of locations where vehicle/pedestrian conflicts might occur.

Therefore, cumulative impacts related to pedestrian activity and pedestrian safety and access would be less than significant.

Although cumulative pedestrian impacts would be less than significant, implementing the planning department's standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a), active garage driveway controls and curbside management (Improvement Measure I-TR-2b), and coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6), as described under existing plus project conditions (Impacts TR-2 and TR-6), would further reduce these less-than-significant impacts.

LOADING IMPACTS

Impact C-TR-5: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on loading. (*Less than Significant*)

Loading impacts by their nature are site-specific and generally do not contribute to impacts from other development projects. The project's proposed supply of off-street loading/service vehicle spaces would meet the project's freight loading/service vehicle demand, as discussed under existing plus project conditions (Impact TR-6).

The proposed project's streetscape changes under the proposed streetscape design or either of the straight-shot streetscape options for 12th Street would provide additional on-street loading zones. These changes, developed in close coordination with the adjacent 1629 Market Street project and the 30 Otis Street project, include on-street loading zones that would be available for use by these and other nearby development projects. The coordinated design for 12th Street accounts for new driveways to provide access to these two development projects that are located across the street from the proposed project or variant. The proposed streetscape changes would not affect nor be affected by proposed street improvements on other nearby streets that are part of other development projects.

Passenger loading zones are planned along South Van Ness Avenue near the entrances to residential lobbies and along 12th Street to serve the proposed project or variant as well as the 1629 Market Street and 30 Otis Street projects and existing residential buildings.

Streetscape improvement designs for the proposed project or variant in combination with streetscape improvements proposed for the 1629 Market Street and 30 Otis Street projects along 12th Street were coordinated to serve all three proposals and would not combine to produce significant environmental impacts. Other nearby cumulative development that could affect other streets in the vicinity would not combine or interfere with the streetscape improvements proposed for the project or variant. Therefore, cumulative impacts related to freight loading and passenger loading would be less than significant.

Although cumulative loading impacts would be less than significant, implementing the planning department's standard conditions of approval regarding queue abatement (Improvement Measure I-TR-2a), active garage driveway controls and curbside management (Improvement Measure I-TR-2b), and coordination of freight loading/service vehicle activities (Improvement Measure I-TR-6), as described under existing plus project conditions (Impacts TR-2 and TR-6), would further reduce these less-than-significant impacts.

EMERGENCY VEHICLE ACCESS IMPACTS

Impact C-TR-6: The proposed project, variant, or straight-shot streetscape options, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to significant cumulative impacts on emergency vehicle access. (*Less than Significant*)

Cumulative development projects approved and under review in the vicinity of the project site would not substantially change basic circulation patterns. Therefore, emergency vehicles would continue to access the project site and other development sites from the same routes as those currently available. In addition, each proposed development project and transportation improvement proposal must be reviewed and approved by the San Francisco Fire Department, which considers emergency vehicle access issues during that review.

Under cumulative conditions, land use changes would likely cause vehicular traffic, transit, bicycle, and pedestrian activity in the area to increase, which could affect emergency vehicle access to, from, or through the study area (e.g., by increasing response times). Projects such as the Muni Forward program, Better Market Street project, and Van Ness BRT project may include streetscape changes that would affect curb lines or other features of the surrounding street network; however, these streetscape changes would be designed according to City standards (and other applicable engineering standards) to maintain adequate emergency vehicle access. The San Francisco Fire Department would also review the proposed changes to ensure adequate access for emergency vehicles.

Some projects such as the Van Ness BRT project would repurpose roadway capacity by replacing general-purpose travel lanes with a transit-only right-of-way. However, these changes would likely help to improve emergency response times through the area, because emergency vehicles would be able to use these lanes to bypass other traffic. Along other streets, emergency vehicles would be permitted to move into opposing travel lanes, and nonemergency vehicles would be required to yield right-of-way to emergency vehicles per section 21806 of the California Vehicle Code.

Therefore, no significant cumulative impacts on emergency vehicle access have been identified, and impacts would be less than significant.

Cumulative Construction Impacts

Impact C-TR-7: The duration and magnitude of temporary construction activities for the proposed project, the variant, or the straight-shot streetscape option, in combination with construction of past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in a significant cumulative impact from potentially hazardous conditions to which the proposed project or variant would contribute considerably. (*Significant and Unavoidable with Mitigation*)

Under cumulative conditions, project-related construction activities may overlap with other construction activities within one block of the project site, for transportation projects (e.g., Better Market Street, Van Ness BRT project) and other development projects that are either already under construction, approved or under consideration, or are otherwise reasonably foreseeable including at 1629 Market Street, 30 Otis Street, One Oak Street, 1546-1564 Market Street, 1500 Mission Street,⁶² 1601 Mission Street, 30 Van Ness Avenue, and 1 South Van Ness Avenue. Given the duration and magnitude of construction activities for these various projects, such construction activities could substantially interfere with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in cumulative potentially hazardous conditions.

As outlined above, the project would follow SFMTA's *Regulations for Working in San Francisco Streets*, to minimize impacts on pedestrians and bicyclists, transit service and emergency vehicle access.

If construction occurs at more than one site in the project vicinity during the same time as the proposed project or variant is under construction, multiple travel/parking lane and sidewalk closures could be required and high volumes of construction-related trucks and other traffic could be present in the project vicinity. These activities could delay or otherwise disrupt transit service and cause hazardous conditions for bicyclists and pedestrians, particularly given the uncertainty regarding the construction schedules for individual projects. Even if each individual project alone would not result in a significant construction-related impact on transportation and circulation, concurrent construction of two or more projects could substantially interfere with background traffic, transit, bicycle, and pedestrian circulation and cause corresponding hazardous conditions, despite the best efforts of project sponsors and construction contractors. Given the number of concurrent construction projects that could occur in the vicinity of the project site, the relatively small geographic area in which the proposed projects are located and the duration of construction activities on each site, this would be a significant cumulative impact.

⁶² The project identified as "1500 Mission Street" includes the buildings currently under construction at both 1500 Mission Street and 49 South Van Ness Avenue.

Construction of the proposed project or variant would contribute considerably to the significant cumulative construction-related impacts. While the proposed project and other development projects would implement construction management plans, as required by City regulations, that would limit construction traffic during peak a.m. and p.m. commute periods, establish construction-related vehicle routes and detours, require coordination with the SFMTA and Public Works related to maintaining efficient transit service, and provide for pedestrian and bicycle safety, these provisions would reduce but not eliminate the significant cumulative impacts related to conflicts between multiple construction activities and pedestrians, bicyclists, transit vehicles and automobiles. Therefore, cumulative construction transportation impacts would be significant and unavoidable, and the proposed project or variant would contribute considerably to this significant and unavoidable impact.

Mitigation Measure M-C-TR-7a: Cumulative Construction Coordination: The project sponsor or its contractor(s) shall consult with City departments such as the SFMTA and Public Works through ISCOTT, and other interdepartmental meetings as deemed necessary by the SFMTA, Public Works, and the San Francisco Planning Department, to develop a Coordinated Construction Management Plan that shall address construction-related vehicle routing, detours, and maintaining transit, bicycle, vehicle, and pedestrian movements in the vicinity of the construction area for the duration of the cumulative construction period overlap. Key coordination meetings would be held jointly between project sponsors and contractors of other projects for which the relevant City departments determine impacts could overlap. The Coordinated Construction Management Plan shall consider other ongoing construction in the project vicinity, including development and transportation infrastructure project, and shall include, but not be limited to, the following:

- **Restricted Construction Truck Access Hours** – Limit construction truck movements to the hours between 9:00 a.m. and 4:00 p.m., or other times if approved by the SFMTA, to minimize disruption to vehicular traffic, including transit during the AM and PM peak periods.
- **Construction Truck Routing Plans** – Identify optimal truck routes between the regional facilities and the project site, taking into consideration truck routes of other development projects and any construction activities affecting the roadway network.
- **Coordination of Temporary Lane and Sidewalk Closures** – The project sponsor shall coordinate lane closures with other projects requesting concurrent lane and sidewalk closures through the ISCOTT and interdepartmental meetings process above, to minimize the extent and duration of requested lane and sidewalk closures. Lane closures shall be minimized especially along transit and bicycle routes, so as to limit the impacts to transit service and bicycle circulation and safety.
- **Maintenance of Transit, Vehicle, Bicycle, and Pedestrian Access** – The project sponsor/construction contractor(s) shall meet with Public Works, SFMTA, the San Francisco Fire Department, Muni Operations and other City agencies to

coordinate feasible measures to include in the Coordinated Construction Management Plan to maintain access for transit, vehicles, bicycles and pedestrians. This shall include an assessment of the need for temporary transit stop relocations or other measures to reduce potential traffic, bicycle, and transit disruption and pedestrian circulation effects during construction of the project.

- **Carpool, Bicycle, Walk and Transit Access for Construction Workers** – The construction contractor shall include methods to encourage carpooling, bicycling, walk and transit access to the project site by construction workers (such as providing transit subsidies to construction workers, providing secure bicycle parking spaces, participating in free-to- employee ride matching program from www.511.org, participating in emergency ride home program through the City of San Francisco (www.sferh.org), and providing transit information to construction workers).
- **Construction Worker Parking Plan** – The location of construction worker parking shall be identified as well as the person(s) responsible for monitoring the implementation of the proposed parking plan. The use of on-street parking to accommodate construction worker parking shall be discouraged. All construction bid documents shall include a requirement for the construction contractor to identify the proposed location of construction worker parking. If on-site, the location, number of parking spaces, and area where vehicles would enter and exit the site shall be required. If off-site parking is proposed to accommodate construction workers, the location of the off-site facility, number of parking spaces retained, and description of how workers would travel between off-site facility and project site shall be required.
- **Project Construction Updates for Adjacent Businesses and Residents** – To minimize construction impacts on access for nearby institutions and businesses, the project sponsor shall provide nearby residences and adjacent businesses with regularly-updated information regarding project construction, including construction activities, peak construction vehicle activities (e.g., concrete pours), travel lane closures, and lane closures. At regular intervals to be defined in the Coordinated Construction Management Plan, a regular email notice shall be distributed by the project sponsor that shall provide current construction information of interest to neighbors, as well as contact information for specific construction inquiries or concerns.

Mitigation Measure M-C-TR-7b: Construction Truck Deliveries During Off-Peak

Periods: Any construction traffic occurring between 7:00 a.m. and 9:00 a.m. or between 3:30 p.m. and 6:00 p.m. would coincide with peak hour traffic and could temporarily impede traffic and transit flow, although it would not be considered a significant impact. Limiting truck movements to the hours between 9:00 a.m. and 3:30 p.m. (or other times, if approved by SFMTA) would further minimize disruption of the general traffic flow on adjacent streets during the a.m. and p.m. peak periods.

As required, the Project Sponsor and construction contractor(s) shall meet with the Sustainable Streets Division of the SFMTA, the San Francisco Fire Department, Muni, and the San Francisco Planning Department to determine feasible measures to reduce

traffic congestion, including potential transit disruption, and pedestrian circulation impacts during construction of the project. To minimize cumulative traffic impacts due to project construction, the Project Sponsor shall coordinate with construction contractors for any concurrent nearby projects that are planned for construction or which later become known.

Mitigation Measure M-C-TR-7c: Construction Management Plan: In addition to items required in the Construction Management Plan, the project sponsor shall include the following:

- Carpool, Shuttle, and Transit Access for Construction Workers – As an improvement measure to minimize parking demand and vehicle trips associated with construction workers, the construction contractor shall include methods to encourage carpooling, shuttle use, and transit use to the project site by construction workers in the Construction Management Plan contracts.
- Project Construction Updates – As an improvement measure to minimize construction impacts on nearby businesses, the project sponsor shall provide regularly-updated information (typically in the form of website, news articles, on-site posting, etc.) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns.

Implementation of these mitigation measures would reduce, but would not eliminate the proposed project or variant's considerable contribution to significant cumulative construction impacts.

Parking Demand

San Francisco does not consider parking supply as part of the permanent physical environment and therefore does not consider changes in parking conditions to be environmental impacts as defined by CEQA. As explained above, SB 743 eliminated parking as an effect that can be considered in determining significant transportation and circulation effects for infill residential projects in transit priority areas. The San Francisco Planning Department acknowledges, however, that parking conditions may be of interest to the public and the decision makers; therefore, parking is analyzed here for informational purposes.

Based on the methodology prescribed in the SF Guidelines, the project would generate an automobile parking demand of up to approximately 1,170 spaces: 1,164 long-term spaces and six short-term spaces.⁶³ As detailed in Chapter 2, Project Description, the project would provide approximately 507 off-street parking spaces (492 for the residential use and 15 for the retail use) plus 6 car-share spaces, for a total of 513 spaces. The project would also implement various streetscape changes along the adjacent street frontages, resulting in minor changes to on-street parking adjacent to the project site. Based on the estimated parking demand and proposed parking supply, the project would result in a net deficit of about 673 long-term parking spaces. The 14 on-

⁶³ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Transportation Impact Study*, Final, Case Number 2015-004568ENV, December 2017.

site parking spaces for retail use would satisfy the demand for six short-term retail parking spaces.

Overall on-street parking occupancy was surveyed on a typical weekday evening in February 2016. The survey showed a supply of about 469 on-street parking spaces in the study area. During the survey period occupancy was approximately 71 percent, although some concentrated areas north of Market Street were at practical capacity (85 percent occupancy or greater). Some (limited) public parking is also available in nearby on-street spaces or off-street facilities. As such, some of the parking deficit could be accommodated by existing parking capacity.

Further, as discussed in the “Environmental Setting,” the project site is well served by local and regional transit services, and the surrounding area is generally conducive to both biking and walking. Additionally, in compliance with the City’s Transportation Demand Management Program Standards, the proposed project would implement several transportation demand management measures, which would encourage transit use, biking, and walking and would help to reduce automobile use and parking demand.

Supplemental Information

During the scoping period for this environmental impact report, several members of the public commented on the parking and passenger and freight loading operations for the proposed project. These comments were largely tied to the size and location of the proposed project, proximity to transit, and the recent increase in on-demand deliveries and the use of transportation network companies. A supplemental transportation study (supplemental study) was prepared to assess passenger loading needs for the proposed project, and to better understand commercial loading and valet operations within the garage.⁶⁴ The supplemental study is summarized, for informational purposes, below.

Methodology. The supplemental study was based on data collection and observations at the NEMA building located at the northwest corner of 10th and Market streets, approximately two blocks to the east of the project site. The NEMA building is owned and operated by the project sponsor, Crescent Heights, and includes 754 residential units and 12,500 gsf of commercial uses. The NEMA building and the project site are surrounded by similar and diverse land uses, and are immediately adjacent to multiple transit lines and bicycle lanes on Market Street. The NEMA building includes transportation amenities that would also be a part of the proposed project, including bicycle parking, bike repair facilities, and dedicated car share parking. The proposed project’s dwelling units would be similar in size and type to those at the NEMA building, and would likely attract a similar tenant demographic. If the 10 South Van Ness Avenue project is approved, the commercial loading and valet operations would be operated by the project sponsor

⁶⁴ CHS Consulting Group, Memorandum to Rachel Schuett, San Francisco Planning Department, *10 South Van Ness Development – Supplemental Transportation Study Memorandum – Final*, October 12, 2018.

in a substantially similar way to the NEMA building, including a 24/7 valet service, and a fully-staffed garage.⁶⁵

Passenger Loading. In order to establish the expected rates of daily curbside passenger loading activity, a 48-hour field observation was conducted at the passenger loading (white curb) zone adjacent to the NEMA building. This 60-foot-long zone provides space for about three vehicles.

Based on the field observation, transportation network company vehicles (TNCs) frequently use this passenger loading zone. TNC pick-up and drop-off activities at that location include NEMA residents as well as other residents, workers, and visitors in the area, including (but not limited to) employees and visitors of the Twitter office building on the east side of 10th Street. This is likely due to the restrictions on passenger loading activities along Market Street, and because this is the closest passenger loading zone to the Twitter building.

The field observation found that during the a.m. peak hour, 4 of 35 passenger arrivals and 2 of 14 passenger departures were attributable to users of the NEMA building, accounting for 12 percent of a.m. peak hour passenger loading trips. During the p.m. peak hour, 1 of 6 passenger arrivals and 8 of 49 passenger departures were attributable to users of the NEMA building. This accounted for 16 percent of p.m. peak hour passenger loading trips.

The general pattern of peak hour loading activities for residential buildings are departures in the a.m. peak hour and arrivals in the p.m. peak hour. This indicates that a large share of the vehicle trips to the passenger loading zone at the NEMA building are associated with commute trips to nearby commercial office uses.

Based on the observed passenger loading activities discussed above, the NEMA building, itself, has demand for one passenger loading space.

Based on the NEMA building field observations, it is estimated that the proposed project would result in approximately 29 passenger loading vehicle trips during the p.m. peak hour, requiring two passenger loading spaces. The proposed project would include five or six passenger loading spaces, depending on the streetscape plan that is implemented. Therefore, either scenario would provide an adequate supply of passenger loading spaces for the proposed project.

Freight Loading. In the 2017 Final TIS for the proposed project, loading demand was calculated based on the methodology outlined in the *SF Guidelines* Appendix H. Based on the *SF Guidelines*, the proposed project would generate up to 35 daily truck trips, which corresponds to a demand for two commercial loading spaces during both the average loading hour and during the

⁶⁵ Ibid., see in particular p. 9 of 26.

peak loading hour. In the supplemental analysis, data provided by Crescent Heights for the NEMA building was used to re-estimate the demand for deliveries for the proposed project.

Based on data provided by Crescent Heights, the NEMA building receives an average of 14 commercial delivery trucks daily. Based on the demand for deliveries at the NEMA building, the proposed project would likely receive an average of about 459 packages per day (compared to 365 packages per day at NEMA). This increase in the volume of packages is not likely to increase the number of daily delivery trucks or the size of the delivery vehicles, because deliveries would be scheduled and coordinated by the service providers. Therefore, the proposed project's three on-site loading spaces in level B1 and the four commercial van loading spaces in level B2 would provide an adequate supply of on-site commercial loading spaces to accommodate the frequency and duration of daily commercial deliveries.

Valet Operations. Based on the 2017 Final TIS, the proposed project is expected to generate approximately 451 new vehicle-trips during the weekday p.m. peak hour (284 inbound and 167 outbound). In the supplemental analysis, data from the NEMA building was used to re-estimate the p.m. peak hour vehicle trips for the proposed project.

Based on the trip generation rates provided in the *SF Guidelines*, NEMA was expected to generate about 290 new vehicle-trips during the weekday p.m. peak hour (192 inbound and 97 outbound). Based on three months of data provided by Crescent Heights and verified by field observation at the NEMA building, only 13 percent of the vehicle trips estimated using the *SF Guidelines* were actually observed. For a conservative analysis, the expected inbound p.m. peak hour vehicle trips to the project site were reduced by 50 percent. Based on this adjustment, it is estimated that the proposed project would experience approximately 143 inbound vehicle trips during the p.m. peak hour, 29 of which would be passenger loading trips.

Finally, based on field observations of the valet operations conducted at the NEMA building during the p.m. peak hour, the average arrival rate was one vehicle every minute and 45 seconds and the average turnover rate for each vehicle was approximately one minute. Assuming the same turnover rate for the proposed project, a maximum queue length of approximately six vehicles would be anticipated during the p.m. peak period. The proposed project's garage ramp would provide capacity for approximately 28 vehicles. Therefore, no vehicle queuing onto 12th Street would be anticipated.

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4.3 NOISE

Section 4.3, Noise, describes the existing environmental and regulatory setting related to noise and vibration and discusses noise and vibration impacts that would result from construction and operation of the proposed project and the variant. The analysis addresses the potential for the proposed project and the variant to affect existing noise levels based on quantification of the noise that would be generated on a temporary basis during construction and over the long term from operation. The analysis determines whether construction or operation would result in significant changes in existing noise levels and identifies mitigation measures, where appropriate. The analysis also assesses vibration that could occur during construction and operation of the proposed project or variant to determine whether vibration could affect nearby historic structures or cause sleep disturbance. Construction and operation of the straight-shot streetscape options, which could be implemented with either the proposed project or the variant, would be the same as the streetscape option for the proposed project or variant, as the differences in the two straight-shot streetscape options relate to the numbers of on-street passenger and freight loading spaces and location of the building's driveway entrance, not to sidewalk and roadway widths or construction activities to make the improvements. Therefore, any impacts identified for the proposed project or the variant would be the same for the straight-shot streetscape options and those options are not analyzed separately.

The information and analysis in this section is based primarily on the *10 South Van Ness Avenue Mixed-Use Project Final Noise Technical Report*.¹

Summary of Market and Octavia Neighborhood Plan Final EIR Noise Section

Market and Octavia Neighborhood Plan Final EIR Setting

The Market and Octavia Neighborhood Plan Final EIR includes both measurements of existing outdoor ambient sound levels and predictions of traffic noise for existing conditions (2003) and future conditions (2025), with and without implementation of the Market & Octavia Area Plan at a variety of representative neighborhood locations. At assessment location #29 (near the intersection of Otis Street and South Van Ness Avenue, the assessment location nearest to the project site) both measured outdoor ambient sound levels in 2003 and predicted traffic noise levels for 2025 ranged from 70 to 75 A-weighted decibels (dBA) day-night noise level (L_{dn}).

¹ AECOM, *10 South Van Ness Avenue Mixed-Use Project - Final Noise Technical Report*, January 2018, Revised September 2018.

Market and Octavia Neighborhood Plan Final EIR Impacts and Mitigation Measures

At assessment location #29, the 70 to 75 dBA L_{dn} range of traffic noise levels predicted for 2025 was not expected to change with or without implementation of the Market & Octavia Area Plan, and thus this was considered to be a less-than-significant impact. Construction of projects within the Market & Octavia Area Plan area was expected to comply with the construction noise limits in the Noise Ordinance in the San Francisco Police Code, and thus, to result in a less-than-significant impact with respect to temporary increases in ambient noise levels. Cumulative operational noise impacts in 2025 with the Market & Octavia Area Plan were also expected to be less than significant.

Environmental Setting

Fundamentals of Noise

ACOUSTICS

Noise generally is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. Pitch is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. Loudness is the intensity or amplitude of sound. The sound pressure level is the descriptor most commonly used to characterize the loudness of a sound level. Because sound pressure can vary enormously within the range of human hearing, the logarithmic decibel scale (dB) is used to quantify sound levels. **Table 4.3.1: Acoustical Terminology** briefly defines these measurement descriptors and other acoustical terminology used in this section.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. A logarithmic scale is used to quantify sound intensity that approximates the range of sensitivity of the human ear that normally extends from 0 dBA to about 140 dBA. A 10-dBA increase in the level of continuous noise represents a perceived doubling of loudness. With respect to traffic noise, increases of 3 dBA are barely perceptible to people, while a 5-dBA increase is readily noticeable.

Different descriptors for sound-level measurements are used to characterize the time-varying nature of sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that noise effects are dependent on the total acoustical energy content and the time and duration of occurrence.

Table 4.3.1: Acoustical Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object that (when transmitted by pressure waves through a medium, such as air) can be detected by a receiving mechanism, such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A measure of sound on a logarithmic scale, which represents the squared ratio of sound-pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-weighted decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent noise level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and minimum noise levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-night level (L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m. (nighttime).
Community noise equivalent level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7 p.m. and 10 p.m. and 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m.

Source: Data compiled by AECOM in 2016.

Table 4.3.2: Typical Sound Levels shows examples of various sound levels in numerous outdoor and indoor environments, with the descriptions placed corresponding to their typical sound levels along a vertical scale of increasing dBA.

In a typical environment, the day-night noise level (L_{dn}) and community noise equivalent level (CNEL) noise descriptors rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent, and they are treated as such in this section.

Table 4.3.2: Typical Sound Levels

Common Outdoor Activities	Noise Levels, dBA	Common Indoor Activities
	110	Rock band
Jet fly-over at 1,000 feet		
	100	
Gas lawn mower at 3 feet		
	90	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban area, daytime	50	Dishwasher in the next room
Quiet urban area, nighttime	40	Theater, large conference room (background)
Quiet suburban area, nighttime		
	30	Library
Quiet rural area, nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio (background)
	10	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement*, 2013,
http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf, accessed January 25, 2018.

NOISE FROM MULTIPLE SOURCES

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are added logarithmically on an energy summation basis. In other words, adding a new noise source to an existing noise source, where both sources produce noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate and the resultant noise level will equal the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise

level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source. If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

ATTENUATION OF NOISE

Sound typically attenuates from stationary point sources at a rate of 6 dB per doubling of distance (e.g., 6 dB at 50 feet, 12 dB at 100 feet, 18 dB at 200 feet). For line sources such as free-flowing traffic on freeways, sound attenuates at approximately 3 dB per doubling of distance (e.g., 3 dB at 50 feet, 6 dB at 100 feet, 9 dB at 200 feet).

Atmospheric conditions (such as wind, temperature gradients, and humidity) can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound traveling over an acoustically absorptive surface (such as grass) attenuates at a greater rate than sound traveling over a hard surface (such as pavement). The increased attenuation caused by acoustical air and ground absorption typically is in the range of 1–2 dB per doubling of distance. Barriers that block the line of sight between a source and receiver, such as buildings and topography, also increase the attenuation of sound over distance.

SENSITIVE RECEPTORS

Noise-sensitive land uses generally consist of those uses where exposure to noise would result in adverse effects, and uses for which quiet is an essential element of the intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other noise-sensitive uses include hospitals, convalescent facilities, hotels, churches, libraries, and other uses where low noise levels are essential.

The San Francisco General Plan quantifies noise sensitivity with guidelines for “satisfactory” noise levels by land-use type. For example, residences are expected to have a maximum exterior L_{dn} of 60 dBA, while 65 dBA L_{dn} is considered to be appropriate for schools and libraries.

Health Effects of Environmental Noise

The U.S. Environmental Protection Agency (U.S. EPA) noise investigation and control program has been inactive since the 1970s, but European nations have continued to study noise and its health effects. Therefore, the World Health Organization is one of the best sources of current

knowledge regarding health impacts of noise.² The organization found that sleep disturbance can occur when continuous indoor noise levels exceed a 30-dBA equivalent noise level (L_{eq}), or when intermittent interior noise levels reach a 45-dBA maximum noise level, particularly if background noise is low.³

The World Health Organization's criteria suggest that when a bedroom window is slightly open (representing a 15-dB noise level reduction from outside to inside), exterior continuous (ambient) nighttime noise levels in residential areas should be 45 dBA L_{eq} or quieter, particularly in areas with older housing stock. An acoustically well-insulated building with its windows and doors closed can provide 30–35 dB of noise attenuation. More conventional residential construction provides 20–25 dB of noise reduction with the windows closed and only about 15 dB of noise reduction when the windows are open.

Other potential health effects of noise identified by the World Health Organization include decreased performance on complex cognitive tasks, such as reading, attention, problem solving, and memorization; physiological effects, such as hypertension and heart disease (after many years of constant exposure, often by workers, to high noise levels); and hearing impairment. This last effect generally occurs after long-term occupational exposure, although shorter term exposure to very high noise levels, such as concert noise at 100 dBA several times a year, also can impair hearing.

In addition, relatively low-level noise can disrupt speech intelligibility (e.g., in a classroom setting, a noise level as low as 35 dBA can disrupt clear understanding). Furthermore, noise can cause annoyance and trigger emotional reactions, including anger, depression, and anxiety. The World Health Organization reports that during daytime hours, few people are seriously annoyed by activities with noise levels below 55 dBA or moderately annoyed by noise levels below 50 dBA.⁴

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) and root-mean-square (RMS) velocity normally are described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is

² The San Francisco General Plan's land use compatibility guidelines for community noise, shown in Figure IV.E-3 of the general plan, were created during the same era (see Table 4.3.10 below).

³ World Health Organization, *Guidelines for Community Noise*, April 1999, <http://apps.who.int/iris/handle/10665/66217>, accessed January 25, 2018.

⁴ Ibid.

the metric often used to describe blasting vibration and other vibration sources that may result in structural stresses on buildings.⁵

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response to ground vibrations. It takes some time for the human body to respond to vibration signals; therefore, average vibration amplitude (the RMS velocity) is the most appropriate descriptor for gauging human response to typical ground vibration. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a period of 1 second. As with airborne sound, the RMS velocity often is expressed in dB notation as vibration dB (VdB), which serves to compress the range of numbers required to describe vibration. This VdB scale is based on a reference value of 1 microinch per second. According to Federal Transit Administration (FTA) guidance,⁶ the background vibration-velocity level typical of residential areas is approximately 50 VdB.

Groundborne vibration normally is perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels.⁷

Existing Noise Environment

The project area's existing noise environment is typical of a downtown urban setting, with primarily commercial, office, and mixed-use residential development within a grid of about two dozen city blocks surrounding the project site. Motor vehicles traveling on U.S. Highway 101 and arterial roadways (such as South Van Ness Avenue and Market Street), along with occasional distant aircraft overflights, generally contribute to transportation-related noise. In addition to vehicular traffic, intermittent outdoor noise sources on and near the project site include construction activities occurring, people talking, building equipment operating (e.g., heating, ventilation, and air conditioning [HVAC]), vehicle doors slamming, vehicle horns honking, and dogs barking. These continuous (e.g., roadway traffic) and intermittent acoustical contributors combine to influence the measurable, perceptible outdoor sound environment.

⁵ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006, https://transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, accessed January 25, 2018.

⁶ Ibid.

⁷ Ibid.

EXISTING NOISE-SENSITIVE LAND USES

The project site is in the Market & Octavia Area Plan area and is located in the South of Market neighborhood of San Francisco. The site is a triangular lot, bordered by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west. Noise-sensitive multifamily residential land uses in the project vicinity occur among the several large, mixed-use commercial, office, and residential land uses along Van Ness Avenue and Market Street.

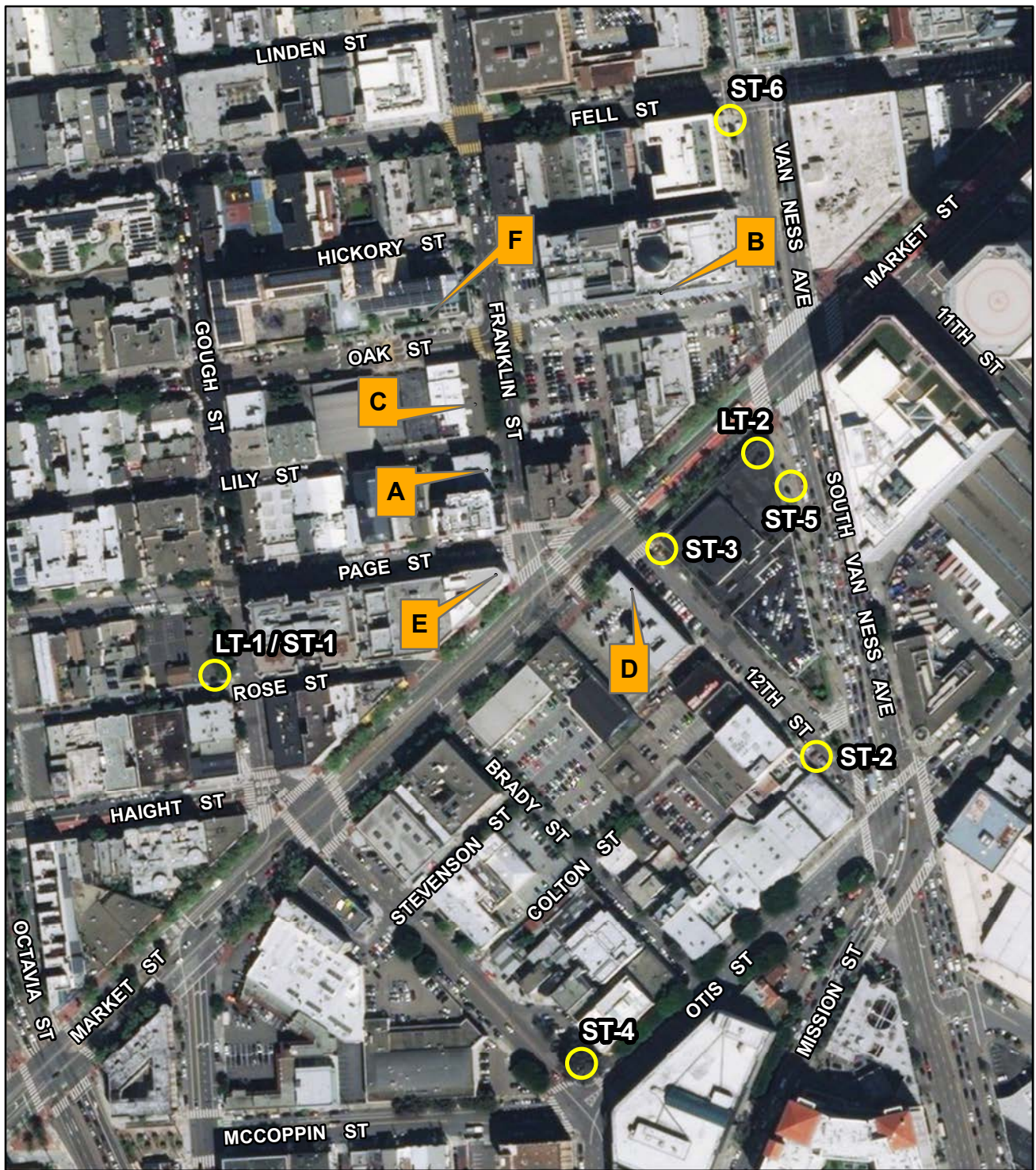
Figure 4.3.1: Noise Measurement Locations shows the six nearby noise-sensitive receptors and the locations where outdoor existing ambient sound levels were measured near the project site during the sound level survey, performed in May 2016.⁸ The noise-sensitive receptors and noise monitoring locations are identified with callouts and yellow circles, respectively. The following existing noise-sensitive receptors are identified in the figure:

- **Location A:** 20 and 23 Franklin Street, multifamily residential buildings, each approximately 250 feet north of the project site
- **Location B:** The Conservatory of Music at 50 Oak Street, approximately 250 feet north of the project site
- **Location C:** 41 Franklin Street, a mixed-use residential and commercial building, approximately 300 feet north of the project site
- **Location D:** 20 12th Street, the Civic Center Hotel, a residential hotel, approximately 65 feet west of the project site
- **Location E:** 1600 Market Street, the Golden Gate Urgent Care facility, approximately 260 feet west of the project site
- **Location F:** 150 Oak Street, the Chinese American International School and French American International School, approximately 500 feet north of the project site

OUTDOOR AMBIENT NOISE LEVEL MEASUREMENTS

Table 4.3.3: Existing Outdoor Ambient Sound Levels shows long-term and short-term noise monitoring results. During the monitoring to establish existing sound levels, temperatures generally ranged from 61 to 68 degrees Fahrenheit, relative humidity ranged from 52 to 69 percent, and wind speeds were calm (0–2 miles per hour).

⁸ The sound level measurements were made in 2016, before the new building at 1500 Mission Street began construction, in 2017. Therefore, the temporary construction noise from this development across from the project site was not captured in the measurements of existing noise conditions. As a result, the noise analysis may be conservative, as a higher “existing” noise level could reduce the additive effect of new noise from the proposed project or variant.



Legend



Noise Measurement Location
(See Table 4.3.3)



Sensitive Receptor Location
(See Table 4.3.11)

Note:

LT-# : Long-Term Survey Location

ST-# : Short-Term Survey Location

0 250 500
Feet

Source: AECOM (2017), SWCA (2018)

10 SOUTH VAN NESS MIXED-USE PROJECT

2015.004568ENV

FIGURE 4.3.1 NOISE MEASUREMENT LOCATIONS AND SENSITIVE RECEPTOR SITE LOCATIONS

Table 4.3.3: Existing Outdoor Ambient Sound Levels

Monitoring Location ID	Date(s)	Start and End Times	L _{eq} (dBA)
LT-1	May 11–12, 2016	10:50 a.m. to 10:50 a.m.	64 (day); 69 (evening); 64 (night)
LT-2	May 18–19, 2016	10:00 a.m. to 10:00 a.m.	71 (day); 69 (evening); 67 (night)
ST-1	May 11, 2016	10:52 a.m. to 11:07 a.m.	61.6
	May 11, 2016	4:50 p.m. to 5:10 p.m.	61.9
	May 11, 2016	9:21 p.m. to 9:27 p.m.	59.8
	May 11, 2016	10:00 p.m. to 10:05 p.m.	57.6
	May 12, 2016	9:22 a.m. to 9:32 a.m.	65.9
ST-2	May 11, 2016	11:26 a.m. to 11:39 a.m.	65.2
	May 11, 2016	5:28 p.m. to 5:38 p.m.	69.2
	May 12, 2016	8:44 a.m. to 8:54 a.m.	64.3
ST-3	May 11, 2016	11:46 a.m. to 11:56 a.m.	64.9
	May 11, 2016	5:41 p.m. to 5:51 p.m.	64.7
	May 12, 2016	8:30 a.m. to 8:40 a.m.	65.9
ST-4	May 11, 2016	12:08 p.m. to 12:18 p.m.	64.4
	May 11, 2016	5:14 p.m. to 5:24 p.m.	63.7
	May 12, 2016	8:59 a.m. to 9:10 a.m.	65.3
ST-5	May 11, 2016	12:33 p.m. to 12:43 p.m.	72.3
	May 11, 2016	5:54 p.m. to 6:09 p.m.	73.1
	May 11, 2016	9:09 p.m. to 9:15 p.m.	72.4
	May 11, 2016	10:12 p.m. to 10:17 p.m.	70.9
	May 12, 2016	8:17 a.m. to 8:27 a.m.	74.8
ST-6	May 11, 2016	12:52 p.m. to 1:02 p.m.	71.5
	May 11, 2016	6:17 p.m. to 6:27 p.m.	68.2
	May 11, 2016	9:00 p.m. to 9:05 p.m.	67.0
	May 11, 2016	10:21 p.m. to 10:26 p.m.	66.0
	May 12, 2016	8:03 a.m. to 8:13 a.m.	72.8

Notes: dBA = A-weighted decibels; ID = identification; L_{eq} = equivalent sound level; LT = long-term; ST = short-term

Source: AECOM, *10 South Van Ness Avenue Mixed-Use Project Final Noise Technical Report*, January 2018.

All but one of the sound level monitoring locations were at street level. Long-term (LT) sound level monitoring position #2 was located in the northern corner of the roof of the existing structure on the project site. The CNEL values that were calculated from measured sound pressure levels at LT-1 and LT-2 are 71 and 61 dBA, respectively. As the measurements were taken in 2016, they do not include the temporary noise levels from construction of the new high-rise building at 1500 Mission Street that began in 2017 and is anticipated to be completed by 2020.⁹

Regulatory Framework

Federal

NOISE CONTROL ACT

The U.S. EPA Office of Noise Abatement and Control originally was established to coordinate federal noise control activities. The federal Noise Control Act of 1972 established programs and guidelines to identify and address the effects of noise on public health and welfare, and the environment. Although primary responsibility for regulating noise was transferred to state and local governments in 1982, U.S. EPA provided guidelines for noise levels that were considered safe for community exposure without the risk of adverse health or welfare effects. U.S. EPA found that to prevent hearing loss over the lifetime of a receptor, the yearly average L_{eq} should not exceed 70 dBA, and to prevent interference and annoyance, the L_{dn} should not exceed 55 dBA in outdoor activity areas or 45 dBA indoors. **Table 4.3.4: Summary of Noise Levels Identified by U.S. EPA as Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety** lists these guidance metrics among other U.S. EPA recommendations.

FEDERAL TRANSIT ADMINISTRATION STANDARDS AND GUIDELINES

The City currently does not have quantitative vibration standards or limits. Instead, the City uses the groundborne vibration standards and guidelines from FTA's technical manual, *Transit Noise and Vibration Impact Assessment*,¹⁰ which provides guidelines for analyzing impacts of construction noise and groundborne vibration with respect to building damage occurring during construction activities. **Table 4.3.5: Federal Transit Administration General Assessment Criteria for Construction Noise** summarizes the FTA's general assessment criteria for construction noise.

⁹ Thomas DiSanto, Deputy Director of Administration and Deborah Landis, Deputy Director of Administration, Memorandum to Planning Commission, FY 2018-20 Budget – Proposed Budget and Work Program, January 18, 2018. Available on line at http://default.sfplanning.org/administration/finance/finance_CPC_FY2018-20_Budget_Proposed_Budget_and_Work_Program-011818.pdf. Accessed August 9, 2018.

¹⁰ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006, https://transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, accessed January 25, 2018.

Table 4.3.4: Summary of Noise Levels Identified by U.S. EPA as Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety

Effect	Level	Area
Hearing loss	$L_{eq} (24 \text{ hr}) < 70 \text{ dBA}^a$	All areas
Outdoor activity interference and annoyance	$L_{dn} < 55 \text{ dBA}$	Outdoor residential areas and farms as well as other outdoor areas where people spend varying amounts of time and places where quiet is a basis for use
Outdoor activity interference and annoyance	$L_{eq} (24 \text{ hr}) < 55 \text{ dBA}$	Outdoor areas where people spend limited amounts of time, such as school yards and playgrounds
Indoor activity interference and annoyance	$L_{dn} < 45 \text{ dBA}$	Indoor residential areas
Indoor activity interference and annoyance	$L_{eq} (24 \text{ hr}) < 45 \text{ dBA}$	Other indoor areas with human activities, such as schools

Notes: dBA = A-weighted decibels; hr = hour; L_{dn} = day-night noise level; L_{eq} = equivalent noise level; U.S. EPA = U.S. Environmental Protection Agency

^a. Yearly average equivalent sound levels in decibels; the exposure period that results in hearing loss at the identified level is 40 years.

Source: U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, 1974, <http://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF>, accessed December 3, 2015.

Table 4.3.5: Federal Transit Administration General Assessment Criteria for Construction Noise

Land Use	1-Hour L_{eq} (dBA)	
	Day	Night
Residential	90	80
Commercial	100	100
Industrial	100	100

Notes: dBA = A-weighted decibels; L_{eq} = equivalent noise level.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006, https://transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, accessed January 25, 2018.

FTA recommends the guidelines specified in Table 4.3.5 for a general assessment of construction noise. If the combined noise level in one hour from the two noisiest pieces of equipment exceeds these criteria, an adverse community reaction may result.

FTA also provides guidelines that are applicable to various building categories for evaluating potential damage from groundborne vibration. **Table 4.3.6: Federal Transit Administration–Recommended Vibration-Damage Criteria** shows FTA’s recommended vibration-damage criteria for construction activities: 0.20 in/sec PPV (94 VdB) for nonengineered timber and masonry buildings and 0.50 in/sec PPV (102 VdB) for structures or buildings constructed of reinforced concrete, steel, or timber.

Table 4.3.6: Federal Transit Administration–Recommended Vibration-Damage Criteria

Building Category	PPV (in/sec)	Approximate VdB ¹
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Nonengineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Notes:

in/sec = inch per second; PPV = peak particle velocity; VdB = vibration decibels

¹ Root-mean-square velocity in decibels (i.e., VdB) referenced to 1 microinch per second.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006, https://transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, accessed January 25, 2018.

In addition, FTA has guidelines for the maximum acceptable vibration criteria for different types of land uses. These criteria, based on the frequency of an event, are applied to specific land use types to address the human response to groundborne vibration. **Table 4.3.7: Federal Transit Administration–Recommended Criteria for Groundborne Vibration Impacts** shows the FTA-recommended criteria for groundborne vibration impacts for various land uses. As shown, FTA recommends a maximum vibration level of 80 VdB for residential uses and buildings where people normally sleep, and 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices).¹¹

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The U.S. Department of Housing and Urban Development has set guidelines for acceptable noise levels in residential areas. These guidelines are specified in Code of Federal Regulations Title 24, part 51, and are as follows:

- Acceptable—65 dBA L_{dn} or less
- Normally unacceptable—exceeding 65 dBA L_{dn} but not exceeding 75 dBA L_{dn}

¹¹ Ibid.

Table 4.3.7: Federal Transit Administration–Recommended Criteria for Groundborne Vibration Impacts

Land Use Category	Impact Levels (VdB)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations	65 ⁴	65 ⁴	65 ⁴
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Notes:

VdB = vibration level in decibels, referenced to 1 microinch per second.

¹ Defined as more than 70 vibration events of the same source per day. Most rapid-transit projects fall into this category.

² Defined as 30–70 vibration events of the same source per day. Most commuter trunk lines have this many operations.

³ Defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

⁴ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research requires detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilation, and air conditioning systems, and stiffened floors.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006, https://transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, accessed January 25, 2018.

- Unacceptable—exceeding 75 dBA L_{dn} . The department’s guidelines also include a goal (not a standard) for interior noise levels not to exceed 45 dBA L_{dn} .¹² Sound-attenuating features, such as barriers or sound-attenuating building materials, are to be used to achieve the interior noise goal where feasible. Standard building construction generally provides 20 dB of sound attenuation; therefore, if the exterior noise environment is classified as acceptable (e.g., 65 dBA L_{dn} or less) according to the U.S. Department of Housing and Urban Development’s guidelines, the interior noise environment should not exceed 45 dBA L_{dn} . The guidelines also encourage the use of quieter construction equipment and methods.¹³

¹² Code of Federal Regulations title 24, section 51.103(c).

¹³ Code of Federal Regulations Title 24, section 51.101(7).

State

CALIFORNIA DEPARTMENT OF TRANSPORTATION VIBRATION GUIDELINES

In its *Transportation and Construction Vibration Guidance Manual*,¹⁴ Caltrans provides guidance related to annoyance from noise, as shown in **Table 4.3.8: Vibration Guidelines for Annoyance**.

Table 4.3.8: Vibration Guidelines for Annoyance

Human Response	Maximum Peak Particle Velocity (in/sec, PPV)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources ²
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.10

Notes:

in/sec = inches per second; PPV = peak particle velocity

¹ Transient sources create a single, isolated vibration event, such as blasting or drop balls.

² Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans, *Transportation and Construction Vibration Guidance Manual*, September 2013, Table 20, p. 38. Available online at <http://www.dot.ca.gov/hq/env/noise/publications.htm>.

Caltrans also offers guidance with respect to vibration velocity thresholds pertaining to building damage risk. Similar to the FTA-based guidance shown in Table 4.3.6, the Caltrans guidance shown in **Table 4.3.9: Caltrans Guidelines for Vibration Damage Potential** includes suggested vibration limits for two types of vibration sources: transient and continuous, explained in the table note.

STATE OF CALIFORNIA GENERAL PLAN GUIDELINES

The State of California has adopted noise compatibility guidelines for general land use planning. The types of land uses addressed by the state standards and the acceptable noise categories for each land use are included in Appendix D, Noise Element Guidelines, of the *State of California General Plan Guidelines*,¹⁵ published and updated by the Governor's Office of Planning and Research. The level of acceptability of the noise environment depends on the activity associated with each particular land use. According to the state guidelines, an exterior noise environment up to 65 dBA L_{dn}/CNEL is considered normally to be acceptable for residential use; up to 70 dBA L_{dn}/CNEL is considered normally to be acceptable for school, office, and commercial uses.

¹⁴ California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2013, http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf, accessed April 8, 2018.

¹⁵ Governor's Office of Planning and Research, *State of California General Plan Guidelines*, 2017, <http://www.opr.ca.gov/planning/general-plan/guidelines.html>, accessed January 25, 2018.

Table 4.3.9: Caltrans Guidelines for Vibration Damage Potential

Structure and Condition	Transient Sources PPV (in/sec)	Continuous/Frequent Intermittent Sources PPV (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Notes:

Caltrans = California Department of Transportation; in/sec = inch per second; PPV = peak particle velocity
Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2013, http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf, accessed April 8, 2018.

CALIFORNIA BUILDING STANDARDS CODE

The State of California has established noise insulation standards for new multifamily residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards and are provided in the 2016 California Building Code.¹⁶ The noise insulation standards set forth an interior standard of 45 dBA L_{dn} /CNEL in any habitable room. The code requires an acoustical analysis, demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA L_{dn} /CNEL. Title 24 standards typically are enforced by local jurisdictions through the building permit application process.

CALIFORNIA GREEN BUILDING STANDARDS CODE

In addition to the noise insulation standards for residential and hotel uses, as described above, the State of California has established noise insulation standards for nonresidential uses in the 2016 California Green Building Standards Code.¹⁷ The code's noise insulation standards establish an interior standard of 50 dBA 1-hour L_{eq} in occupied areas during hours of operation.

¹⁶ California Code of Regulations Title 24, part 2, section 1207.

¹⁷ California Code of Regulations, Title 24, part 11, section 5.507.

Local

SAN FRANCISCO GENERAL PLAN

The *San Francisco General Plan* (general plan) focuses on the effect on the community of noise from ground-transportation noise sources and includes a land use compatibility chart for community noise. This chart (**Table 4.3.10: San Francisco Land Use Compatibility Chart for Community Noise**) identifies a range of noise levels considered generally to be compatible or incompatible with various land uses.

The chart also indicates when to consider or analyze special noise reduction requirements, such as providing sound insulation for affected properties. Residential and hotel uses are considered compatible (satisfactory) in areas where the noise level is 60 dBA L_{dn} or less; schools, classrooms, libraries, churches, and hospitals are compatible in areas where the noise level is 65 dBA L_{dn} or less; and playgrounds, parks, offices, retail commercial uses, and noise-sensitive manufacturing and communication uses are considered compatible in areas where the noise level is 70 dBA L_{dn} or less.

SAN FRANCISCO NOISE CONTROL ORDINANCE

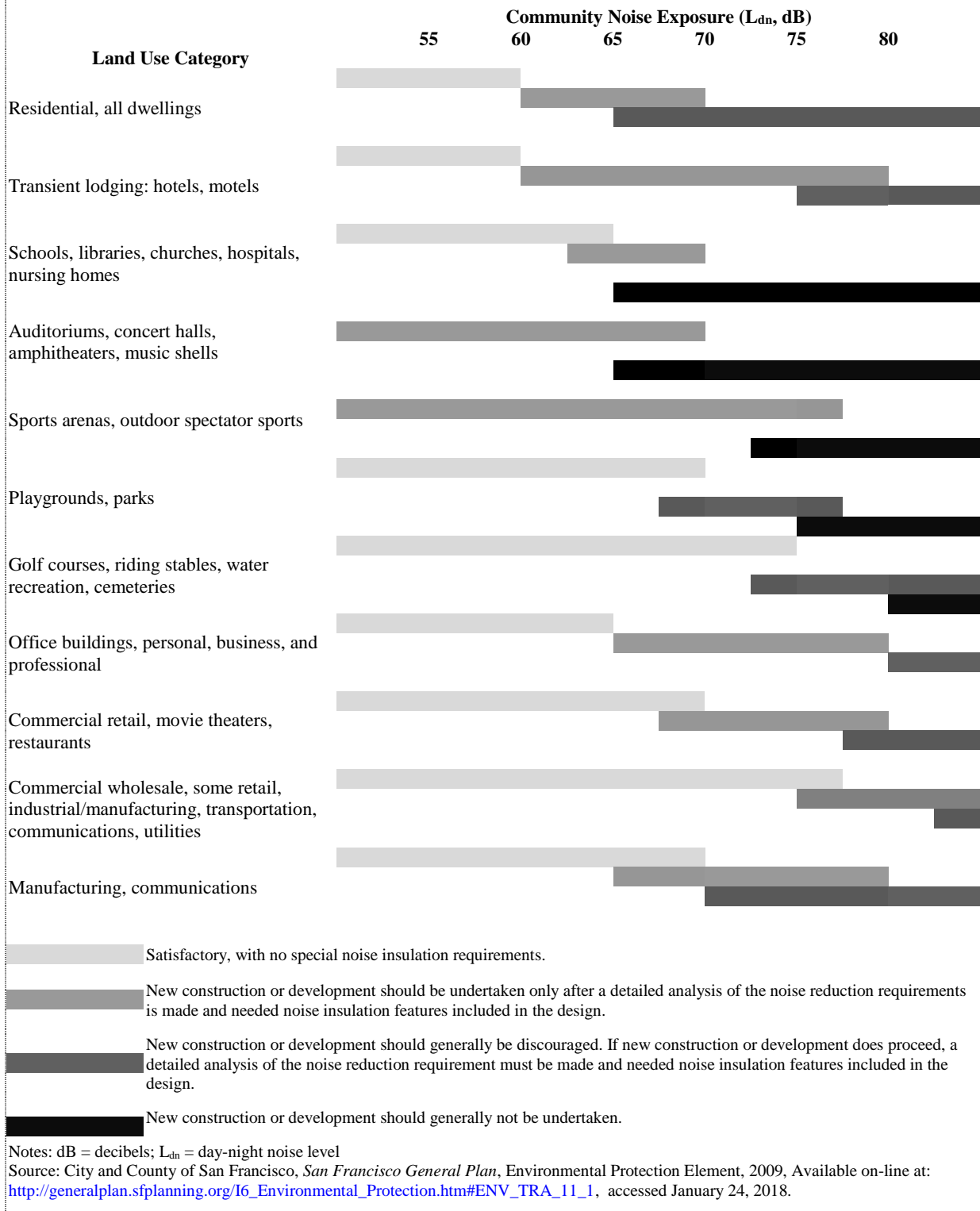
The San Francisco Noise Control Ordinance regulates sources of both construction noise and stationary-source noise within the city limits, such as transportation, construction, mechanical equipment, entertainment, and human or animal behavior. San Francisco Police Code article 29, Regulation of Noise, addresses noise from construction equipment, nighttime construction work, and stationary mechanical equipment and waste processing activities.

Section 2907, Construction Equipment, and Section 2908, Construction Work at Night

The following sections of the Noise Control Ordinance establish noise levels for construction equipment. Section 2907(a) limits noise levels from construction equipment to 80 dBA at 100 feet (or other equivalent noise level at another distance) between 7 a.m. and 8 p.m. According to section 2908, construction work at night (from 8 p.m. to 7 a.m.) may not exceed the ambient level by 5 dB at the nearest property plane unless the director of public works or the director of building inspection grants a special permit before the start of such work.

The provisions of section 2907(a) do not apply to impact tools and equipment that have intake and exhaust mufflers as recommended by the manufacturers, and that are approved by the director of public works or the director of building inspection as accomplishing maximum noise attenuation. The noise exemption also applies to pavement breakers and jackhammers that are equipped with acoustically attenuating shields or shrouds as recommended by the manufacturers, and that are approved by the director of public works or the director of building inspection as accomplishing maximum noise attenuation.

Table 4.3.10: San Francisco Land Use Compatibility Chart for Community Noise



Section 2909, Noise Limits

This section of the Noise Control Ordinance regulates noise from onsite stationary noise sources (e.g., stationary mechanical and electrical equipment) within specific land uses. Section 2909 states that the noise levels from equipment operating on the project property is not to exceed the ambient noise levels at the property plane by the following amounts:

- 5 dBA, if the noise source is on a residential property
- 8 dBA, if the noise source is on a commercial or industrial property
- 10 dBA, if the noise source is on a public property

In addition, section 2909 states that no fixed (permanent) noise source may cause the noise level inside any sleeping or living room in a residential dwelling unit to exceed 45 dB between 10 p.m. and 7 a.m., or 55 dB between 7 a.m. and 10 p.m. when windows are open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

Impacts and Mitigation Measures

Significance Thresholds

The significance thresholds in this analysis are consistent with the environmental checklist in CEQA Guidelines Appendix G, as modified by the San Francisco Planning Department (planning department). For this analysis, the following applicable thresholds were used to determine whether implementing the proposed project or the variant would result in a significant impact related to noise and vibration. The project would have a significant effect on noise and vibration if it would:

- Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Approach to Analysis

CONSTRUCTION NOISE IMPACTS

Construction of the proposed project or variant is anticipated to occur over 36 months and would include the following general phases: (1) demolition; (2) shoring and excavation; (3) foundation

and podium construction; (4) tower(s)/superstructure/skin; and (5) interior work. Construction hours typically would be from 7 a.m. to 8 p.m., Monday through Thursday, and 7 a.m. to 5 p.m. on Fridays. Limited evening/nighttime work (from 8 p.m. to 7 a.m.) and work on Saturdays (from 7 a.m. to 5 p.m.) would be required during the third and fourth construction phases. The construction noise analysis includes an evaluation of compliance with the noise ordinance criteria.

Daytime construction noise levels were estimated using a method similar to the general assessment technique that is described in the FTA guidance manual, a method that studied the anticipated two loudest pieces of onsite construction equipment. The noise technical report¹⁸ presents details regarding the approach to the analysis, including the construction equipment considered for each construction phase, their respective reference sound levels, their locations, and the expected noise attenuation factors of approximately 6 dBA reduction for every doubling of distance. Construction activities that would cause a temporary increase in noise levels of greater than 10 dBA above the ambient noise level or noise levels of 90 dBA at sensitive receptor locations could be considered a significant impact if either the degree of exceedance of the above quantitative standards or the duration of the exceedance is substantial, or both.

In addition, in order to prevent health effects resulting from sleep disturbance, the quantitative analysis of nighttime construction noise was evaluated based on the potential for construction noise to result in interior noise levels of 45 dBA or more at sensitive receptor locations. A significant noise impact from nighttime construction noise is determined by considering the degree of the exceedance of the 45 dBA interior noise standard and the duration of the exceedance.

OPERATIONAL NOISE IMPACTS

Both project scenarios would include one emergency generator and mechanical equipment, which would be located in the garage. Heating, ventilation and air conditioning (HVAC) equipment would be located on the roof of either the proposed project or variant. To evaluate operational noise impacts from stationary sources, such as HVAC equipment and backup generators, the noise levels generated by outdoor stationary noise sources associated with the proposed project or variant were estimated and then were compared to the City's standards in the noise ordinance.

For the buildings' fixed mechanical equipment (which also would include equipment installed inside with intakes or vents on the building facades), a noise performance criterion was specified to meet the City's noise standards because detailed design information is not available at this stage of the proposed project. The City's Noise Control Ordinance states that noise from project-related fixed mechanical equipment should not exceed the ambient noise level by 5 dBA at the

¹⁸ AECOM, *10 South Van Ness Avenue Mixed-use Project Noise Final Technical Report*, January 2018, pp. 18-19.

noise source property plane for residential uses. The ordinance also specifies that noise levels generated by loading dock and trash compactor operations are not to exceed 75 dBA at a distance of 50 feet.

TRAFFIC NOISE IMPACTS

A potentially significant increase in the ambient noise level due to traffic resulting from a proposed project is unlikely unless the project would cause a doubling of existing traffic levels, which in turn is generally assumed to result in a 3 dBA increase in the existing ambient noise level.¹⁹ Although a 5 dBA increase in the ambient noise environment is readily perceptible, in areas where the noise environment is already degraded, such as the project site, a lower standard of 3 dBA is necessary to ensure that there would not be a significant increase in ambient noise levels.

GROUNDBORNE VIBRATION IMPACTS

The proposed project and variant would require the same construction activities and would have the same intensity and duration of construction.

Determining potential vibration effects at the location of a noise-sensitive land use requires comparing predicted vibration levels with established criteria. The analysis of potential building damage is based on the vibration levels generated by the project at nearby buildings. A significant impact would occur if the FTA vibration standard listed in Table 4.3.6 on p. 4.3.13 is exceeded at nearby buildings, with a particular focus on vibration effects on historic buildings. A significant impact with regard to human annoyance from vibration could occur if vibration would result in sleep disturbance.

For assessing human annoyance resulting from a transient vibration event (e.g., a heavy vehicle pass-by or temporary operation of stationary vibration-producing equipment), FTA guidance indicates that a maximum of 80 VdB is acceptable for infrequent (fewer than 70 per day) vibration events. For this analysis, it was assumed that these transient, construction-related vibration events may take place as close as the project site boundary.

This analysis of construction vibration assumes that during each of the four studied exterior-construction phases for noise, a piece of equipment or activity may dominate with respect to vibration. The assumed equipment or activity for these phases and their reference vibration velocity levels are as follows:

¹⁹ Caltrans, *Technical Noise Supplement*, November 2009, p. 2-48. Available at: <http://www.dot.ca.gov/env/noise/docs/tens-nov2009.pdf>. Accessed December 18, 2017.

- **Demolition:** Large bulldozer (0.089 in/sec and 87 RMS VdB at 25 feet)
- **Shoring and excavation:** Loaded truck (0.076 in/sec and 86 RMS VdB at 25 feet)
- **Foundation and podium:** Caisson drilling (i.e., augering cast-in-place piles, 0.089 and 87 RMS VdB, respectively)
- **Tower(s)/superstructure/skin:** Loaded truck (0.076 in/sec and 86 RMS VdB at 25 feet)

Project Features

The proposed project or variant would demolish the existing building on the project site and construct a mixed-use development that would include residential, commercial, parking, and open space uses. A complete project description is included in Chapter 2, Project Description. This section includes a description of project features that are pertinent to noise impacts. The proposed project and variant features related to noise are similar; therefore, they are discussed together.

Under the proposed project, the existing building would be demolished and two podiums would be constructed, with one tower above each podium. The towers would have a maximum height of approximately 400 feet above the ground (420 feet total, including roof screens and the stair/elevator penthouse on each tower) and would have 20-foot-tall parapets. The podium portion would rise to a height of approximately 120 feet above the ground.

Under the variant, the existing building would be demolished and a single podium would be constructed, with a single tower above. The tower would be 590 feet tall and 55 stories above the ground. Like the proposed project, the variant would include a stair/elevator penthouse that would extend up to 20 feet above the roof height, for a total height of 610 feet. The podium portion of the building would rise to a height of approximately 164 feet above the ground.

As noted above, construction of either the proposed project or the variant is anticipated to occur over 36 months and would include the following generalized phases: (1) demolition; (2) shoring and excavation; (3) foundation and podium construction; (4) tower(s)/superstructure/skin; and (5) interior work. Construction hours would typically be from 7 a.m. to 8 p.m., Monday through Thursday, and 7 a.m. to 5 p.m. on Fridays. Limited evening/nighttime work (from 8 p.m. to 7 a.m.) and work on Saturdays (7 a.m. to 5 p.m.) would be required for the third and fourth construction phases. No impact pile driving is required for construction of the proposed project. The straight shot streetscape design variant would widen the sidewalk on 12th Street adjacent to the proposed building to provide a pedestrian promenade. Construction would involve the same types of equipment and activities for the proposed project and variant, and therefore is not analyzed separately.

The proposed project or variant would include onsite stationary sources consisting of HVAC equipment, a loading dock, a standby generator, and a trash compactor near existing sensitive uses. The design and placement of the loading dock and trash compactor would include barriers

and/or shielding as required to meet the limit of 75 dBA at a distance of 50 feet established by section 2904 of the Noise Control Ordinance.

Impact Analysis

Impact NO-1: Proposed project or variant construction would generate noise levels in excess of standards and would result in substantial temporary increases in ambient noise levels. (*Less than Significant with Mitigation*)

CONSTRUCTION NOISE ORDINANCE COMPLIANCE

The proposed project and variant would require the same construction activities and would have the same intensity and duration of construction. The loudest of the reference L_{\max} values for the non-impact-type equipment anticipated for construction (of either the proposed project or variant), as listed in the *10 South Van Ness Avenue Mixed-Use Project Final Noise Technical Report*,²⁰ is 84 dBA at a reference distance of 50 feet (for a drill rig). Propagating this sound level to a distance of 100 feet would mean that use of this equipment at 100 feet would be less than 80 dBA; thus, noise from this loudest equipment and individual pieces of equipment having quieter reference noise levels would be compatible with the limit of 80 dBA at 100 feet, required by section 2907 of the noise ordinance in the San Francisco Police Code.

Daytime Construction Noise Impacts

Table 4.3.11: Predicted Daytime Construction Noise Levels (average hourly L_{eq}) at the Nearest Noise-Sensitive Receptors shows the predicted daytime construction noise levels resulting from project construction, assuming the simultaneous operation of the two loudest pieces of equipment for either the proposed project or variant at the six noise-sensitive receptor locations shown on Figure 4.3.1 for the first four construction phases: demolition, shoring and excavation, foundation and podium, and tower(s)/superstructure/skin. The fifth phase, interior work, is not expected to produce noise levels greater than any preceding phase. Most activities during the fifth phase would take place within the newly skinned structures, and thus, would be substantially attenuated by the building façade and would not significantly affect the noise-sensitive receptors. Because impact pile driving is not planned for the proposed project or variant, operation of other impact-type equipment that is expected to be used for construction would be compatible with the FTA daytime standards shown in Table 4.3.5.

²⁰ AECOM, *10 South Van Ness Avenue Mixed-use Project Final Noise Technical Report*, January 2018, revised September 2018, pp. 19-20.

Table 4.3.11: Predicted Daytime Construction Noise Levels (average hourly L_{eq}) at the Nearest Noise-Sensitive Receptors

Noise-Sensitive Receptor Location ¹	Street Address or Intersection	Approximate Distance from Construction Activity Centerpoint to Receiver (feet)	Estimated Existing Daytime L_{eq} (dBA) at Noise-Sensitive Receptor	Predicted Average Hourly L_{eq} (dBA) per Construction Phase			
				Demolition (Dozer + Dump Truck)	Shoring & Excavation (Excavator + Dump Truck)	Foundation & Podium (Concrete Pump Truck + Auger)	Tower(s)/ Superstructure /skin (Crane + Air Compressor)
A	20 and 23 Franklin Street	285	67	68	67	70	67
B	50 Oak Street	285	70	68	67	70	67
C	41 Franklin Street	335	67	66	65	69	66
D	20 12th Street	100	67	77	76	80	77
E	1600 Market Street	295	67	67	66	70	67
F	150 Oak Street	535	67	62	61	65	62

Notes:

dBA = A-weighted decibels; L_{eq} = equivalent sound level; **Bold** values indicate that the increase over the existing ambient sound level is predicted to exceed 10 dBA.

¹Figure 4.3.1 shows the locations of the noise-sensitive receptors.

Source: AECOM, *10 South Van Ness Avenue Mixed-use Project Noise Technical Report*, January 2018, revised September 2018.

Based on the average of short-term (ST) measurements from ST-1 and ST-5, existing daytime L_{eq} levels at noise-sensitive receptor locations A, C, D, E, and F are approximately 67 dBA. Based on the short-term L_{eq} measurements from ST-6, the existing daytime L_{eq} at noise-sensitive receptor location B is approximately 70 dBA. Considering these existing daytime noise levels, the use of a concrete pump truck and auger during the foundation and podium construction phase may result in a noise level of 80 dBA, an increase above this ambient of up to 13 dBA at noise-sensitive receptor location D (the Civic Center Hotel on 12th Street, across the street from the project site). While the foundation and podium construction phase may last from four to five months, the main concrete pumping activity would occur during short periods of this phase. A continuous concrete pour for the foundation mat is expected to take approximately 24 hours, and thus would occur over at least one night. Use of concrete pump trucks for other aspects of building construction would be much shorter and are expected to occur during daytime hours. The 13 dBA increase would be greater than 10 dBA above the ambient noise level; therefore, this impact would be significant.

Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan

The project sponsor shall prepare a construction noise plan for review and approval by Planning Department and Department of Building Inspection before permit issuance, demonstrating that daytime and nighttime construction noise resulting from the proposed project or variant will not exceed applicable limits of the noise ordinance and will not cause a temporary increase in ambient noise levels greater than 10 dBA L_{eq} . The plan shall include, and project sponsor's construction contractor(s) shall implement, the following features:

- **Stage Concrete Pump Trucks during Daytime along South Van Ness Avenue or Attenuate Truck Noise at Noise Sensitive Receptors**

The project sponsor shall (through the construction contractor) stage the use of concrete pump trucks along South Van Ness Avenue adjacent to the project site during daytime construction activities. If it is undesirable to stage concrete pump trucks along South Van Ness Avenue, the project sponsor shall install noise attenuation features around the staging area of the concrete pump trucks in order to attenuate construction noise at the closest sensitive receptor at 20 12th Street.

- **Prohibit Use of Concrete Pump Trucks at Night at Any Locations that Analysis Shows Fail to Meet Established Noise Levels at Sensitive Receptors**

The project sponsor shall (through the construction contractor) prepare a site-specific noise analysis, including measurements at the closest sensitive receptor site, the Civic Center Hotel at 20 12th Street, of noise from concrete pump trucks, showing that use of concrete pump trucks at various locations on or around the project site including along South Van Ness Avenue would not result in interior noise levels above 45 dBA during nighttime hours (8 p.m. to 7 a.m.) at the receptor site. A report presenting the results of this analysis shall be provided to the Department of Building Inspection prior to authorization to conduct nighttime construction activities that would involve the use of any concrete pump trucks, and concrete pump trucks shall be authorized only at the locations on or adjacent to the project site that are shown in the report to meet the 45 dBA interior noise level at the sensitive receptor site.

- **Telephone Hotline for Noise Complaint Reporting**

The project sponsor (through the construction contractor) shall establish a telephone hotline for use by the public to report any perceived adverse noise conditions associated with construction of the proposed project or variant. If the telephone is not staffed 24 hours per day, the contractor shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This hotline telephone number shall be posted at the project site during construction in a manner and at a location visible to passers-by. This telephone number shall be maintained until the proposed project or variant has been considered commissioned and is ready for occupancy.

- **Investigate and Respond to Noise Complaints**

The project sponsor (through the construction contractor) shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The contractor or authorized agent shall implement all of the following measures:

- Use a noise complaint resolution form to document and respond to each noise complaint.
- Contact the person(s) making the noise complaint within 24 hours.
- Conduct an investigation to attempt to determine the source of noise related to the complaint.
- Take reasonable measures to reduce noise at its source (or abate the noise along the direct sound path between the source and the receptor of concern) if the source of the noise that has generated the complaint is associated with construction of the proposed project or variant and is found to involve any of the following:
 - o Noise from a construction activity that is causing interior noise levels at a noise-sensitive receptor to exceed 45 dBA during the nighttime hours of 8 pm to 7 am.
 - o Noise levels that exceed 10 dBA above the ambient at noise sensitive receptors

To determine if any of the above are met, noise readings shall be taken at the noise sensitive receptor location with the equipment at issue in operation and again with such equipment not in operation.

- **Implement Best Construction Practices**

To the extent practical, the construction contractor shall adopt and implement the following typical field techniques for reducing noise from construction activities, to reduce aggregate construction noise levels for nearby noise-sensitive receptors

- Unless safety provisions require otherwise, adjust audible backup alarms downward in sound level while still maintaining an adequate signal-to-noise ratio for alarm effectiveness. Consider signal persons, strobe lights, or alternative safety equipment and/or processes as allowed to reduce reliance on high-amplitude sonic alarms/beeps.
- Place stationary noise sources, such as generators and air compressors, on the project site as far away from nearby noise-sensitive receptors as possible.
- Place non-noise-producing mobile equipment, such as trailers, in the direct sound pathways between suspected major noise-producing sources and noise-sensitive receptors.

- **Implement Measures to Reduce Equipment Noise Generation**

To the extent practical, the construction contractor shall implement one or more of the following measures for construction equipment selection (or preferences) and expected functions to help reduce noise:

- Provide impact noise-producing equipment (i.e., jackhammers and pavement breaker[s]) with noise-attenuating shields, shrouds, or portable barriers or enclosures, to reduce operating noise.
- Line or cover hoppers, storage bins, and chutes with sound-deadening material (e.g., apply wood or rubber liners to metal bin impact surfaces).

- Provide upgraded mufflers, acoustical lining, or acoustical paneling for other noisy equipment, including internal combustion engines.
- Use alternative procedures of construction and select a combination of techniques that generates the least overall noise and vibration.
- Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as the following:
 - o Electric equipment instead of diesel-powered equipment
 - o Hydraulic tools instead of pneumatic tools
 - o Electric saws instead of air- or gasoline-driven saws

If insufficient space exists or the construction contractor lacks available resources (such as semi-truck trailers, bulk material storage containers, or field office trailers) to create a noise barrier using non-noise-producing equipment in use at an active construction site as suggested above under Best Construction Practices, the contractor also may employ field-erected temporary noise barriers. Options for such onsite barriers may include using appropriately thick wooden panel walls (at least 0.5 inch thick) that are high enough to block the line of sight from the dominant construction noise source(s) such as the concrete pump trucks to the noise-sensitive receptors. Depending on factors such as barrier height, barrier extent, and distance between the barrier and the noise-producing equipment or activity, such barriers may reduce construction noise by 3–15 dBA at the locations of nearby noise-sensitive receptors.

Alternately, field-erected noise curtain assemblies may be installed around specific equipment sites or zones of anticipated mobile or stationary activity. These techniques will be most effective and practical when the noise source for the construction activity is stationary (e.g., auger or drill operation) and the specific source locations of noise emission are near the ground and can be placed as close to the equipment/activity-facing side of the noise barrier as possible.

Implementing Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan, would reduce the daytime noise level at noise-sensitive receptor location D, the Civic Center Hotel, during the foundation and podium construction phase by a range of 3-15 dBA, to reduce the increase in ambient noise to below the 10 dBA increase above ambient noise level standard. Mitigation Measure M-NO-1 would achieve this reduction by either locating concrete pump trucks along South Van Ness Avenue where distance and potentially intervening new structures would attenuate their noise or erecting noise attenuation features to block noise between the concrete pump trucks and sensitive noise receptors at the Civic Center Hotel. This feature of the mitigation measure would reduce the noise level such that construction activities at receptor location D (the Civic Center Hotel) would not be expected to exceed 10 dBA above the ambient noise levels. Thus, the impact would be less than significant with implementation of mitigation.

Nighttime Construction Impacts

Table 4.3.12: Predicted Ambient Noise Increment Resulting from Nighttime Construction Noise Levels under the Proposed Project or Variant shows that among the six noise-sensitive receptors evaluated in the noise technical report, receptor location D, the Civic Center Hotel, is expected to experience evening and nighttime construction noise levels during the foundation and podium phase, resulting in an increase in the ambient noise level of 5 dBA or more (see boldfaced values in the table). Given that nighttime construction work would exceed an increase of 5 dBA above the ambient at noise sensitive receptors, it would also exceed the noise ordinance requirements, which are based on increases in ambient noise levels at the property plane. This would exceed the exposure standards in section 2908 of the San Francisco Noise Ordinance. Therefore, nighttime construction work would require a permit under section 2908 of the Noise Ordinance. Based on information from the project sponsor, the potential for nighttime project construction activity, such as concrete pours and operating generators, would be limited to the third and fourth construction phases.²¹ Therefore, no nighttime construction noise impact would occur during the first two construction phases.

To evaluate potential construction noise resulting from the proposed project or variant as related to sleep disturbance, **Table 4.3.13: Predicted Interior Noise Levels Resulting from Nighttime Construction Noise under the Proposed Project or Variant** refines the analysis results shown in Table 4.3.12 by applying a 25-dB exterior-to-interior noise reduction associated with typical building construction and closed windows. During the foundation and podium construction phase at noise-sensitive receptor location D, the proposed project or variant is expected to cause a temporary and intermittent increase in interior noise levels that would exceed the 45-dBA threshold by 5–6 dBA. Although it is anticipated that nighttime construction work would be limited, there are currently no specific details regarding the duration of nighttime construction work other than the approximately 24-hour period of the continuous concrete pour for the foundation mat during the foundation and podium construction phase. However, the project sponsor indicates that nighttime construction work occasionally may be required for the foundation and tower/superstructure work. The duration of each phase is approximately 8 and 9 months, respectively, with some overlap. Therefore, this impact would be significant.

Implementing Mitigation Measure M-NO-1 would reduce evening and nighttime construction exterior noise levels during the foundation and podium construction phase to 69 dBA L_{eq} and 67 dBA L_{eq} , respectively. With a 25-dB exterior-to-interior noise reduction to account for the building structure with windows closed, the resulting interior noise levels at the Civic Center Hotel would be approximately 44 to 42 dBA. Therefore, the impact would be less than significant with mitigation incorporated.

²¹ AECOM, *10 South Van Ness Project Final Noise Technical Report*, p. 18.

Table 4.3.12: Predicted Ambient Noise Increment Resulting from Nighttime Construction Noise Levels under the Proposed Project or Variant

Noise-Sensitive Land Use ¹ (time of day)	Baseline Ambient Sound Level (dBA L _{eq})	Predicted Evening/Nighttime Construction Noise Level (dBA)		Noise Levels During Construction (dBA)		Ambient Noise Level Increment (dBA)	
		Foundation & Podium (concrete pump truck)	Tower(s)/ Superstructure/ Skin (generator)	Foundation & Podium (concrete pump truck)	Tower(s)/ Superstructure/ Skin (generator)	Foundation & Podium (concrete pump truck)	Tower(s)/ Superstructure/ Skin (generator)
A (evening)	66 ²	66	58	69	67	3	1
A (nighttime)	64 ³	66	58	68	65	4	1
B (evening)	67 ⁴	66	58	70	68	3	1
B (nighttime)	66 ⁵	66	58	69	67	3	1
C (evening)	66 ²	64	56	68	66	2	0
C (nighttime)	64 ³	64	56	67	65	3	1
D (evening)	66 ²	75	67	76	70	10	4
D (nighttime)	64 ³	75	67	75	69	11	5
E (evening)	66 ²	65	57	69	67	3	1
E (nighttime)	64 ³	65	57	68	65	4	1
F (evening)	66 ²	60	52	67	66	1	0
F (nighttime)	64 ³	60	52	65	64	1	0

Notes:

dBA = A-weighted decibels; L_{eq} = equivalent sound level

¹ Figure 4.3.1 shows the locations of the noise-sensitive receptors and Table 4.3.11 lists the addresses of these receptors.

² Value based on average of measured evening period (7 p.m. to 10 p.m.) L_{eq} at ST-1 and ST-5, given proximity of receptor.

³ Value based on average of measured nighttime period (10 p.m. to 7 a.m.) L_{eq} at ST-1 and ST-5, given proximity of receptor.

⁴ Value based on measured L_{eq} at ST-6 during evening period (7 p.m. to 10 p.m.).

⁵ Value based on measured L_{eq} at ST-6 during nighttime hours (10 p.m. to 7 a.m.).

Bold values indicate that the increase over the existing ambient sound level is predicted to meet or exceed 5 dBA.

Source: AECOM, 10 South Van Ness Avenue Mixed-use Project Final Noise Technical Report, January 2018, revised September 2018.

Table 4.3.13: Predicted Interior Noise Levels Resulting from Nighttime Construction Noise under the Proposed Project or Variant

Noise-Sensitive Receptor ¹ (time of day)	Baseline Indoor Ambient Sound Level ² (dBA L _{eq})	Predicted Interior Evening/ Nighttime Construction Noise Level (dBA)		Interior Noise Levels during Construction (dBA)		Decibels above the 45-dBA Sleep Disturbance Threshold (dB)	
		Foundation (concrete pump truck)	Tower(s)/ Superstructure (generator)	Foundation (concrete pump truck)	Tower(s)/ Superstructure (generator)	Foundation (concrete pump truck)	Tower(s)/ Superstructure (generator)
A (evening)	41	41	33	44	42	N/A	N/A
A (nighttime)	39	41	33	43	40	N/A	N/A
B (evening)	42	41	33	45	43	N/A	N/A
B (nighttime)	41	41	33	44	42	N/A	N/A
C (evening)	41	39	31	43	41	N/A	N/A
C (nighttime)	39	39	31	42	40	N/A	N/A
D (evening)	41	50	42	51	45	6	N/A
D (nighttime)	39	50	42	50	44	5	N/A
E (evening)	41	40	32	44	42	N/A	N/A
E (nighttime)	39	40	32	43	40	N/A	N/A
F (evening)	41	35	27	42	41	N/A	N/A
F (nighttime)	39	35	27	40	39	N/A	N/A

Notes:

dB = decibels; dBA = A-weighted decibels; L_{eq} = equivalent sound level; N/A = not applicable; **Bold** values indicate that the increase over the existing ambient sound level is predicted to exceed interior noise level of 45 dBA.

¹ Figure 4.3.1 shows the locations of the noise-sensitive receptors.

² Based on outdoor ambient values from Table 4.3.3, assuming an exterior-to-interior noise level reduction of 25 dBA consistent with Federal Highway Administration, *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, 2011.

Source: AECOM, *10 South Van Ness Avenue Mixed-use Project Final Noise Technical Report*, January 2018, revised September 2018.

Construction-Related Traffic Noise

With respect to temporary increases in roadway traffic volumes due to construction activities for the proposed project or variant, the combination of haul trips and construction worker trips to and from the site construction traffic would range from as few as 48 round trips (96 one-way trips) per day to as many as 500 round trips (1,000 one-way trips) per day during peak construction periods. At this quantity, the increase in local roadway traffic volumes from construction activities at the eight study intersections shown in Table 4.3.14, p. 4.3.34, would be no greater than about 50 percent, representing less than a 2-dBA increase in traffic noise. An increase of less than 2 dBA would be an imperceptible change in noise levels; therefore, construction traffic noise impacts would be less than significant.

Impact NO-2: Operation of the proposed project or variant would generate noise levels in excess of standards or result in substantial temporary increases in ambient noise levels, above levels existing without the project. (*Less than Significant with Mitigation*)

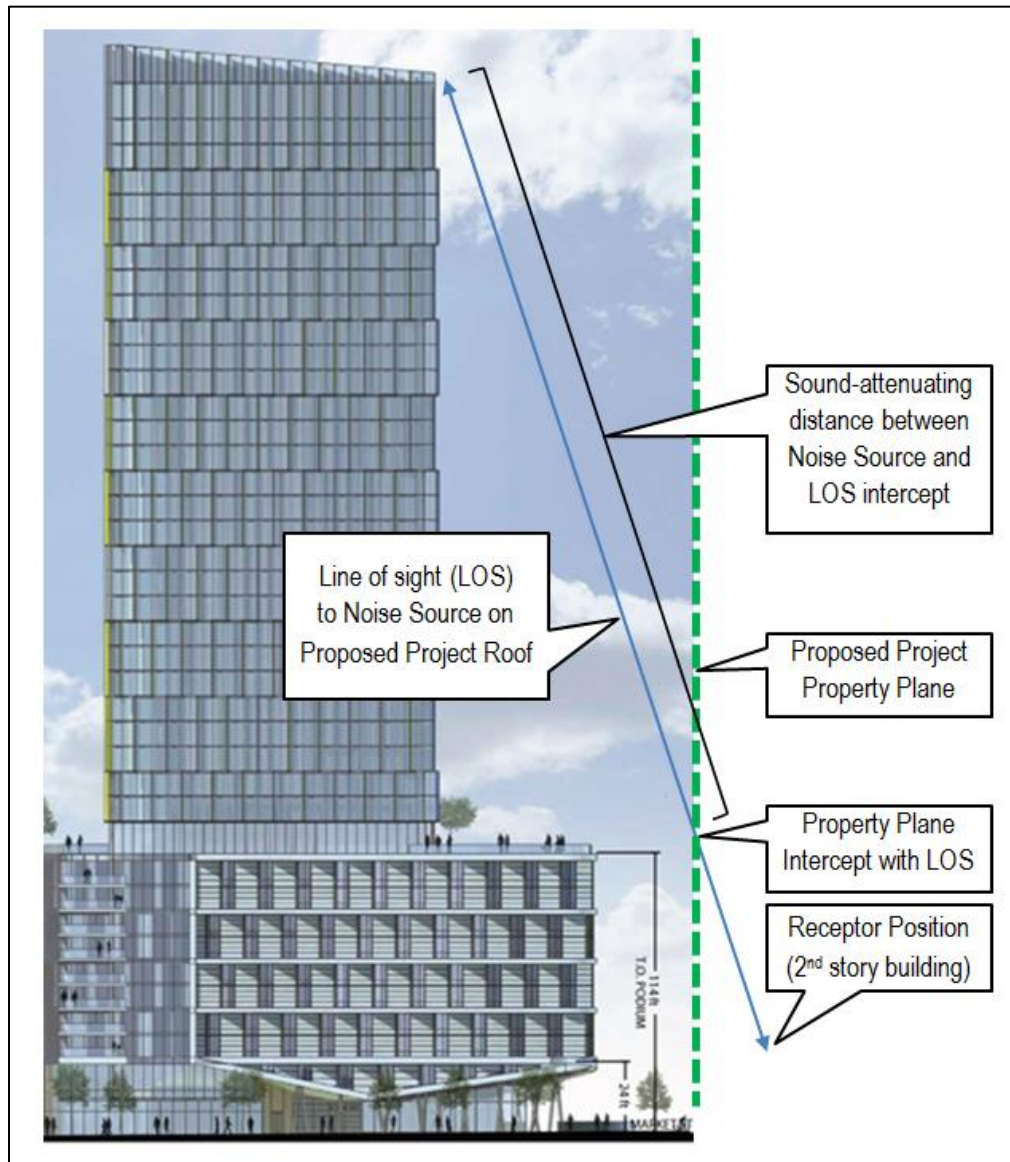
As required in section 2909(a)(1) of the San Francisco Noise Ordinance, noise from stationary sources (fixed noise sources) may not exceed ambient noise levels at the edge of the project site by 5 dBA for fixed mechanical equipment associated with residential land uses. In addition, pursuant to section 2909(d), no fixed-source noise may cause the noise level inside the sleeping or living area of a residential property to exceed 45 dBA between 10 p.m. and 7 a.m. or 55 dBA between 7 p.m. and 10 p.m.

Trash collection and waste disposal noise is governed separately in Section 2904 of the noise ordinance. That section prohibits unnecessary noise by persons engaged in waste removal, collection, or disposal activities in general, and specifies that related mechanical equipment shall not be operated in such a way as to create mechanical or hydraulic noise exceeding 75 dBA at a distance of 50 feet.

Onsite Stationary Operational Noise

The proposed project or variant would include onsite stationary sources consisting of HVAC equipment, a loading dock, a standby generator, and a trash compactor near existing sensitive uses. The HVAC mechanical equipment would be located on the rooftop, and the loading dock, standby generator, and trash compactor would be located in the basement.

Noise from rooftop HVAC would need to travel at least 65 feet in the horizontal plane to reach the nearest noise-sensitive receptor, location D shown in Figure 4.3.1 (20 12th Street, the Civic Center Hotel). This sound propagation distance would be increased substantially because of the height of the source with respect to the receiver height, as shown in **Figure 4.3.2: Rooftop Noise Travel to Nearest Noise-Sensitive Receptor** by a sample line-of-sight illustration (using the proposed project for illustrative purposes). While all building mechanical equipment would be designed with appropriate noise-control devices, such as sound-absorptive equipment interior linings, HVAC duct sound attenuators, acoustical louvers, and sound screen/parapet walls, to comply with the City's Noise Control Ordinance, the HVAC equipment has not yet been selected and its precise placement on the roof of the proposed project or variant has not been established; therefore it is not possible to provide a project-specific analysis to confirm that the project would comply with the Noise Ordinance. Furthermore, because the proposed project is required to comply with Health Code article 38, which requires the project's residential units to be equipped with Minimum Efficiency Reporting Value (MERV) 13 filters, the project is likely to require a substantial HVAC system; one that is larger than what would typically be required for a project of this size that is not subject to Health Code article 38. Therefore, the impact is determined to be significant. **Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy**, establishes a performance standard that when met would result in compliance with the Noise Ordinance and thus reduce the impact to a less-than-significant level.



Source: City and County of San Francisco, *10 South Van Ness Avenue Mixed-use Project Noise Technical Report*, prepared by AECOM in 2017.

Figure 4.3.2: Rooftop Noise Travel to Nearest Noise-Sensitive Receptor

Loading dock and trash compactor operations would generate noise levels of approximately 71 dBA L_{eq} and 65 dBA L_{eq} , respectively, at a distance of 50 feet.²² The stationary noise sources in the basement would be shielded from nearby noise-sensitive land uses by the building structure. In addition, the design and placement of the loading dock and trash compactor would include barriers and/or shielding as required to meet the limit of 75 dBA at a distance of 50 feet, established by section 2904 of the Noise Ordinance. Therefore, loading and trash compactor operations would comply with the noise ordinance and would not cause significant noise impacts at the nearest sensitive receptors.

Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy

After completing installation of the HVAC equipment but before receipt of any Certificate of Occupancy, the project sponsor shall conduct noise measurements to ensure that the noise generated by stationary equipment complies with section 2909 (a) and (d) of the San Francisco Noise Ordinance.

The noise measurements shall be conducted by persons qualified in acoustical analysis and/or engineering. The measurements shall demonstrate with reasonable certainty that the project's stationary mechanical equipment will not do either of the following:

- (a) Cause the noise level measured inside any sleeping or living room in a dwelling unit on residential property to exceed 45 dBA with windows open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed
- (b) Result in an increase in ambient noise levels of 5 dBA or more at the property plane

On completion of such testing, the acoustical consultant/acoustical engineer shall submit a memorandum summarizing test results to the San Francisco Planning Department. If measured noise levels are found to exceed these standards, the project sponsor shall be responsible for implementing stationary equipment noise-control measures or other acoustical upgrades such as additional noise insulation in mechanical rooms, until similar measurements of interior sound levels in sleeping or living rooms in residential units after installation of these upgrades demonstrate compliance with the noise ordinance standards above.

No Certificate of Occupancy shall be issued for any part of the structure until the standards in the Noise Ordinance are shown to be met.

Implementation of Mitigation Measure M-NO-2 would result in compliance with the noise ordinance requirements and would reduce the onsite stationary noise impact to a less-than-significant level.

²² Ibid.

Transportation Noise

Table 4.3.14: Predicted Changes in Traffic Noise Levels with the Proposed Project shows a comparison of existing and existing plus project-generated peak-hour traffic volumes for both the morning and afternoon peak periods at eight study intersections near the project site. The number of vehicle trips generated by the variant would be comparable to those generated by the proposed project (within 1 percent);²³ therefore, traffic noise was not calculated separately for the variant. The table also shows the change in outdoor ambient noise levels near these locations that are expected to result from changes in traffic volumes with trips added by the proposed project or variant. At all eight intersections studied, the increase in the outdoor ambient noise level is shown to be much less than 3 dBA. Therefore, the impact would be less than significant. No mitigation is necessary.

Table 4.3.14: Predicted Changes in Traffic Noise Levels with the Proposed Project

Studied Intersection	Existing Intersection Peak-Hour Traffic Volumes		Existing + Proposed Project Intersection Peak-Hour Traffic Volumes		Traffic Volume Change with the Proposed Project		Noise Level Change (dBA) with the Proposed Project	
	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
Market Street/South Van Ness Avenue/Oak Street	3,705	3,906	3,781	4,084	76	178	0.09	0.19
Market Street/12th Street/Page Street/Franklin Street	1,921	2,254	2,231	2,644	310	390	0.65	0.69
Mission Street/South Van Ness Avenue/Otis Street/12th Street	4,544	4,589	4,734	4,893	190	304	0.18	0.28
Mission Street/11th Street	1,447	1,769	1,501	1,860	54	91	0.16	0.22
Market Street/Gough Street/Haight Street	2,969	3,156	3,032	3,394	63	238	0.09	0.32
Otis Street/McCoppin Street/Mission Street/Gough Street	1,384	1,630	1,537	1,795	153	165	0.46	0.42
Howard Street/11th Street	1,032	1,375	1,040	1,405	8	30	0.03	0.09
Van Ness Avenue/Fell Street	4,392	4,073	4,445	4,142	53	69	0.05	0.07

Note:

According to the *10 South Van Ness Avenue Single Tower Project Variant—Draft Memorandum*, prepared by CHS Consulting, the variant would result in a number of vehicle trips similar to that of the proposed project (within 1 percent). Therefore, the noise levels resulting from traffic generated by the variant would be the same as or similar to those presented above.

Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-use Residential Project Transportation Impact Study*, December 2017; AECOM, *10 South Van Ness Avenue Mixed-Use Project Final Noise Technical Report*, January 2018, revised September 2018.

²³ CHS Consulting Group, *10 South Van Ness Avenue Mixed-use Project Transportation Impact Study*, December 2017, Appendix A, p. 1 of 12.

Impact NO-3: The proposed project or variant would not generate or result in exposure of persons to excessive groundborne vibration. (*Less than Significant*)

Construction Vibration

Sleep Disturbance

The results from vibration can range from no perceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, to the risk of varying degrees of building damage or human annoyance at the highest levels. Sensitive receptors in the project area are occupants of buildings surrounding the project site. The FTA guidance sets vibration limits for human annoyance at 80 VdB. An analysis was conducted of vibration effects during construction of the proposed project or variant during four of the five construction phases (Phase 5, interior finishing, would not result in noticeable vibrations at off-site locations) at the six nearest sensitive residential receptors. As shown in Table 4.3.15, the FTA human annoyance limit of 80 VdB would not be exceeded at any of the sensitive receptor locations either during the daytime or during nighttime construction and therefore would not result in sleep disturbance.

Building Damage

Table 4.3.15: Predicted Construction Vibration Levels at the Nearest Noise-Sensitive Receptors shows the predicted construction vibration levels associated with either the proposed project or the variant at the four nearest noise-sensitive receptors for each construction phase studied.

Of the noise-sensitive receptors listed in Table 4.3.15, four have been identified as historic resources by the San Francisco Planning Department: A (20 Franklin Street), B (Conservatory of Music), C (41 Franklin Street), and D (20 12th Street). The planning department has also identified 42–50 12th Street and 68 12th Street as historic resources. Historic buildings may be sensitive to vibration, depending on the building construction. Because 42-50 and 68 12th Street lie south of noise-sensitive receptor D (20 12th Street) at approximately the same distance from the project site, the vibration level at location D is assumed to be representative of the vibration levels experienced at these two neighboring historic properties. The clock tower that has been preserved as part of the project at 1500 Mission Street is located across South Van Ness Avenue from the project site (more than 200 feet to the east) and also is considered to be a historic resource. The vibration level at 1500 Mission Street is anticipated to be between the levels experienced at noise-sensitive receptors D and A.

Table 4.3.15: Predicted Construction Vibration Levels at the Nearest Noise-Sensitive Receptors

Noise-Sensitive Receiver Location (see Figure 4.3.1)	Street Address	Approximate Distance from Construction Activity to Receiver (feet)	Predicted PPV (in/sec) and Lv (VdB) per Anticipated Construction Phase			
			Demolition (large bulldozer)	Excavation (loaded truck)	Foundation (caisson drilling)	Superstructure (loaded truck)
A	20 and 23 Franklin Street	250	0.003 in/sec 57 VdB	0.002 in/sec 56 VdB	0.003 in/sec 57 VdB	0.002 in/sec 56 VdB
B	50 Oak Street	250	0.003 in/sec 57 VdB	0.002 in/sec 56 VdB	0.003 in/sec 57 VdB	0.002 in/sec 56 VdB
C	41 Franklin Street	300	0.002 in/sec 55 VdB	0.002 in/sec 54 VdB	0.002 in/sec 55 VdB	0.002 in/sec 54 VdB
D	20 12th Street	65 ^{See Note A}	0.021 in/sec 75 VdB	0.018 in/sec 74 VdB	0.021 in/sec 75 VdB	0.018 in/sec 74 VdB
E	1600 Market Street	260	0.003 in/sec 56 VdB	0.002 in/sec 55 VdB	0.003 in/sec 56 VdB	0.002 in/sec 55 VdB
F	150 Oak Street	500	0.001 in/sec 48 VdB	0.001 in/sec 47 VdB	0.001 in/sec 48 VdB	0.001 in/sec 47 VdB

Notes:

in/sec = inch(es) per second; Lv = vibration level; PPV = peak particle velocity; VdB = vibration decibel(s) or vibration velocity level.

Note A: Installation of the Muni elevator could require excavation that could occur as close as 40 feet from 20 12th Street. At a reference distance of 25 feet, the PPV value for a large bulldozer or caisson drilling would be 0.089 PPV and 0.076 PPV for a loaded truck. *Source:* Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment*, 2006, Table 12-2: Vibration Source Levels for Construction Equipment.
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

Source: AECOM, *10 South Van Ness Avenue Mixed-use Project Noise Technical Report*, January 2018, revised September 2018.

None of the predicted, construction-related vibration levels listed in Table 4.3.15 would exceed the building damage risk threshold of 0.12 in/sec for the most sensitive of buildings, based on FTA guidance. Based on these estimates, the construction vibration impact on existing buildings and noise-sensitive receptors would be less than significant.

Bay Area Rapid Transit (BART) structures underlie the project site. These structures are constructed of reinforced concrete, and thus would have a corresponding vibration damage risk threshold of 0.50 in/sec PPV (Table 4.3.6). The BART structures are not expected to be affected by construction vibration for the following reasons:

- Reference vibration levels for representative equipment and vehicles used in construction of the proposed project or variant would not exceed 0.09 in/sec PPV at a reference distance of 25 feet. Assuming that vibration would propagate hemispherically close to the source and in a manner similar to propagation near the surface, the distance at which the resulting construction vibration would approach the aforementioned applicable damage risk threshold would be 8 feet.

- Blasting and pile driving, considered generators of high levels of transient vibration, would not occur as part of construction of the proposed project or variant.

BART requires that structures over or adjacent to the BART subway structures provide for a minimum clearance between them of at least 7.5 feet, with a minimum cover of 8 feet wherever feasible.²⁴ BART requires that design and construction documents be submitted for review and approval, that dewatering monitoring and recharging plans be submitted if applicable, and that steel-lined BART tunnels be monitored for vibration effects (movement and deformation) during construction. Based on these requirements, the construction vibration impact on underlying BART structures would be less than significant.

Operational Vibration

Operation of the building(s) and mechanical systems under either the proposed project or variant would be unlikely to create sources of enduring vibration perceptible to noise- and vibration-sensitive receptors in the surrounding community. This would include users of the project and the surrounding buildings. Undue vibration from such stationary operating equipment typically is a symptom of rotational imbalance that requires service and correction. Anticipated typical sources of potential vibration (e.g., fans, pumps, motors, and compressors in HVAC systems) would be designed, installed, and maintained to be well balanced and produce minimal vibration levels, unlikely to be perceived beyond the project site. Therefore, the operational vibration impact on existing noise-sensitive receptors, including both people and buildings, would be less than significant, and no mitigation is necessary.

Cumulative Impacts

The geographic extent of the analysis of cumulative projects is within 1,500 feet of the project site for traffic-generated noise and within 900 feet for construction noise. For the cumulative analysis, reasonably foreseeable future projects in the project area were included in the evaluation in conjunction with the proposed project (see Section 4.0 for a discussion of reasonably foreseeable projects).

Impact C-NO-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative construction noise. (*Less than Significant with Mitigation*)

Construction noise is a localized impact that reduces as distance from the noise source increases. Intervening features (e.g., buildings) increase noise attenuation with distance by providing barriers to sound wave propagation. Construction activities for the proposed project or variant could coincide with similar activities for private development projects, municipal street

²⁴ Langan Engineering and Environmental Services, *Geotechnical Investigation, 10 South Van Ness Avenue, San Francisco, California*, March 2017, Appendix F.

improvements, and infrastructure maintenance and replacements. Nearby developments that may be under construction during construction of some portion of the proposed project or variant include One Oak Street, 1500 Mission Street, 1546–1564 Market Street, 30 Otis Street, 42 Otis Street, 1629 Market Street, and the Van Ness Bus Rapid Transit (BRT) project. Therefore, noise-sensitive receptors near the project site could be exposed to these concurrent construction activities and could experience temporary increases in outdoor ambient sound levels. Construction noise from projects further from the project site would attenuate substantially due to distance and intervening structures and would not contribute to cumulative construction noise.

All project-related construction activity in the City would be required to comply with the San Francisco Noise Ordinance, which prohibits construction activities between 8 p.m. and 7 a.m. without a special nighttime noise permit, and limits noise from any individual piece of construction equipment, except impact tools approved by San Francisco Public Works Department or Department of Building Inspection, to 80 dBA at 100 feet. As explained above in the Fundamentals of Noise (pp. 4.3.4–4.3.5), multiple noise sources when added together typically increase the overall noise level by about 3 decibels or less unless the difference in two pieces of equipment is greater than 10 decibels. In addition, noise from a single source is reduced by distance and by intervening structures.

Construction schedules for the cumulative projects listed above could change once construction of the proposed project or variant is underway. Therefore, it is difficult to predict whether construction activities associated with nearby projects would overlap with that of the proposed project or variant. However, based on the number of projects in the immediate vicinity of the project site, it is possible that construction activities from cumulative projects could overlap with the proposed project's construction activities, increasing the severity of construction noise impacts. Based on all of the above, construction of the proposed project in combination with that of nearby projects could combine to result in a significant cumulative construction noise impact. Based on the noise levels predicted for some of the proposed project's construction activities, the proposed project or variant would contribute considerably to the significant cumulative noise impacts.

However, with implementation of Mitigation Measure M-NO-1, the proposed project's contribution to significant cumulative construction noise impacts would not be cumulatively considerable. Therefore, cumulative construction noise impacts would be less than significant with mitigation.

Impact C-NO-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact related to vibration. (*Less than Significant*)

Similar to noise, vibration impacts are localized because vibration attenuates rapidly from the source. Because of the principles of groundborne vibration propagation, potential significant

vibration impacts attributable to construction activities generally would be limited to buildings and structures close to the project site.²⁵ Therefore, unless other projects would be constructed concurrently with the proposed project or variant and would be as close as the proposed project to the same noise-sensitive receptors or the same historic buildings (which are considered sensitive to vibration), their vibration impacts would not combine to produce a cumulative impact. The reasonably foreseeable projects that are close enough to the project site to potentially contribute to cumulative vibration impacts during construction are 1629 Market Street, 30 Otis Street and 42 Otis Street.

The closest sensitive receptor to the project site is the Civic Center Hotel at 20 12th Street (about 65 feet from the project site, and about 40 feet from the nearest construction activities), which is also the closest historic structure. The proposed project would result in a maximum vibration level of 0.021 in/sec PPV during construction which would be substantially below the building damage risk threshold of 0.12 in/sec based on FTA guidance. Installation of the Muni elevator could require excavation somewhat closer to the building at 20 12th Street; however, the PPV values for typical equipment would range from 0.076 to 0.089 in/sec PPV at 25 feet reference distance and would continue to be substantially below the building damage risk threshold. Therefore, the proposed project would not have the potential to result in building damage to the Civic Center Hotel.

Since the proposed project would not result in vibration-related damage to adjacent structures during construction activities, and because vibration is localized, attenuating rapidly from the source, project construction activities would not have the potential to combine with construction activities from cumulative projects to result in cumulative vibration effects that would damage nearby buildings. Therefore, cumulative vibration effects to the Civic Center Hotel or other nearby historic buildings would be less than significant.

Impact C-NO-3: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to significant cumulative impacts related to operational noise and vibration. (*Less than Significant*)

Operational Noise

To determine the cumulative noise level, operational traffic noise from the proposed project was evaluated based on information from the 10 South Van Ness Avenue Transportation Impact Study (TIS). The TIS 2040 cumulative analysis used the results of a computer model run of the San Francisco County Transportation Authority's SF CHAMP travel demand forecasting model that accounts for reasonably foreseeable development projects near the project site, including the One Oak Street, 1500 Mission Street, 1629 Market Street, and 30 Otis Street projects, as well as

²⁵ AECOM, *10 South Van Ness Avenue Mixed-Use Project Final Noise Technical Report*, January 2018, revised September 2018, p. 6.

forecasted background growth and approved transportation projects such as Muni Forward, the San Francisco Bicycle Plan, the central subway project and the Van Ness BRT project. Planned roadway and transit changes associated with the Better Market Streets Plan and other transportation-related projects were reviewed and used to adjust the CHAMP model 2040 results for intersections analyzed in the 10 South Van Ness project's TIS.²⁶

Because of the additive properties of noise, traffic would have to double in the future, to increase traffic-related noise by 3 dBA, the level perceptible to most people. The predicted increase in roadway traffic under 2040 cumulative conditions, which accounts for background growth and anticipated development, would not double existing traffic volumes along any transportation corridors in the project vicinity. **Table 4.3.16: Predicted Changes in Traffic Noise Levels under Cumulative Conditions** shows examples of these predicted changes in traffic-dominated, outdoor ambient noise levels at four of the study intersections. As shown, cumulative traffic would increase noise levels by less than 2 dBA at all four intersections, which would not be perceptible to the human ear.

The number of vehicle trips generated by the variant would be comparable to those generated by the proposed project (within 1 percent).²⁷ Therefore, the cumulative traffic noise impacts for the variant would be similar to those shown in Table 4.3.16.

Table 4.3.16: Predicted Changes in Traffic Noise Levels under Cumulative Conditions

Study Intersection	Existing Intersection Peak-Hour ¹ Traffic Volumes		2040 Cumulative Peak-Hour ¹ Traffic Volumes		Traffic Volume Change (2040–Existing)		Noise Level (dBA) Change	
	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
Market Street/South Van Ness Avenue/Oak Street	3,705	3,906	3,858	4,141	153	235	0.18	0.25
Market Street/12th Street/Page Street/Franklin Street	1,921	2,254	n/a	2,810	n/a	556	n/a	0.96
Mission Street/South Van Ness Avenue/Otis Street/12th Street	4,544	4,589	5,550	5,808	1,006	1,219	0.87	1.02
Mission Street/11th Street	1,447	1,769	n/a	2,609	n/a	840	n/a	1.69

Notes:

dBA = A-weighted decibels

1. CHS Consulting Group, *10 South Van Ness Avenue Mixed-use Project Transportation Impact Study*, December 2017, Figure 8, p. 23, and Figure 16, p. 87.

Source: AECOM, *10 South Van Ness Avenue Mixed-use Project Final Noise Technical Report*, January 2018 revised September 2018, Table 9, p. 39.

²⁶ CHS Consulting Group, *10 South Van Ness Avenue Mixed-use Project Transportation Impact Study*, December 2017, pp. 74-76.

²⁷ *Ibid.*, Appendix A, p. 1 of 12.

In addition, other planned projects (e.g., the Better Market Street project, Muni Forward and the Van Ness BRT project) are expected to result in reduced vehicle trips associated with future development near the project site through reduced roadway capacity for single occupancy vehicles, improved conditions for pedestrians and bicyclists, and increased transit service.

Reductions in passenger vehicle volumes would reduce traffic noise levels as well (see Impact NO-1 for a discussion of the relationship between traffic volumes and operational noise impacts). Therefore, vehicle trips generated by the proposed project or variant, combined with vehicle trips associated with future development in the project area, would not be expected to double the traffic volumes and cumulative traffic noise impacts would be less than significant.

Aside from traffic noise, operational noise from future land use development projects likely would be generated by stationary noise sources, such as mechanical equipment. However, that mechanical equipment would be required to comply with the San Francisco Noise Ordinance, as would the proposed project or variant's mechanical equipment. In addition, beyond the project site boundaries, noise from the proposed project or variant's mechanical equipment generally would not be audibly distinct from other acoustical contributors to the outdoor ambient sound environment. Thus, increases in ambient noise levels from operation of mechanical equipment at individual development projects would not combine to create a significant cumulative noise impact, and the cumulative impact would be less than significant.

Operational Vibration

As described above, both the proposed project and variant would include typical residential and commercial-grade HVAC equipment, which would produce limited vibration associated with their normal operational modes. Because of the principles of groundborne vibration propagation, including the fact that vibration diminishes rapidly with distance, the proposed project's limited vibration associated with normal operating modes of HVAC equipment would not combine with other sources of operational vibration to result in cumulative vibration impacts. Therefore, the cumulative impact related to operational vibration would be less than significant.

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4.4 AIR QUALITY

Section 4.4, Air Quality, evaluates the impacts related to air quality and the health risks and hazards that could result from short-term construction and long-term operation of the proposed project and variant. The analysis identifies both project-level and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid the identified significant impacts. The information and analysis in this section is based primarily on the *10 South Van Ness Project Final Criteria Air Pollutant Analysis*¹ and the *10 South Van Ness Final Health Risk Assessment*.²

Summary of Market and Octavia Neighborhood Plan Final EIR Air Quality Section

Market and Octavia Neighborhood Plan Final EIR Setting

The Market and Octavia Neighborhood Plan Final EIR included ambient air quality standards and San Francisco Bay Area (Bay Area) attainment status for various pollutants including ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM),³ and visibility-reducing particles. The nearest permanent air quality monitoring station to the project area is in San Francisco on Arkansas Street. This station monitors ozone, CO, NO₂, SO₂, PM₁₀, and PM_{2.5}.

Market and Octavia Neighborhood Plan Final EIR Impacts and Mitigation Measures

As stated in the Market and Octavia Neighborhood Plan Final EIR, air quality impact assessments were done by estimating concentrations of pollutants for the 2025 Without Plan and 2025 With Plan scenarios. The Final EIR found that with adherence to the San Francisco General Plan (general plan), implementing the Market & Octavia Area Plan would have no significant air quality or odor impacts on sensitive receptors. The plan projected an increase in residential density, which could increase traffic congestion and increase CO concentrations at intersections. However, the predicted CO concentrations would be below both the state and national average eight-hour standard and the average one-hour standard mostly because vehicular emissions would be lower in future years because of various federal and state emissions reduction programs.

¹ AECOM, *10 South Van Ness Project Final Criteria Air Pollutant Analysis*, January 2018 (hereinafter “AECOM, *Criteria Air Pollutant Analysis*”).

² AECOM, *10 South Van Ness Final Health Risk Assessment*, January 2018, revised September 2018 (hereinafter “AECOM, *HRA*”).

³ Particulate matter (PM) is subdivided into two classes based on particle size: PM equal to or less than 10 microns in diameter (PM₁₀) and PM equal to or less than 2.5 microns in diameter (PM_{2.5}).

Therefore, the Market & Octavia Area Plan would not have a significant impact on CO concentrations.

The Market and Octavia Neighborhood Plan Final EIR found that dust emissions and emissions from construction equipment would result in a potentially significant air quality impact. With Mitigation Measure 5.8.A: Construction Mitigation Measure for Particulate Emissions identified in the EIR, the impact would be reduced to a less-than-significant level. The impact of short-term exhaust emissions from construction equipment would also be potentially significant if not mitigated. Implementing Mitigation Measure 5.8.B: Construction Mitigation Measure for Short-Term Exhaust Emissions would reduce the impact to a less-than-significant level. Because the plan would be consistent with the Clean Air Plan for development in San Francisco, there would be no significant cumulative air quality impacts.

Environmental Setting

Regional Air Quality

CLIMATE AND METEOROLOGY

The project site and vicinity are within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD or air district). The air district is the regional agency with jurisdiction to regulate air quality within the nine-county San Francisco Bay Area Air Basin (SFBAAB), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties, and portions of Sonoma and Solano counties.

The Bay Area has a Mediterranean climate characterized by mild, dry summers and mild, moderately wet winters; moderate daytime onshore breezes; and moderate humidity. The project site is located in the Peninsula region of the Bay Area, which extends from northwest of San Jose to the Golden Gate Bridge. The Santa Cruz Mountains run up the center of the Peninsula, with elevations exceeding 2,000 feet at the southern end, decreasing to 500 feet in South San Francisco. Coastal towns experience a high incidence of cool, foggy weather in the summer. Cities in the southeastern Peninsula area experience warmer temperatures and fewer foggy days because the marine layer is blocked by the ridgeline to the west. San Francisco lies at the northern end of the Peninsula. Because most of San Francisco's topography is below 200 feet, marine air is able to flow easily across most of the City, making its climate cool and windy.

The blocking effect of the Santa Cruz Mountains results in variations in summertime maximum temperatures in different parts of the Peninsula. For example, in coastal areas and in San Francisco, the mean maximum summer temperatures are in the mid 60s, while in Redwood City the mean maximum summer temperatures are in the low 80s. Mean minimum temperatures during the winter months are in the high 30s to low 40s on the eastern side of the Peninsula and in the low 40s along the coast.

Two important gaps in the Santa Cruz Mountains occur on the Peninsula. The larger of the two is the San Bruno Gap, extending from Fort Funston on the Pacific Ocean to San Francisco International Airport on San Francisco Bay. Because the gap is oriented in the same northwest-to-southeast direction as the prevailing winds, and because the elevations along the gap are less than 200 feet, marine air can easily penetrate to the bay and beyond. The other gap is the Crystal Springs Gap, between Half Moon Bay and San Carlos. As the sea breeze strengthens on summer afternoons, the gap permits maritime air to pass across the mountains, and its cooling effect is commonly seen from San Mateo to Redwood City.

Annual average wind speeds range from 5 to 10 miles per hour (mph) throughout the Peninsula, with higher wind speeds usually found along the coast. Winds on the eastern side of the Peninsula are often high in certain areas, such as near the San Bruno Gap and the Crystal Springs Gap.

The prevailing winds along the Peninsula's coast are from the west, although individual sites can show substantial differences. For example, Fort Funston in western San Francisco shows a southwest wind pattern while Pillar Point in San Mateo County shows a northwest wind pattern. On the east side of the mountains, winds are generally from the west, although wind patterns in this area are often influenced greatly by local topographic features.

Air pollution potential along the Peninsula is highest in the southeastern portion. This is the area most protected from the high winds and fog of the marine layer. Pollutant transport from upwind sites is common. In the southeastern portion of the Peninsula, air pollutant emissions are higher than in the rest of the Peninsula because of emissions from motor vehicle traffic and stationary sources. At the northern end of the Peninsula in San Francisco, pollutant emissions are high primarily because of motor vehicle congestion.

AIR POLLUTANT STANDARDS AND ATTAINMENT DESIGNATIONS

Air pollutant standards have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) for the following six criteria air pollutants that affect ambient air quality: ozone, CO, PM, NO₂, SO₂, and lead. These air pollutants are called "criteria air pollutants" because they are regulated by specific public health- and welfare-based criteria. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. **Table 4.4.1: Federal and State Air Quality Standards in the San Francisco Bay Area Air Basin** presents the national ambient air quality standards (NAAQS or national standards) and California ambient air quality standards (CAAQS or California standards).

Table 4.4.1: Federal and State Air Quality Standards in the San Francisco Bay Area Air Basin

Pollutant	Averaging Time	California Standards		National Standards	
Ozone	1 Hour	0.090 ppm (180 µg/m ³)	Nonattainment	–	N/A
	8 Hours	0.070 ppm (137 µg/m ³)	Nonattainment	0.070 ppm (137 µg/m ³)	Nonattainment
Respirable Particulate Matter (PM ₁₀)	24 Hours	50 µg/m ³	Nonattainment	150 µg/m ³	Unclassified
	AAM	20 µg/m ³	Nonattainment	–	N/A
Fine Particulate Matter (PM _{2.5})	24 Hours	–	N/A	35 µg/m ³	Nonattainment
	AAM	12 µg/m ³	Nonattainment	12.0 µg/m ³	Nonattainment
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂)	AAM	0.030 ppm (57 µg/m ³)	Attainment	0.053 ppm (100 µg/m ³)	Attainment
	1 Hour	0.18 ppm (339 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	Attainment
Sulfur Dioxide (SO ₂)	24 Hours	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	Attainment
	AAM	–	Attainment	0.030 ppm (80 µg/m ³)	Attainment
Lead (Pb)	30-Day Average	1.5 µg/m ³	Attainment	–	Attainment
	Calendar Quarter	–	Attainment	1.5 µg/m ³	Attainment
	Rolling 3-Month Average ¹⁴	–	Attainment	0.15 µg/m ³	Attainment
Visibility-Reducing Particles	8 Hours	See note 1	N/A	No national standards ²	
Sulfates	24 Hours	25 µg/m ³	Attainment		
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride (C ₂ H ₃ Cl)	24 Hours	0.01 ppm (26 µg/m ³)	Unclassified		

Notes: µg/m³ = micrograms per cubic meter; AAM = annual arithmetic mean; mg/m³ = milligrams per cubic meter; ppm = parts per million

¹ In 1989, the California Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

² National ambient air quality standards have not been established for visibility-reducing particles, sulfates, hydrogen sulfide, or vinyl chloride.

Source: California Air Resources Board, Ambient Air Quality Standards, May 4, 2016, <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed in April 2018.

Both EPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. “Attainment” status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. “Nonattainment” refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. “Unclassified” refers to regions where there is not enough data to determine the region’s attainment status for a specified criteria air pollutant.

As shown in Table 4.4.1, the SFBAAB is designated as either in attainment or unclassified for most criteria pollutants with the exception of ozone, PM_{2.5}, and PM₁₀. These three pollutants are designated as nonattainment under either the state or federal standards.

Ambient air pollutant concentrations in the SFBAAB are measured at air quality monitoring stations operated by the ARB and BAAQMD. In general, the SFBAAB experiences low concentrations of most pollutants compared to federal or state standards. **Table 4.4.2: Summary of Criteria Pollutant Monitoring Data (2013–2017)** presents a five-year summary of the highest annual concentrations of criteria air pollutants collected at the air quality monitoring station at Arkansas and 16th streets in San Francisco’s lower Potrero Hill area. This is the closest monitoring station to the project site (approximately 1.25 miles southeast of the project site) and best represents available air quality data.

Air Pollutant Types, Sources, and Effects

As discussed above, air pollutants are termed criteria air pollutants because they are regulated by specific public health– and welfare-based criteria. The following discussion explains the types, sources, and effects of criteria air pollutants.

CRITERIA AIR POLLUTANTS

Ozone, or smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. Ozone formation is greatest on warm, windless, sunny days. The main sources of NO_x and ROG, often referred to as ozone precursors, are combustion processes (including motor vehicle engines), the evaporation of solvents, paints, and fuels, and biogenic sources. Automobiles are the single largest source of ozone precursors in the SFBAAB. Tailpipe emissions of ROG are highest during cold starts, hard acceleration, stop-and-go conditions, and slow speeds. They decline as speeds increase up to about 50 mph, then increase again at high speeds and high engine loads. ROG emissions associated with evaporation of unburned fuel depend on vehicle and ambient temperature cycles. NO_x emissions exhibit a different curve; emissions decrease as the vehicle approaches 30 mph and then begin to increase with increasing speeds. Ozone levels usually build up during the day, peaking in the afternoon hours.

Table 4.4.2: Summary of Criteria Pollutant Monitoring Data (2013–2017)

Air Pollutant	Averaging Time	Item	Applicable Standard	2013	2014	2015	2016	2017
Ozone	1 Hour	Max 1 Hour (ppb)		69	79	85	70	87
		Days > State Standard	90ppb	0	0	0	0	0
	8 Hour	Max 8 Hour (ppb)		59	69	67	57	54
		Days > State Standard	70 ppb	0	0	0	0	0
		Days > National Standard	70 ppb	0	0	0	0	0
		3-Year Average		46	47	48	49	47
Carbon monoxide	1 Hour	Max 1 Hour (ppm)	20 ppm	4.8	1.6	1.8	1.7	2.5
	8 Hour	Max 8 Hour (ppm)		1.4	1.2	1.3	1.1	1.4
		Days > State Standard	9 ppm	0	0	0	0	0
		Days > National Standard	9 ppm	0	0	0	0	0
Nitrogen dioxide	Annual	Annual Average (ppb)		14	12	12	11	11
	1 Hour	Max 1 Hour (ppb)		73	84	71	58	73
		Days > State Standard	180 ppb	0	0	0	0	0
		Days > National Standard	100 ppb	0	0	0	0	0
Sulfur dioxide	1 Hour	Max 1 Hour (ppb)		–	–	–	–	–
		Days > National Standard		–	–	–	–	–
	24 Hour	Max 24 Hour (ppb)		–	–	–	–	–
		Days > State Standard		–	–	–	–	–
PM ₁₀	Annual	Annual Average (µg/m ³)		18.3	17.0	19.2	17.0	22.0
		Max 24 Hour (µg/m ³)	20 µg/m ³	44	36	47	29	77
	24 Hour	Days > State Standard	50 µg/m ³	0	0	0	0	2
		Days > National Standard	150µg/m ³	0	0	0	0	0
PM _{2.5}	Annual	Annual Average (µg/m ³)	12µg/m ³	10.1	7.7	8.9	7.5	9.7
		3-Year Average (µg/m ³)		9.3	8.6	10.5	7.6	8.3
	24 Hour	24 Hour (µg/m ³)	35 µg/m ³	48.5	33.2	35.4	19.6	49.9
		Estimated Days > National Standard	35 µg/m ³	2	0	0	0	7
		3-Year Average (µg/m ³)		25	23	25	22	27

Notes: > = exceed; µg/m³ = micrograms per cubic meter; – = insufficient data; National Standard = national ambient air quality standard; PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter; PM₁₀ = particulate matter equal to or less than 10 microns in diameter; ppb = parts per billion; ppm = parts per million; State Standard = California ambient air quality standard

Bold = exceeds standard

Source: Bay Area Air Quality Management District, Annual Bay Area Air Quality Summaries: 2013, 2014, 2015, 2016, and 2017, available on line at <http://www.baaqmd.gov/~media/files/communications-and-outreach/annual-bay-area-air-quality-summaries/pollsum2017-pdf.pdf?la=en>, similar URLs for earlier years, accessed June 2018.

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, it can aggravate existing respiratory diseases such as asthma, bronchitis and emphysema. Chronic exposure to high ozone levels can permanently damage lung tissue. Ozone can also damage plants and trees, and materials such as rubber and fabrics.

Table 4.4.2 shows that, according to published data, the standards for ozone (state one-hour standard of 90 parts per billion [ppb] and the state/federal eight-hour standard of 70 ppb) were not exceeded at the San Francisco – Arkansas Street monitoring station between 2013 and 2017. However, the air basin remains listed as nonattainment for ozone because of exceedances at other monitoring stations in the SFBAAB.

Particulate matter (PM₁₀ and PM_{2.5}) refers to a wide range of solid or liquid particles in the atmosphere, including smoke, dust, aerosols, and metallic oxides. Respirable particulate matter with an aerodynamic diameter of 10 microns or less is referred to as PM₁₀. PM_{2.5} includes a subgroup of finer particles that have an aerodynamic diameter of 2.5 microns or less. Some particulate matter, such as pollen, is naturally occurring. In the SFBAAB, most particulate matter is caused by combustion, factories, construction, grading, demolition, agricultural activities, and motor vehicles. Land use development projects typically result in particulate matter emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities.

Fugitive dust is PM₁₀ and PM_{2.5} suspended in the air by wind action and human activities. Fugitive dust particles are composed mainly of soil minerals (e.g., oxides of silicon, aluminum, calcium, and iron), but can also contain sea salt, pollen, spores, and tire particles. Because of their small size, PM₁₀ and PM_{2.5} can remain airborne for weeks. Fugitive dust accounts for about 90 percent of all primary PM₁₀ emissions.⁴ PM₁₀ and PM_{2.5} pose health concerns because the PM can contain harmful substances that can deposit deep in the lungs when inhaled, causing respiratory illnesses and lung damage. In addition, fugitive dust can reduce visibility.

As shown in Table 4.4.2, the state 24-hour PM₁₀ standard of 50 micrograms per cubic meter (µg/m³) was exceeded up to 24 days in 2017 during the wildfires in counties north of San Francisco, when air quality reached unhealthy levels in these counties.⁵ While there have also been wildfires in counties north of San Francisco in 2018, the resulting poor air quality is considered an extraordinary condition that rarely occurs in the Bay Area. The state 24-hour PM_{2.5} standard was exceeded on 9 days between 2013 and 2017. The SFBAAB is designated as nonattainment for the state PM₁₀ and both the federal and state PM_{2.5} standards.

⁴ California Air Resources Board, Fugitive Dust Control Self-Inspection Handbook How to Control Dust and Reduce Air Pollution, 2007, https://www.arb.ca.gov/pm/fugitivedust_large.pdf, accessed May 2017.

⁵ PM₁₀ concentrations were sampled every twelfth day; therefore, actual days over the standard can be estimated to be 12 times the numbers listed in the table.

Nitrogen dioxide is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

In 2010, a new federal one-hour NO₂ standard was implemented. As shown in Table 4.4.2, the federal standard was not exceeded between 2013-2017.

Carbon monoxide is an odorless, colorless gas. It is formed by the incomplete combustion of fuels. The single largest source of CO in the SFBAAB is motor vehicles. Emissions are highest during cold starts, hard acceleration, stop-and-go driving, and when a vehicle is moving at low speeds.

When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease or anemia, as well as fetuses. Even healthy people exposed to high CO concentrations can experience headaches, dizziness, fatigue, unconsciousness, and even death.

As shown in Table 4.4.2, the applicable standards for CO (state one-hour standard of 20 ppm and the state/federal eight-hour standard of 9 ppm) were not exceeded between 2013 and 2017. The SFBAAB is classified as an attainment/maintenance area for both the state and federal CO standards.

Sulfur dioxide is a colorless acid gas with a pungent odor. SO₂ has the potential to damage materials and can have health effects at high concentrations. It is produced by the combustion of sulfur-containing fuels, such as oil, coal and diesel. SO₂ can irritate lung tissue and increase the risk of acute and chronic respiratory disease.

EPA has designated the SFBAAB as an attainment area for SO₂. In 2013, EPA established requirements for a monitoring network to measure SO₂ concentrations; however, no additional SO₂ monitors were required for the SFBAAB because the air basin had never been designated as nonattainment for SO₂.

Lead is a metal found naturally in the environment and in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers. In the early 1970s, EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline

was introduced for motor vehicles equipped with catalytic converters. EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

On October 15, 2008, EPA strengthened the national ambient air quality standard for lead by lowering it from $1.5\mu\text{g}/\text{m}^3$ to $0.15\mu\text{g}/\text{m}^3$. EPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas. Lead monitoring stations in the SFBAAB are located at the Palo Alto Airport, Reid-Hillview Airport (San Jose), and San Carlos Airport. Non-airport locations for lead monitoring are in Redwood City and San Jose. The SFBAAB is designated as an attainment area for lead.

TOXIC AIR CONTAMINANTS AND LOCAL HEALTH RISKS AND HAZARDS

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refers to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects.

Concentrations of TACs are also used as indicators of air quality conditions. Air pollutant human exposure standards are identified for many TACs, including the following common TACs relevant to development projects: particulate matter, fugitive dust, lead, and asbestos. These air pollutants are called TACs because they are air pollutants that may cause or contribute to an increase in mortality or serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health impact may pose a threat to public health even at low concentrations. TACs can cause long-term health effects (such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) or short-term acute effects (such as eye watering, respiratory irritation, runny nose, throat pain, or headaches).

TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to a particular TAC. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Cancer risk is typically expressed as excess cancer cases per million exposed individuals, typically over a lifetime exposure or other prolonged duration. For noncarcinogenic substances, there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels may vary depending on the specific pollutant.

Unlike criteria air pollutants, TACs do not have ambient air quality standards but are regulated by the air district using a risk-based approach to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health

exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.

Diesel particulate matter (diesel PM) is the solid material in diesel exhaust. Diesel PM was identified as a TAC by ARB in 1998.⁶ Federal and state efforts to reduce diesel PM emissions have focused on the use of improved fuels, adding particulate filters to engines, and requiring the production of new-technology engines that emit fewer exhaust particulates. PM_{2.5} poses an increased health risk because the particles can deposit deep in the lungs and contain substances that are particularly harmful to human health. Exposures to PM_{2.5} are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.⁷

ARB identifies substances as TACs as defined in California Health and Safety Code section 39655 and listed in Title 17, section 93000 of the California Code of Regulations, “Substances Identified As Toxic Air Contaminants.” ARB also collects ambient TAC emissions data at the San Francisco–Arkansas Street monitoring station. **Table 4.4.3: Carcinogenic Toxic Air Contaminants—Annual Average Ambient Concentrations at the San Francisco–Arkansas St. Monitoring Station (2017)** shows ambient concentrations of carcinogenic TACs measured at the San Francisco–Arkansas Street monitoring station and the estimated cancer risks from exposure to these substances.

When TAC measurements at the San Francisco–Arkansas Street monitoring station are compared to ambient concentrations of various TACs for the Bay Area as a whole, the estimated average lifetime cancer risk resulting from TAC concentrations monitored at the San Francisco – Arkansas Street station does not appear to be substantially greater or less than that for the Bay Area as whole.

Air Pollution Exposure Zone

The City and air district conducted a citywide health risk assessment based on an inventory and assessment of air pollution and exposures from mobile, stationary, and area sources in San Francisco to identify areas of the City most adversely affected by sources of TACs.

⁶ California Air Resources Board, “The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines,” fact sheet, October 1998.

⁷ San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 2008.

Table 4.4.3: Carcinogenic Toxic Air Contaminants—Annual Average Ambient Concentrations at the San Francisco–Arkansas St. Monitoring Station (2017)

Substance	Mean Concentration	Cancer Risk per Million ^a
Gaseous Toxic Air Contaminants (ppb)		
Acetaldehyde	0.69	10
Benzene	0.216	56
1,3-butadiene	0.036	41
Carbon tetrachloride	*	*
Chloroform	0.028	2
Para-dichlorobenzene	*	*
cis-1,3-dichloropropene	0.05	10
trans-1,3-dichloropropene	0.05	10
Ethyl benzene	0.11	3
Ethylene dibromide	*	*
Ethylene dichloride	*	*
Formaldehyde	1.64	35
Perchloroethylene	0.009	1
Methylene chloride	0.114	1
Methyl tertiary-butyl ether (MBTE)	*	*
Trichloroethylene	0.010	0.3
Polycyclic Aromatic Hydrocarbons (ng/m³)		
Benzo(a)pyrene	*	*
Benzo(b)fluoranthene	*	*
Benzo(k)fluoranthene	*	*
Dibenz(a,h)anthracene	*	*
Indeno(1,2,3-cd)pyrene	*	*
Particulate TACs (ng/m³)		
Arsenic	0.92	9
Beryllium	0.150	1
Cadmium	0.70	9
Lead	*	*
Nickel	3.2	2
Hexavalent chromium	*	*
Total Risk for All TACs		188

Notes:

ppb = parts per billion; TAC = toxic air contaminant; ng/m³ = nanograms per cubic meter; * indicates that insufficient or no data were available to determine the value.

a. The potential cancer risk estimates reflect the risk assessment methodology finalized by the Office of Environmental Health Hazard Assessment on March 6, 2015. Information on the agency's risk assessment methodology can be found at http://www.oehha.ca.gov/air/hot_spots/hotspots2015.html.

Source: ARB, Annual Toxics Summaries by Monitoring Site, 2017

Citywide air dispersion modeling was conducted using AERMOD⁸ to assess emissions from roadways, permitted stationary sources, port and maritime sources, and Caltrain. Emissions of diesel PM, PM_{2.5} (including brake and tire wear), organic gases, and other TACs from stationary sources were modeled on a 20-by-20-meter receptor grid over the entire City. The results represent existing exposure to PM_{2.5} concentrations and excess lifetime cancer risk across San Francisco. The procedures used to conduct the modeling are available in The San Francisco Community Risk Reduction Plan: Technical Support Documentation.⁹

The modeling results were used to identify areas of the City with poor air quality, identified as the Air Pollutant Exposure Zone (APEZ). The APEZ identifies areas that meet any of the criteria described below.

- **Excess cancer risk of 100 per 1 million persons.** This criterion is based on EPA guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale levels.¹⁰ As described by BAAQMD, EPA considers a cancer risk of 100 per million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking (54 *Federal Register* 38044, September 14, 1989), EPA states that it

...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately one in one million and (2) limiting to no higher than approximately one in ten thousand [100 in one million] the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.

The 100 per one million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on BAAQMD regional modeling.¹¹

⁸ AERMOD is the EPA’s recommended steady-state air dispersion plume model. Dispersion modeling uses mathematical formulations to characterize the atmospheric processes that disperse a pollutant emitted by a source. Based on emissions and meteorological inputs, a dispersion model can be used to predict concentrations at selected downwind receptor locations. For more information on AERMOD and to download the AERMOD Implementation Guide, see <https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models>, accessed September 24, 2018.

⁹ Bay Area Air Quality Management District, San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Community Risk Reduction Plan: Technical Support Documentation*, December 2012.

¹⁰ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, (hereinafter “BAAQMD Revised Draft Options and Justification Report, 2009”), p. 67. Available at <http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en>, accessed September 2018.

¹¹ BAAQMD, *Revised Draft Options and Justification Report*, 2009.

- **Fine particulate matter of 2.5 $\mu\text{g}/\text{m}^3$.** In April 2011, EPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*, “Particulate Matter Policy Assessment.”¹² In this document, EPA staff concludes that the then-current federal annual $\text{PM}_{2.5}$ standard of 15 $\mu\text{g}/\text{m}^3$ should be revised to a level within the range of 13 to 11 $\mu\text{g}/\text{m}^3$, with evidence strongly supporting a standard within the range of 12 to 11 $\mu\text{g}/\text{m}^3$. The APEZ for San Francisco¹³ is based on the health protective $\text{PM}_{2.5}$ standard of 11 $\mu\text{g}/\text{m}^3$, as supported by EPA’s Particulate Matter Policy Assessment, although lowered to 10 $\mu\text{g}/\text{m}^3$ to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.
- **Proximity to freeways.** According to ARB, studies have shown an association between the proximity of sensitive land uses to freeways/other major transportation thoroughfares and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses in close proximity to freeways/other major transportation thoroughfares increases both exposure to air pollution and the potential for adverse health effects. As evidence shows that sensitive uses in an area within a 500-foot buffer of any freeway are at an increased health risk from air pollution,¹⁴ lots that are within 500 feet of freeways are included in the APEZ. The project site is located in the APEZ.
- **Location in a health-vulnerable zip code.** In addition to the lots included in the APEZ, zip codes in the lowest 20 percent of Bay Area Health Vulnerability scores (zip codes 94102, 94103, 94105, 94124, and 94130) are identified as health-vulnerable zip codes. For health-vulnerable zip codes, the standard for being within the APEZ was lowered to an excess cancer risk from the contribution of emissions from all modeled sources greater than 90 per one million persons, and/or cumulative $\text{PM}_{2.5}$ concentrations greater than 9 $\mu\text{g}/\text{m}^3$. The project site is located in a health-vulnerable zip code (94102).

The above citywide health risk modeling was also used as the basis in approving amendments to the San Francisco Building and Health codes, generally referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code, article 38 (Ordinance 224-14, effective December 8, 2014) (article 38). Article 38 is discussed further below.

Sensitive Receptors

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality, because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their

¹² U.S. Environmental Protection Agency, *Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards*, April 2011, EPA/452/R-11-003, Office of Air Quality Planning and Standards.

¹³ San Francisco Department of Public Health, *Air Pollutant Exposure Zone Map*, 2014.

¹⁴ California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005.

exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 30 years.

The air district defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, day care centers, hospitals, and senior-care facilities.¹⁵

Figure 4.3.1, Noise Measurement Locations and Sensitive Receptors Site Locations, p. 4.3.9 in Section 4.3, Noise, shows representative nearby existing sensitive receptors. The nearest sensitive receptors are residential units (i.e., multifamily unit) located across Market Street to the north (1580 Market Street, approximately 120 feet from the edge of the project site), and the residential hotel located across 12th Street to the west (1601 Market Street, approximately 80 feet from the edge of the project site). The 1500 Mission Street project located to the east, across South Van Ness Avenue, will include residential receptors and a daycare center when it is completed. Once the proposed project or variant is operational, the onsite residents would also be considered sensitive receptors.

Existing Emission Sources

STATIONARY SOURCES

While there are no existing stationary sources on the project site, there are several buildings within 1,000 feet of the project site that include stationary sources such as boilers, diesel hydraulic starters, and emergency generators.

MOBILE SOURCES

The existing auto dealership generates mobile vehicle emissions from employee and customer trips, vehicle starts associated with movement of cars for parking and storage, test drives, and vehicle service and maintenance. In addition to trips associated with the existing site, mobile vehicle emissions from public transportation, resident, employee, and visitor trips occur on adjacent roadways.

Regulatory Framework

Air quality in the SFBAAB is regulated by EPA, ARB, BAAQMD, and the City. Each of these agencies develops rules, regulations, policies, and/or goals to attain the directives imposed

¹⁵ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, (hereafter “BAAQMD CEQA Guidelines, May 2017”), Glossary, p. E-4. available at http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed May 2017

through legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

FEDERAL

EPA is charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act, which was enacted in 1970. The most recent major Clean Air Act amendments were made by Congress in 1990.

Federal Clean Air Act

The Clean Air Act required EPA to establish national ambient air quality standards. EPA has established primary and secondary national standards for the following criteria air pollutants: ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. The primary standards protect public health and the secondary standards protect public welfare. The primary standards are shown in Table 4.4.1. The Clean Air Act also requires each state to prepare an air quality control plan referred to as a state implementation plan (SIP). A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The federal Clean Air Act Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

Emission Standards for New Off-Road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment (which includes construction equipment). In 1994, EPA established emission standards for hydrocarbons, NO_x, CO, and PM to regulate new pieces of off-road equipment. These emission standards came to be known as tier 1. Since that time, increasingly more stringent tier 2, tier 3, and tier 4 (interim and final) standards were adopted by EPA, as well as by ARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower (hp) sizes must meet tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for tier 4 final emissions standards.

STATE

The SIP for the State of California is administered by ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts. The air district prepares its federal attainment plan, which is sent to ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g.,

emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

California Clean Air Act and California Ambient Air Quality Standards

ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act. The California Clean Air Act was adopted in 1988; it requires ARB to establish California air quality standards (Table 4.4.1). ARB has established California standards for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the federal criteria air pollutants. In most cases, the California standards are more stringent than the national standards.

Other ARB responsibilities include but are not limited to overseeing local air district compliance with California and federal laws; approving local air quality plans; submitting SIPs to EPA; monitoring air quality; determining and updating area designations and maps; and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Air Resources Board In-Use Off-Road Diesel Vehicle Regulation

In 2007, ARB adopted a regulation to reduce diesel PM and NO_x emissions from in-use off-road heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (Assembly Bill 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588), also known as the Hot Spots Act. To date, ARB has identified more than 21 TACs, and has adopted EPA's list of hazardous air pollutants as TACs.

California Air Resources Board Airborne Toxics Control Measures

ARB has adopted Airborne Toxics Control Measures for sources that emit a particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions.

California Air Resources Board Diesel Risk Reduction Plan

The ARB-adopted Diesel Risk Reduction Plan recommends control measures to achieve a diesel PM reduction of 85 percent by 2020 from year 2000 levels. Recent regulations and programs include the low-sulfur diesel fuel requirement and more stringent emission standards for heavy-duty diesel trucks and off-road in-use diesel equipment. As emissions are reduced, it is expected that the risks associated with exposure to the emissions will also be reduced.

REGIONAL

Bay Area Air Quality Management District Air Quality Planning

The air district is the primary agency responsible for ensuring that air quality standards (both national and California ambient air quality standards) are attained and maintained in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The air district prepares ozone attainment plans to meet the national ozone standard, clean air plans for the California standard, and PM plans to fulfill federal air quality planning requirements for the SFBAAB. The air district also inspects stationary sources of air pollution; responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the Clean Air Act, the Clean Air Act Amendments of 1990, and the California Clean Air Act.

Bay Area Air Quality Management District 2017 Bay Area Clean Air Plan

The air district has the responsibility to monitor ambient air pollutant levels throughout the SFBAAB and to develop and implement strategies to attain the applicable federal and state standards.¹⁶ The federal and state clean air acts require plans to be developed for areas that do not meet air quality standards. The air district adopted the *Bay Area Clean Air Plan: Spare the Air, Cool the Climate* (Bay Area Clean Air Plan) on April 19, 2017, to provide a regional strategy to improve Bay Area air quality and meet public health goals.¹⁷ The control strategy described in the Bay Area Clean Air Plan includes a wide range of control measures designed to reduce emissions and lower ambient concentrations of harmful pollutants, safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, and reduce greenhouse gas emissions to protect the climate.

¹⁶ The nearest monitoring station to the project site is at 10 Arkansas Street, 1.25 miles southeast of the project site on the east side of San Francisco.

¹⁷ Bay Area Air Quality Management District, Bay Area 2017 Clean Air Plan: Spare the Air, Cool the Climate—A Blueprint for Clean Air and Climate Protection in the Bay Area, Final, April 19, 2017, available at http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed September 2018.

The Bay Area Clean Air Plan addresses four categories of pollutants: ground-level ozone and its key precursors, ROG and NO_x; PM, primarily PM_{2.5}, and precursors to secondary PM_{2.5}; air toxics; and greenhouse gases. The control measures are categorized based on economic sectors including stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, and water measures.¹⁸

The 2017 Bay Area Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, in accordance with the requirements of the state Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals:

- **Protect air quality and health at the regional and local scale:** Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants.
- **Protect the climate:** Reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

Bay Area Air Quality Management District Particulate Matter Plan

To fulfill federal air quality planning requirements, the air district adopted a PM_{2.5} emissions inventory for year 2010 at a public hearing on November 7, 2012. The Bay Area Clean Air Plan also includes several measures for reducing PM emissions from stationary sources and wood burning. On January 9, 2013, EPA issued a final rule determining that the Bay Area has attained the national 24-hour PM_{2.5} standard, suspending federal SIP planning requirements for the SFBAAB. Despite this EPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour PM_{2.5} standard until the air district submits a redesignation request and a maintenance plan to EPA, and EPA approves the proposed redesignation.

Bay Area Air Quality Management District 2001 Ozone Attainment Plan

The air district adopted the Bay Area Ozone Attainment Plan in 2001 in response to EPA's finding that the Bay Area had failed to attain the national standard for ozone. The plan includes a control strategy for ozone and its precursors to ensure a reduction in emissions from stationary sources, mobile sources, and the transportation sector.¹⁹

¹⁸ Ibid.

¹⁹ Bay Area Air Quality Management District, *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard*, adopted October 24, 2001, Planning and Research Division, San Francisco, CA. Available at http://www.baaqmd.gov/~media/files/planning-and-research/plans/2001-ozone-attainment-plan/oap_2001.pdf, accessed May 2017.

Bay Area Air Quality Management District Regulation 2, Rule 5

The air district regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (regulation 2, rule 5) permitting process.²⁰ Although emergency generators are intended to be used only during periods of power outages, monthly testing of each generator is required; however, the air district limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of tier 2 emission standards (before control measures).

Bay Area Air Quality Management District Regulations Pertaining to Odorous Emissions

Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, rule 301 is a nuisance provision that states that sources cannot emit air contaminants that cause nuisance to a considerable number of persons. Regulation 7 specifies limits for the discharge of odorous substances where the air district receives complaints from 10 or more complainants within a 90-day period.

Association of Bay Area Governments and Metropolitan Transportation Commission Plan Bay Area

On July 26, 2017, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) approved the *Plan Bay Area 2040*. The *Plan Bay Area* includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. The plan's transportation policies focus on maintaining the extensive existing transportation network and utilizing these systems more efficiently to handle the density of land uses in Bay Area transportation cores.²¹ Assumptions for land use development in the plan are based on local and regional planning documents. Emission forecasts in the Bay Area Clean Air Plan rely on projections of vehicle miles traveled, population, employment, and land use made by local jurisdictions during development of *Plan Bay Area 2040*.

²⁰ Bay Area Air Quality Management District, Regulation 2, Permits; Rule 5, New Source Review of Toxic Air Contaminants, December 7, 2016, http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-02/rg0205_120716-pdf.pdf?la=en, accessed May 2017.

²¹ Association of Bay Area Governments and Metropolitan Transportation Commission, Plan Bay Area 2040, adopted July 26, 2017, <https://mtc.ca.gov/our-work/plans-projects/plan-bay-area-2040>, accessed February 6, 2018.

LOCAL

San Francisco General Plan Air Quality Element

San Francisco has a number of policies and regulations related to air quality, including those within the Air Quality Element of the *San Francisco General Plan*²² and the City's Building and Health codes. The objectives specified by the City in the general plan include the following:

- **Objective 1:** Adhere to State and Federal air quality standards and regional programs.
- **Objective 2:** Reduce mobile sources of air pollution through implementation of the Transportation Element of the General Plan.
- **Objective 3:** Decrease the air quality impacts of development by coordination of land use and transportation decisions.
- **Objective 4:** Improve air quality by increasing public awareness regarding the negative health effects of pollutants generated by stationary and mobile sources.
- **Objective 5:** Minimize particulate matter emissions from road and construction sites.
- **Objective 6:** Link the positive effects of energy conservation and waste management to emission reductions.

San Francisco Health and Building Codes

Construction Dust Control Ordinance

San Francisco Health Code article 22B and San Francisco Building Code section 106A.3.2.6 collectively constitute the Construction Dust Control Ordinance (adopted in July 2008). The ordinance requires that all site preparation work, demolition, or other construction activities in San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specific dust control measures whether or not the activity requires a permit from the Department of Building Inspection (DBI). For projects on sites larger than 0.5 acre, the Construction Dust Control Ordinance requires that the project sponsor submit a dust control plan for approval by the San Francisco Department of Public Health before DBI issues a building permit. The project site is over 1 acre and therefore the project sponsor would be required to prepare a construction dust control plan. The Construction Dust Control Ordinance requires project sponsors and contractors responsible for construction activities to control construction dust on the site or implement other practices that result in equivalent dust control that are acceptable to the director of public health.

²² San Francisco Planning Department, *San Francisco General Plan*, amended by Resolution No. 14149, adopted on June 27, 1996, Air Quality Element, http://generalplan.sfplanning.org/I10_Air_Quality.htm, accessed May 2017.

Protection of Sensitive Uses from Air Pollutants

The City adopted article 38 of the San Francisco Health Code in 2008, and amended it in 2014, to protect new sensitive uses from existing sources of air pollution by requiring enhanced ventilation and filtration systems in certain areas of the City. The amendments make the health code and building code consistent with the results of the air quality modeling undertaken to identify the City's APEZ, discussed above.

As revised in 2014, article 38 of the health code applies to all development that includes "sensitive uses," as defined in the code, including all residential units; adult, child and infant care centers; schools; and nursing homes. Article 38 considers all existing known sources of TACs and PM_{2.5}, and requires "enhanced ventilation," including filtration of outdoor air, for all sensitive use projects, such as the proposed project, located in the APEZ. The filtration requirement of article 38 specifies Minimum Efficiency Reporting Value 13 or equivalent, based on American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 52.2, and requires the health department to confer with other City departments and report to the board of supervisors regarding technologies it has identified or evaluated that may comply with the requirements of the health code.

Article 38 also requires periodic updating of the APEZ Map (about every five years) to account for changes in sources of TACs and PM_{2.5} emissions or updated health risk quantification methodologies.

Impacts and Mitigation Measures

Significance Thresholds

The thresholds for determining the significance of impacts in this analysis are consistent with the environmental checklist in Appendix G of the CEQA Guidelines, which has been modified by the San Francisco Planning Department. For the purpose of this analysis, the following thresholds were used to determine whether implementing the proposed project or the variant would result in a significant impact related to air quality.

Implementation would have a significant effect on air quality if the proposed project or variant would do any of the following:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation or result in a cumulatively considerable net increase in criteria pollutants;
- Conflict with or obstruct implementation of the applicable air quality plan;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Approach to Analysis

In general, the proposed project or variant would generate emissions of criteria air pollutants, ozone precursors, and TACs during construction and operation. The *10 South Van Ness Project Final Criteria Air Pollutant Analysis*²³ and *10 South Van Ness Final Health Risk Assessment*²⁴ analyzed regional criteria air pollutants and health risks, respectively, associated with construction and operations of the proposed project and variant. The following discusses the approach used to analyze the significance thresholds above.

CONSISTENCY WITH AIR QUALITY PLAN

The proposed project or variant would be consistent with the Bay Area Clean Air Plan if it would support the plan's goals, include applicable control measures from the Bay Area Clean Air Plan, and would not disrupt or hinder implementation of any control measures from the plan.

Consistency with this plan is the basis for determining whether the proposed project or variant would conflict with or obstruct implementation of an applicable air quality plan.

CRITERIA AIR POLLUTANT IMPACTS

The construction and operational phases of land use projects may contribute to regional emissions of criteria air pollutants. **Table 4.4.4: Thresholds of Significance for Criteria Air Pollutants** identifies significance thresholds for criteria air pollutants as provided by the air district, followed by a discussion of each threshold.²⁵ Projects that would result in emissions of criteria air

Table 4.4.4: Thresholds of Significance for Criteria Air Pollutants

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other best management practices		Not Applicable

Notes: lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; PM₁₀ = particulate matter with aerodynamic diameter less than 10 microns; ROG = reactive organic gases; tpy = tons per year

Source: BAAQMD *CEQA Guidelines*, May 2017, available at http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed May 2017.

²³ AECOM, *Criteria Air Pollutant Analysis*.

²⁴ AECOM, HRA.

²⁵ BAAQMD *CEQA Guidelines*, May 2017.

pollutants less than these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the SFBAAB.

The potential for a project to result in a net increase in criteria air pollutants that may contribute to an existing or projected air quality violation is based on the Clean Air Act and California Clean Air Act emissions limits for stationary sources, as explained below.

Ozone Precursors

To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, the air district's Regulation 2, Rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO_x, the offset emissions level is an annual average of 10 tons per year (or 54 pounds per day).²⁶ These levels represent emissions below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects generate ROG and NO_x emissions as a result of increases in vehicle trips, architectural coatings, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects. Projects resulting in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ROG and NO_x emissions. Because construction activities are temporary, only average daily thresholds are applicable to construction-phase emissions.

Particulate Matter (PM₁₀ and PM_{2.5})

The air district has not established an offset limit for PM_{2.5}. However, the emissions limit in the federal New Source Review for stationary sources in nonattainment areas is an appropriate significance threshold. For PM₁₀ and PM_{2.5}, the emissions limits under New Source Review are 15 tons per year (or 82 pounds per day) and 10 tons per year (or 54 pounds per day), respectively. These emissions limits represent the levels below which a source is not expected to have an impact on air quality.²⁷ Similar to the ozone precursor thresholds identified above, land use development projects typically generate PM emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of a

²⁶ BAAQMD, *Revised Draft Options and Justification Report*, 2009, p. 17.

²⁷ *Ibid.*, p. 16.

land use project. Again, because construction activities are temporary, only the average daily thresholds are applicable to construction-phase emissions.

Fugitive Dust

Fugitive dust emissions are typically generated during construction phases. Studies have shown that applying best management practices at construction sites significantly controls fugitive dust²⁸ and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.²⁹ The air district has identified best management practices to control fugitive dust emissions from construction activities.³⁰ The City's Construction Dust Control Ordinance (Ordinance 176-08) requires measures to control fugitive dust. Best management practices employed in compliance with this ordinance are an effective strategy for controlling construction-related fugitive dust. The proposed project and variant would be subject to the requirements of the ordinance.

Other Criteria Pollutants

Regional concentrations of CO in the Bay Area have not exceeded state standards in the past 11 years and SO₂ concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicle traffic. Construction-related SO₂ emissions represent a negligible portion of the total basinwide emissions and construction-related CO emissions represent less than 5 percent of the Bay Area's total basinwide CO emissions. Given the Bay Area's attainment status and the limited CO and SO₂ emissions that could result from development projects, such projects would not result in a cumulatively considerable net increase in CO or SO₂, and quantitative analysis is not required.

LOCAL AIR QUALITY HEALTH RISKS/HAZARDS IMPACTS

The thresholds of significance used to evaluate health risks from new sources of TACs are based on the potential for a proposed project to substantially affect the geography and severity of the APEZ at the locations of sensitive receptors. The project site is located in an APEZ and adjacent to a major transportation thoroughfare. The proposed project or variant would result in a significant impact if the project's or variant's contribution to an excess cancer risk would exceed

²⁸ Western Regional Air Partnership, WRAP Fugitive Dust Handbook, September 7, 2006, available at http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf, accessed February 16, 2012.

²⁹ BAAQMD, *Revised Draft Options and Justification Report*, 2009, p. 27.

³⁰ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2011, available at <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en>, accessed May 2017.

7 in 1 million or the contribution to the annual average PM_{2.5} concentrations would exceed 0.2 µg/m³).³¹

ODOR IMPACTS

The odor impact analysis evaluates the types of land uses proposed to determine whether major sources of odors would be anticipated.

CUMULATIVE ANALYSIS

Criteria Air Pollutants

The contribution of a project's individual air pollutant emissions to regional air quality impacts is, by its nature, a cumulative effect. Emissions from past, present, and future projects in the vicinity also have or will contribute to adverse regional air quality impacts on a cumulative basis. No single project by itself would be sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality conditions.

The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, if a project's emissions are below the project-level thresholds, the project would not be considered to result in a considerable contribution to cumulative regional air quality impacts.

Cumulative Health Risk Analysis

The cumulative health risk assessment takes into account the contribution of localized health risks to sensitive receptors from sources included in the citywide modeling (the citywide health risk assessment) in addition to the project's sources and other cumulative project sources within 1,000 feet of the project site per air district guidance.³² The analysis considers whether there would be a significant adverse cumulative impact associated with project implementation in combination with past, present, and probable future projects, and if so, whether the project's incremental contribution to the cumulative impact would be considerable. Both conditions must apply for a project's contribution to cumulative effects to be deemed cumulatively considerable (significant).

³¹ A 0.2 µg/m³ increase in PM_{2.5} would result in a 0.28 percent increase in non-injury mortality or an increase of about twenty-one excess deaths per 1,000,000 population per year from non-injury causes in San Francisco. This information is based on Jerrett M et al., Spatial Analysis of Air Pollution and Mortality in Los Angeles, *Epidemiology* 16 (2005): 727–736, as cited in Bhatia & Rivard, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways*, May 2008, p. 16. The excess cancer risk has been proportionally reduced from 10 per million persons exposed (the threshold for projects not located within the APEZ that would affect the geography and severity of the APEZ) to result in a significance criteria of 7 per million persons exposed.

³² BAAQMD, *CEQA Air Quality Guidelines*, May 2017, p. 5-2.

If so, then mitigation measures are identified to reduce the project's contribution to the extent feasible.

Project Features

Both the proposed project and the variant would involve demolishing the existing building on the project site and constructing a mixed-use development that would include residential, commercial, and open space uses. The proposed project and variant would seek *Leadership in Energy and Environmental Design* (LEED) Gold certification, including measures applicable to both construction and operation, and would incorporate a number of sustainability features. The proposed project or variant would also include a total of 33 net new street trees along the project site frontage(s), one 1,500-kilowatt diesel-powered emergency generator and other mechanical equipment in the garage/basement, and approximately 3,000 gross square feet of the roof area would be reserved for heating, ventilation, and air conditioning mechanical equipment. An elevator providing access to the Muni station may be included near the corner of Market Street and South Van Ness Avenue.

The proposed project or the variant could include a straight-shot streetscape option for 12th Street that would replace the proposed streetscape improvements. The straight-shot streetscape option for the proposed project would have more freight and passenger loading areas than the option for the variant, and the driveway accessing the basement would be further from the intersection of 12th Street/South Van Ness Avenue than would the driveway for the variant. Other features of the straight-shot streetscape options would be the same. With these options, the sidewalk on the east side of 12th Street would be wider than the 21-foot-wide sidewalks that would be provided under the proposed project or variant and would feature a "shared street" configuration, with two 11-foot travel lanes, and more limited truck and passenger loading areas on both sides of the street with no on-street automobile parking spaces. Construction activities for the straight-shot streetscape options are expected to be essentially the same as those for the proposed project or variant streetscape improvements. Therefore, a separate analysis of the proposed project or variant together with one of the straight-shot streetscape options is not presented.

Construction of the proposed project would occur in several overlapping phases and is anticipated to occur over approximately 36 months. Construction would include the following phases: demolition; shoring and excavation; foundation and podium construction; tower/superstructure/skin; and interior work. Construction hours would typically be from 7 a.m. to 8 p.m., Monday through Thursday, and 7 a.m. to 5 p.m. on Fridays and Saturdays. Limited evening work (between 8 p.m. to 7 a.m.) and work on weekends (7 a.m. to 5 p.m.) would be required for the third and fourth phases.

Construction activities that relate particularly to air emissions would involve demolition of existing onsite structures and site preparation, and new construction activities would include

grading, shoring and excavation, foundations, structural work to construct the podium and the tower or towers, exterior skin, interior finishes, and paving. During construction, heavy-duty trucks would haul soil and materials on and off site during the entire construction period. The proposed project or variant would generate from a minimum of 8 haul truck trips per day to a maximum of 50 haul truck trips per day, which equates to an approximate range of one to six truck round trips per hour, depending on the construction phase.

Analytic Methodology

Quantitative analysis of the proposed project and project variant's criteria air pollutant, ozone precursor, and TAC emissions resulting from construction and operation was conducted consistent with guidance and methodologies from local, regional, state, and federal agencies, including the BAAQMD,³³ ARB, the California Office of Environmental Health Hazard Assessment, and EPA. Pursuant to the air district's guidance, California Emissions Estimator Model (CalEEMod) Version 2016.3.1 was used to estimate emissions associated with construction and operational activities.

Construction activities, equipment, phasing, and duration would be the same for the proposed project and the variant; therefore, the criteria air pollutant analysis discusses only the impacts related to the proposed project, and the results of this analysis would be the same for both the proposed project and the variant.

The actual timing of construction would be dependent on approval and funding considerations. As a result, actual construction activities may occur over a less-concentrated time period than the assumed three years. Total construction emissions were calculated and then converted from total tons to average pounds per day for each construction phase. If the duration of construction activities were to extend beyond three years, the total amount of construction emissions would not increase; rather, the average daily emissions would decrease commensurate with the extended duration of construction. Therefore, assuming a concentrated three-year construction period results in higher (worst-case) average daily emissions than would occur if construction were to extend beyond three years.

Operation of the proposed project or variant would result in emissions from area, energy, stationary, and mobile sources, and estimates were made for each of these sources.

³³ BAAQMD *CEQA Guidelines*, May 2017.

Criteria Air Pollutants

CONSTRUCTION EMISSIONS SOURCES AND METHODOLOGY

Off-Road Equipment

Off-road construction equipment would generate exhaust-related emissions of criteria air pollutants, ozone precursors, and TACs. To calculate emissions, the number and types of construction equipment required for each construction phase were identified. Other parameters used to quantify emissions from construction equipment were hours of operation per day, horsepower, and load factor for each respective piece of equipment.

CalEEMod contains emission factors from ARB's off-road equipment emissions estimator model, OFFROAD2011. The emission factors for off-road engines were based on the fleet average for the calendar year of the analysis. Default assumptions for the parameters noted above contained in CalEEMod were used to quantify off-road emissions. Default assumptions typically are conservative, providing a reasonable upper boundary of potential construction emissions.³⁴

On-Road Vehicles

On-road construction sources include construction-worker vehicles, haul trucks, material delivery trucks, and onsite work trucks. CalEEMod was used to estimate emissions from on-road vehicles (running exhaust, brake wear, tire wear, and running losses). Haul trips were estimated based on the total volume of soil, estimated at 100,000 cubic yards, exported from the project site. Default assumptions for parameters such as other vehicles, construction worker trips, trip distance, and vehicle type were obtained from CalEEMod. CalEEMod incorporates emission factors from ARB's on-road emissions inventory model, EMISSION FACTORS (EMFAC) 2014 (EMFAC2014) and were used to quantify emissions.³⁵

³⁴ Some equipment, including cranes and lifts, would be electric powered. CalEEMod only allows for equipment to be modeled with alternative powered engines as mitigation measures. Therefore, although the use of electric equipment is a project design feature and not a mitigation measure, the "mitigated emissions" in the CalEEMod outputs for construction emissions from these types of equipment were used to model the impacts of the unmitigated project.

³⁵ California Air Resources Board, EMFAC2014 Volume III—Technical Documentation v1.0.7, May 2015, <https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>, accessed May 2017. EMFAC2017 was released in December 2017 after publication of the Notice of Preparation for the EIR on the proposed project and variant, which establishes the project baseline. Differences among EMFAC2014 and 2017 were reviewed and show that, in general EMFAC 2017 emissions factors are not likely to change the calculated project emissions, except for NO_x emissions, which would likely decrease. Therefore, use of EMFAC2014 presents the same or more conservative (i.e., higher) results than using EMFAC2017.

Off-Gassing Materials

Architectural coating materials used during construction would generate off-gas emissions of ROG, which were estimated in CalEEMod. CalEEMod contains assumptions for application of architectural coatings that are based on the land use type and square footage of the buildings to be constructed.

OPERATIONAL EMISSIONS SOURCES AND METHODOLOGY

Area Sources

Area-source emissions include consumer products, landscape maintenance equipment, and natural gas combustion. Emissions from landscape maintenance equipment and natural gas combustion were estimated using CalEEMod default values based on the size and type of land uses to be developed. Based on consultation between the San Francisco Planning Department and the air district, emissions from consumer products were estimated using an ROG emission factor of 0.0000151 pound per square foot per day. This emission factor is based on San Francisco ROG emissions data and land use data.³⁶

On-Road Vehicles

Mobile-source emissions were estimated using trip-generation rates from the transportation impact study conducted for the proposed project.³⁷ The proposed project would generate 2,904 daily vehicle trips. As described for construction on-road vehicles, CalEEMod Version 2016.3.1 incorporates EMFAC2014 mobile-source emission factors.

Stationary Sources

Stationary-source emissions were calculated based on project-specific information, assuming one 1,500-kilowatt backup diesel emergency generator that would operate approximately 48 hours per year and would be located in the underground parking garage. The emergency generator would generate emissions of criteria pollutants and TACs. Emission factors and methods prescribed by ARB and EPA (e.g., AP 42 Compilation of Air Pollutant Emission Factors) were used to estimate emissions from the generator. The emergency generator would meet a minimum of tier 2 emission standards when it is installed in the year 2022, and would comply with BAAQMD regulation 2, rule 5, New Source Review for Toxic Air Contaminants, and the BAAQMD testing limits of no more than 50 hours per year.

³⁶ Bay Area Air Quality Management District, "RE: ROG Calculations and Mitigation," email communication between Allison Kirk and Sigalle Michael, BAAQMD, and Wade Wietgreffe, San Francisco Planning Department, March 24, 2014.

³⁷ CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case Number 2015-004568ENV.

Health Risks

A health risk assessment of construction-related and operational emissions was completed to evaluate potential health risks to sensitive receptors. Emissions of PM_{2.5} (from vehicle exhaust, tire and brake wear, road dust, and fugitive dust) are assessed on an annual basis; whereas excess cancer risk (from diesel vehicle exhaust, diesel generator exhaust, and ROG from gasoline vehicle exhaust) is based on a longer term exposure, 30 years.

Typically, construction projects generate diesel PM in a single area for a short period of time. The dose of TACs to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period to a fixed amount of emissions results in a higher exposure level and higher health risks for the maximally exposed individual.

EXISTING HEALTH RISK CONDITIONS

Existing health risk conditions are derived from the citywide health risk assessment that was conducted using AERMOD and includes emissions from the following primary sources:

- Vehicles on local roadways; and
- Permitted stationary sources including gasoline dispensing stations, prime and standby diesel generators, recycling facilities, dry cleaners, large boilers, and other industrial facilities; and
- Maritime emissions.

PM_{2.5} concentrations and excess cancer risk from the proposed project are added to the citywide health risk assessment to determine existing plus project PM_{2.5} concentrations and excess cancer risks. The results of this analysis are used to determine whether the proposed project would substantially affect the geography or severity of the APEZ.

HEALTH RISK ASSESSMENT METHODOLOGY

Consistent with the San Francisco citywide health risk assessment³⁸ the air toxics analysis evaluated health risks and PM_{2.5} concentrations resulting from the proposed project and variant on the surrounding community per year of construction. The American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model (version 16216r) (Code of Federal Regulations title 40, part 51) was used to estimate pollutant concentrations at specific distances from emission

³⁸ San Francisco Department of Public Health, San Francisco Planning Department, and Bay Area Air Quality Management District, *The San Francisco Community Risk Reduction Plan: Technical Support Documentation*, December 2012.

sources using one year (2008) of hourly meteorological data from the Mission Bay station, consistent with the citywide health risk assessment.

As discussed above, construction emissions were calculated for each year. For the health risk assessment, these emissions were converted from total tons per year to grams per second for the PM_{2.5} analysis and pounds per year for the excess cancer risk analysis for each construction phase. The PM_{2.5} and diesel PM emissions from off-road construction equipment were represented in the AERMOD model by area sources.

Operational emission sources evaluated in the dispersion modeling include emissions from on-road vehicles and the emergency generator. On-road emissions from operation of vehicles associated with the proposed project were modeled as adjacent volume sources. It was assumed that operational emissions would include the use of one emergency generator that would be located in the basement of the building. The generator was modeled as a point source, and the exhaust was assumed to exit the side of the building and turn to exhaust vertically.

Maximum annual PM_{2.5} concentrations and excess cancer risk plot files generated by AERMOD were input to the Hotspots Analysis and Reporting Program version 2 (HARP2), an air dispersion modeling and risk assessment tool, with corresponding TAC emission rates for each phase of construction and the project's operational emissions to calculate TAC concentrations generated by the proposed project. These concentrations were then used to estimate the long-term effects of TACs on nearby offsite and future onsite residential locations. The project-level PM_{2.5} concentrations and excess cancer risk values were then added to the existing cancer risk and PM_{2.5} concentrations in the citywide health risk assessment database. The citywide health risk assessment was conducted in 2012 and HARP2 is based on 2015 guidance from the California Office of Environmental Health Hazard Assessment.³⁹ Therefore, the risk values in the citywide health risk assessment database were adjusted to reflect the changes in health risk assessment methodology consistent with the 2015 guidance from the California Office of Environmental Health Hazard Assessment.⁴⁰ The locations of existing offsite and proposed onsite sensitive receptors included in the health risk assessment modeling are discussed above in the subsection entitled "Sensitive Receptors" on pp. 4.4.13–4.4.14. Consistent with the project description, the analysis assumes that there are no onsite receptors before operation of the building.

³⁹ California Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual*, February 2015.

⁴⁰ The citywide health risk assessment analysis was conducted in 2012. The 2015 Office of Environmental Health Hazard Assessment guidance updated cancer risk calculations and age sensitivity factors. A scaling factor was developed comparing the 2015 cancer risk methodology to that in the original 2003 Office of Environmental Health Hazard Assessment guidance. The calculated residential lifetime excess cancer risk is 1.3744 times higher than residential cancer risk as calculated using the original 2003 Office of Environmental Health Hazard Assessment guidance, which was used in developing the citywide health risk assessment. This scaling factor has been reviewed and approved by BAAQMD and was applied to the citywide health risk assessment.

Impact Analysis

CRITERIA AIR POLLUTANT ANALYSIS

Impact AQ-1: The proposed project or variant's construction activities would generate criteria air pollutants and fugitive dust, but would not violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (*Less than Significant*)

Construction of the proposed project or variant would generate emissions associated with heavy-duty construction equipment, material-hauling trucks, and construction-worker vehicles.

Table 4.4.5: Project Construction Criteria Air Pollutant Emissions shows the proposed project's average daily emissions during construction. Pursuant to BAAQMD guidance, only exhaust-related PM₁₀ and PM_{2.5} emissions are presented with the project's construction emissions because the air district recommends that fugitive PM₁₀ and PM_{2.5} emissions be addressed through implementation of best management practices. Projects that would result in emissions of criteria air pollutants less than the significance thresholds in Table 4.4.4 on p. 4.4.22 would not violate an air quality standard or contribute substantially to an air quality violation.

As shown in Table 4.4.5, construction-generated emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust would not exceed applicable mass emission thresholds of significance. Therefore, construction period criteria air pollutant impacts for the proposed project and variant would be less than significant.

The air district recommends that all projects, regardless of the level of average daily emissions, implement best management practices to reduce construction-related fugitive dust emissions.⁴¹

The Construction Dust Control Ordinance requires that all site preparation work, demolition, or other construction activities in San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specific dust control measures whether or not the activity requires a permit from the DBI. For projects over one half-acre, such as the proposed project, the Dust Control Ordinance requires that the project sponsor submit a Dust Control Plan for approval by the San Francisco Department of Public Health. The Department of Building Inspection will not issue a building permit without written notification from the Director of Public Health that the applicant has a site-specific Dust Control Plan, unless the director waives the requirement.

⁴¹ BAAQMD *CEQA Guidelines*, May 2017

Table 4.4.5: Project Construction Criteria Air Pollutant Emissions

Construction Year/Phase	ROG	NO _x	PM ₁₀ (exhaust)	PM _{2.5} (exhaust)
2019	1.48 tons	12.98 tons ¹	0.71 tons	0.70 tons
2020	0.58 tons	4.64 tons	0.17 tons	0.17 tons
2021	5.00 tons	2.19 tons	0.05 tons	0.04 tons
2022	2.38 tons	0.51 tons	0.01 tons	0.01 tons
Total Construction Emissions	9.44 tons	20.33 tons	0.94 tons	0.93 tons
Average Daily Construction Emissions ²	20.2 lb/day	43.4 lb/day	2.0 lb/day	2.0 lb/day
Threshold	54	54	82	54
Exceed Threshold?	No	No	No	No

Notes:

lb/day = pounds per day; NO_x = oxides of nitrogen; PM₁₀ = particulate matter with aerodynamic diameter less than 10 microns; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; ROG = reactive organic gases

¹ The *Criteria Air Pollutant Analysis* prepared for the 10 South Van Ness Mixed-use Project shows that controlled emissions with the use of Tier 4 engines during construction, as required in Mitigation Measure M-AQ-3a, would reduce NO_x emissions during construction to approximately 1.83 tons in 2019.

² Average daily construction emissions were calculated assuming a total construction duration of 36 months, 26 days per month.

Source: Data compiled by AECOM in 2017

The site-specific Dust Control Plan would require the project sponsor to:

- submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site;
- wet down areas of soil at least three times per day;
- provide an analysis of wind direction and install upwind and downwind particulate dust monitors;
- record particulate monitoring results;
- hire an independent, third-party to conduct inspections and keep a record of those inspections;
- establish shut-down conditions based on wind, soil migration, etc.;
- establish a hotline for surrounding community members who may be potentially affected by project-related dust;
- limit the area subject to construction activities at any one time;
- install dust curtains and windbreaks on the property lines, as necessary;
- limit the amount of soil in hauling trucks to the size of the truck bed and secure with a tarpaulin;
- enforce a 15-mph speed limit for vehicles entering and exiting construction areas;

- sweep affected streets with water sweepers at the end of the day;
- install and utilize wheel washers to clean truck tires;
- terminate construction activities when winds exceed 25-miles per hour;
- apply soil stabilizers to inactive areas; and
- sweep off adjacent streets to reduce particulate emissions.

The project sponsor would be required to designate an individual to monitor compliance with these dust control requirements. San Francisco ordinance 175-91 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition project occurring within the boundaries of San Francisco, unless permission is obtained from the San Francisco Public Utilities Commission. Non-potable water must be used for soil compaction and dust control activities during project construction and demolition. The San Francisco Public Utilities Commission operates a recycled water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge. Because the proposed project would be required to comply with the regulations and procedures set forth by the Dust Control Ordinance, potential dust-related air quality impacts from the proposed project or variant would be reduced to a less-than-significant level.

In summary, construction of the proposed project or variant would not violate or contribute substantially to an existing or projected air quality violation. Therefore, construction-related criteria air pollutant impacts from the proposed project and variant would be less than significant, and no mitigation is necessary.

Impact AQ-2: During project operations, the proposed project or variant would result in emissions of criteria air pollutants, but not at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (*Less than Significant*)

Operation of the proposed project or variant would result in emissions from area, energy, stationary, and mobile sources. The air quality analysis evaluated the proposed project's and variant's daily operational air quality emissions from these sources. **Table 4.4.6: Project Operational Criteria Air Pollutant Emissions** shows the proposed project's annual and daily operational emissions relative to the air district's operational significance thresholds. Because the number of vehicle trips resulting from the variant would be comparable to those resulting from the proposed project (within 1 percent),⁴² mobile-source pollutant emissions for the variant would be similar to those shown in Table 4.4.6.

As summarized in Table 4.4.6, the long-term operational emissions attributable to the proposed project or variant would generate emissions of ROG, NO_x, PM₁₀, and PM_{2.5} that would not

⁴² CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017, Case Number 2015-004568ENV.

exceed the thresholds of significance. Therefore, the proposed project or variant would not violate or contribute substantially to an existing or projected air quality violation. This impact would be less than significant for the proposed project and variant, and no mitigation is necessary.

Table 4.4.6: Project Operational Criteria Air Pollutant Emissions

Operational Emissions Source	ROG	NO _x	PM ₁₀ (total)	PM _{2.5} (total)
Annual Emissions (tpy)				
Area Sources	3.58	0.08	0.04	0.04
Energy Sources	0.05	0.41	0.03	0.03
Mobile Sources	0.69	2.72	2.33	0.65
Stationary Sources ¹	0.08	0.35	0.01	0.01
Annual Operational Emissions	4.40	3.57	2.42	0.73
Threshold	10	10	15	10
Daily Emissions (lb/day)				
Daily Operational Emissions	24.1	19.6	13.2	4.0
Threshold	54	54	82	54
Exceed Threshold?	No	No	No	No

Notes:

lb/day = pounds per day; NO_x = oxides of nitrogen; PM₁₀ = particulate matter with aerodynamic diameter less than 10 microns; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; ROG = reactive organic gases; tpy = tons per year

Totals may not appear to add exactly because of rounding.

¹ Stationary sources represent the emergency diesel generator emissions.

Source: Data compiled by AECOM in 2017

HEALTH RISK ANALYSIS

Impact AQ-3: Construction and operation of the proposed project or variant would generate toxic air contaminants, including diesel particulate matter, at levels which would expose sensitive receptors to substantial air pollutant concentrations. (*Less than Significant with Mitigation*)

Construction activities, such as demolition, excavation, building construction and interior and exterior finishing, would affect local air quality during the construction phases of the proposed project or variant. During construction, emissions of TACs and PM_{2.5} would expose nearby sensitive receptors to substantial pollutant concentrations. Off-road diesel equipment used for clearing and grading, materials handling and installation, and other construction activities would generate diesel PM and TAC emissions. Consistent with the citywide health risk assessment, this analysis evaluated health risks and PM_{2.5} concentrations resulting from the proposed project or variant on the surrounding community.

Because construction of the proposed project would not overlap with its operation, this discussion presents construction PM_{2.5} concentrations followed by operational PM_{2.5} concentrations. However, because excess cancer risk is evaluated over a 30-year period, the cancer risk analysis below presents the risk that would result when exposed to both construction and operational emissions together when assessing the cancer risk impact to offsite sensitive receptors.

Construction-Related PM_{2.5} Concentrations

The project site is located in an area defined as an APEZ. Within the APEZ, the significance threshold for annual average PM_{2.5} concentrations is a project contribution of 0.2 microgram per cubic meter (µg/m³) or greater. **Table 4.4.7: Existing plus Project (Unmitigated) Modeled Annual Average PM_{2.5} Concentration during Construction at the Maximally Exposed Individual Off-Site Receptor** shows the results of the baseline (existing) plus project-conditions PM_{2.5} modeling analyses at offsite sensitive receptor locations.

Table 4.4.7: Existing plus Project (Unmitigated) Modeled Annual Average PM_{2.5} Concentration during Construction at the Maximally Exposed Individual Offsite Receptor

Emissions Source	PM _{2.5} Concentration (µg/m ³)
Existing Conditions (CRRP-HRA [2014]) ^{1, 3}	9.038
Project Construction ²	2.025
Total PM _{2.5}	11.063
Significance threshold for project PM _{2.5} contribution within an APEZ	0.2
Significant?	Yes

Notes: µg/m³ = micrograms per cubic meter; APEZ = Air Pollutant Exposure Zone; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions) plus nearby existing stationary sources that were permitted by the BAAQMD after the CRRP-HRA was completed (see *10 South Van Ness Project Final Health Risk Assessment*, Section 2.0, pp. 11-12).

² Based on 2019 construction PM_{2.5} annual concentrations using unmitigated construction equipment at an offsite receptor. Receptor location: X (UTM) = 551,200, Y (UTM) = 4,180,220. Note that the maximally exposed individual receptor would be in different locations for PM_{2.5} than for cancer risk (discussed below) and would be in a different location in the mitigated scenario for each source.

³ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in PM_{2.5} concentrations of 0.01 µg/m³, which if added to the existing conditions would result in a total PM_{2.5} concentration of 11.07 µg/m³ at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017

As shown in Table 4.4.7, the maximum PM_{2.5} concentration due to construction of the project would be approximately 2.0 µg/m³, which would occur in year 2019; this level exceeds the APEZ threshold of 0.2 µg/m³. Therefore, construction of the project would generate emissions that would expose sensitive receptors to substantial pollutant concentrations. Thus, this impact would be significant. Implementation of **Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions**, shown below, would be required to reduce annual PM_{2.5} concentrations.

Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions

The project sponsor shall comply with the following requirements:

- A. **Construction Emissions Minimization Plan.** Before a construction permit is issued, the project sponsor shall submit a construction emissions minimization plan to the environmental review officer (ERO) or the ERO's designated representative for review and approval. The construction emissions minimization plan shall detail project compliance with the following requirements:
- (1) All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:
 - (a) Where access to alternative sources of power is reasonably available, portable diesel engines shall be prohibited. Where portable diesel engines are required because alternative sources of power are not reasonably available, the portable diesel engine shall meet the requirements of section (A)(1)(b), below.
 - (b) All off-road equipment shall have engines that meet either EPA or ARB tier 4 final off-road emission standards. If engines that comply with tier 4 final off-road emission standards are not commercially available, then the project sponsor shall seek a waiver from this requirement from the ERO and provide the next cleanest piece of off-road equipment as provided by the step-down schedule in Table M-AQ-3-1.
 - i. If seeking a waiver from this requirement, the project sponsor shall demonstrate that the resulting emissions would not result in the following:
 - Annual average construction-related PM_{2.5} emissions in excess of 0.2 µg/m³ at off-site sensitive receptor locations and
 - The combined cancer risk from construction and operational emissions generated by the project do not exceed an excess cancer risk of 7 per one million persons exposed at off-site sensitive receptor locations
 - ii. For purposes of this mitigation measure, "commercially available" shall mean the availability of tier 4 final engines taking into consideration factors such as critical-path timing of construction; (ii) geographic proximity to the project site of equipment; and (iii) geographic proximity of access to off-haul deposit sites.

Table M-AQ-3-1: Off-Road Equipment Compliance Step-Down Schedule

Compliance Alternative	Engine Emissions Standard	Emissions Control
1	Tier 4 Interim	N/A
2	Tier 3	ARB verified diesel emissions control strategy
3	Tier 2	ARB verified diesel emissions control strategy

How to use the table: If the requirements of (A)(1)(b) cannot be met, then the project sponsor would need to meet Compliance Alternative 1. Should the project sponsor not be able to supply off-road equipment meeting Compliance Alternative 1, then Compliance Alternative 2 would need to be met. Should the project sponsor not be able to supply off-road equipment meeting Compliance Alternative 2, then Compliance Alternative 3 would need to be met.

- (c) Renewable diesel shall be used to fuel all diesel engines unless it can be demonstrated to the environmental review officer that such fuel is: (1) not compatible with on-road or off-road engines, (2) that emissions from the transport of fuel to the project site will offset its emissions reduction potential, or (3) the fuel is not commercially available.
- (2) The project sponsor shall require in its construction contracts that the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, and Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.
 - (3) The project sponsor shall require that construction operators properly maintain and tune equipment in accordance with manufacturer's specifications.
 - (4) The construction emissions minimization plan shall include estimates of the construction timeline by phase with a description of each piece of off-road equipment required for every construction phase. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For verified diesel emissions control strategy installed: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date.
 - (5) The project sponsor shall keep the construction emissions minimization plan available for public review onsite during working hours. The project sponsor shall post at the perimeter of the project site a legible and visible

sign summarizing the requirements of the plan. The sign shall also state that the public may ask to inspect the construction emissions minimization plan at any time during working hours, and shall explain how to request inspection of the plan. Signs shall be posted on all sides of the construction site that face a public right-of-way. The project sponsor shall provide copies of the construction emissions minimization plan to members of the public as requested.

- B. **Reporting.** Quarterly reports shall be submitted to the ERO or the ERO's designated representative indicating the construction phase and off-road equipment information used during each phase, including the information required in A(4).

- (1) Within six months of the completion of construction activities, the project sponsor shall submit to the ERO or the ERO's designated representative a final report summarizing construction activities. The final report shall indicate the start and end dates and duration of each construction phase. For each phase, the report shall include detailed information required in A(4).

- C. **Certification Statement and Onsite Requirements.** Before the start of construction activities, the project sponsor must certify that it is in compliance with the construction emissions minimization plan, and that all applicable requirements of the plan have been incorporated into contract specifications.

Table 4.4.8: Existing plus Project (Mitigated) Modeled Annual Average PM_{2.5} Concentration during Construction at Maximally Exposed Individual Off-Site Receptor

shows that the maximum PM_{2.5} concentration due to construction at the project maximally exposed individual resident, assuming use of Tier 4 construction equipment per Mitigation Measure M-AQ-3a. This table shows that when added to existing conditions, the project would result in a total PM_{2.5} concentration of 9.137 µg/m³ in the worst year of construction (2019). As shown in Table 4.4.8, with mitigation, the maximum PM_{2.5} concentration due to construction of the project at offsite sensitive receptor locations would be 0.1 µg/m³. These results are below the significance threshold of 0.2 µg/m³. Therefore, the proposed project or variant's construction-related PM_{2.5} emissions impact would be less than significant with mitigation.

Operational PM_{2.5} Concentrations

Table 4.4.9: Existing plus Project (Unmitigated) Modeled Annual Average Operational PM_{2.5} Concentration at the Maximally Exposed Individual Receptor show the results of the baseline plus project-conditions PM_{2.5} concentration from the modeling analyses at both offsite and onsite sensitive receptors.

Table 4.4.8: Existing plus Project (Mitigated) Modeled Annual Average PM_{2.5} Concentration during Construction at Maximally Exposed Individual Off-Site Receptor

Emissions Source	PM _{2.5} Concentration (µg/m ³)
Offsite Receptors Using Tier 4 Final Construction Engines	
Existing Conditions (CRRP-HRA [2014]) ^{1,3}	9.038
Project Construction ²	0.099
Existing plus Project PM _{2.5} Concentration	9.137
Significance threshold for project PM _{2.5} contribution within an APEZ	0.2
Significant?	No

Notes: µg/m³ = micrograms per cubic meter; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions) plus nearby existing sources that were permitted by the BAAQMD after the CRRP-HRA was completed (see *10 South Van Ness Project Final Health Risk Assessment*, Section 2.0, pp. 11-12).

² Based on 2019 construction PM_{2.5} annual concentrations using mitigated construction equipment at an offsite receptor. Receptor location: X (UTM) = 551,200, Y (UTM) = 4,180,920

³ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in PM_{2.5} concentrations of 0.01 µg/m³, which if added to the existing conditions would result in a total PM_{2.5} concentration of 9.15 µg/m³ at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017

As shown in Table 4.4.9, the maximum PM_{2.5} concentration due to project operations when added to existing conditions would result in a total PM_{2.5} concentration of 9.21 µg/m³ at the project (offsite) maximally exposed individual resident and 9.08 at the onsite maximally exposed individual resident. The maximum PM_{2.5} contribution from the proposed project or variant would be 0.18 µg/m³ at offsite receptors and 0.08 µg/m³ at onsite receptors. The unmitigated offsite operational PM_{2.5} concentrations for the proposed project and variant would be less than 0.2 µg/m³, a less-than-significant impact. No mitigation is necessary.

Cancer Risk

Cancer risks to existing offsite receptors were calculated assuming exposure during the entire construction period through operations. Cancer risks from project operations only are calculated for onsite receptors as these receptors would not be exposed to construction period emissions resulting from the proposed project.

A total 30-year cancer risk is presented by adding the construction risks to the operational risk at each offsite receptor location. Existing plus Project excess cancer risk was estimated by adding these project contributions to the existing background excess cancer risk. The excess cancer risk attributable to unmitigated construction and operational emissions resulting from the project at

Table 4.4.9: Existing plus Project (Unmitigated) Modeled Annual Average Operational PM_{2.5} Concentration at the Maximally Exposed Individual Receptor

Emissions Source	PM _{2.5} Concentration (µg/m ³)
Offsite Receptors–Operations	
Existing Conditions ^{1,4}	9.03
Project Operations ²	0.18
Total PM _{2.5}	9.21
Significance threshold for project PM _{2.5} contribution within an APEZ	0.2
Significant?	No
Onsite Receptors–Operations	
Existing Conditions ^{1,4}	9.0
Project Operations ³	0.08
Total PM _{2.5}	9.08
Significance threshold for project PM _{2.5} contribution within an APEZ	0.2
Significant?	No

Notes: µg/m³ = micrograms per cubic meter; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

1. Community Risk Reduction Plan health risk assessment for Year 2014 plus nearby existing stationary sources that were permitted after the CRRP-HRA was prepared, explained in the *10 South Van Ness Final Health Risk Assessment*, Section 2.0, pp. 11-12.
2. Based on operational PM_{2.5} concentrations using unmitigated stationary source equipment and project vehicle trips. Receptor location: X (UTM) = 551,180, Y (UTM) = 4,180,900.
3. Based on operational PM_{2.5} concentrations using unmitigated stationary source equipment. Receptor location: X (UTM) = 551,120, Y(UTM)=4,180,900.
4. The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in PM_{2.5} concentrations of 0.01 µg/m³, which if added to the existing conditions would result in a total PM_{2.5} concentration of 9.22 µg/m³ at most at offsite receptors and 9.09 µg/m³ at most at onsite receptors. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017

the offsite maximally exposed individual residential receptor is presented in **Table 4.4.10: Maximum Unmitigated Excess Cancer Risk at Existing Offsite Residential Receptors**. As shown in Table 4.4.10, construction and operation of the proposed project or variant would result in a maximum excess cancer risk of approximately 133 in a million (rounded) at an offsite receptor, mostly due to emissions that would occur during the first two years of construction.

Table 4.4.11: Maximum Unmitigated Modeled Operational Excess Cancer Risk at Onsite Residential Receptors summarizes the excess cancer risk attributable to unmitigated operational project sources at onsite receptor locations. As shown in Table 4.4.11, operation of the proposed project or variant would result in an excess cancer risk of 15.8 in a million at an onsite receptor, mostly due to emissions from the project's emergency generator.

The results presented in Tables 4.4.10 and 4.4.11 both exceed the significance threshold of 7 in a million. Thus, this impact of the proposed project and variant would be significant.

Table 4.4.10: Maximum Unmitigated Excess Cancer Risk at Existing Offsite Residential Receptors

Emissions Source	Excess Cancer Risk (in a million) ⁴
Existing Conditions (CRRP-HRA [2014]) ^{1, 5}	93.57
Project Construction	
2019 ²	95.69
2020	32.18
2021	1.19
2022	0.12
Project Operations ³	3.48
Project Excess Cancer Risk	132.66
Existing plus Project Excess Cancer Risk	226.23

Notes: CRRP = Community Risk Reduction Plan; HRA = health risk assessment

¹ Community Risk Reduction Plan health risk assessment for Year 2014 plus nearby existing stationary sources that were permitted by the BAAQMD after the CRRP-HRA was completed (see *10 South Van Ness Project Final Health Risk Assessment*, Section 2.0, pp. 11-12).

² Maximum cancer risk is attributable primarily to excavation construction equipment and haul truck trips.

³ Maximum concentrations attributable primarily (approximately 2/3) to the project's emergency generator.

⁴ Receptor location: X (UTM) = 551,200, Y (UTM) = 4,180,920.

⁵ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in a cancer risk of 5.7 per one million persons exposed at that project's maximum exposed receptor. If this value is added to the existing conditions, total cancer risks at an offsite receptor would be 231.91 per one million persons exposed at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017.

Table 4.4.11: Maximum Unmitigated Modeled Operational Excess Cancer Risk at Onsite Residential Receptors

Emissions Source	Excess Cancer Risk (in a million) ³
Existing Conditions (CRRP-HRA [2014]) ¹	93.68
Project Operations ²	15.8
Total Excess Cancer Risk	109.48

Notes: CRRP = Community Risk Reduction Plan; HRA = health risk assessment; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 plus nearby existing stationary sources that were permitted by the BAAQMD after the CRRP-HRA was completed (see *10 South Van Ness Project Final Health Risk Assessment*, Section 2.0, pp. 11-12).

² Maximum concentrations attributable primarily to the project's emergency generator and vehicle traffic.

³ Receptor location: X (UTM) = 551,120, Y (UTM) = 4,180,900.

⁴ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in a cancer risk of 5.7 per one million persons exposed at that project's maximum exposed receptor. If this value is added to the existing conditions, total cancer risks at an onsite receptor would be 115.48 per one million persons exposed at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017.

As shown in the tables above, the project's contribution to cancer risk at onsite and offsite receptors would exceed the significance threshold of seven in one million persons exposed, resulting in a significant impact. Implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions, pp. 4.4.37–4.4.38 above, and **Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Diesel Equipment**, presented below, would be required to reduce the excess cancer risk.

Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Operational Diesel Generators

The project sponsor shall require in applicable contracts that the operational backup diesel generator:

- (1) Comply with ARB Airborne Toxic Control Measure emissions standards for model year 2008 or newer engines; and
- (2) Meet tier 4 final emissions standards; and
- (3) Be fueled with renewable diesel.

The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (regulation 2, rule 2, and regulation 2, rule 5) and the emissions standard requirement of this measure to the San Francisco Planning Department for review and approval before a permit for a backup diesel generator is issued by any City agency.

Once operational, the diesel backup generator shall be maintained in good working order for the life of the equipment and any future replacement of any diesel backup generators shall be required to be consistent with these emissions specifications. The operator of the facility at which the generator is located shall maintain records of the testing schedule for each diesel backup generator for the life of that diesel backup generator. The facility operator shall provide this information for review to the San Francisco Planning Department within three months of a request for such information.

Table 4.4.12: Maximum Mitigated Modeled Excess Cancer Risk at Existing Offsite Residential Receptors and **Table 4.4.13: Maximum Mitigated Modeled Excess Cancer Risk at Onsite Residential Receptors** summarize the excess cancer risk attributable to Existing plus Project Conditions, accounting for Mitigation Measures M-AQ-3a and M-AQ-3b at offsite and onsite receptor locations. Because onsite receptors would not be exposed to construction-period emissions, only operational emissions from the proposed project are shown for onsite residential receptors in Table 4.4.13.

Table 4.4.12: Maximum Mitigated Modeled Excess Cancer Risk at Existing Offsite Residential Receptors

Emissions Source	Excess Cancer Risk (in a million) ⁴
Existing Conditions (CRRP-HRA [2014]) ^{1,5}	93.57
Project Construction ²	
2019	4.17
2020	1.43
2021	0.05
2022	0.01
Project Operations ³	0.73
Total Project Excess Cancer Risk	6.39
Existing plus Project Excess Cancer Risk	99.96

Notes: CRRP = Community Risk Reduction Plan; HRA = health risk assessment; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions) plus nearby stationary sources that were permitted by the BAAQMD after the CRRP-HRA was completed (see *10 South Van Ness Project Final Health Risk Assessment*, Section 2.0, pp. 11-12).

² Maximum concentrations attributable primarily to the project's excavation construction sources and haul truck trips.

³ Maximum concentrations attributable primarily to the project's emergency generator and vehicle traffic.

⁴ Receptor location: X (UTM) = 551,200, Y (UTM) = 4,180,920.

⁵ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in a cancer risk of 5.7 per one million persons exposed at that project's maximum exposed receptor. If this value is added to the existing conditions, total cancer risks at an offsite receptor would be 105.66 per on million persons exposed at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017.

Table 4.4.13: Maximum Mitigated Modeled Excess Cancer Risk at Onsite Residential Receptors

Emission Source	Excess Cancer Risk (in a million) ^{3,4}
Existing Conditions (CRRP-HRA [2014]) ¹	93.68
Project Operations ²	2.43
Existing plus Project Excess Cancer Risk	96.11

Notes: CRRP = Community Risk Reduction Plan; HRA = health risk assessment; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions) and nearby stationary sources.

² Maximum concentrations attributable primarily to the project's emergency generator, and vehicle traffic.

³ Receptor location: X (UTM) = 551,120, Y (UTM) = 4,180,900.

⁴ The existing conditions do not account for operations of the 1500 Mission Street project, which is expected to be near completion once the proposed project begins construction. The 1500 Mission Street project is expected to result in a cancer risk of 5.7 per one million persons exposed at that project's maximum exposed receptor. If this value is added to the existing conditions, total cancer risks at an onsite receptor would be 101.81 per on million persons exposed at most. Because the significance threshold is based on the project contribution to existing health risks, the inclusion of the 1500 Mission Street project under either the existing or cumulative conditions does not affect the project's health risk analysis.

Source: Data compiled by AECOM in 2017.

As shown in Table 4.4.12, with mitigation, construction and operation of the proposed project or variant would result in an excess cancer risk of 6.39 in a million at the offsite maximally exposed individual residential receptor, mostly due to construction emissions occurring during the first two years of construction. As shown in Table 4.4.13, operation of the proposed project or variant would result in an excess cancer risk of 2.43 in a million at an onsite receptor, mostly due to emissions from traffic traveling on 12th Street and emissions from the emergency generator. These results are below the significance threshold of 7 in a million excess cancer risk. Therefore, the operational TAC emission impact of the proposed project or variant would be less than significant with mitigation.

In addition to the mitigation measures outlined above, Article 38 requires that the project sponsor submit an Enhanced Ventilation Proposal for approval by the Director of Public Health that achieves protection from PM_{2.5} equivalent to that associated with a Minimum Efficiency Reporting Value 13 filtration because the project is located within the APEZ. DBI will not issue a building permit without written notification from the Director of Public Health that the applicant has an approved Enhanced Ventilation Proposal. This requirement would further reduce indoor exposure to air pollutants for the proposed project's or variant's residents.

Impact AQ-4: The proposed project or variant would not generate emissions that create objectionable odors affecting a substantial number of people. (*Less than Significant*)

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. Although offensive odors do not cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and can cause citizens to submit complaints to local governments and regulatory agencies.

Projects with the potential to expose a substantial number of people to objectionable odors are deemed to have a significant impact. Facilities that may generate objectionable odors affecting a substantial number of people include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Construction

Project construction under the proposed project or variant would include minor sources of odors. Exhaust odors from diesel engines, as well as ROG emissions from asphalt paving and the application of architectural coatings, may be considered offensive by some individuals. Odors from these sources would be localized and generally confined to the immediately surrounding area. Additionally, odors from diesel fumes, asphalt paving, and architectural coatings would be temporary and would disperse rapidly with distance from the source.

Therefore, construction-generated odors would not result in frequent exposure of sensitive receptors to objectionable odor emissions. Construction-related odor impacts for the proposed project and variant would be less than significant, and no mitigation is necessary.

Operation

Operational land uses associated with the proposed project or variant would be primarily residential, and typical urban retail and commercial uses, which are not typically generators of substantial odor emissions. Therefore, operational odor impacts for the proposed project and variant would be less than significant and no mitigation is necessary.

Impact AQ-5: The proposed project or variant would not conflict with or obstruct implementation of the 2017 Bay Area Clean Air Plan. (*Less than Significant*)

Air quality plans describe air pollution control strategies to be implemented by a city, county, or region. The primary goals of the 2017 Bay Area Clean Air Plan are to protect public health and protect the climate by reducing emissions, concentrations of harmful air pollutants, and exposure to the pollutants that pose the greatest health risk. To meet the primary goals, the 2017 Bay Area Clean Air Plan includes individual control measures that describe specific actions to reduce emissions of air pollutants with measures assigned into categories such as mobile-source, stationary-source, and land use and local impacts measures.

The proposed project or variant would be consistent with the 2017 Clean Air Plan if it would support the plan's goals, include applicable control measures from the 2017 Clean Air Plan, and would not disrupt or hinder implementation of any control measures from the plan. Consistency with this plan is the basis for determining whether the proposed project or variant would conflict with or obstruct implementation of an applicable air quality plan.

The 2017 Bay Area Clean Air Plan includes Transportation Control Measure (TCM) D3, "Local Land Use Strategies." TCM D3 calls for promoting and supporting land use patterns, policies, and infrastructure investments that support high-density mixed-use, residential, and employment development to facilitate walking, bicycling, and transit use. The compact, dense mixed-use development of the proposed project or variant, and its location in an area that has multiple transportation options that encourage residents to bicycle, walk and use transit to and from the project site instead of using private automobiles, would ensure consistency with the goals of this Clean Air Plan control measure. In addition, Planning Code section 169 requires that the project sponsor develop a TDM plan to reduce the use of single-occupancy vehicles and encourage the use of transit and nonmotorized travel modes (see Chapter 2.0, Project Description, pp. 2.22-2.25). Thus, the proposed project or variant would include the applicable control measures identified in the 2017 Bay Area Clean Air Plan.

Examples of a project that could cause the disruption or delay of 2017 Bay Area Clean Air Plan are projects that would preclude the extension of a transit line or bike path, or projects that propose excessive parking beyond City parking requirements. The proposed project would include about 984 dwelling units with 491 parking spaces unbundled from the units, and therefore would not provide excessive parking. The proposed development (under either the proposed project or the variant) would be a high-density urban infill development located in a neighborhood well-served by local and regional transit. The proposed project or variant would improve walking conditions by widening sidewalks on 12th Street in coordination with other local development projects, and by providing a mid-block alley. The proposed project or variant would not preclude the extension of a transit line or a bike path or any other transit improvement and, thus, would not disrupt or hinder implementation of control measures identified in the 2017 Bay Area Clean Air Plan.

Based on this analysis, the proposed project or variant would not interfere with implementation of the 2017 Bay Area Clean Air Plan, and this impact would be less than significant.

Mitigation measures identified in Impact AQ-3 would reduce emissions during construction and operation to less-than-significant levels. Mitigation Measure M-AQ-3a, pp. 4.4.37–4.4.39, which requires use of cleaner, tier 4 construction equipment, is consistent with the 2017 Bay Area Clean Air Plan Mobile Source Measure C-1, “Construction and Farming Equipment,” which calls for incentives to retrofit construction equipment with diesel PM filters or upgrade to tier 3 or 4 engines and use renewable alternative fuels in applicable equipment. Mitigation Measure M-AQ-3b, p. 4.4.43, which requires the proposed emergency generator to meet more restrictive emissions standards, would be consistent with the 2017 Bay Area Clean Air Plan stationary-source control measure SSM-21, “Revise Regulation 2, Rule 5: New Source Review for Air Toxics,” which supports implementing more stringent requirements for stationary sources like the project’s or variant’s emergency generator.

Cumulative Impacts

Impact C-AQ-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not contribute considerably to cumulative regional air quality impacts. (*Less than Significant*)

By its very nature, air pollution is largely a cumulative impact. Emissions from past, present, and future projects contribute to the region’s adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulative adverse air quality impacts.

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. In developing thresholds

of significance for air pollutants, the air district considered the emission levels for which a project's individual emissions would be cumulatively considerable. If the proposed project's or variant's construction and operational emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project or variant would not be considered to result in a cumulatively considerable contribution to regional air quality impacts. As shown in Tables 4.4.5 and 4.4.6, construction and operational emissions from the project or variant would not exceed the criteria air pollutant thresholds of significance. Therefore, emissions associated with the proposed project or variant would not result in a significant cumulative impact related to regional air quality. This impact would be less than significant.

Impact C-AQ-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would contribute to cumulative health risk impacts on sensitive receptors. (*Less than Significant with Mitigation*)

This analysis includes an evaluation of cumulative PM_{2.5} concentrations and excess cancer risk at offsite and onsite sensitive receptors that could result from existing sources, project sources, and other nearby projects.

There are 21 projects located within 1,000 feet of the project site (area of influence as determined by air district guidance in the BAAQMD CEQA Air Quality Guidelines).⁴³ These projects are listed in Table 19 in the Health Risk Assessment.⁴⁴ Air quality analyses have been completed for only a few of these projects, and others are still under way. The 1500 Mission Street Project is located across South Van Ness Avenue and will be close to completion at the time construction begins at the project site;⁴⁵ therefore, the highest modeled PM_{2.5} concentration due to operational emissions from that project was conservatively added to all modeled receptors for the cumulative analysis presented in this section. The 1629 Market Street project is located across 12th Street from the project site and is scheduled to be constructed between March 2018 and November 2021, overlapping with construction of the proposed project or variant. The highest modeled PM_{2.5} concentration due to construction and operational emissions from the 1629 Market Street project was added to all modeled receptors for the cumulative analysis presented in this section. The other nearby projects are smaller in scope and size and further away from the project site; therefore, since construction impacts are localized, contributions from those projects would be minimal. These projects would contribute additional PM_{2.5} emissions and excess cancer risk to

⁴³ BAAQMD, *CEQA Guidelines*, May 2017, Section 5.1.3, pp. 5-2 – 5-3. The guidance recommends use of a 1,000-foot radius, taking into account the proposed project plus foreseeable future projects within that radius.

⁴⁴ AECOM, *10 South Van Ness Project, Final Health Risk Assessment*, January 2018, revised September 2018, p. 43.

⁴⁵ The project identified as “1500 Mission Street” includes both 49 South Van Ness Avenue and 1500 Mission Street. Since the 1500 Mission Street project's construction would be essentially completed before the proposed project's or variant's construction begins, the proposed project's health risk impact would not have the potential to combine with the health risk impact of construction of the 1500 Mission Street project.

both offsite and onsite sensitive receptors. The PM_{2.5} concentration and excess cancer risk from operation of the 1500 Mission Street project and construction and operation of the 1629 Market Street project are summarized in **Table 4.4.14: Cumulative Projects within the Immediate Vicinity of the Proposed Project with Known Health Risk Effects**.

As stated above, the maximum cancer risk and annual PM_{2.5} values at the respective project's or variant's maximally exposed individual receptors calculated in these analyses were conservatively added to all receptors within the modeling domain for this project. Offsite sensitive receptors would be exposed to simultaneous construction emissions associated with the proposed project, existing sources, and construction emissions from the 1629 Market Street Project. Offsite receptors would also be exposed to the operational emissions from the proposed project and the 1500 Mission Street and 1629 Market Street projects and other past, present and reasonably foreseeable projects for which cancer risk information is not known. Onsite sensitive receptors, however, would only be exposed to operational emissions from existing sources, project sources, and the operational emissions from the 1500 Mission Street and 1629 Market Street projects. Therefore, this cumulative analysis presents results for offsite sensitive receptors, followed by onsite sensitive receptors.

Table 4.4.14: Cumulative Projects within the Immediate Vicinity of the Proposed Project with Known Health Risk Effects

Address	PM _{2.5} (µg/m ³)	Excess Cancer Risk (in a million)
1629 Market Street Construction Impact	0.18	3.9
1629 Market Street Operational Impact	0.02	
1500 Mission Street Operational Impact	0.01	5.7
Total Construction	0.18	9.6
Total Operational	0.03	

Notes:

PM_{2.5} = particulate matter less than 2.5 microns, µg/m³ = micrograms per cubic meter.

Source: Data provided by Ramboll Environ in 2016 and 2017

Cumulative PM_{2.5} Construction Analysis

As shown in **Table 4.4.15: Cumulative plus Project Annual PM_{2.5} Concentrations at Offsite Receptors during Project Construction**, the PM_{2.5} concentrations due to existing conditions (2014) in the project area are 9.038 µg/m³. Existing 2014 conditions are used for the analysis of cumulative construction phase impacts because construction of the proposed project or variant and the other nearby projects would be completed well before year 2040 (the cumulative horizon year). Table 4.4.15 summarizes the Cumulative Plus Project Conditions annual PM_{2.5} concentrations at offsite sensitive receptor locations without and with implementation of Mitigation Measure M-AQ-3a. As shown in this table, under both existing and cumulative conditions, the project would meet the APEZ criteria indicating that a significant cumulative

impact exists. In the unmitigated scenario, the proposed project would contribute approximately $2 \mu\text{g}/\text{m}^3$ of $\text{PM}_{2.5}$ at offsite receptors, exceeding the $0.2 \mu\text{g}/\text{m}^3$ significance threshold. Therefore, the proposed project would result in a significant contribution to cumulative $\text{PM}_{2.5}$ concentrations, and implementation of Mitigation Measure M-AQ-3a would be necessary to reduce or eliminate the significant effect.

Table 4.4.15: Cumulative plus Project Annual $\text{PM}_{2.5}$ Concentrations at Offsite Receptors during Project Construction

Cumulative Construction Scenario	Annual Average $\text{PM}_{2.5}$ Concentration Unmitigated ($\mu\text{g}/\text{m}^3$)	Annual Average $\text{PM}_{2.5}$ Concentration Mitigated ($\mu\text{g}/\text{m}^3$)
Existing conditions (CRRP-HRA [2014]) ¹	9.038	9.038
Project construction ²	2.025	0.099
Other cumulative projects ³	0.19	0.19
Cumulative construction $\text{PM}_{2.5}$ concentration	11.25	9.327

Notes: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; $\text{PM}_{2.5}$ = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions) plus nearby existing sources permitted since the CRRP HRA was prepared in 2012.

² Based on 2019 construction $\text{PM}_{2.5}$ annual concentrations at an offsite receptor. Receptor location: X (UTM) = 551,200, Y (UTM) = 4,180,920.

³ Includes operational effects from the 1500 Mission Street Project, and construction effects from the 1629 Market Street project as this project could be under construction concurrently with the proposed project.

Source: Data compiled by AECOM in 2017

Table 4.4.15 shows that with implementation of Mitigation Measure M-AQ-3a, construction-related $\text{PM}_{2.5}$ concentrations at offsite receptor locations would be reduced to $0.099 \mu\text{g}/\text{m}^3$, or $0.01 \mu\text{g}/\text{m}^3$ rounded, which is below the $0.2 \mu\text{g}/\text{m}^3$ threshold for determining whether a project's contribution to $\text{PM}_{2.5}$ concentrations would be cumulatively considerable. Therefore, with implementation of Mitigation Measure M-AQ-3a the contribution of the proposed project or variant to cumulative construction-related $\text{PM}_{2.5}$ impacts would be less than significant.

Cumulative $\text{PM}_{2.5}$ Operational Analysis

In the project area, the 2040 background cumulative conditions show similar $\text{PM}_{2.5}$ concentrations as the existing 2014 conditions. Although the 2040 baseline scenario accounts for an increase in vehicle trips, vehicle emissions are expected to decrease due to more stringent emissions standards. Background $\text{PM}_{2.5}$ concentrations under existing 2014 conditions are greater than baseline 2040 concentrations. Therefore, in order to provide a worst case cumulative assessment of operational $\text{PM}_{2.5}$ concentrations, the analysis uses existing 2014 conditions from the citywide health risk assessment. **Table 4.4.16: Cumulative plus Project Annual $\text{PM}_{2.5}$ at Offsite and Onsite Receptors during Project Operation** presents the $\text{PM}_{2.5}$ concentration at the proposed project's and variant's offsite and onsite maximally exposed individual residential receptors during operation of the proposed project in addition to $\text{PM}_{2.5}$ concentrations from the existing

2014 condition and operation of the 1500 Mission Street and 1629 Market Street projects. Cumulative PM_{2.5} emissions would exceed the APEZ criterion of 9.0 µg/m³ for health vulnerable locations, resulting in a significant cumulative impact. However, the evaluation of whether the proposed project or variant would result in a cumulatively considerable contribution to a significant impact is based on whether the individual project would contribute 0.2 µg/m³ or more to this cumulative impact.

Table 4.4.16: Cumulative plus Project Annual PM_{2.5} at Offsite and Onsite Receptors during Project Operation

Cumulative Operational Scenario	Annual Average PM _{2.5} Concentration Unmitigated (µg/m ³)
Offsite Receptor	
Baseline Conditions (CRRP-HRA [2014]) ³	9.06
Project Operations ¹	0.18
Other Cumulative Projects ²	0.03
Cumulative Operational PM _{2.5} Concentration	9.27
Onsite Receptor	
Baseline Conditions (CRRP-HRA [2014]) ³	9.04
Project Operations ⁴	0.07
Other Cumulative Projects ²	0.03
Cumulative Operational PM _{2.5} Concentration	9.14

Notes:

µg/m³ = micrograms per cubic meter; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

¹ Maximum concentrations attributable to emergency generator and vehicle traffic at an offsite receptor. Receptor location: X (UTM) = 551,080, Y (UTM) = 4,180,900.

² Includes operational effects from both the 1500 Mission Street project and the 1629 Market Street project.

³ Community Risk Reduction Plan health risk assessment for Year 2014 plus nearby sources permitted since 2012. Year 2040 emissions (typically used for future Baseline Conditions) plus nearby existing sources are projected to be lower than 2014 conditions; therefore Year 2014 emissions present a more conservative result when added to project or variant and other cumulative projects emissions.

⁴ Maximum concentrations attributable to emergency generator and vehicle traffic (tire and brake wear) at an onsite receptor. Receptor location: X (UTM) = 551,120, Y (UTM) = 4,180,900.

Source: Data compiled by AECOM in 2017

As shown in Table 4.4.16, operation of the proposed project or variant would result in an annual PM_{2.5} concentration of approximately 0.18 µg/m³ at an offsite receptor, with a total PM_{2.5} concentration of approximately 9.27 µg/m³ when cumulative conditions and nearby projects are added. This would be a significant cumulative impact. However, emissions from the proposed project or variant would not reach the significance threshold of 0.2 µg/m³. Therefore, the proposed project or variant would not result in a considerable contribution to the cumulative PM_{2.5} impact.

Operation of the proposed project or variant would result in an annual PM_{2.5} concentration of 0.07 µg/m³ at an onsite receptor as shown in Table 4.4.16, with a total PM_{2.5} concentration of approximately 9.14 µg/m³ under cumulative conditions. The total PM_{2.5} concentration would

result in a significant cumulative impact. As noted above, the evaluation of whether a project would result in a cumulatively considerable contribution to a significant impact is based on the individual project threshold of $0.2 \mu\text{g}/\text{m}^3$. The proposed project or variant would not reach the significance threshold of $0.2 \mu\text{g}/\text{m}^3$, and therefore would not contribute considerably to the significant cumulative $\text{PM}_{2.5}$ impact on an onsite receptor.

Excess Cancer Risk

The cumulative health risk assessment takes into account the contribution of localized health risks to sensitive receptors from sources included in the citywide modeling (citywide health risk assessment) in addition to the proposed project's or variant's sources and other cumulative project sources within 1,000 feet of the project site per air district guidance. In the project area, the 2040 background cancer risk values versus existing baseline conditions decrease from approximately 94 in 1 million to 55 in a million at offsite receptor locations and from approximately 94 in a million to 52 in a million at onsite receptor locations. To present a more conservative (i.e. worst-case) analysis, therefore, the existing conditions 2014 cancer risk of 93.57 in 1 million for offsite receptors and 93.68 in 1 million for onsite receptors have been used as the baseline conditions in the cumulative cancer risk analysis.

As shown in **Table 4.4.17: Cumulative plus Project Excess Cancer Risk at Offsite Sensitive Receptors** and **Table 4.4.18: Cumulative plus Project Conditions at Onsite Receptors**, cancer risks due to cumulative conditions are anticipated to exceed the APEZ criterion of 90 in 1 million for health vulnerable locations. This would be a significant cumulative impact. However, the evaluation of whether the project would result in a considerable contribution to the significant cumulative impact is based on the individual project threshold of 7 in 1 million cancer risk.

As shown in Table 4.4.17, operation of the proposed project or variant without mitigation would result in a cancer risk of 132.66 in 1 million at an offsite sensitive receptor, which in combination with existing conditions and other cumulative projects would result in a total cumulative excess cancer risk of 235.83. This would be a significant cumulative impact.

Operation of the proposed project or variant with implementation of Mitigation Measures M-AQ-3a and M-AQ-3b would result in an excess cancer risk of 6.39 in a million at an offsite receptor, with a cumulative excess cancer risk of 109.56, or approximately 110 in 1 million when nearby projects are accounted for. The proposed project or variant would not exceed the significance threshold of 7 in 1 million excess cancer risk with implementation of mitigation measures M-AQ-3a and M-AQ-3b. Therefore, the proposed project or variant's contribution to significant cancer risk impacts at offsite sensitive receptors would not be considerable with mitigation.

Table 4.4.17: Cumulative plus Project Excess Cancer Risk at Offsite Sensitive Receptors

Cumulative Cancer Risk Scenario	Excess Cancer Risk Unmitigated (in a million)	Excess Cancer Risk Mitigated (in a million)
Baseline Conditions (CRRP-HRA [2014]) ¹	93.57	93.57
Project Total Cancer Risk ²	132.66	6.39
Other Cumulative Projects Cancer Risk ³	9.6	9.6
Cumulative Excess Cancer Risk	235.83	109.56
APEZ Criterion	90	90

Notes: CRRP = Community Risk Reduction Plan; HRA = health risk assessment; UTM = Universal Transverse Mercator

¹ Community Risk Reduction Plan health risk assessment for Year 2014 (Existing Conditions).

² Maximum operational concentrations attributable primarily to emergency generator and vehicle traffic. Receptor location for project cancer risk: X (UTM) = 551,200, Y (UTM) = 4,180,920.

³ Operational effects from 1500 Mission Street, and construction and operational effects from 1629 Market Street.

Source: Data compiled by AECOM in 2017

Table 4.4.18: Cumulative plus Project Excess Cancer Risk at Onsite Receptors

Cumulative Scenario	Excess Cancer Risk Unmitigated (in-a-million)³	Excess Cancer Risk Mitigated (in-a-million)³
Cumulative Conditions (CRRP-HRA [2014])	93.68	93.68
Project Operations ¹	15.8	2.43
Other Cumulative Projects ²	9.6	9.6
Cumulative Excess Cancer Risk	119.48	105.71
APEZ Criterion	90	90

Notes: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; APEZ = Air Pollutant Exposure Zone; CRRP = Community Risk Reduction Plan; HRA = health risk assessment; $\text{PM}_{2.5}$ = particulate matter with aerodynamic diameter less than 2.5 microns; UTM = Universal Transverse Mercator

¹ Maximum operational excess cancer risk attributable primarily to emergency generator at an onsite receptor and vehicle traffic. Receptor location X (UTM) = 551,120 Y (UTM) = 4,180,900.

² Concurrent project excess cancer risk.

Source: Data compiled by AECOM in 2017

Table 4.4.18 shows that operation of the proposed project or variant without mitigation would result in an excess cancer risk of 15.8 in 1 million at an onsite sensitive receptor, with a cumulative excess cancer risk of 119.48, or approximately 120 in 1 million. This would be a significant cumulative impact. The proposed project or variant would exceed the significance threshold of 7 in 1 million cancer risk at an onsite sensitive receptor. Therefore, the proposed project or variant's contribution to this significant cumulative impact would be considerable.

Operation of the proposed project or variant with implementation of Mitigation Measure M-AQ-3b would result in a cancer risk of 2.43 in 1 million at an onsite receptor, with a cumulative cancer risk of 105.71, or approximately 106 in 1 million when nearby projects are accounted for. The proposed project or variant would not exceed the significance threshold of 7 in 1 million cancer risk with implementation of Mitigation Measure M-AQ-3b. Therefore, the proposed project or variant's contribution to significant cumulative cancer risk impacts to onsite sensitive

receptors would not be considerable with mitigation. The project or variant would result in a less-than-significant cumulative impact with mitigation.

4.5 WIND

Introduction

Section 4.5, Wind, describes the proposed project's and variant's impacts on ground-level wind currents at various publicly accessible locations on and near the project site. The Environmental Setting describes the general wind characteristics in San Francisco, provides details of the wind environment near the project site, and discusses the regulations that define the criteria used by the city to determine whether the wind impacts of a proposed project would be significant. The evaluation of potential wind impacts considers the results of wind tunnel testing for three test scenarios under both the proposed project and variant: an existing scenario, which establishes the baseline wind conditions at and around the project site; a project scenario, which evaluates the project's and variant's effects on ground-level winds; and a cumulative scenario, which evaluates the effects of the project and variant in combination with other reasonably foreseeable projects.

The wind data cited in this section are based on the results of the *Wind Microclimate Wind Study* prepared for the proposed project by the engineering firm BMT Fluid Mechanics (BMT).¹

Environmental Setting

San Francisco's Existing Wind Environment

The difference in atmospheric pressure between two points on the earth causes air masses to move from the area of higher pressure to the area of lower pressure. This movement of air masses results in wind currents. In San Francisco, average winds speeds are the highest in the summer and lowest in the winter. However, the strongest peak wind speeds occur in the winter. The highest average wind speeds occur in mid-afternoon and the lowest in the early morning. Average wind speeds are highest during the summer and lowest during the winter. Winds exhibit certain characteristics over the course of a day in San Francisco: the highest wind speeds generally occur during the mid-afternoon hours, while the lowest wind speeds often occur during early mornings.

Wind directions are reported as directions from which the winds blow. Meteorological data collected at the old San Francisco Federal Building at 50 United Nations Plaza over a six-year period between 1945 and 1950 show that westerly through northwesterly winds are the most frequent and strongest winds during all seasons.² Of the 16 primary wind directions, four have the greatest frequency of occurrence: northwest, west-northwest, west, and west-southwest. These wind conditions reflect the persistence of sea breezes.

¹ BMT Fluid Mechanics. 10 South Van Ness Avenue Project, *Wind Microclimate Study*, August 24, 2018.

² Arens, E. et al., "Developing the San Francisco Wind Ordinance and its Guidelines for Compliance," *Building and Environment*, Vol. 24, No. 4, pp. 297–303, 1989.

Wind Effects on People

The comfort of pedestrians varies under different conditions of sun exposure, temperature, clothing, and wind speed.³ Winds up to about 4 miles per hour (mph) have no noticeable effect on pedestrian comfort. With speeds from 4 to 8 mph, wind is felt on the face. Winds from 8 mph to 13 mph will disturb hair, cause clothing to flap, and extend a light flag mounted on a pole. Winds from 13 to 19 mph will raise loose paper, dust, and dry soil, and will disarrange hair. With winds from 19 to 26 mph, the force of the wind will be felt on the body. With winds from 26 to 34 mph, umbrellas are used with difficulty, hair is blown straight, there is difficulty in walking steadily, and wind noise is unpleasant. Winds over 34 mph can result in loss of balance, and gusts can blow people over.⁴

Wind Effects from Buildings

The direction and speed of wind currents can be altered by natural features of the land or by buildings and structures. Groups of buildings clustered together tend to act as obstacles that reduce wind speeds; building height, massing, and orientation or profiles of buildings may also be factors that can affect wind speeds. Tall buildings and exposed structures can strongly affect the wind environment for pedestrians. A building that stands alone or is much taller than the surrounding buildings can intercept and redirect winds that might otherwise flow overhead and bring them down the vertical face of the building to ground level, where they create ground-level wind and turbulence. These redirected winds can be relatively strong and turbulent, and may in some instances be incompatible with the intended uses of nearby ground-level pedestrian spaces.

Moreover, slab-shaped buildings have the greatest potential to cause wind acceleration; buildings with a geometrically complex shape or setbacks have a lesser effect. Buildings oriented with a wide axis perpendicular to prevailing winds will also generally cause greater ground-level wind acceleration than buildings oriented with a narrow axis perpendicular to prevailing winds. Thus, wind impacts are generally caused by large building masses that are substantially taller than their surroundings, and by buildings oriented so that a large wall catches a prevailing wind, particularly if such a wall includes little or no articulation.

³ Lawson, T. V., and A. D. Penwarden, "The Effects of Wind on People in the Vicinity of Buildings," Proceedings of the Fourth International Conference on Wind Effects on Buildings and Structures, London, 1975, Cambridge University Press, Cambridge, U.K., pp. 605–622, 1976.

⁴ National Oceanic and Atmospheric Administration, Beaufort Wind Scale, <https://www.weather.gov/mfl/beaufort>, accessed February 4, 2018.

Wind Conditions in the Project Vicinity

The proposed project is located south of Market Street on the east side of 12th Street at the intersection of Market Street, 12th Street, and South Van Ness Avenue, in San Francisco's South of Market (SoMa) neighborhood. The north-of-Market Street grid is oriented within nine degrees of the four cardinal directions (north, south, east, and west); however, the street grid south of Market Street is oriented approximately northwest/southeast and southwest/northeast. This orientation typically results in a less predictable pattern of wind variation at the pedestrian level.

South Van Ness Avenue, which forms the eastern project site boundary, runs generally north-south, parallel to the north-of-Market Street grid. The area just north of the intersection of Market Street and Van Ness Avenue—north of and upwind from the project site—is one of the windiest areas in San Francisco. The general openness and lack of buildings taller than 80 feet in the upwind areas west of Van Ness Avenue, along with the width of Van Ness Avenue itself, allows the prevailing northwesterly, west-northwesterly, and westerly winds direct access to this area, with relatively little disruption from intervening buildings. These approaching winds, and the combined presence of existing tall buildings, including 100 Van Ness Avenue (at Fell Street), Fox Plaza (at Hayes, Polk, and Market streets), 1455 Market Street (at 11th Street), and the NEMA apartment tower at 8 10th Street (at Market Street), result in strong, turbulent winds at and near ground level within the triangular area roughly defined by Van Ness Avenue and Hayes and Market streets, including at the intersection of 12th and Market streets.

Recent wind tunnel testing for the proposed project and other projects in the vicinity of the intersection of Market Street and Van Ness Avenue has shown that the windy conditions on Van Ness Avenue north of Market Street also exist on South Van Ness Avenue between Market and Mission streets. These conditions exist for the reason noted above: little obstruction of prevailing winds by buildings to the west. Furthermore, the width of South Van Ness Avenue offers an unobstructed path for northwesterly to westerly winds to be redirected downward and channeled to the south at ground level.

Regulatory Framework

SAN FRANCISCO PLANNING CODE SECTION 148

The San Francisco Planning Code (planning code) section 148 establishes wind comfort and wind hazard criteria for the Downtown (C-3) Use Districts in which the project site is located.⁵ Section 148 defines “equivalent wind speed” as “an hourly mean wind speed adjusted to incorporate the effect of gustiness or turbulence on pedestrians” and is used to evaluate wind speeds. Section 148

⁵ Other sections of the planning code apply comparable standards in the Downtown Residential (DTR) Districts, the Folsom and Main Residential/Commercial Special Use District, the Van Ness Special Use District, and certain zoning districts in the SoMa neighborhood.

establishes the wind hazard criterion as wind speed that exceeds 26 mph for a single hour of the year.⁶ Under section 148, new buildings and additions to buildings may not cause wind speeds that meet or exceed this hazard criterion. Under section 148, no exception may be granted for buildings that result in winds that exceed the hazard criterion.

Planning code section 148 also establishes pedestrian comfort wind speed criteria, which are 7 mph for seating areas and 11 mph for areas of substantial pedestrian use.⁷ The comfort criteria require that wind speeds not exceed these levels more than 10 percent of the time year-round between 7 a.m. and 6 p.m.

Impacts and Mitigation Measures

Significance Thresholds

The proposed project or variant would have a significant impact related to wind if it would alter wind in a manner that substantially affects public areas.

To assess whether a project would result in a significant impact under the CEQA significance threshold, the city uses the planning code's hazard criterion. That is, the city determines whether a project would cause equivalent wind speeds to reach or exceed the wind hazard criterion of 26 mph for a single hour of the year. If a project would cause a new wind hazard or exacerbate an existing wind hazard in a public area, it may result in a significant impact under CEQA. The San Francisco Planning Department (planning department) does not consider exceedances of the comfort criteria to be a significant impact for CEQA purposes. However, the wind study assessed wind conditions related to the comfort criteria and the results of this assessment are summarized at the end of this section for informational purposes.

⁶ The wind hazard criterion is derived from the wind condition that would generate a three-second gust of wind at 20 meters per second, a commonly used guideline for wind safety. This wind speed, on an hourly basis, is a 26 mph average for a full hour. Because the original Federal Building wind data were collected at one-minute averages, the 26 mph hourly average is converted to a one-minute average of 36 mph, which is used to determine compliance with the 26 mph one-hour hazard criterion in the planning code. (Arens, E. et al., "Developing the San Francisco Wind Ordinance and its Guidelines for Compliance," Building and Environment, Vol. 24, No. 4, pp. 297–303, 1989.)

⁷ The wind comfort criteria are defined in terms of equivalent wind speed, which is an average wind speed (mean velocity), adjusted to include the level of gustiness and turbulence. Equivalent wind speed is defined as the mean wind velocity, multiplied by the quantity (1 plus 3 times the turbulence intensity) divided by 1.45. This calculation magnifies the reported wind speed when turbulence intensity is greater than 15 percent.

Approach to Analysis

BMT conducted a wind tunnel test to characterize the existing pedestrian wind environment and to assess future wind conditions on sidewalks and open spaces around the project site with construction of the proposed project or variant.⁸ A 1-inch-to-25-foot scale (1:300) model of the project site and surrounding buildings within a 1,500-foot radius was constructed to assess existing, existing-plus-project, and existing-plus-variant conditions.

The mean speed profile and turbulence of the natural wind approaching the modeled area were simulated in the wind tunnel, and pedestrian-level wind speeds were measured using sensors at 64 locations for 16 wind directions at a 5-foot (pedestrian) height above grade. Locations for wind speed sensors, or study test points, were selected to indicate how the general flow of winds would be directed around the project buildings. Consistent with section 148, most test points were located within public sidewalks, which are assumed for the purpose of this analysis to be areas of substantial pedestrian use. Two test points were located along new sidewalk spaces under the proposed project and variant, and one test point was located in the center of the proposed mid-block alley under the proposed project (i.e., these three test points are not included in the existing scenario).

Cumulative Wind Analysis

For the cumulative scenarios, the wind study model included nearby cumulative projects that are either approved but unbuilt, or are under review with the planning department and that could meaningfully affect wind conditions in the project vicinity. The model used project plans where available; however, for some cumulative projects, final plans were not available and simplified massing models were used.

Project Features

The proposed project would involve the demolition of the existing building and the construction of two 41-story towers. The project sponsor is considering a variant to the proposed project that would involve construction of a single 55-story tower over a podium structure. These proposed development scenarios have the potential to affect ground-level wind conditions in the project vicinity. This analysis considers the wind hazard effects of each scenario separately.

PROPOSED PROJECT

The proposed building would consist of two 41-story building volumes on the triangle-shaped project site. The towers would be 400 feet tall (420 feet total, including roof screens and elevator penthouses). These structures would also include podium levels: the north tower podium would

⁸ BMT Fluid Mechanics. 10 South Van Ness Project, Wind Microclimate Study, August 24, 2018.

be 114 feet in height, and the south tower podium would be 120 feet in height. New publicly accessible open space would be provided in the form of a new pedestrian-oriented right-of-way (or alley) that would run through the block from South Van Ness Avenue to 12th Street. The proposed project would include expansion of the eastern and western sidewalks along 12th Street from a width of 15 feet to 21 feet. Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets. The “pedestrian island” at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection. In addition, 33 net new street trees would be planted along the perimeter of the project site frontage, in compliance with the city’s Better Streets Plan.

The proposed project would also include additional building elements that would serve as wind abatement features, specifically 25-foot-tall evergreen street trees adjacent to the project site, a 35-foot-tall wind canopy (varying in width between 10 and 20 feet) around the perimeter of the building’s podium, and a 20-foot-tall free-standing wind screen (approximately 30 feet in diameter) at the 12th Street entrance to the mid-block passage under the proposed project.

In addition, this testing scenario includes 25-foot-tall evergreen trees that would be planted along the east side of South Van Ness Avenue as part of the proposed project (along the 1 South Van Ness Avenue frontage), as well as those to be planted as part of the 1500 Mission Street Project that is currently under construction.

VARIANT

The variant would consist of a single, taller tower and a podium. With the variant, the building would be 590 feet tall and would have 55 stories. The podium would range from 13 stories (139 feet, 9 inches) at the north end to 15 stories (164 feet, 10 inches) at the south end.

New publicly accessible open space would be provided in the form of a new pedestrian-oriented right-of-way (or alley) that would run through the block from Market Street to 12th Street. The proposed variant would include substantially the same streetscape improvements and on-street parking and loading as the proposed project, as described above.

The variant would also include a 35-foot-tall wind canopy (varying in width between 10 and 45 feet) around the perimeter of the building’s podium that would serve as a wind abatement feature.

In addition, this testing scenario includes 25-foot-tall evergreen trees that would be planted along the east side of South Van Ness Avenue as part of the variant (along the 1 South Van Ness Avenue frontage), as well as those to be planted as part of the 1500 Mission Street Project that is currently under construction.

Project Impacts

Impact WI-1: The proposed project or variant would not alter wind in a manner that would substantially affect public areas in the vicinity of the project site. (*Less than Significant*)

Under existing conditions, 5 of the 64 test points exceed the hazard criterion, with the total number of hours exceeding the hazard criterion reaching 53 hours per year. The test points at which the hazard criterion is exceeded are as follows: on the southeastern sidewalk of Mission Street near the intersection with South Van Ness Avenue; on the eastern sidewalk of Van Ness Avenue near the Fell Street intersection with Van Ness Avenue and between Fell and Market streets; and on the southern sidewalk corner of Market and 10th streets (see test points 22, 34, 35, 56, and 62 on **Figure 4.5.1: Wind Hazard Results – Existing Scenario**).

PROPOSED PROJECT

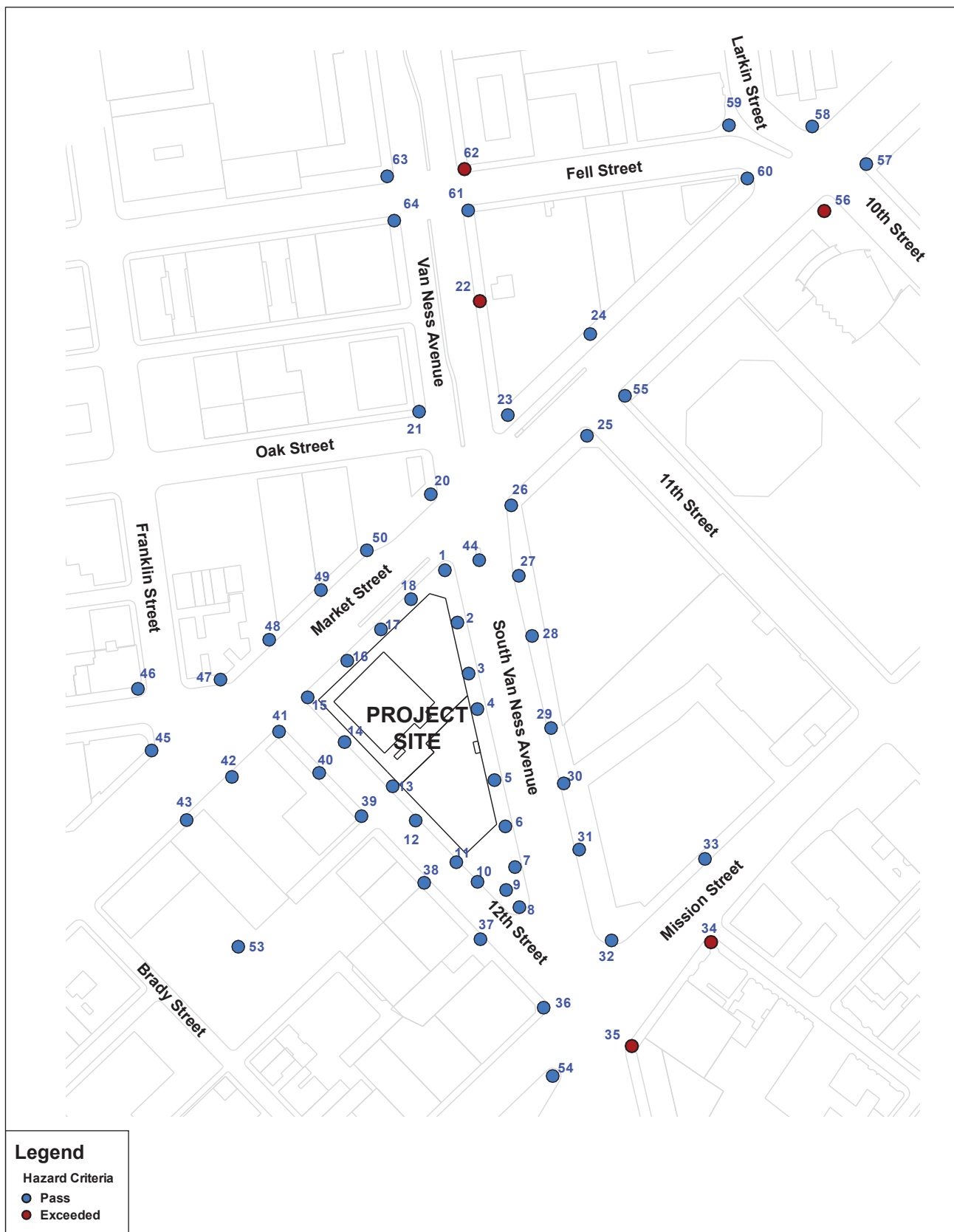
The proposed project would alter wind patterns in the vicinity of the project site. The existing-plus-project scenario would reduce the number of exceedances of the hazard criterion from five test points under existing conditions to four (see test points 22, 34, 56, and 62 on **Figure 4.5.2: Wind Hazard Results – Existing-Plus-Project Scenario**). The total number of exceedance hours per year under the existing-plus-project scenario would remain the same as under existing conditions. **Table 4.5.1: Wind Hazards – Existing-Plus-Project Scenario** summarizes the test results.

Table 4.5.1: Wind Hazards – Existing-Plus-Project Scenario

Scenario	Hours/Year of Hazard Exceedance	Change in Hours/Year Relative to Existing	Number of Hazard Exceedance Locations
Existing	53	N/A	5
Existing-Plus-Project	53	0	4

Source: BMT Fluid Mechanics. *10 South Van Ness Project, Wind Microclimate Study*, August 24, 2018.

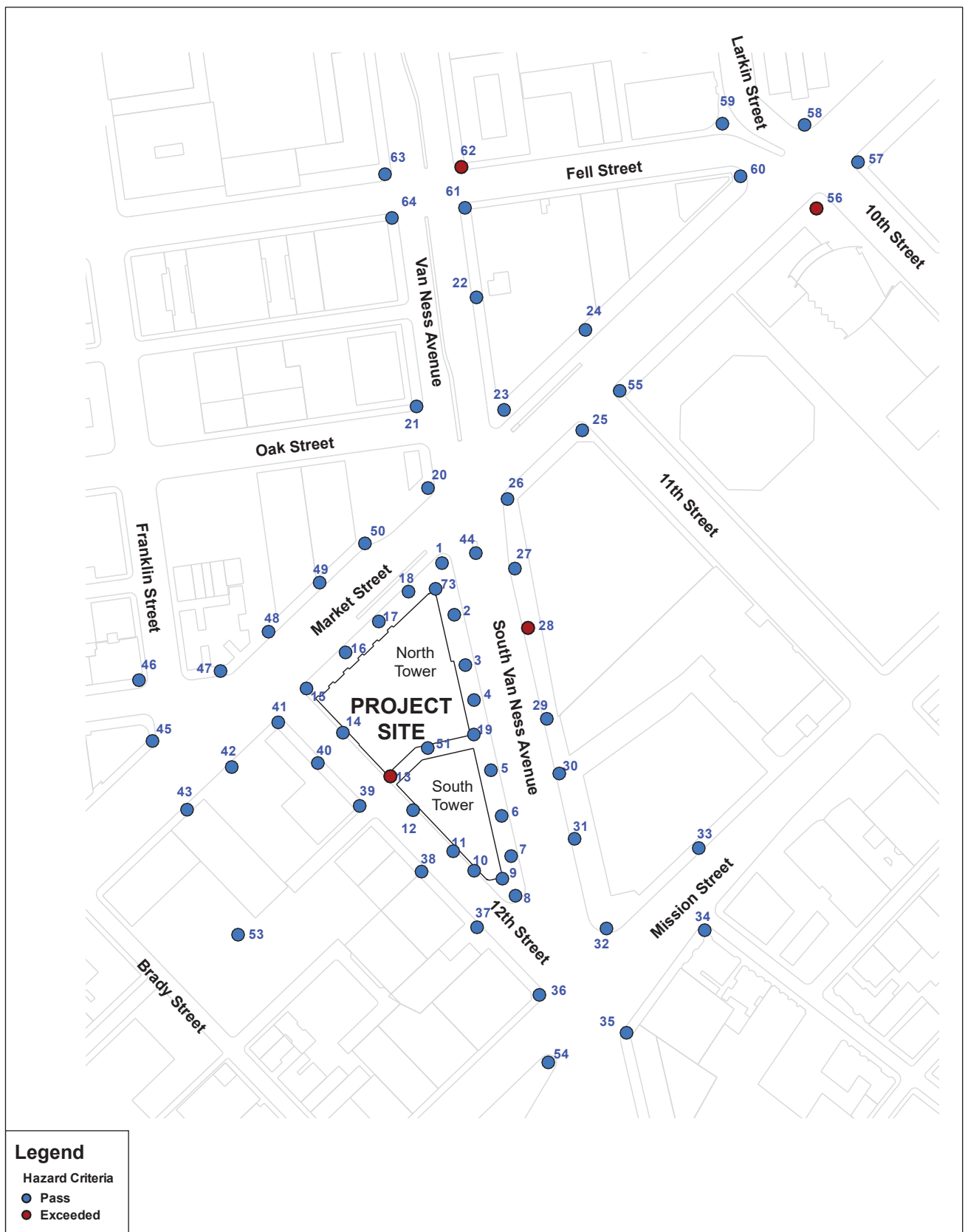
Overall, the proposed project would not alter wind conditions in a manner that would substantially affect public areas in the vicinity of the project site because the proposed project would result in no net increase in the number of hours per year that exceed the wind hazard criterion, and the proposed project would result in a net reduction in the number of test locations that exceed the wind criterion. Therefore, the proposed project would result in less-than-significant wind impacts, and no mitigation measures are necessary.



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FIGURE 4.5.1: WIND HAZARD CONDITIONS - EXISTING SCENARIO



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FIGURE 4.5.2: WIND HAZARD RESULTS - EXISTING-PLUS-PROJECT SCENARIO

VARIANT

The variant would alter wind patterns in the vicinity of the project site. The existing-plus-variant scenario would reduce the number of exceedances of the hazard criterion from five test points under existing conditions to three (see test point 56, 62 and 73 on **Figure 4.5.3: Wind Hazard Results – Existing-Plus-Variant**). The total number of exceedance hours per year under the existing-plus-variant scenario would remain the same as under existing conditions. **Table 4.5.2: Wind Hazards – Existing-Plus-Variant Scenario** summarizes the test results.

Table 4.5.2: Wind Hazards – Existing-Plus-Variant Scenario

Scenario	Hours/Year of Hazard Exceedance	Change in Hours/Year Relative to Existing	Number of Hazard Exceedance Locations
Existing	53	N/A	5
Existing-Plus-Variant	53	0	3

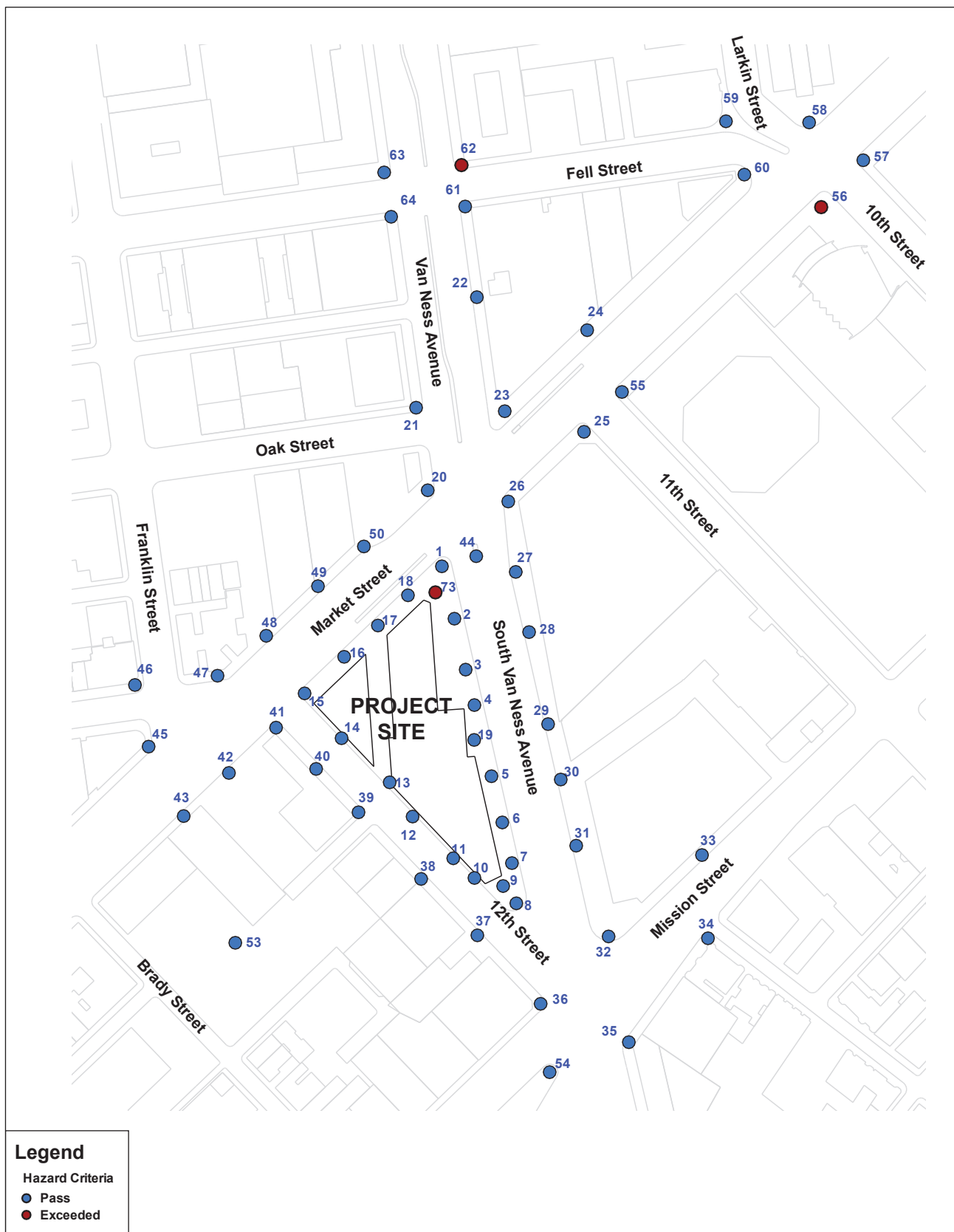
Source: BMT Fluid Mechanics. *10 South Van Ness Project, Wind Microclimate Study*, August 24, 2018.

Overall, the variant would not alter wind conditions in a manner that would substantially affect public areas in the vicinity of the project site because the variant would result in no net increase in the number of hours per year that exceed the wind hazard criterion, and the variant would result in a net reduction in the total number of test locations that exceed the wind criterion. Therefore, the variant would result in less-than-significant wind impacts, and no mitigation measures are necessary.

Cumulative Impacts

Impact C-WI-1: The proposed project or variant, in combination with other past, present, and reasonably foreseeable future projects, would alter wind in a manner that would make a cumulatively considerable contribution to a significant cumulative wind impact. (Significant and Unavoidable with Mitigation)

The geographic scope for cumulative wind impacts includes the area within an approximately 1,500-foot radius of the project site. For the purposes of this analysis, the nearby cumulative projects that are currently either approved but unbuilt or are under review include the following:



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FIGURE 4.5.3: WIND HAZARD RESULTS - EXISTING-PLUS-VARIANT SCENARIO

Address	Case File No.	Proposed Building Height (Feet)
1629 Market Street	2015-005848ENV	85
1700 Market Street	2013.1179E	100
1740 Market Street	2014.0409E	101
1601 Mission Street	2014.1121ENV	140
One Oak Street	2009.0159E	420
30 Otis Street	2015-010013ENV	250
42 Otis Street	2016-005406ENV	63
200-214 Van Ness Avenue	2015-012994ENV	135
Parcel T	2014.1509ENV	71
1390 Market Street	2005.0979E	142
98 Franklin Street	2016-014802ENV	390
30 Van Ness Avenue	2015.008571ENV	570
Parcel U	No current case number	71

The cumulative-plus-project and cumulative-plus-variant scenarios also included existing and proposed street trees on the project site, additional street trees under cumulative development, and off-site wind screens or other abatement features identified under cumulative development projects. Those elements were tested to evaluate potential mitigation for adverse wind effects.

The cumulative-plus-project scenario would increase the number of test points that would exceed the hazard criterion and the number of hours per year that winds would exceed the hazard criterion compared to existing conditions. With the cumulative-plus-project scenario, the total number of hazard exceedance hours would increase to 89 hours, compared to the 53 hours per year under existing conditions. Seven test points would exceed the hazard criterion under the cumulative-plus-project scenario, compared to five test points with existing conditions.

Table 4.5.3: Wind Hazards – Cumulative-Plus-Project Scenario summarizes the test results.

Table 4.5.3: Wind Hazards – Cumulative-Plus-Project Scenario

Scenario	Hours/Year of Hazard Exceedance	Change in Hours/Year Relative to Existing	Number of Hazard Exceedance Locations
Existing	53	N/A	5
Cumulative-Plus-Project	89	36	7

Source: BMT Fluid Mechanics. *10 South Van Ness Project, Wind Microclimate Study*, August 24, 2018.

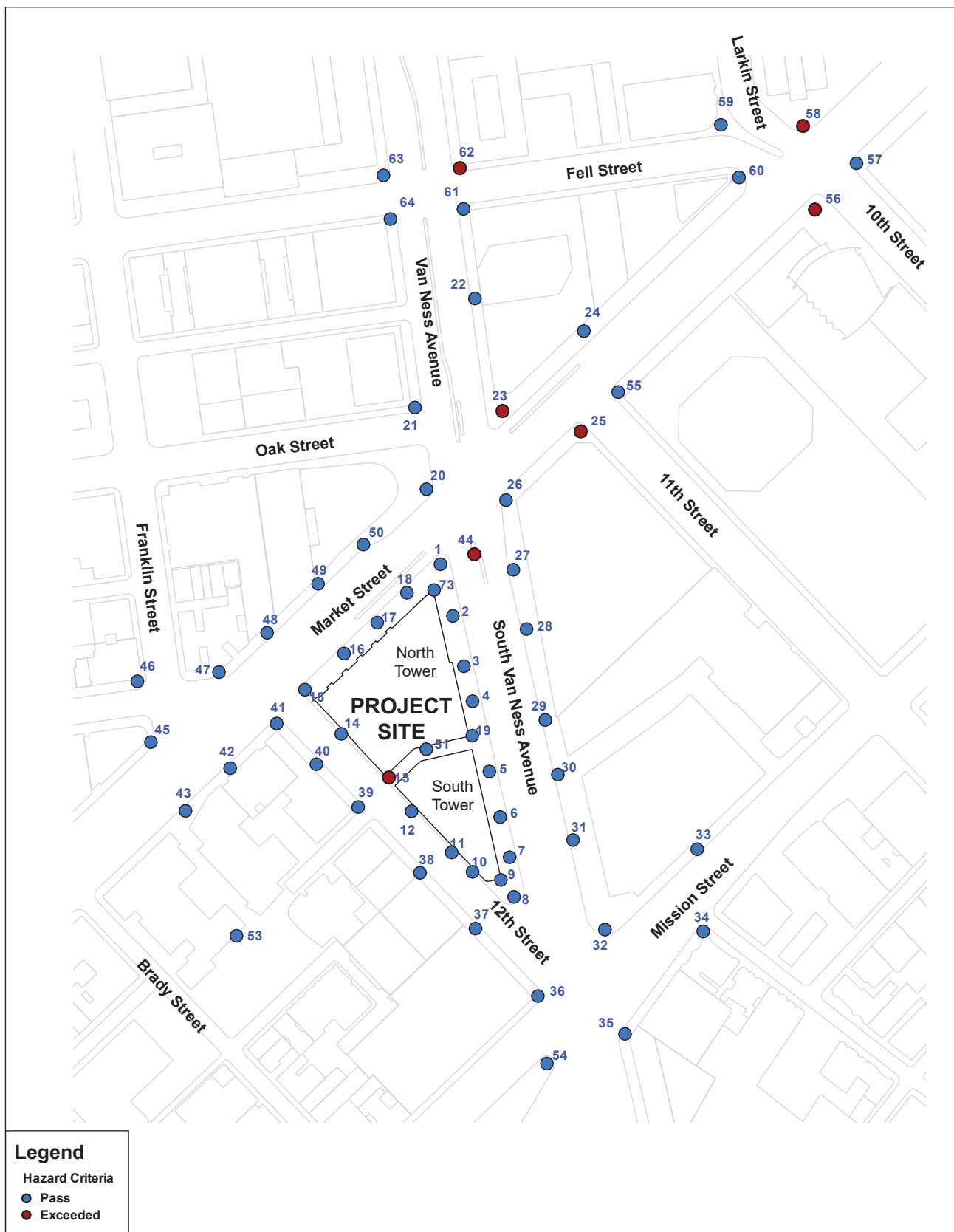
Two test points, 56 and 62, that would exceed the hazard criterion under existing conditions would also exceed the hazard criterion under the cumulative-plus-project scenario. Five new test points (13, 23, 25, 44, and 58) would exceed the hazard criterion with the cumulative-plus-project scenario (see **Figure 4.5.4: Wind Hazard Results – Cumulative-Plus-Project Scenario**). These test points are located at the intersection of Market Street and 10th Street on the northeast and southwest corners of the sidewalk; at the intersection of Market Street and Van Ness Avenue at the northeast corner of the sidewalk and at the southern pedestrian island on South Van Ness Avenue; at the intersection Market Street and 11th Street at the southwest corner of the sidewalk; and at the western entrance to the proposed mid-block pedestrian alleyway on the project site.

One test point (13), which would exceed the hazard criterion under the existing-plus-project scenario, would also exceed the hazard criterion under the cumulative-plus-project scenario. One test point (28), which would exceed the hazard criterion under the existing-plus-project scenario, would no longer exceed the hazard criterion under the cumulative-plus-project scenario. However, four new test point locations (23, 25, 44, and 58) would exceed the hazard criterion under the cumulative-plus-project scenario. Therefore, new locations of wind hazard exceedances would be caused by interactions of the proposed project with cumulative development, as those exceedances of the hazard criterion would not occur in the existing-plus-project scenario. Thus, the project would make a considerable contribution to a significant cumulative impact.

In summary, the cumulative-plus-project scenario would increase the number of hours per year of exceedance under the section 148 wind hazard criterion to 89 hours per year, compared to 53 hours per year under existing conditions. Therefore, the project would make a considerable contribution to a significant cumulative wind impact. Proposed on- and off-site wind reduction measures discussed above (street trees and wind screens) would not reduce the project's contribution to cumulative wind impacts to a less-than-significant level.

The cumulative setting may change for various reasons prior to completion of project construction. For example, there could be design revisions to one or more of the cumulative development projects considered in the wind impact analysis; new development projects may be proposed in the project vicinity; or economic conditions or other factors could delay or halt construction of one or more of the cumulative projects. Potential changes in the number, location, or design of buildings in the cumulative setting could alter the cumulative wind environment, possibly redirecting wind flows to new locations or changing the intensity of wind flows.

Due to the uncertainty regarding cumulative development in the project vicinity and in order to identify measures to reduce cumulative wind impacts based upon the most current available information on cumulative projects, Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts, identified below, would be implemented. The measure would require development and implementation of wind reduction measures based on performance standards to reduce off-site wind hazards in the cumulative plus project setting based on best available information. Mitigation Measure M-C-WI-1 would require further wind tunnel testing and refinement of wind reduction measures.



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FIGURE 4.5.4: WIND HAZARD RESULTS - CUMULATIVE-PLUS-PROJECT SCENARIO

Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts

The project sponsor shall retain a qualified wind consultant to prepare, in consultation with the San Francisco Planning Department (planning department), a wind impact mitigation report that identifies design measures to reduce the project's contribution to off-site wind impacts in the cumulative-plus-project setting, based on best available information ("the wind report"). Prior to the final addenda approval by the Department of Building Inspection (DBI), the project sponsor shall submit the wind report to the planning department for its review and approval. The wind report shall incorporate updated information on cumulative development in the area and shall contain a list of potential wind reduction design measures, along with the estimated effectiveness of each measure to reduce the identified cumulative off-site wind hazards. Such wind reduction design measures may include additional on-site landscaping, or equivalent wind-reducing features; and off-site wind reduction measures such as landscaping, streetscape improvements or other wind-reducing features, such as wind screens.

The project sponsor shall implement as many of the design measures identified in the wind report as needed to reduce the project's contribution to identified cumulative offsite wind hazards. The planning department shall approve the final list of wind reduction measures that the project sponsor shall implement.

However, the effectiveness of Mitigation Measure M-C-WI-1 is considered uncertain because landscaping such as street trees is considered an "impermanent" feature that may change over time or through the seasons and therefore may not consistently perform in the manner assumed in the wind model. In addition, the feasibility of Measure M-C-WI-1 contemplates installation of wind screens on an off-site property not fully under the project sponsor's control. Thus, the impact is conservatively identified as significant and unavoidable with mitigation.

CUMULATIVE-PLUS-VARIANT SCENARIO

The cumulative-plus-variant scenario would increase the number of test points that would exceed the hazard criterion and the number of hours per year that winds would exceed the hazard criterion compared to existing conditions. With the cumulative-plus-variant scenario, the total number of hazard exceedance hours would increase to 101 hours, compared to the 53 hours per year under existing conditions. Seven test points would exceed the hazard criterion with the cumulative-plus-variant scenario, compared to five test points with existing conditions.

Table 4.5.4: Wind Hazards – Cumulative-Plus-Variant Scenario summarizes the test results.

Table 4.5.4: Wind Hazards – Cumulative-Plus-Variant Scenario

Scenario	Hours/Year of Hazard Exceedance	Change in Hours/Year Relative to Existing	Number of Hazard Exceedance Locations
Existing	53	N/A	5
Cumulative-Plus-Variant	101	48	7

Source: BMT Fluid Mechanics. *10 South Van Ness Project, Wind Microclimate Study*, August 24, 2018.

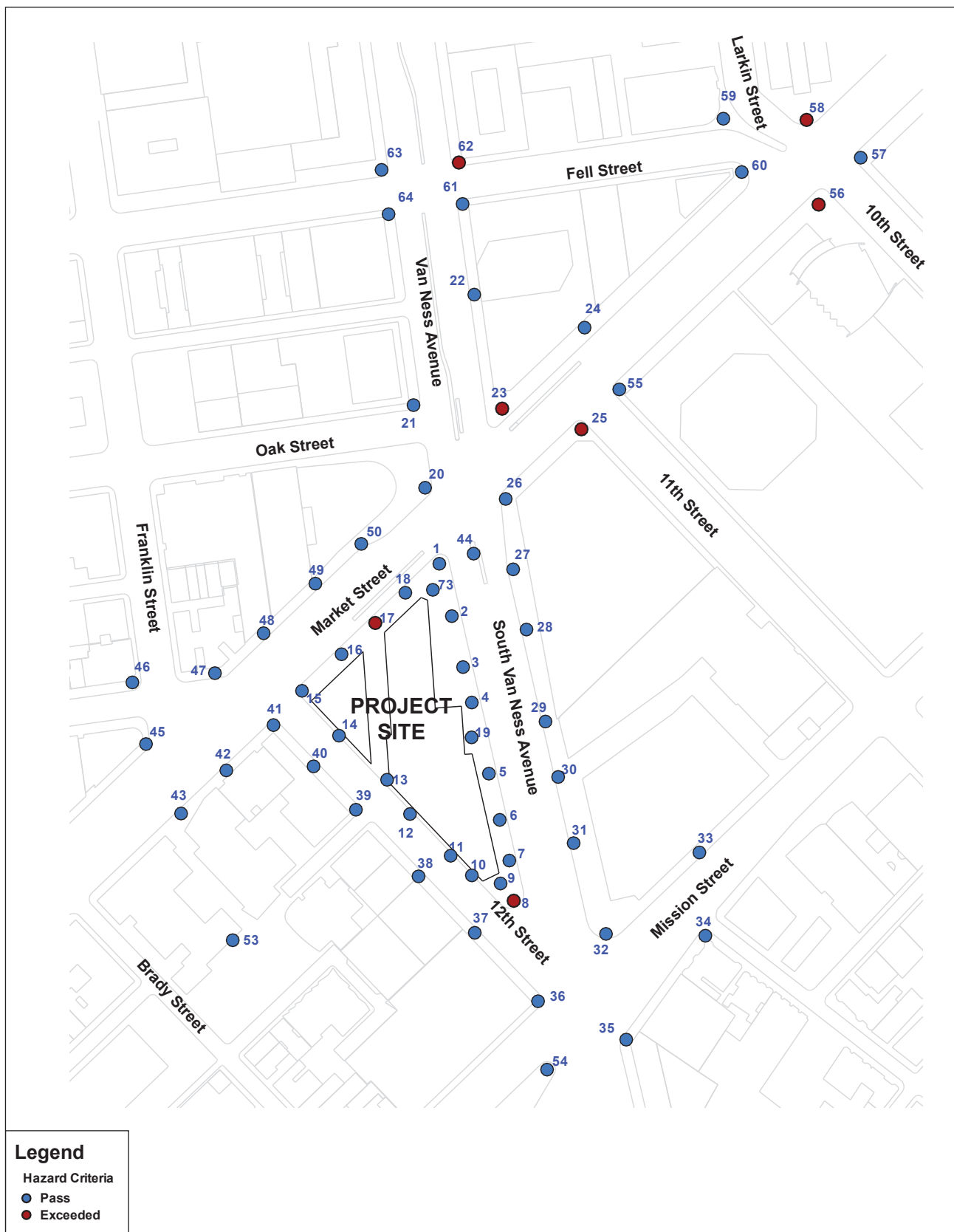
Two test points, 56 and 62, that would exceed the hazard criterion under existing conditions would also exceed the hazard criterion under the cumulative-plus-variant scenario. Five new test points (8, 17, 23, 25, and 58) would exceed the hazard criterion with the cumulative-plus-variant scenario (see **Figure 4.5.5: Wind Hazard Results – Cumulative-Plus-Variant Scenario**).

These test points are located at the intersection of Market Street and 10th Street on the northeast and southwest corners of the sidewalk; the intersection of Market Street and Van Ness Avenue at the northeast corner of the sidewalk; the intersection Market Street and 11th Street at the southwest corner of the sidewalk; at the south corner of the sidewalk adjacent to the project site; and at the northern entrance to the proposed mid-block pedestrian alleyway on the project site.

One test point (73), which would exceed the hazard criterion under the existing-plus-variant scenario, would no longer exceed the hazard criterion under the cumulative-plus-variant scenario. However, five new test point locations (8, 17, 23, 25, and 58) would exceed the hazard criterion under the cumulative-plus-variant scenario. Therefore, new locations of wind hazard exceedances would be caused by interactions of the variant with cumulative development, as those exceedances of the hazard criterion would not occur in the existing-plus-variant scenario. Thus, the variant would make a considerable contribution to a significant cumulative impact.

In summary, the cumulative-plus-variant scenario would increase the number of hours per year of exceedance under the section 148 wind hazard criterion to 101 hours per year, compared to 53 hours per year under existing conditions. Therefore, the variant would make a considerable contribution to a significant cumulative wind impact (a significant impact). Proposed on- and off-site wind reduction measures discussed above (wind canopy) would not reduce the variant's contribution to cumulative wind impacts to a less-than-significant level.

As with the cumulative-plus-project scenario, the cumulative setting may change for various reasons prior to completion of project construction. Due to the uncertainty regarding cumulative development in the project vicinity and in order to identify measures to reduce cumulative wind impacts based upon the most current available information on cumulative projects, Mitigation Measure M-C-WI-1, p. 4.5.15, would be implemented. However, the effectiveness of Mitigation Measure M-C-WI-1 is considered uncertain because landscaping such as street trees is considered



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2015-004568ENV

FIGURE 4.5.5: WIND HAZARD RESULTS - CUMULATIVE-PLUS-VARIANT SCENARIO

an “impermanent” feature that may change over time or through the seasons and therefore may not consistently perform in the manner assumed in the wind model. In addition, the feasibility of Measure M-C-WI-1 contemplates installation of wind screens on an off-site property not fully under the project sponsor’s control. Thus, the impact is conservatively identified as significant and unavoidable with mitigation.

Supplemental Information

The wind study also assessed the existing and proposed wind environment in terms of a comfort criterion. The planning department considers the wind comfort criteria enumerated in section 148 when assessing the design of buildings in the C-3 zoning area. Section 148 establishes equivalent wind speeds of 7 mph as the comfort criterion for seating areas and 11 mph as the comfort criterion for areas of substantial pedestrian use. As there are no existing public seating areas within the study area, the wind study assessed conditions related to the 11 mph comfort criterion.

The section 148 comfort criteria are not CEQA significance criteria. The results of this assessment are summarized in this section for informational purposes.

Wind Comfort Analysis

Under existing conditions, wind speeds in the vicinity of the project site average 11 mph for all measurement locations. Winds at 24 of the 64 locations exceed the 11 mph comfort criterion for areas of substantial pedestrian use established by planning code section 148. In general, the test points at which the criterion is exceeded are located on Van Ness Avenue, South Van Ness Avenue, and Market, Mission, Hayes, and Larkin streets.

Proposed Project

Under the existing-plus-project conditions, average wind speeds would be similar to existing conditions. The average wind speeds would increase by 1 mph, to 12 mph. The number of locations where the comfort criterion is exceeded would increase by 15, to 39 of the 64 test locations. Implementation of the proposed project would eliminate two existing comfort exceedances, but would result in 17 new comfort exceedances when compared to existing conditions. Under the proposed project, wind speeds at these test points would increase between 1 and 13 mph.

Under the cumulative-plus-project scenario, average wind speeds would be similar to existing conditions. The average wind speeds would increase by 1 mph, to 12 mph. The number of locations where the comfort criterion is exceeded would increase by 17, to 41 of the 64 test locations. Implementation of the proposed project under cumulative conditions would eliminate three existing comfort exceedances, but would result in 20 new comfort exceedances when

compared to existing conditions. Under the cumulative-plus-project scenario, wind speeds at these test points would increase between 1 and 14 mph.

These changes in project-level and cumulative wind comfort conditions would not be considered environmental impacts under CEQA.

Variant

Under the existing-plus-variant conditions, average wind speeds would be similar to existing conditions. The average wind speeds would increase by 2 mph, to 13 mph. The number of locations where the comfort criterion is exceeded would increase by 18, to 42 of the 64 test locations. Implementation of the variant would eliminate one existing comfort exceedance, but would result in 19 new comfort exceedances when compared to existing conditions. Under the variant, wind speeds at these test points would increase between 1 and 13 mph.

Under the cumulative-plus-variant scenario, average wind speeds would be similar to existing conditions. The average wind speeds would increase by 2 mph, to 13 mph. The number of locations where the comfort criterion is exceeded would increase by 23, to 47 of the 64 test locations. Implementation of the variant under cumulative conditions would eliminate one existing comfort exceedance, but would result in 24 new comfort exceedances when compared to existing conditions. Under the cumulative-plus-variant scenario, wind speeds at these test points would increase between 1 and 14 mph.

These changes in variant-level and cumulative wind comfort conditions would not be considered environmental impacts under CEQA.

Wind Effects on Bicyclists

During the scoping period for this environmental impact report, several members of the public expressed concerns regarding the existing and potential future wind conditions for bicyclists in nearby bicycle lanes. For informational purposes, BMT collected wind speeds for the existing, existing-plus-project, existing-plus-variant, cumulative-plus-project, and cumulative-plus-variant scenarios at 20 test points located within the existing bicycle lanes along Market and Mission/Otis streets between Brady and 10th streets.⁹ Wind speeds exceeded one hour per year at these test points are shown in **Table 4.5.5: Bicycle Lane Wind Speeds**.

As shown in Table 4.5.5, existing wind speeds exceeded one hour per year at these 20 test points range from a low of 10.4 mph to a high of 27.2 mph, with the highest speeds at test point 114. Test point 114 is near the intersection of Mission Street and South Van Ness Avenue.

⁹ BMT Fluid Mechanics. *10 South Van Ness Avenue Project, Bicycle Lane Wind Microclimate Study*, August 28, 2018.

Table 4.5.5: Bicycle Lane Wind Speeds

Test Point	Existing	Existing plus Project	Variant plus Project	Cumulative plus Project	Cumulative plus Variant
	Wind Speed Exceeded 1 hour/year (mph)	Wind Speed Exceeded 1 hour/year (mph)	Wind Speed Exceeded 1 hour/year (mph)	Wind Speed Exceeded 1 hour/year (mph)	Wind Speed Exceeded 1 hour/year (mph)
101	18.1	17.9	18.1	22.9	22.3
102	18.4	17.2	16.9	20.7	20.3
103	15.7	14.9	15.5	25.2	24.2
104	11.3	20.5	19.1	20.5	19.9
105	12.2	20.0	12.7	17.8	19.0
106	11.8	19.1	16.2	20.2	22.3
107	10.4	13.2	12.5	18.6	18.6
108	13.6	16.1	15.9	13.7	13.4
109	14.2	13.6	13.9	17.7	17.1
110	14.2	16.2	16.0	24.0	24.3
111	13.2	14.2	14.5	24.2	24.4
112	10.9	11.4	11.7	20.7	20.3
113	12.4	12.8	12.5	17.2	17.6
114	27.2	20.4	19.6	17.6	16.8
115	16.7	11.5	12.0	11.2	11.5
116	16.8	16.6	16.9	23.9	23.7
117	19.2	18.8	19.1	21.0	20.9
118	22.0	22.3	22.9	17.8	18.4
119	20.7	20.7	21.2	17.9	18.0
120	18.5	18.8	18.7	17.6	17.3

Source: BMT Fluid Mechanics

With project implementation, wind speeds exceeded one hour per year would range from 11.4 mph to 22.3 mph. With implementation of the variant wind speeds would range from 11.7 mph to 22.9 mph. Under both the existing plus project and the existing plus variant scenarios the highest wind speeds would occur at test point 118. Test point 118 is on the north side of Market Street, west of 10th Street.

Under the cumulative plus project conditions, wind speeds exceeded one hour per year would range from 11.2 to 25.2 mph, with the highest speeds at test point 103, on the south side of Market Street within the intersection with South Van Ness Avenue.

Under the cumulative plus variant conditions, wind speeds exceeded one hour per year would range from 11.5 to 24.4 mph, with the highest speeds at test point 111, on the north side of Otis Street just east of Brady Street.

4.6 SHADOW

Section 4.6, Shadow, addresses the shadow impacts of the proposed project and variant on publicly accessible open spaces and recreation facilities in the project area. For the purposes of shadow impact analysis, the project area is typically within 1,500 feet of the project site. The environmental setting discussion identifies existing public and private publicly accessible open spaces and recreation facilities near the project site; specifies applicable City regulations related to shadow and solar access; and describes shadows on existing public and private open spaces and recreation facilities. The impact discussion analyzes whether buildings associated with the proposed project or variant would shade parks and open spaces in a manner that would substantially affect outdoor recreation facilities or other public areas. The impact discussion also evaluates the potential for the proposed project or variant to combine with past, present, and reasonably foreseeable future projects and result in potentially cumulative shadow effects.

The analysis, calculations, and shadow diagrams were prepared by an independent shadow consultant and are the primary sources of the information presented in this section.^{1, 2}

Summary of Market and Octavia Neighborhood Plan Final EIR Shadow Section

Market and Octavia Neighborhood Plan Final EIR Setting

The Market and Octavia Neighborhood Plan Final EIR describes neighborhood-oriented parks and open spaces that are under the jurisdiction of the San Francisco Recreation and Park Department (recreation and park department). The San Francisco Planning Code (planning code) contains provisions to ensure that sunlight is present in parks and on sidewalks in the greater downtown area, including the project area. These provisions include section 295 (the Sunlight Ordinance), section 146(a), section 146(c), and section 147. Planning code section 295 does not allow new buildings that would cause significant new shadow between specific hours of the day on open space that is under the jurisdiction of the San Francisco Recreation and Park Commission (recreation and park commission). If a project would result in substantial new shadow on such public open spaces during these specified hours, that would be considered a significant impact.

Market and Octavia Neighborhood Plan Final EIR Impacts and Mitigation Measures

Shadow effects for the project area were analyzed for representative times of day and during specific seasons of the year. The analysis is based on three-dimensional modeling of the project area. Shadows on existing parks and open spaces in the project area would not be expected to

¹ FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018.

² FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

result in significant impacts. However, the Market and Octavia Plan EIR found that with new development, shadows on existing parks and open spaces, such as the War Memorial Open Space and United Nations Plaza, could have potentially significant shadow impacts. As such, implementation of Mitigation Measure 5.5.A2 (Shadow Mitigation Measure—Parks and Open Space Not Subject to Section 295) was required. The Market and Octavia Plan EIR found Mitigation Measure 5.5.A2 would reduce this impact, but may not eliminate the significant shadow impacts. Also, potential shadow impacts on parks that have not yet been constructed have not been identified as significant. If a new park is not under the jurisdiction of the recreation and park department and is only subject to Mitigation Measure 5.5.A2, then shadow impacts would be reduced, but could be potentially significant and unavoidable. As stated in the Market and Octavia Neighborhood Plan Final EIR, Mitigation Measure 5.5.A2 would apply to new buildings and additions to existing buildings in the Market and Octavia Neighborhood Plan Final EIR Project Area where the building height exceeds 50 feet. Mitigation Measure 5.5.A2 would determine the impact of shadows by assessing the amount of area shaded, the duration of the shadow, and the importance of sunlight to the type of open space being shaded. Implementation of this mitigation measure would reduce potentially significant shadow impacts but may not eliminate the impacts entirely.

Implementation of Mitigation Measure 5.5.A2 would reduce the potentially significant cumulative shadow impacts, but the impacts may still be potentially significant and unavoidable.

Environmental Setting

Figure 4.6.1: Shadow Fan Analysis for the Proposed Project, and **Figure 4.6.2: Shadow Fan Analysis for the Variant** show that the following publicly accessible, outdoor open spaces may be within the potential reach of shadows that would be cast by the proposed project and variant, respectively:

- **Proposed project:** The existing Patricia's Green and Page & Laguna Mini Park, and the proposed 11th & Natoma and Brady parks³ (see Figure 4.6.1)
- **Variant:** The existing Patricia's Green, Page & Laguna Mini Park, Howard & Langton Mini Park, Hayes Valley Playground, Koshland Community Park and Learning Center, Buchanan Street Mall, Page Street Community Garden, and the proposed 11th & Natoma and Brady parks (see Figure 4.6.2)

³ Given that the 11th & Natoma and Brady parks are proposed, the discussion of new shading on these parks is not part of the impact analysis under CEQA. Instead, an informational discussion is included at the end of this section.

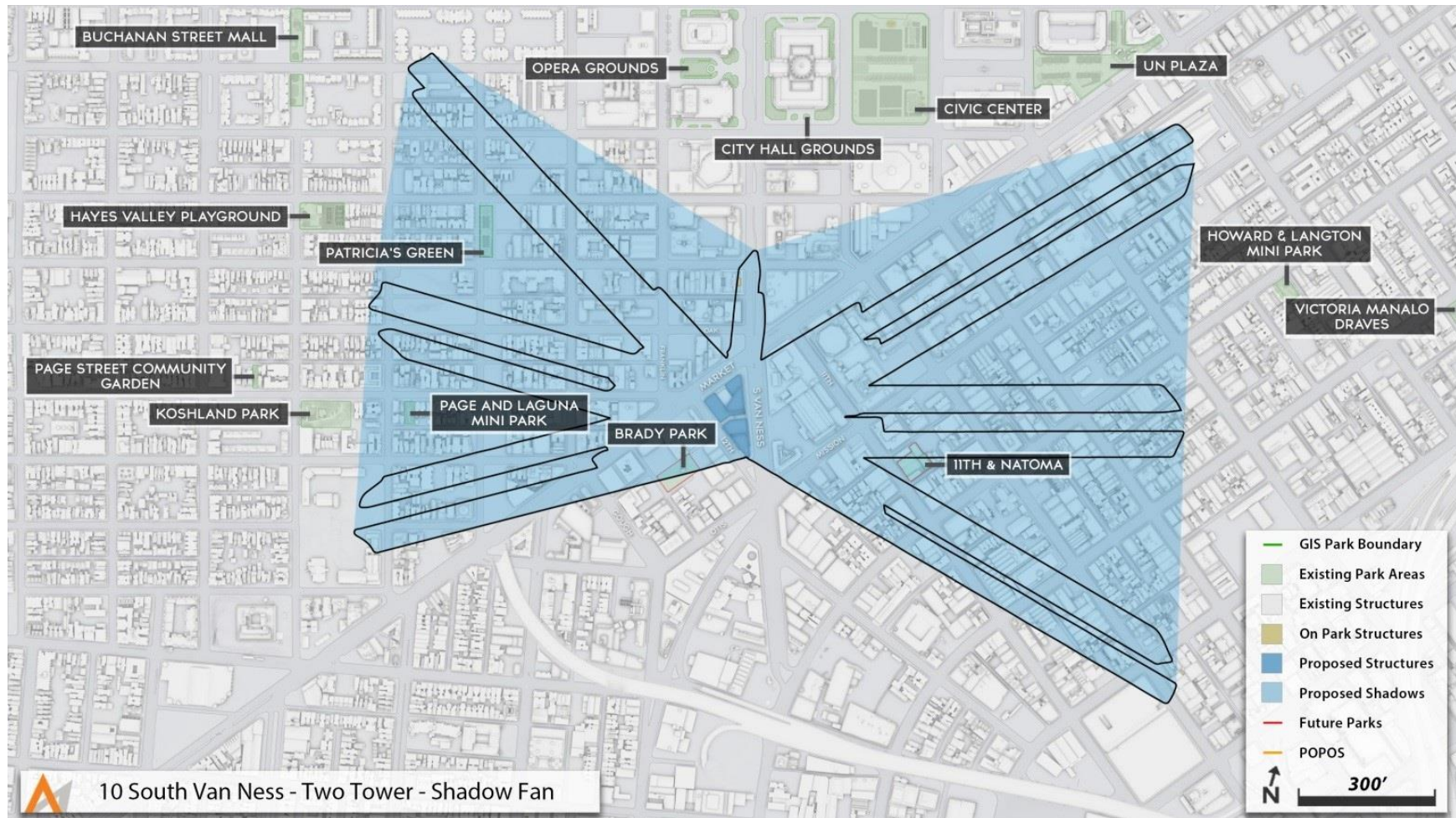


Figure 4.6.1: Shadow Fan Analysis for the Proposed Project

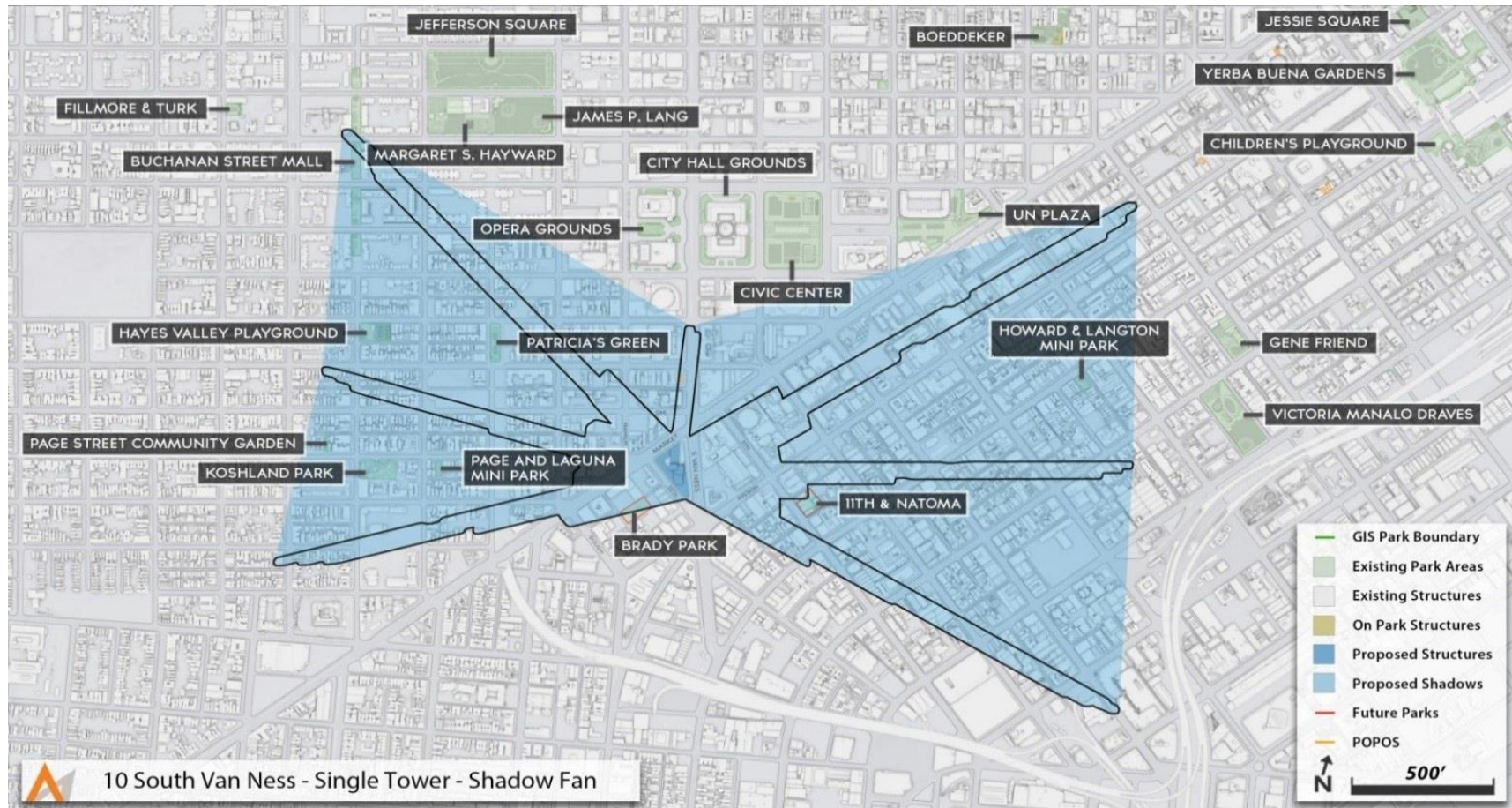


Figure 4.6.2: Shadow Fan Analysis for the Variant

These open spaces are under the jurisdiction of the recreation and park commission and are subject to the provisions of the Sunlight Ordinance, as articulated in section 295 of the San Francisco Planning Code. (This planning code regulation is discussed under “Section 295/Proposition K” in Section 4.6.3, Regulatory Framework, pp. 4.6.10-4.6.11.)

San Francisco Recreation and Park Commission Properties

PATRICIA’S GREEN

Figure 4.6.3: Aerial Photograph of Patricia’s Green shows Patricia’s Green, a 17,901-square-foot (0.41-acre) urban park under the jurisdiction of the recreation and park commission. Patricia’s Green is located in the Western Addition neighborhood of San Francisco, along the former Central Freeway parcel between Octavia Boulevard’s northbound and southbound travel lanes. Patricia’s Green is bounded by Hayes Street to the north, Fell Street to the south, and Octavia Boulevard to the east and west.



Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

Figure 4.6-3: Aerial Photograph of Patricia’s Green

Patricia's Green is divided into three basic sections. In the northern part of the park, a picnic seating area is along Hayes Street. It features a plaza with four picnic tables around a mature tree and a mix of wooden and concrete benches. Two additional picnic tables are on the western side of this area, adjacent to restaurants along Octavia Boulevard. The central section of the park contains a circular plaza with four concrete benches and eight bollards. Lawn areas north and south of the central plaza are used for art exhibitions. The southern section of the park contains a children's play area, featuring a dome structure with ropes and bars for climbing, and rubber safety paving. Low, square concrete pillars delineate the border between the play area and the lawn. Patricia's Green users can sit on the benches that line the outer edges of the sidewalks. The park is not fenced, and it has no public restrooms.

PAGE & LAGUNA MINI PARK

Page & Laguna Mini Park is a 6,576-square-foot (.15-acre) community garden within the block bounded by Page Street to the north, Octavia Boulevard to the east, Rose Street to the south, and Laguna Street to the west. Nestled between two Victorian houses, Page & Laguna Mini Park includes a curving walkway that cuts through the space from the south to the north, 16 flower beds, and apple trees with seating at their bases.

HOWARD & LANGTON MINI PARK

Howard & Langton Mini Park is a 10,218-square-foot (0.23-acre) park and community garden on the northern corner of the block bounded by Howard Street to the northwest, Rausch Street to the southwest, Folsom Street to the southeast, and Langton Street to the northeast. The perimeter of Howard & Langton Mini Park is lined by large trees, and the park is crisscrossed by sandy paths that surround and define the community garden beds.

HAYES VALLEY PLAYGROUND

Hayes Valley Playground is an approximately 32,000-square-foot (0.75-acre) playground, featuring children's play areas, a stage and plaza for community gatherings, community garden plots, outdoor fitness equipment, and a 2,500-square-foot clubhouse. The playground is bounded by Hayes Street to the north, Buchanan Street to the west, and Linden Street to the south. It occupies the western half of the block bounded on the east by Laguna Street, the remainder of which is occupied by restaurants and retailers that front Laguna Street.

KOSHLAND COMMUNITY PARK AND LEARNING CENTER

Koshland Community Park and Learning Center is an approximately 35,000-square-foot (0.82-acre) park in the Lower Haight neighborhood of the City. The northwestern corner of the park features a basketball half-court, and the eastern section contains children's play equipment and community garden plots. These features are connected via a meandering concrete path. Koshland Community Park and Learning Center occupies the northwestern corner of a large block bounded

by Page Street to the north, Buchanan Street to the west, Haight Street to the south, and Laguna Street to the east.

BUCHANAN STREET MALL

Buchanan Street Mall is an approximately 79,000-square-foot (1.81-acre) park that generally runs north to south for five city blocks. The northernmost section, north of Turk Street, includes a lawn and children's play equipment, and forms the eastern boundary of the block bounded by Eddy Street to the north, Webster Street to the west, and Turk Street to the south. The next block to the south, bounded by Turk Street to the north and Golden Gate Avenue to the south, features a large tree, children's play equipment, and a small grass lawn. The following block, bounded by the Ella Hill Hutch Community Center to the west, features a basketball half-court occupying the central portion of the park and large trees on either end. The next block, bounded by McAllister Street to the north and Fulton Street to the south, contains three small grass lawns. The southernmost section of Buchanan Street Mall features two grass lawns on either end of a set of children's play equipment, and terminates at a 26-car parking lot.

OPEN SPACES ELIMINATED FROM FURTHER CONSIDERATION

Although within the potential reach of shadow from the variant, the *10 South Van Ness Shadow Technical Memorandum* eliminated Page Street Community Garden from the need for further analysis, concluding that the single tower project variant would not cast any new shadow on this park. At times when variant shadow would potentially reach this park, the potentially affected areas of the park are already shaded by existing buildings. As such, no further analysis is necessary for this park.

The Market & Octavia Area Plan has identified the center of the *Brady Block* as a location for creating a public park. The future Brady Park is bounded by Market Street to the north, Brady Street to the west, Otis Street to the south, and 12th Street to the east. Brady Park would serve as a public gathering point and would be accessed via a network of mid-block alleys, designed as "living alley" spaces. The City has not yet designed Brady Park or approved funding for park construction.

In addition, there is one San Francisco Unified School District property located at 95 Gough Street. However, the property is occupied by the SFUSD's physical educational department; it is used for administrative purposes, and is not used as a school or a play yard.⁴

⁴ Lee, Elizabeth, San Francisco Unified School District. Email communication with Rachel Schuett, San Francisco Planning Department. August 20, 2018.

Privately Owned Public Open Spaces

The nearest *privately owned public open space*⁵ is in the front lobby of 77 Van Ness Avenue. Because this space is indoors, it is not considered to be an outdoor recreation facility under CEQA, as it is applied in San Francisco.

Public Sidewalks

The public sidewalks in the project area are shadowed by existing buildings throughout the day as well as throughout the year. In general, the sidewalks are shadowed in the early morning and the late afternoon, and receive the greatest amount of sunlight during the middle of the day.

Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to shadow are applicable to the proposed project or variant.

State

No state plans, policies, regulations, or laws related to shadow are applicable to the proposed project or variant.

Local

SAN FRANCISCO GENERAL PLAN

The Recreation and Open Space Element and Urban Design Element of the San Francisco General Plan (general plan) contain objectives and policies related to retaining sunlight in open spaces and other public areas.

⁵ As defined by the San Francisco Planning Department, privately owned public open spaces are “publicly accessible spaces in forms of plazas, terraces, atriums, small parks, and even snippets which are provided and maintained by private developers.” San Francisco Planning Department, “Privately-Owned Public Open Space and Public Art (POPOS),” <http://sf-planning.org/privately-owned-public-open-space-and-public-art-popos>, accessed August 20, 2018.

Recreation and Open Space Element

Policy 1.9 in the general plan's Recreation and Open Space Element states:

Solar access to public open space should be protected. In San Francisco, presence of the sun's warming rays is essential to enjoying open space. Climatic factors, including ambient temperature, humidity, and wind, generally combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility and comfort of the open space.

Shadows are particularly a problem in downtown districts and in neighborhoods immediately adjacent to the downtown core, where there is a limited amount of open space, where there is pressure for new development, and where zoning controls allow tall buildings. But the problem potentially exists wherever tall buildings near open space are permitted.

Properties under the jurisdiction of the recreation and park department or designated for acquisition are protected by a voter-approved Planning Code amendment. It restricts the construction of any structure exceeding forty feet in height that would cast a shadow that is adverse to the use of the park from between one hour after sunrise to one hour before sunset, unless it is determined that the impact on the use of the space would be insignificant. In determining whether a new shadow cast by a development is adverse to the use of a particular property, the City considers several quantitative and qualitative criteria, including the size of the park property, the amount of existing shadow, and the timing, size, location, and duration of the new shadow and the public good served by the building.

The City should support more specific protections elsewhere to maintain sunlight in these spaces during the hours of their most intensive use while balancing this with the need for new development to accommodate a growing population in the City

Urban Design Element

Policy 3.4 in the general plan's Urban Design Element calls for the promotion of building forms that will respect and improve the integrity of open spaces and other public areas. Buildings to the south, east, and west of parks and plazas are to be limited in height or effectively oriented so as not to prevent the penetration of sunlight to such parks and plazas. Where feasible, large buildings and developments are to have ground-level open space, well situated for public access and sunlight penetration.

Market & Octavia Area Plan

To address shadow effects from new development on public and publicly accessible open spaces, the Market & Octavia Area Plan includes policies to ensure that "tower forms allow adequate light and air to reach dwelling units and minimize shadow to streets and open spaces," and to proportionally relate building podium street wall height to the width of the adjacent streets.⁶ For the project site, policy 1.2.8 of the Market & Octavia Area Plan calls for development of slender

⁶ City and County of San Francisco, *Market & Octavia Area Plan*, adopted May 30, 2008, p. 14.

residential towers above the building base along the Market Street corridor. Policy 7.12 further encourages use of slender residential towers, whose form and bulk are carefully controlled so that they “are not overly imposing on the skyline and do not produce excessive wind or shadows on public spaces.”

SAN FRANCISCO PLANNING CODE

Section 101.1/Proposition M

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added section 101.1 to the San Francisco Planning Code and established eight priority policies. These priority policies are the basis on which inconsistencies in the general plan are resolved. Priority policy number 8 calls for the protection of parks and open space, and their access to sunlight and vistas.

Before issuing a permit for any project that requires an initial study under CEQA, or for any demolition, conversion, or change of use, and before taking any action that requires a finding of consistency with the general plan, the City is required to find that the proposed project or legislation would be consistent with the priority policies.

Section 295/Proposition K

In 1984, San Francisco voters approved an initiative known as Proposition K, the Sunlight Ordinance, which was codified in 1985 as San Francisco Planning Code section 295. Section 295 prohibits the approval of “any structure that would cast any shade or shadow upon any property under the jurisdiction of, or designated for acquisition by” the recreation and park commission unless the San Francisco Planning Commission, with review and comment by the recreation and park commission, has found that the shadows cast by a proposed project would not have an adverse impact on the use of the property. Section 295 does not apply to structures that do not exceed 40 feet in height. The period to be analyzed is from the first hour after sunrise until the last hour before sunset.

On February 7, 1989, pursuant to Proposition K, the planning commission and the recreation and park commission made a joint resolution, adopting criteria for determining significant shadows in 14 downtown parks, as described in a February 3, 1989, memorandum to the commissions regarding Proposition K. These criteria establish an absolute cumulative limit (ACL) for new shadow allowed on these parks and qualitative criteria for allocating the ACL among individual development projects. The ACL for a particular park is expressed as a percentage of the park’s theoretically available annual sunlight (TAAS), which is the number of hours of sunlight theoretically available in a year at that location during Proposition K hours—that is, from the first hour after sunrise until the last hour before sunset. The difference between the ACL and the amount of existing shadow on a particular park is commonly referred to as the park’s shadow budget. The shadow budget then is allocated to individual projects within the ACL, based on

qualitative criteria established for each park, which vary by park but may include factors such as time of day, time of year, shadow characteristics (size, duration, location), and the public good served by the building casting the shadow.

The planning commission and the recreation and park commission have not established ACLs for new shadow on any of the parks discussed in this section. That is, no quantitative criterion has been established for determining the significance of new shadow. However, these parks are subject to planning code section 295, and thus, would be subject to the qualitative criteria for determining whether new shadow would be significant. This analysis is included in the impact analysis, beginning on p. 4.6.27.

Sections 146 and 147

Because the project site is within a Downtown Commercial (i.e., C-3) district, the proposed project and variant would be subject to San Francisco Planning Code sections 146 and 147. Section 146 requires buildings to be designed in order to maintain direct sunlight on public sidewalks in certain downtown areas during critical periods of use. Section 147 requires that all new development and additions to existing structures where the height exceeds 50 feet be shaped to minimize shadow on public plazas or other publicly accessible open spaces, other than those protected by section 295 (Sunlight Ordinance), “in accordance with the guidelines of good design and without unduly restricting the development potential of the property.” The amount of area shadowed, the duration of the shadow, and the importance of sunlight to the type of open space being shadowed are important factors to consider when determining compliance with this criterion.

Impacts and Mitigation Measures

Significance Thresholds

The following significance threshold is from Appendix B of the San Francisco Planning Department’s (planning department’s) Environmental Review Guidelines and is used to determine the level of impacts related to shadow. Implementation of the proposed project or variant would have a significant effect if it would do the following:

- Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas

Section 295 prohibits approval of a project that would have an adverse impact on the use of recreation and park commission property, unless it is determined that the impact on the open space would be insignificant. Although ACLs have been established for new cumulative shadow on certain parks, the planning commission and the recreation and park commission have not established ACLs for new shadow on any of the parks discussed in this section. As such, project

impacts on parks would be subject to qualitative considerations for determining whether the impact of project shadow would be significant.

Both the Section 295 review for the proposed project and variant and the review of shadow impacts in this section address a broader array of shadow-related considerations that may include not only quantitative criteria, but also qualitative criteria: open space usage; time of day and/or time of year; physical layout of the affected facilities; duration, size, shape, and location of the shadow; and proportion of open space affected. If the San Francisco Planning Department determines, based on these factors, that the use and enjoyment of the park or public space would be substantially and adversely affected, the impact would be *significant* in the way that the term is used under CEQA. Therefore, in certain situations, the environmental impact of new shadow could be significant under planning code section 295 but not under CEQA, and vice versa.

Compliance with section 295 of the planning code occurs independently of this EIR's analysis and evaluation of shadow impacts. The purpose of this EIR analysis is to provide the public and City decision makers with information that sufficiently describes the shadow associated with the proposed project or variant in terms of the following factors:

- Types of parks and open spaces the shadow would affect
- When and where the shadow would occur
- Anticipated duration of the shadow
- Potential for the shadow to substantially and adversely affect any activities or uses in the subject parks or open spaces

Approach to Analysis

SHADOW FAN

To determine whether any properties under the jurisdiction of the recreation and park commission could potentially be affected by shadow related to the proposed project or variant, the planning department prepared a shadow fan diagram. The shadow fan is a tool that plots the maximum potential reach of project shadow over the course of a year (from one hour after sunrise until one hour before sunset for the spring and fall equinoxes and the summer and spring solstices) relative to the location of nearby open spaces, recreation facilities, and publicly accessible parks. The shadow fan accounts for topographical variation but not shadows cast by existing buildings. The planning department uses the shadow fan as the basis for initially identifying which open spaces, recreation facilities, and parks merit further study. Those that are outside the maximum potential reach of project shadow do not require further study. Figure 4.6.1, p. 4.6.3, and Figure 4.6.2, p. 4.6.4, show the shadow fans prepared for the proposed project and variant, respectively.

SHADOW MODEL

An independent consultant used site survey and project data to create a digital model for evaluation of the proposed project and variant's shadow impacts. Existing buildings adjacent to and in the vicinity of each affected park were identified and modeled using aerial photography and photogrammetric mapping data. The digital model reflects a minimum level of detail and includes only those surrounding buildings that are needed to represent the shadows that could fall on the surface of each park from one hour after sunrise to one hour before sunset, as defined in planning code section 295. Consistent with section 295, where this section describes the timing of shadow impacts on parks, the *beginning of the day* refers to one hour after sunrise on any given day. Correspondingly, the *end of the day* refers to one hour before sunset. The actual times change throughout the year, based on the day and season.

Shadow Calculations

The model quantifies square foot-hours, which account for the amount of shadow cast by existing buildings, the amount of net new shadow cast by the proposed project or variant, and the remaining amount of sunlight on the subject open space over a specific period. The shadow calculations serve as the basis for the quantitative evaluation of shadow impacts.

Shadow Scenarios

To quantitatively evaluate shadow impacts, shadow quantities on the parks described in Section 4.6.2, Environmental Setting, pp. 4.6.5 through 4.6.7, were calculated for the following conditions:

- **Existing Conditions**—Baseline shadow or total shadow coverage (without the proposed project or variant) on the six existing recreation and park commission properties cast by existing buildings
- **Existing plus Proposed Project**—Total shadow coverage on each of the properties cast by the existing buildings plus the proposed project
- **Existing plus Variant**—Total shadow coverage on each of the properties cast by the existing buildings plus the variant
- **Cumulative Project**—Total shadow coverage cast by the existing buildings and foreseeable projects on each property (without the proposed project or variant)
- **Cumulative plus Proposed Project**—Total shadow coverage on each of the properties cast by the existing buildings, foreseeable projects, and the proposed project
- **Cumulative plus Variant**—Total shadow coverage on each of the properties cast by the existing buildings, foreseeable projects, and the variant

Shadow Diagrams

Using a computer program that accounts for building heights and topography, the consultant prepared shadow diagrams for the open spaces that would be affected by the proposed project or variant. **Figures 4.6.4 through 4.6.9**, pp. 4.6.15 through 4.6.20, show a representative sample of maximum shadows associated with the proposed project under planning code section 295, one hour after sunrise and one hour before sunset on June 21 (summer solstice), September 21 (equinox), and December 21 (winter solstice). **Figures 4.6.10 through 4.6.15**, pp. 4.6.21 through 4.6.26, show the projected shadows associated with the variant at the same times on the same dates.

Fog, rain, overcast days, and shadows from existing or proposed trees are not taken into account when illustrating existing sources of shadow in these diagrams (notwithstanding that shadow from existing trees may be relevant to how visitors use park facilities). Shadow diagrams are snapshots taken at a particular representative time of day and day of the year. They illustrate the extent and location of shadows cast by existing buildings, net new shadow from a proposed building, and areas of sunlight on the subject open space.

A sweep is a series of shadow diagrams from a particular day that demonstrates how shadows move across a specific space within a certain time frame. Shadow diagrams also may serve as the basis for the qualitative analysis of shadow impacts, because they graphically represent where new shadow may affect open spaces. The black line in the following shadow diagrams represents the boundary of new shadow cast by the proposed project or variant.

Proposed Project



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.4: Shadow for the Proposed Project One Hour after Sunrise on June 21 (6:46 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, 10 South Van Ness Shadow—Variant Technical Memorandum, January 17, 2018

Figure 4.6.5: Shadow for the Proposed Project One Hour after Sunrise on September 21 (7:57 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

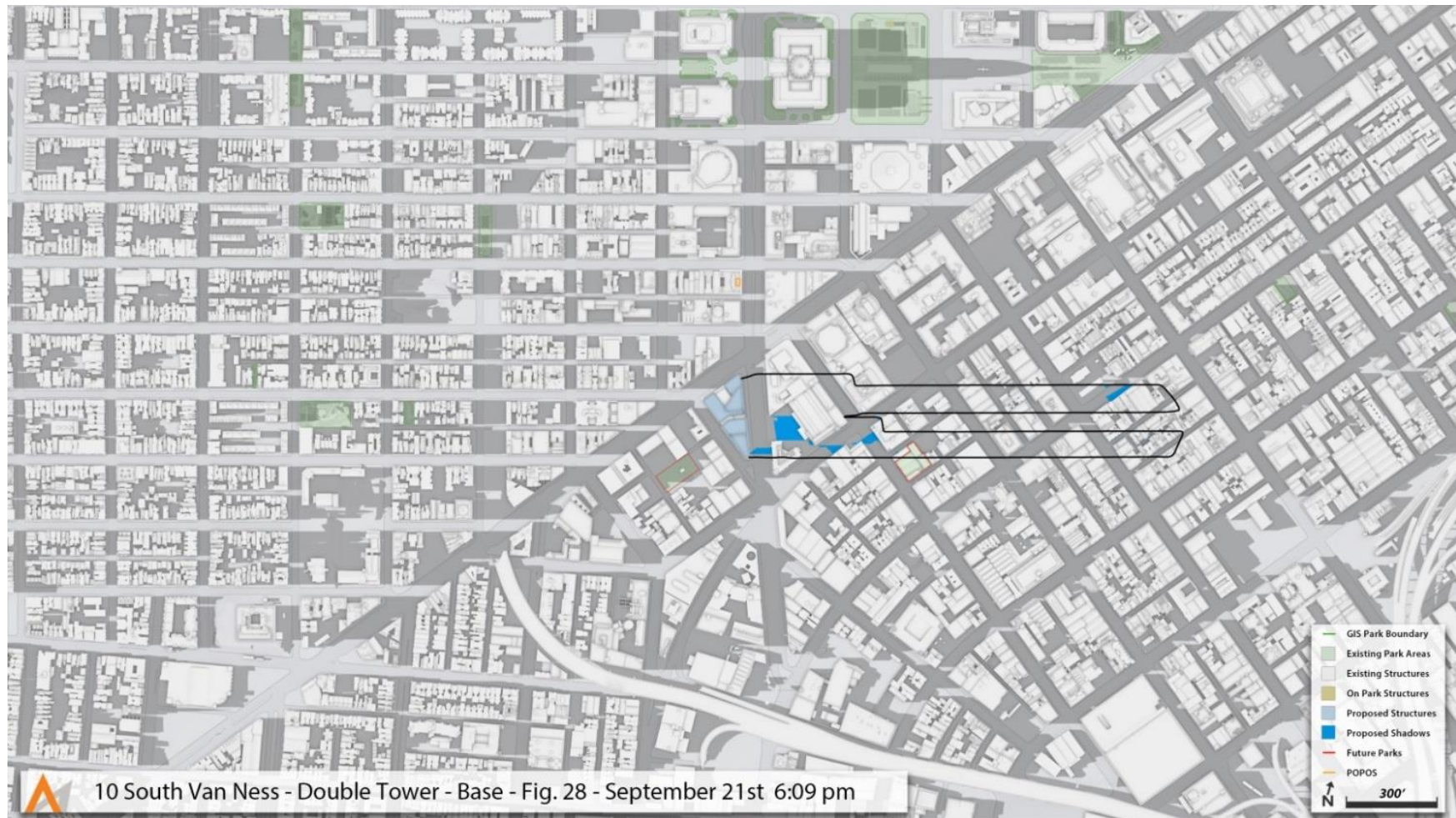
Figure 4.6.6: Shadow for the Proposed Project One Hour after Sunrise on December 21 (8:19 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.7: Shadow for the Proposed Project One Hour before Sunset on June 21 (7:35 p.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.8: Shadow for the Proposed Project One Hour before Sunset on September 21 (6:09 p.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.9: Shadow for the Proposed Project One Hour before Sunset on December 21 (3:54 p.m.)

Variant



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.10: Shadow for the Variant One Hour after Sunrise on June 21 (6:46 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.11: Shadow for the Variant One Hour after Sunrise on September 21 (7:57 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

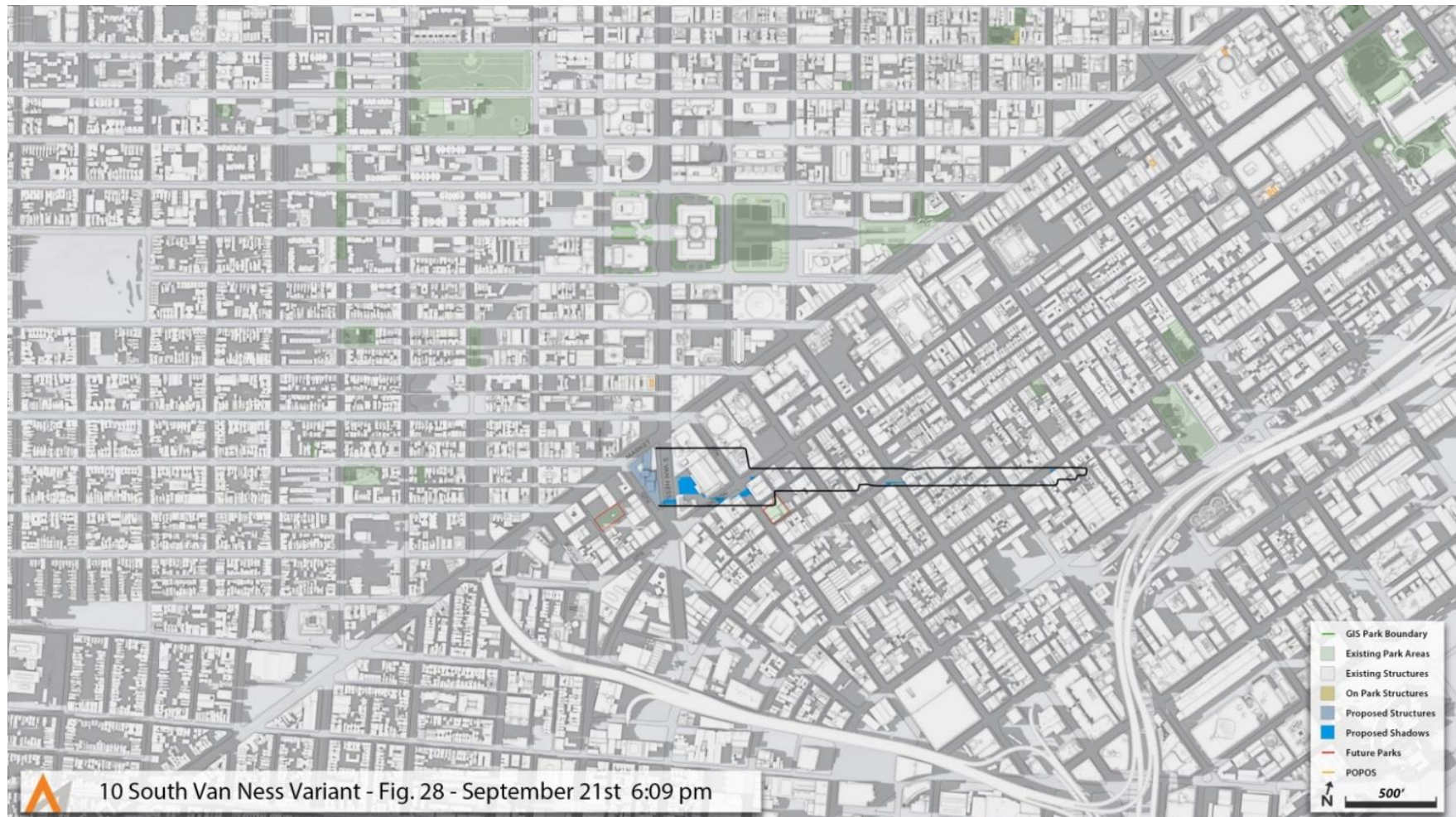
Figure 4.6.12: Shadow for the Variant One Hour after Sunrise on December 21 (8:19 a.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.13: Shadow for the Variant One Hour before Sunset on June 21 (7:36 p.m.)



Note: POPOS = privately owned public open space

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.14: Shadow for the Variant One Hour before Sunset on September 21 (6:09 p.m.)

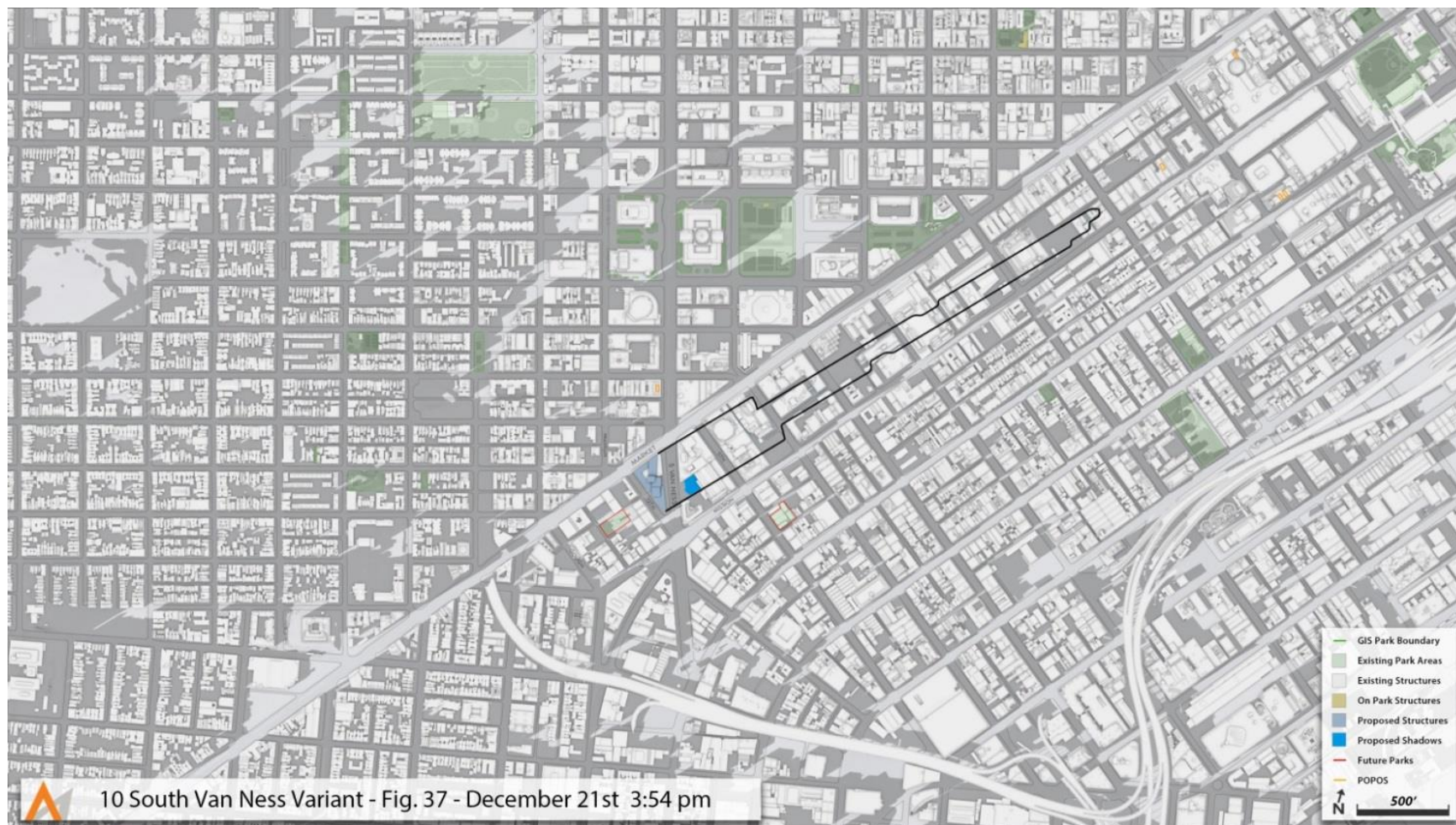


Figure 4.6.15: Shadow for the Variant One Hour before Sunset on December 21 (3:54 p.m.)

Project Features

The proposed project or variant would demolish the existing building on the project site and construct a mixed-use development that would include residential, commercial, parking, and open space uses. A complete project description is included in Chapter 2, Project Description. This section includes a description of project features that are pertinent to shadow impacts. The proposed project and variant features related to shadow are similar; therefore, they are discussed together.

The proposed project would involve constructing a building with two towers, each 41-stories and 400 feet tall (420 feet total, including roof screens and elevator penthouses) (see **Figure 2.4: Proposed Project – Ground Floor Plan** and **Figure 2.5: Proposed Project – Level 2 Floor Plan**, pp. 2.10 and 2.13, respectively, in Chapter 2, Project Description). Above grade, each structure would consist of a tower on top of a podium. The towers would be separated by a minimum of 115 feet. The north tower podium and south tower podium would be approximately 114 feet and 120 feet tall, respectively. Under the proposed project, 2,975 gross square feet of publicly accessible open space and 45,176 gross square feet of common open space would be provided.

The variant would feature one 55-story tower that would be up to 590 feet tall (610 feet total, including roof screens and elevator penthouses) (see **Figure 2.20: Variant – Building Elevations Along 12th Street, Market Street, and South Van Ness Avenue**, p. 2.39). The tower would be built on top of two podium structures that would be separated at ground level by a mid-block alley, but connected between Levels 3 and 8. The podium would range from 13 stories (139 feet, 9 inches) at the north end to 15 stories (164 feet, 10 inches) at the south end. Under the variant, 12,091 gross square feet of publicly accessible open space, 25,565 gross square feet of common open space, and 9,550 gross square feet of private open space would be provided.

Impact Evaluation

PUBLIC PARKS

Impact SH-1: The proposed project or variant would not alter shadows in a manner that would substantially affect public areas or outdoor recreation facilities. (*Less than Significant*)

Table 4.6.1: Annual Shadow Results—Comparison between the Proposed Project and the Variant compares the annual shadow results under existing conditions to those under existing conditions plus the proposed project and existing conditions plus the variant. As discussed under “Shadow Calculations,” p. 4.6.13, annual shadow results are expressed as square foot–hours, which account for the amount of shadow cast by existing buildings, the amount of net new shadow cast by the proposed project or variant, and the remaining amount of sunlight on the subject open space over a specific period. The annual shadow results are also expressed as a

Table 4.6.1: Annual Shadow Results—Comparison between the Proposed Project and the Variant

Park	Measure	Existing Conditions	Existing plus Proposed Project	Existing plus Variant	Difference between Existing plus Variant and Existing plus Project
Patricia’s Green	sfh ¹	13,462,755	13,590,616	13,675,423	84,807
	% TAAS ²	20.208%	20.400%	20.527%	0
Page & Laguna Mini Park	sfh	12,095,949	12,098,870	12,110,036	11,166
	% TAAS	49.427%	49.439%	49.485%	.046%
Howard & Langton Mini Park	sfh	18,575,415	N/A	18,576,228	N/A
	% TAAS	48.850%	N/A	48.852%	N/A
Hayes Valley Playground	sfh	32,458,749	N/A	32,487,917	N/A
	% TAAS	26.588%	N/A	26.612%	N/A
Koshland Community Park and Learning Center	sfh	21,611,520	N/A	21,696,777	N/A
	% TAAS	16.233%	N/A	16.297%	N/A
Buchanan Street Mall	sfh	81,866,060	N/A	81,875,692	N/A
	% TAAS	27.873%	N/A	27.876%	N/A

Notes:

N/A = not applicable; sfh = square foot–hours; TAAS = theoretically available annual sunlight

¹ All sfh are rounded to the nearest whole number

² All percentages are rounded to the nearest 0.000%

Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

percentage of the theoretically available annual sunlight, which is the amount of theoretically available annual sunlight at a property during Proposition K hours, or from the first hour after sunrise until the last hour before sunset, as discussed under “Section 295/Proposition K” in Section 4.6.2, Regulatory Framework, p. 4.6.10. The shadow calculations serve as the basis for the quantitative evaluation of shadow impacts.

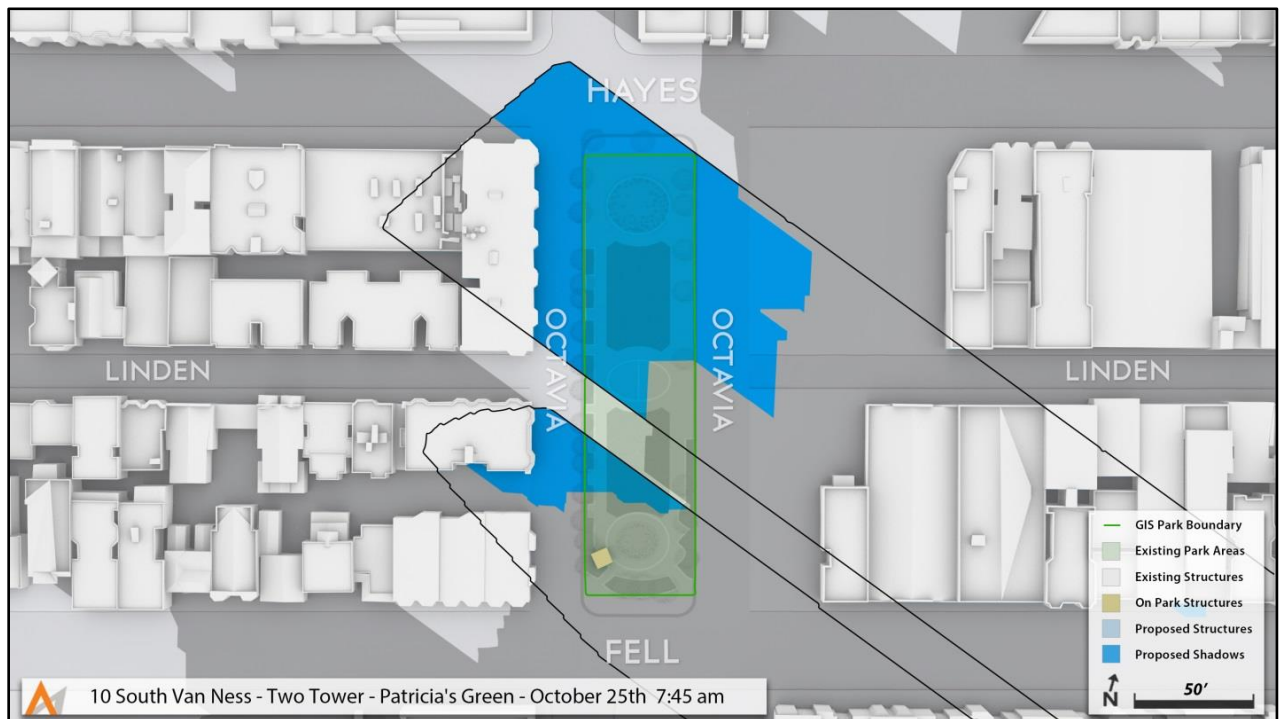
Impacts are discussed separately for each property below, followed by an overall impact conclusion for all properties. As noted, the shadow from the proposed project would not reach several of the properties; in those cases, the impact analysis pertains to the variant only.

Patricia’s Green

Patricia’s Green has approximately 66,620,502.8 square foot–hours of theoretically available annual sunlight and the existing annual shadow coverage is 13,462,755.35 square foot–hours, which is 20.21 percent of the theoretically available annual sunlight.

Proposed Project

The proposed project would cast new shadow on Patricia's Green between January 18 and March 1, and between October 11 and November 22. No new shadow from the proposed project would reach Patricia's Green after 8:59 a.m. on any day of the year. During the periods when shadows would be cast on this property, the largest new shadow (based on area) would occur on February 15 and October 25 beginning at 7:45 a.m., lasting 15 minutes and covering an area of approximately 10,475 square feet, or 58.5 percent (**Figure 4.6.16: Proposed Project's Largest New Shadow on Patricia's Green (58.5 percent on October 25 at 7:45 a.m.)**) of the area of the park. The proposed project would add 127,861 square foot-hours of shadow annually on Patricia's Green, or 0.192 percent more shadow on the park when calculated as a percentage of theoretically available annual sunlight. Annual shadow results for existing conditions, the proposed project, and the variant are shown in **Table 4.6.2: Annual Shadow Results for Patricia's Green**.



Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.16: Proposed Project's Largest New Shadow on Patricia's Green (58.5 percent on October 25 at 7:45 a.m.)

Table 4.6.2: Annual Shadow Results for Patricia’s Green

	Existing Conditions	Existing plus Proposed Project	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 66,620,503 sfh¹</i>			
Annual shadow (sfh)	13,462,755	13,590,616	13,675,423
<i>Difference</i>		+127,861	+212,668
Annual Shadow as a Percentage of TAAS	20.208%	20.400%	20.527%
<i>Difference</i>		+0.192%	+0.319%

Notes:

sfh = square foot–hours; TAAS = theoretically available annual sunlight

¹ Based on the City’s annualized TAAS factor.

Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

Variant

The variant would cast new shadow on Patricia’s Green between January 18 and March 1, and between October 8 and November 22. As shown in Figure 4.6.4 (p. 4.6.15), Figure 4.6.7 (p. 4.6.18), Figure 4.6.10 (p. 4.6.21), and Figure 4.6.13 (p. 4.6.24), new shadow from the proposed project or variant would not reach Patricia’s Green on the summer solstice. No new shadow from the variant would reach Patricia’s Green after 9:29 a.m. on any day of the year. During the periods when shadows would be cast on the park, the largest new shadow (based on area) would occur on October 18 beginning at 9 a.m., lasting 15 minutes and covering an area of approximately 11,895 square feet, or 66.4 percent of the park. **Figure 4.6.17: Variant’s Largest New Shadow on Patricia’s Green (66 percent on October 18 at 9 a.m.)** shows the variant’s maximum shadow coverage on Patricia’s Green. The variant would add 212,668 square foot–hours of shadow annually on Patricia’s Green, or 0.319 percent more shadow on the park when calculated as a percentage of theoretically available annual sunlight (Table 4.6.2).

Overall Effect on Patricia’s Green

A visual observation was conducted on the morning of June 20, 2016. Activities included sitting, walking, dog walking, stretching, yoga, and socializing. The number of users between 7 and 9:45 a.m. varied between four and 20, with the lowest number at 7 a.m. and the highest at 9:45 a.m. Based on the site visit, park use before 9 a.m. typically is low.

In October, shadows would be cast on Patricia’s Green from sunrise until approximately 7:45 a.m. under the proposed project, or from sunrise until approximately 9:29 a.m. under the variant. Shadows cast by the proposed project would cover the northern half of Patricia’s Green and a small portion of the southern lawn and western sidewalk, while shadows cast by the variant would cover portions of both the northern and southern lawns. Shadows cast by the proposed project at approximately 7:45 a.m. or by the variant at approximately 9 a.m. would cover roughly

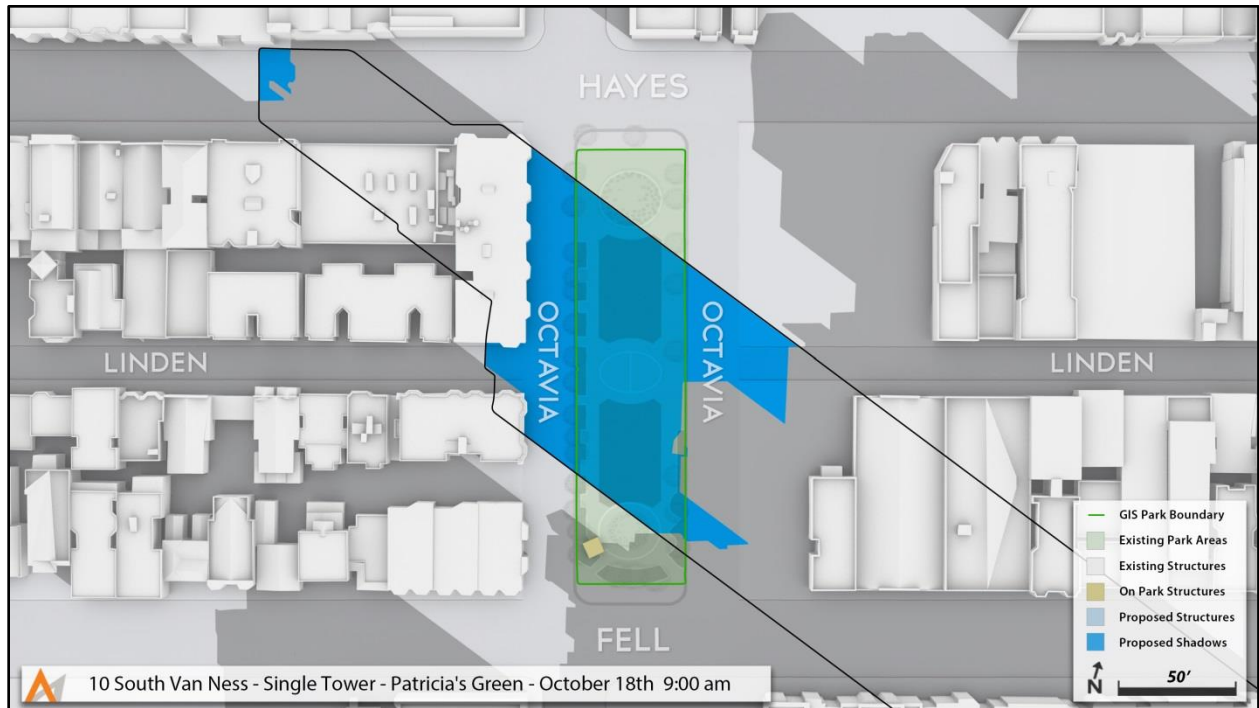


Figure 4.6.17: Variant's Largest New Shadow on Patricia's Green (66 percent on October 18 at 9 a.m.)

half of the property. New shadows from the proposed project would not cover the children's play area, while new shadows from the variant would cover a small portion of the children's play area during the time of maximum shading.

The variant would cover a larger area of Patricia's Green with shadows for a longer portion of the year than the proposed project, but both the proposed project and the variant would affect Patricia's Green only during the morning. Based on a visual observation of the park during the morning, use of the park before 9 a.m. was low. Furthermore, active recreational uses, such as walking and dog walking, were observed to be the principal activities at times when the variant would create net new shadow on the park. Enjoyment of these activities is less dependent on sunlight than passive recreational uses, such as sitting, talking on the phone, or eating. Therefore, new shadows from the proposed project or the variant would not substantially affect use of Patricia's Green. In addition, shadows cast by the variant, which would cover a larger area of the property than the proposed project, would recede entirely by 9:29 a.m. People using Patricia's Green between 9 and 9:29 a.m. potentially would be adversely affected by new shadow from the variant. However, park usage increases substantially after 9:29 a.m., at which point new shadow from the variant would no longer reach Patricia's Green.

Because of the limited duration of shadows and time of day, and time of year when Patricia's Green would be shaded by the proposed project or variant, new shadow would not substantially

affect users at Patricia's Green. Therefore, the impact of new shadow at Patricia's Green from the proposed project or variant would be less than significant.

Page & Laguna Mini Park

Page & Laguna Mini Park has 24,472,209 square foot-hours of theoretically available annual sunlight. The park's existing annual shadow coverage is 12,095,949 square foot-hours, which is 49.427 percent of theoretically available annual sunlight available on Page & Laguna Mini Park.

Proposed Project

The proposed project would cast new shadow on Page & Laguna Mini Park between April 12 and May 10, and between August 2 and August 30. No new shadow from the proposed project would affect the park after 7:41 a.m. on any day of the year. During the periods when shadows would be cast on this park, the largest new shadow (based on area) would occur on August 30 and April 12 at 7:38 a.m., lasting 3 minutes, 36 seconds and covering an area of approximately 1,134 square feet, or 17.24 percent of the park (**Figure 4.6.18: Proposed Project's Largest New Shadow on Page & Laguna Mini Park (17.24 percent on August 30 at 7:38 a.m.)**). This maximum shadow coverage from the proposed project would occur in the southern quarter of the park, north of the Rose Street entrance. Annual shadow results for existing conditions, the proposed project, and the variant are shown in **Table 4.6.3: Annual Shadow Results for the Page & Laguna Mini Park**.

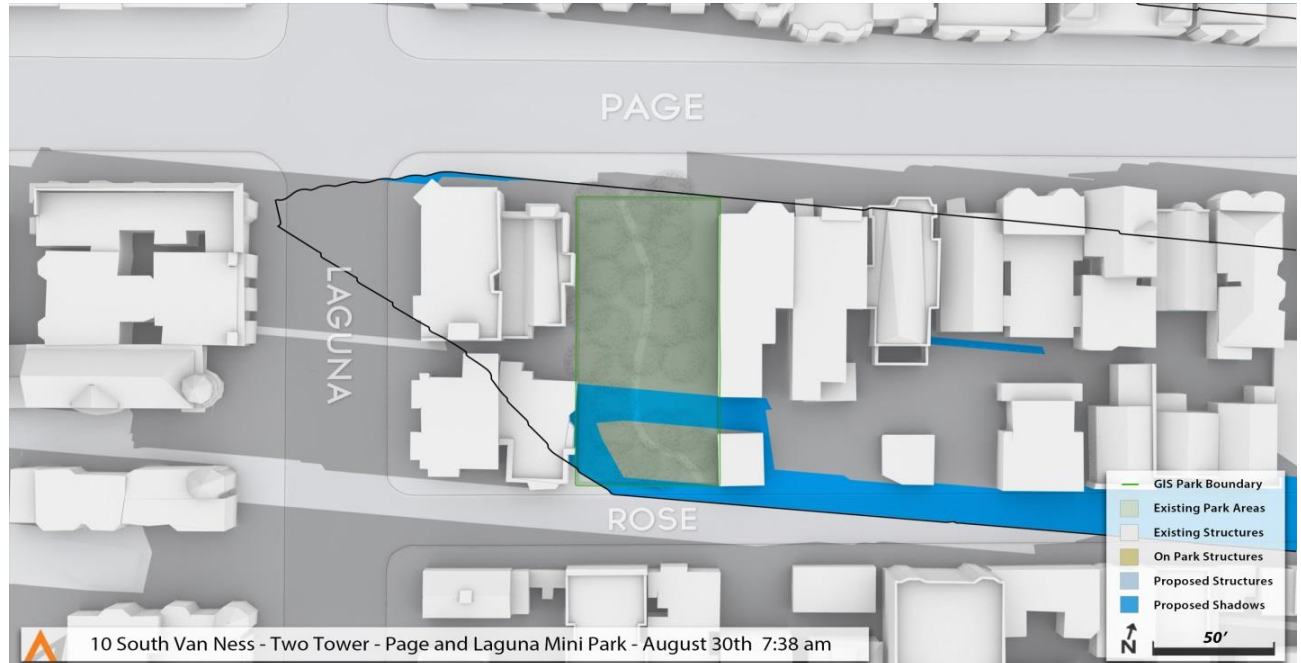


Figure 4.6.18: Proposed Project's Largest New Shadow on Page & Laguna Mini Park (17.24 percent on August 30 at 7:38 a.m.)

Table 4.6.3: Annual Shadow Results for the Page & Laguna Mini Park

	Existing Conditions	Existing plus Proposed Project	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 24,472,209 sfh¹</i>			
Annual shadow (sfh)	12,095,949	12,098,870	12,110,036
<i>Difference</i>		+2,921	+14,086
Annual Shadow as a Percentage of TAAS	49.427%	49.439%	49.485%
<i>Difference</i>		+0.012%	+0.058%

Notes:

sfh = square foot-hours; TAAS = theoretically available annual sunlight

¹ Based on the City's annualized TAAS factor.

Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

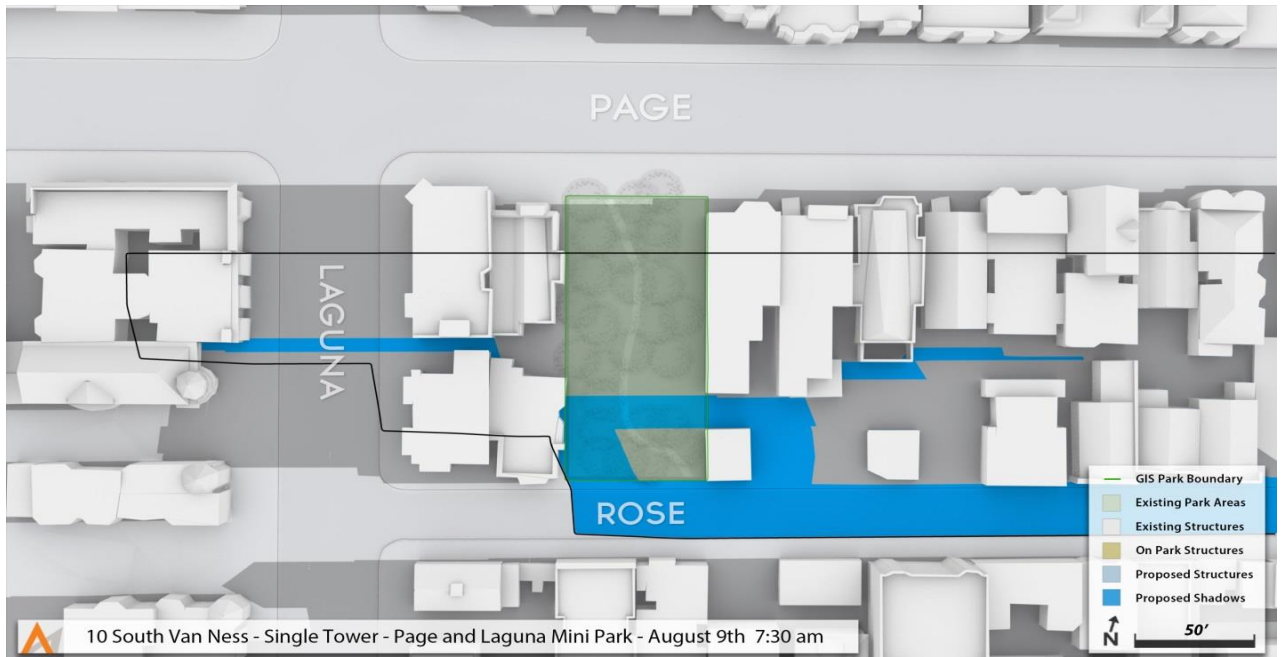
Variant

The variant would cast new shadow on Page & Laguna Mini Park between August 2 and August 23, and between April 9 and May 10. During the period when shadows would be cast on this park, the largest new shadow (based on area) would occur on August 9 and May 3 at 7:45 a.m., would last 15 minutes, and would cover an area of approximately 1,236 square feet, or 18.8 percent of the park. This maximum shadow coverage of the variant would occur in the southern quarter of the park, north of the Rose Street entrance (**Figure 4.6.19: Variant's Largest New Shadow on Page & Laguna Mini Park (18.8 percent on August 9 at 7:45 a.m.)**). The variant would add 14,086 square foot-hours of net new shadow, resulting in a 0.058 percent increase in annual shadow compared to existing conditions as a percentage of theoretically available annual sunlight (Table 4.6.3).

Overall Effect on Page & Laguna Mini Park

As stated previously, the proposed project and variant would result in increases in annual shadow of 0.012 percent and 0.058 percent, respectively. In August, when shadows cast by the proposed project or variant would be the greatest, the majority of the park would already be shaded by other buildings in the vicinity.

Site visits to Page & Laguna Mini Park took place on the mornings of July 26 and 28, 2016, and on the afternoons of August 4 and 5, 2016, to observe park use and assess new shading effects on the existing pattern of park use. Based on the visual observation, the primary activities include walking and dog walking. Between 7 and 10 a.m., the number of people using the park ranged from zero to six at any given time.



Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.19: Variant’s Largest New Shadow on Page & Laguna Mini Park (18.8 percent on August 9 at 7:45 a.m.)

Shadows from the proposed project would affect the park primarily in the morning when park usage typically is low. Furthermore, active recreational uses, such as walking and dog walking, are the principal observed activities. Enjoyment of these activities is less dependent on sunlight than passive recreational uses, such as sitting, talking on the phone, or eating. Therefore, the increase in shadow caused by the proposed project or variant would not substantially or negatively affect park use, and the impact of the proposed project or variant on Page & Laguna Mini Park would be less than significant.

Howard & Langton Mini Park

As shown in Figure 4.6.1, p. 4.6.3, shadow from the proposed project would not reach Howard & Langton Mini Park. Therefore, the following analysis pertains to the variant only. Annual shadow on Howard & Langton Mini Park currently is 48.850 percent of theoretically available annual sunlight (**Table 4.6.4: Annual Shadow Results for Howard & Langton Mini Park**).

Shadows from the variant on Howard & Langton Mini Park would occur on and around October 18 and February 22. During these periods, the largest new shadow (based on area) would occur at 5:27 p.m., would last six minutes, and would cover an area of approximately 602 square feet (5.89 percent) of the park. **Figure 4.6.20: Variant’s Largest New Shadow on Howard & Langton Mini Park (5.89 percent on October 18 at 5:27 p.m.)** shows the maximum shadow coverage on Howard & Langton Mini Park.

Table 4.6.4: Annual Shadow Results for Howard & Langton Mini Park

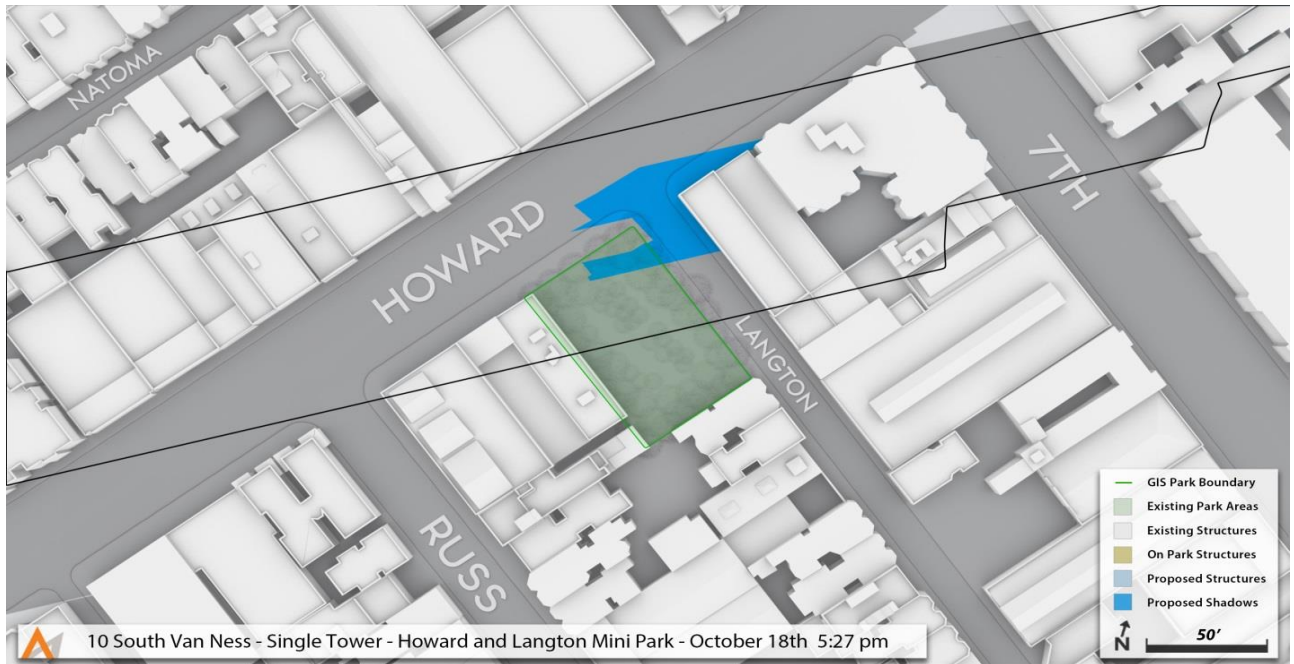
	Existing Conditions	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 38,025,265 sfh¹</i>		
Annual shadow (sfh)	18,575,415	18,576,228
<i>Difference</i>		+812
Annual Shadow as a Percentage of TAAS	48.850%	48.852%
<i>Difference</i>		+0.002%

Notes:

sfh = square foot-hours; TAAS = theoretically available annual sunlight

¹ Based on the City's annualized TAAS factor.

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.



Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.20: Variant's Largest New Shadow on Howard & Langton Mini Park (5.89 percent on October 18 at 5:27 p.m.)

In addition, the portion of the park that would be shaded by the variant has substantial tree cover, which casts shadow on this portion of the park year-round. Persons seeking sunlight would not be using this portion of the park. As such, new shadow from the variant likely would not substantially affect users of the park. Therefore, the variant's impact on shadow at Howard & Langton Mini Park would be less than significant.

Hayes Valley Playground

As shown in Figure 4.6.1, p. 4.6.3, shadow from the proposed project would not reach Hayes Valley Playground. Therefore, the following analysis pertains to the variant only. Annual shadow on the playground currently is 26.588 percent of theoretically available annual sunlight (Table 4.6.5: Annual Shadow Results for the Hayes Valley Playground).

Table 4.6.5: Annual Shadow Results for the Hayes Valley Playground

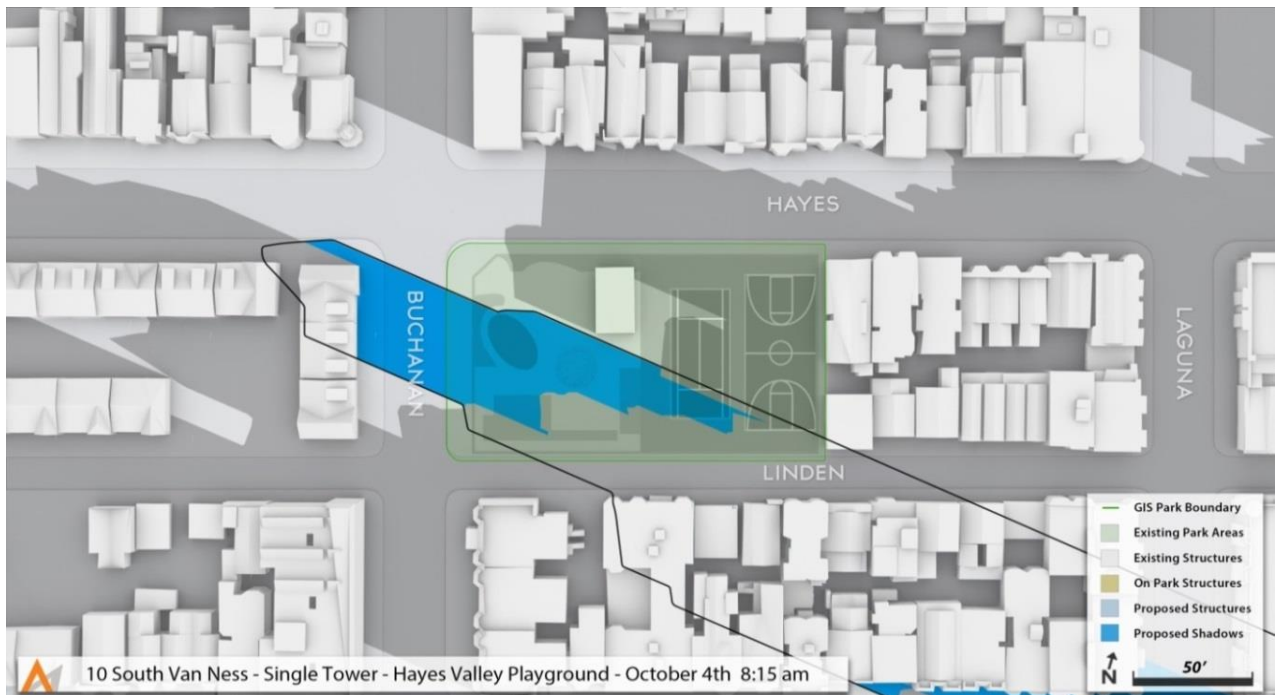
	Existing Conditions	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 122,080,743 sfh¹</i>		
Annual shadow (sfh)	32,458,749	32,487,917
Difference		+29,168
Annual Shadow as a Percentage of TAAS	26.588%	26.612%
Difference		+0.024%

Notes: sfh = square foot-hours; TAAS = theoretically available annual sunlight

¹Based on the City's annualized TAAS factor.

Source: FASTCAST, 10 South Van Ness Shadow—Variant Technical Memorandum, January 17, 2018.

The variant would cast new shadow on Hayes Valley Playground between October 4 and 11, and again between March 1 and 8. During these two weeks of the year, no new shadow from the variant would affect the playground after 8:29 a.m. During these periods, the largest new shadow (based on area) would occur on October 4 and March 8 at 8:15 a.m., would last 10 minutes, 12 seconds, and would cover approximately 7,762 square feet (23.66 percent) of the playground (**Figure 4.6.21: Variant's Largest New Shadow on Hayes Valley Playground (23.66 percent on October 4 at 8:15 a.m.)**).



Source: FASTCAST, 10 South Van Ness Shadow—Variant Technical Memorandum, January 17, 2018

Figure 4.6.21: Variant's Largest New Shadow on Hayes Valley Playground (23.66 percent on October 4 at 8:15 a.m.)

Hayes Valley Playground features children’s play areas, a stage and plaza for community gatherings, community garden plots, outdoor fitness equipment, a 2,500-square-foot clubhouse, a basketball court, and a tennis court. The largest new shadow would cover the community plaza, a portion of the play area, and a small portion of the tennis court (Figure 4.6.21).

A visual survey of Hayes Valley Playground was conducted on the morning of August 2, 2017. The primary observed activities involved people exercising on park-provided exercise equipment, playing basketball, playing on and around play structures, walking, and dog walking. Between 7 and 10 a.m., a maximum of four park users were present at any given time. At 10:30 a.m., when new shadow from the variant would not cover any portion of the park at any time of the year, five people were using the playground.

The types of activities observed at this playground generally were active recreational uses, such as playing basketball or playing on the playground. Enjoyment of these types of activities is not substantially affected by shadow.

Therefore, due to the short duration of the shadows and the types of activities that generally take place at the times shadows occur, the shadow impacts of the variant on the Hayes Valley Playground would be less than significant.

Koshland Community Park and Learning Center

As shown in Figure 4.6.1, p. 4.6.3, shadow from the proposed project would not reach Koshland Community Park and Learning Center. Therefore, the following analysis pertains to the variant only. Annual shadow on Koshland Community Park and Learning Center currently is 16.233 percent of theoretically available annual sunlight (**Table 4.6.6: Annual Shadow Results for Koshland Community Park and Learning Center**).

Table 4.6.6: Annual Shadow Results for Koshland Community Park and Learning Center

	Existing Conditions	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 133,133,539 sfh¹</i>		
Annual shadow (sfh)	21,611,520	21,696,777
<i>Difference</i>		+82,257
Annual Shadow as a Percentage of TAAS	16.233%	16.297%
<i>Difference</i>		+0.064%

Notes:

sfh = square foot–hours; TAAS = theoretically available annual sunlight

¹ Based on the City’s annualized TAAS factor.

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

The variant would cast new shadow on Koshland Community Park and Learning Center between August 9 and August 16, and between April 26 and May 3. No new shadow from the variant would affect the property after 7:44 a.m. on any day of the year. During these two weeks, the largest new shadow (based on area) would occur on August 16 and April 26, beginning at 7:25 a.m., would last 2 minutes, 24 seconds, and would cover an area of approximately 19,772 square feet (55.27 percent) of the property. **Figure 4.6.22: Variant's Largest New Shadow on Koshland Community Park and Learning Center (55.27 percent on August 16 at 7:25 a.m.)** shows the maximum shadow coverage on Koshland Community Park and Learning Center.



Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.22: Variant's Largest New Shadow on Koshland Community Park and Learning Center (55.27 percent on August 16 at 7:25 a.m.)

Shadow from the variant would cover approximately half of the property, including portions of the basketball half-court and children's play equipment, until approximately 7:25 a.m. on April 26 and August 16 (Figure 4.6.22).

A visual survey of Koshland Community Park and Learning Center was conducted on the morning of July 18, 2017, to observe park usage. Based on visual observation, park usage was between zero and two people between 7 and 8 a.m., and between one and five people between 8 and 8:30 a.m. Between 8 and 8:30 a.m., five adults were observed participating in a fitness-related group activity on the basketball half-court. Between 9 and 10 a.m., the park was used only by a few people who were walking dogs, which is an active recreational use, an activity less affected by shadow than passive uses such as sitting, talking on the phone, or eating.

Results of the visual survey indicate that use generally increases between sunrise and the middle of the day, as temperatures and sunlight increase. Furthermore, shadow from the variant would not affect the property after 7:44 a.m. on any day of the year. As the variant would create shadow only before 7:44 a.m. and uses at this time are primarily active, it would not substantially affect recreational use of the park. Therefore, the variant's impact on shadow at Koshland Community Park and Learning Center would be less than significant.

Buchanan Street Mall

As shown in Figure 4.6.1, p. 4.6.3, shadow from the proposed project would not reach the Buchanan Street Mall. Therefore, the following analysis pertains to the variant only. Annual shadow on the mall currently is 27.873 percent of theoretically available annual sunlight (Table 4.6.7: Annual Shadow Results for the Buchanan Street Mall).

Table 4.6.7: Annual Shadow Results for the Buchanan Street Mall

	Existing Conditions	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 293,711,495 sfh¹</i>		
Annual shadow (sfh)	81,866,060	81,875,692
<i>Difference</i>		+9,632
Annual Shadow as a Percentage of TAAS	27.873%	27.876%
<i>Difference</i>		+0.003%

Notes:

sfh = square foot-hours; TAAS = theoretically available annual sunlight

¹ Based on the City's annualized TAAS factor.

Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

The variant would cast new shadow from sunrise to 8:10 a.m. between November 1 and November 29, and between January 11 and February 8. No new shadow from the variant would affect the mall after 8:10 a.m. on any day of the year. During these periods, the largest new shadow (based on area) would occur on November 22 and January 18 at 8 a.m., would last nine minutes, and would cover an area of approximately 2,475 square feet (3.14 percent) of the property. **Figure 4.6.23: Variant's Largest New Shadow on the Buchanan Street Mall (3.14 percent on November 22 at 8 a.m.)** shows the maximum shadow coverage on the mall.

Shadow from the variant would cover a small portion of the mall north of McAllister Street (Figure 4.6.23). The portion of the mall that would be shadowed because of the variant is currently occupied by a large tree, which casts shadow on that area year-round. Therefore, the variant's impact on shadow at Buchanan Street Mall would be less than significant.



Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.23: Variant’s Largest New Shadow on the Buchanan Street Mall (3.14 percent on November 22 at 8 a.m.)

Overall Shadow Impact Conclusion

As described above, visual observations were conducted at the six recreation and park commission properties that would be shaded by the proposed project or variant,⁷ to observe how new shading could affect existing patterns of use. Primarily, active recreational uses were observed, including walking, dog walking, exercising, playing sports, and playing on play structures. Passive recreational uses, including sitting, eating, talking on the phone, or listening to music, were less common during the hours in which new shadow would reach the six park properties.

Shadow from the proposed project or variant on parks would be limited to certain days of the year and would be limited in duration on those days. Net new shadow on these parks would generally occur at times of day when park uses were observed to be primarily active uses that are not dependent on access to sunlight. For these reasons, the proposed project or variant would not substantially interfere with existing recreational uses of the affected parks. Therefore, the impact would be less than significant.

⁷ Visual observations were conducted at Patricia’s Green, Page & Laguna Minipark, Howard & Langton Minipark, Hayes Valley Playground, Koshland Community Park and Learning Center, and Buchanan Street Mall.

OTHER PUBLIC SPACES

Impact SH-2: The proposed project or variant would not substantially shade outdoor recreation facilities or other public areas, such as streets and sidewalks that are not under the jurisdiction of the San Francisco Recreation and Park Commission. (*Less than Significant*)

Privately Owned Public Open Spaces

Privately owned public open spaces are publicly accessible spaces, including plazas, terraces, atriums, and small parks that are provided and maintained by private entities. The one existing privately owned public open space in the vicinity of the project site is located in the lobby of a building at 77 Van Ness Avenue. This space is indoors; thus, it would not be affected by shadow related to the proposed project or the variant. Therefore, it is not considered in this analysis.

Streets and Sidewalks

In accordance with San Francisco Planning Code section 146, the proposed project or the variant would be designed in order to maintain direct sunlight on public sidewalks in certain downtown areas during critical periods of use. However, the proposed project or variant would cast new shadow on nearby streets and sidewalks throughout the year, to the extent that these areas are not shaded already by existing buildings that line the streets.

In the mornings during the summer, shadow from the proposed project or variant would shade streets and sidewalks to the west, including Market Street, Gough Street, and Octavia Street, among others. In the afternoons during the summer, shadow from the proposed project or variant would shade Mission Street, Howard Street, and 10th Street, among others. During the spring and fall, Oak Street, Octavia Street, and Fell Street, among others, would be shaded during the mornings, and streets including Ninth Street, 10th Street, and Folsom Street would be shaded during the afternoons. During the winter, Gough Street, Octavia Street, and Webster Street would be shaded during the mornings; and Sixth Street, Seventh Street, Eighth Street, and Ninth Street would be shaded during the afternoons.

New shadow from the proposed project or variant would not affect the use and enjoyment of sidewalks in the area, which function primarily as public pathways for pedestrians. In addition, many sidewalks that would be shaded by the proposed project or variant already are shadowed for portions of the day by nearby, multistory buildings.

Overall, the proposed project or variant would not substantially increase the amount of shadow on the sidewalks above levels that are common and generally expected in densely developed urban settings. Therefore, the shadow impact of the proposed project or variant on sidewalks in the project area would be less than significant.

CUMULATIVE IMPACTS

Impact C-SH-1: The proposed project or variant in combination with past, present, and reasonably foreseeable future projects in the project area would not create new shadow in a manner that would substantially affect outdoor recreation facilities or other public areas. The proposed project would not make a cumulatively considerable contribution to a significant cumulative shadow impact. (*Less than Significant*)

The cumulative projects considered in this shadow analysis are past, present, and reasonably foreseeable projects that include proposed buildings at least 40 feet tall on project sites within a 1,500-foot radius of the project site. The list of cumulative projects was based on the projects for which planning department Environmental Evaluation Applications were filed or which the planning department had otherwise determined are reasonably foreseeable, at the time of the notice of preparation.

However, as discussed in Section 4.0.7, changes to the cumulative project list have been made since the preparation of the shadow technical memoranda for the project and variant. These changes include moving several projects from the cumulative projects list into the existing condition, including 1500 Mission Street; adding certain projects to the cumulative projects list, including 98 Franklin Street, 30 Van Ness Avenue, 42 Otis Street, and Parcel U; and removing projects that are no longer reasonably foreseeable, including 33 Gough Street and 1390 Market Street. The current list of cumulative projects is shown in **Table 4.0.1: Cumulative Projects**, p. 4.0.10, and **Figure 4.0.1: Cumulative Projects**, p. 4.0.11, in Section 4.0, Chapter Introduction.

The projects that were moved into the existing condition were accounted for in the cumulative shadow scenario for the proposed project and variant. The proposed 98 Franklin Street project would cast intervening shadow on parks to the northwest in the morning during the summer (with the proposed project), and in the fall (with the variant). The 30 Van Ness Avenue project may also cast shadow on parks to the northwest in the morning during the summer and in the fall. Therefore, by not including these two projects, the cumulative shadow analysis likely overestimates the amount of net new shading contributed by the project and variant on parks to the northwest during these times of day and year. Given the height of the proposed projects at 42 Otis Street and Parcel U, the addition of these projects to the cumulative scenario would not change the amount of shadow on nearby parks. Similarly, given the heights of the proposed projects at 33 Gough Street and 1390 Market Street, the removal of these projects from the cumulative scenario would not change the shadow effects of the proposed project or variant. The cumulative analyses for affected parks in this section therefore represents a conservative estimate of cumulative shadow impacts, because the cumulative analyses likely overstates, rather than understates, the proposed project's and variant's relative contribution to cumulative shadow on public open spaces.

Multiple buildings on the cumulative projects list have not been designed or proposed yet. However, the Hub project outlines the height and development intensity allowed for buildings in the Hub project area. Because multiple buildings now in the Hub project area are expected to be demolished and replaced with larger buildings in the future, the shadow model included these projects as simplified building envelopes. The following projects were modeled as simplified building envelopes: 33 Gough Street (modeled as a 200-foot-tall building with an 80-foot-tall podium), 1390 Market Street (Fox Plaza Expansion, modeled as a 120-foot-tall building), and 30 Van Ness Avenue (modeled as a 400-foot-tall building).

Construction of foreseeable projects under cumulative conditions would increase the area and duration of shadow that would fall on Patricia's Green, Page & Laguna Mini Park, Hayes Valley Playground, Koshland Community Park and Learning Center, Howard & Langton Mini Park, and Buchanan Street Mall. **Table 4.6.8: Annualized Shadow Results—Comparison between the Cumulative Projects with the Proposed Project and Variant** summarizes annualized shadow under cumulative conditions and cumulative conditions plus the proposed project and variant. In the table, the data shown in the five columns to the right of the Cumulative Projects column indicate the contribution of the proposed project or variant to cumulative shadow impacts. Thus, these columns subtract shadow under the proposed project, variant, or existing conditions from the cumulative projects scenarios to identify the incremental contribution from the proposed project or the variant. The differences presented in these five columns support a determination of whether or not a cumulative impact related to shadow would occur.

Cumulative impacts for each park are discussed separately below, followed by an overall cumulative impact conclusion for all properties.

Patricia's Green

The shadow technical memoranda that were prepared for the proposed project and variant modeled and quantified potential shadows from cumulative projects in combination with the proposed project and variant, to understand the amount of shadow that would be attributable to the proposed project and variant relative to that of the cumulative projects. With development of cumulative projects, the annual shadow coverage on Patricia's Green would be 24,917,975 square foot-hours, or 11,455,220 square foot-hours more shadow coverage than under existing conditions. This would translate to an increase in shadow coverage equal to 17.195 percent of theoretically available annual sunlight compared to existing conditions. As shown in **Figure 4.6.24: Cumulative Projects plus Variant—Largest New Shadow Coverage on Patricia's Green (11.8 percent on October 4 at 9 a.m.)**, the majority of this shadow would be attributable to three structures anticipated to be built under cumulative conditions adjacent to Patricia's Green, namely at 432, 424, and 350 Octavia Boulevard. Under cumulative plus proposed project or variant conditions, the proposed project would contribute 0.002 percent of the increase in shadow, and the variant would contribute 0.024 percent of the increase in shadow, as a percentage of theoretically available annual sunlight.

Table 4.6.8. Annualized Shadow Results—Comparison between the Cumulative Projects with the Proposed Project and Variant

		Existing Conditions	Cumulative Projects	Cumulative Projects plus Proposed Project	Cumulative Projects plus Variant	Difference between Cumulative plus Variant and Cumulative plus Proposed Project	Difference between Cumulative plus Proposed Project and Existing Conditions	Difference between Cumulative plus Variant and Existing Conditions
Patricia's Green	sfh ¹	13,462,755	24,917,975	24,919,509	24,933,774	14.265	11,456,754	11,471,019
	% TAAS ²	20.208%	37.403%	37.405%	37.427%	.022%	17.20%	17.22%
Page & Laguna Mini Park	sfh	12,095,949	12,098,671	12,101,592	12,112,758	11,166	5,643	16,809
	% TAAS	49.427%	49.438%	49.458%	49.496%	.038%	0.03%	0.07%
Hayes Valley Playground	sfh	32,458,749	32,458,749	N/A	32,487,917	N/A	N/A	29,168
	% TAAS	26.588%	26.588%	N/A	26.612%	N/A	N/A	0.02%
Koshland Community Park and Learning Center	sfh	21,611,520	21,611,520	N/A	21,696,777	N/A	N/A	85,257
	% TAAS	16.233%	16.233%	N/A	16.297%	N/A	N/A	0.06%
Buchanan Street Mall	sfh	81,866,060	81,866,060	N/A	81,875,692	N/A	N/A	9,632
	% TAAS	27.873%	27.873%	N/A	27.876%	N/A	N/A	0.003%
Howard & Langton Mini Park	sfh	18,575,415	18,575,415	N/A	18,576,228	N/A	N/A	813
	% TAAS	48.850%	48.850%	N/A	48.852%	N/A	N/A	0.002%

Notes:

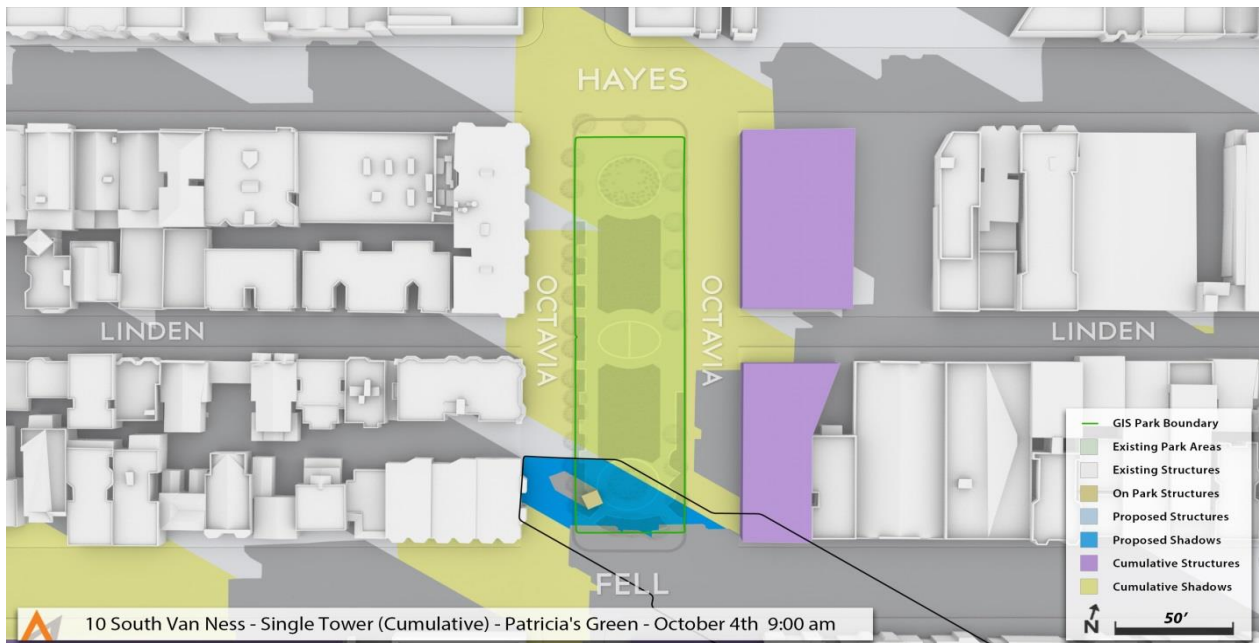
N/A = not applicable; sfh = square foot-hours; TAAS = theoretically available annual sunlight

¹ All sfh are rounded to the nearest whole number.

² All percentages are rounded to the nearest 0.000%.

³ Under cumulative conditions (without the proposed project or the variant), future foreseeable projects surrounding the proposed Brady Park such as at 1601–1637 Market Street, 1700 Market Street, 53 Colton Street, and 30 Otis Street would shade most of the properties (with the exception of the southwestern corner) because of their adjacency to the open space.

Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.



Source: FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018

Figure 4.6.24: Cumulative Projects plus Variant—Largest New Shadow Coverage on Patricia’s Green (11.8 percent on October 4 at 9 a.m.)

Shadow coverage under cumulative conditions would be 37.403 percent of theoretically available annual sunlight, an increase of 17.195 percent over existing conditions. This increase, attributable mainly to the development of adjacent buildings (at 432, 424, and 350 Octavia Street), was identified as an adverse cumulative impact in the Market and Octavia Neighborhood Plan Final EIR.⁸ With respect to Patricia’s Green (which was referred to as Hayes Green in the plan EIR), the plan EIR determined that shadow impacts resulting from plan implementation would be potentially significant because at the time the plan EIR was being prepared, Patricia’s Green was under construction, and thus a qualitative analysis of how the park would be used could not be undertaken.

Shadow coverage at Patricia’s Green is 20.208 percent of theoretically available annual sunlight under existing conditions but would be 37.403 percent with implementation of cumulative projects, which would create a substantial increase in shadow. Because the Market and Octavia Neighborhood Plan Final EIR determined that cumulative impacts from plan implementation would be potentially significant, and because the plan area generally is developing as planned, the cumulative impact from development of cumulative projects would be *significant and unavoidable*. The CEQA Guidelines state that when a cumulative impact is cumulatively

⁸ San Francisco Planning Department, *Market and Octavia Neighborhood Plan Final EIR*, Volume II, September 2007. Planning Department Case No. 2003.0347E. State Clearinghouse No. 2004012118. Available: <http://www.sf-planning.org/index.aspx?page=1714>.

significant, the lead agency examining the project shall determine whether a project's incremental effect is cumulatively considerable. Therefore, the analysis below examines whether the proposed project or variant would have a significant cumulative impact.

As described under "Significance Thresholds," p. 4.6.12, the analysis of shadow impacts considers the times and locations where shadows would occur, the anticipated duration of the shadows, and the potential for the shadows to substantially and adversely affect any activities or uses in the subject properties or open spaces.

The largest new shadow would occur on October 4 and March 8 at 9 a.m., and would cover approximately 11.8 percent of Patricia's Green. New shadow at Patricia's Green would be greatest during the morning but would decrease throughout the day, as the observed park use increases. Results of the visual observation, which are included in the technical memoranda prepared for the proposed project and the variant, showed that usage during morning hours includes sitting, walking, dog walking, stretching and yoga, and socializing.

The visual observation demonstrated that use of Patricia's Green is lowest during the morning hours, when shadow under cumulative conditions would be the greatest, and would be highest during the middle of the day, when project shadows would be smallest. During the summer, and during the majority of the day during the spring, fall, and winter, no shadow would occur on Patricia's Green. Therefore, few park users would be affected by shadow from development of the cumulative projects. Furthermore, the proposed project and variant would contribute 0.002 percent and 0.024 percent of the 17.20 percent and 17.22 percent increases in shadow under cumulative plus proposed project and cumulative plus variant conditions, respectively. Therefore, the incremental shadow effect of the proposed project or variant on Patricia's Green would not adversely affect park usage, and likewise would not make a cumulatively considerable contribution to this adverse cumulative impact. The project or variant's contribution to the cumulative impact would therefore be less than significant.

Page & Laguna Mini Park

Page & Laguna Mini Park was not discussed in the Market and Octavia Neighborhood Plan Final EIR. As shown in Table 4.6.8, p. 4.6.44, the increase in shadow on Page & Laguna Mini Park from development under cumulative conditions would increase shadow as a percentage of theoretically available annual sunlight by 0.011 percent compared to existing conditions. Under cumulative conditions, shadow would reach the park in the early morning hours, when the park already generally would be in shadow from existing buildings. Furthermore, early-morning uses typically would be limited to active recreational uses, including walking, dog walking, and exercising, which are less dependent on sunlight than passive recreational uses, including sitting, eating, and talking on the phone. Therefore, no cumulative impact would occur.

Hayes Valley Playground, Koshland Community Park and Learning Center, Buchanan Street Mall, and Howard & Langton Mini Park

As shown in Table 4.6.8, p. 4.6.44, shadow at these parks under the cumulative projects scenario would be identical to shadow under existing conditions and under the existing plus project scenario. That is, no shadow from cumulative projects would reach these parks. Because cumulative projects would not shade these parks, impacts under cumulative conditions would be the same as those discussed for the existing plus variant scenario under Impact SH-1 (see “Howard & Langton Mini Park,” “Hayes Valley Playground,” “Koshland Community Park and Learning Center,” and “Buchanan Street Mall,” on pp. 4.6.34 through 4.6.39), and no cumulative impact would occur.

Streets and Sidewalks

Cumulative projects would add new shadow on sidewalks in the project area; however, these sidewalks already are shadowed for much of the day by densely developed surrounding buildings. The increase in shadow under cumulative conditions would not exceed levels that are common and generally expected in densely developed urban settings. Therefore, the cumulative shadow impact on streets and sidewalks would be less than significant.

Overall Cumulative Shadow Conclusion

The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in project area, would result in less-than-significant impacts to five of the six area parks. The proposed project or variant would not make a considerable contribution to the cumulative shadow impact on Patricia’s Green; therefore, cumulative shadow impacts would be less than significant.

Informational Discussion on Proposed Parks

The proposed Brady Park has not been approved and the design details may change. Similarly, the 11th & Natoma Park does not exist yet, and final programming has not been determined. The 11th & Natoma Park would be approximately the same size as Patricia’s Green and may include a playground, sports court, and/or active green space, but these uses are initial programming concepts and a conceptual site plan is not publicly available. Given that these parks do not yet exist it was not possible to conduct site visits to observe park use. Without information about park programming or observations of park use it is not possible to assess the effects of shading on the use and enjoyment of the parks for the purpose of CEQA analysis. An assessment of impacts on the proposed parks would be speculative, and therefore, pursuant to the CEQA Guidelines, should not be considered in making an impact determination. However, a discussion characterizing the shadow effects of the proposed project and variant on the proposed parks is included, below, for informational purposes.

PROPOSED BRADY PARK

Table 4.6.9: Annual Shadow Results for the Proposed Brady Park shows quantitative results for existing conditions plus the proposed project, summarized as a percentage of theoretically available sunlight. If the proposed Brady Park is implemented as planned, new shadow from the proposed project would reach the park and shadow from the variant would not reach the park. As shown in Table 4.6.9, Brady Park would have 77,542,402 square foot–hours of theoretically available annual sunlight throughout the year.

Table 4.6.9: Annual Shadow Results for the Proposed Brady Park

	Existing Conditions ¹	Existing plus Proposed Project
<i>Theoretically Available Annual Sunlight = 77,542,402 sfh²</i>		
Annual shadow (sfh)	11,500,977	11,544,071
<i>Difference</i>		<i>+43,094</i>
Annual Shadow as a Percentage of TAAS	14.832%	14.888%
<i>Difference</i>		<i>+0.056%</i>

Notes:

sfh = square foot–hours; TAAS = theoretically available annual sunlight

¹ *Existing* presents the amount of shadow that would be cast on the park if the park existed under current conditions.

² Based on the City's annualized TAAS factor.

Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Existing shadow on the proposed park will be approximately 11,500,977 square foot–hours, which is 14.832 percent of theoretically available annual sunlight. With the proposed project, Brady Park would be shaded for an additional 43,094 square foot–hours during the year, an increase of 0.056 percent.

Shadows from the proposed project would occur between May 24 and July 19. The average duration of new shadow on the proposed Brady Park would be 35 minutes, 38 seconds, with the longest duration occurring on June 21 for approximately 50 minutes. The largest new shadow (based on area) would occur on June 21 at 6:47 a.m. and would cover approximately 3,500 square feet (16.8 percent) of the proposed park. New shadow would affect the park for a maximum of 50 minutes in the park's northwestern half (see **Figure 4.6.25: Proposed Project's Largest New Shadow on the Proposed Brady Park (16.8 percent on June 21 at 6:46 a.m.)**). No new shadow from the proposed project would occur at the proposed Brady Park after 7:44 a.m. at any point during the year.



Source: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018

Figure 4.6.25: Proposed Project's Largest New Shadow on the Proposed Brady Park (16.8 percent on June 21 at 6:46 a.m.)

In the future, the surrounding cumulative projects, including 1601–1637 Market Street, 1700 Market Street, 53 Colon Street, and 30 Otis Street, would shade portions of the park during all hours of the day.

PROPOSED 11TH & NATOMA PARK

The recreation and park commission has acquired a new park property on 11th Street between Minna and Natoma streets (Block 3510/Lots 035, 037, 039, 055, 056). The proposed 11th & Natoma Park would be in District 6, the Western South of Market neighborhood, which has the fewest public parks in the City. Development of this park would be consistent with objective 1 in the *San Francisco Recreation and Parks 2016–2020 Strategic Plan*, which strives to “develop more open space to address population growth in high needs areas and emerging neighborhoods.”⁹ The timing of construction and programming of the proposed 11th & Natoma Park is unknown at this time, but construction would begin no sooner than 2021, when the current site tenant’s lease expires. The site of the proposed 11th & Natoma Park currently is occupied by commercial buildings.

⁹ San Francisco Recreation and Park Department, 2016, *San Francisco Recreation and Parks 2016–2020 Strategic Plan*, <https://view.joomag.com/rpd-strategic-plan/0230791001453414745?shortv>.

If the proposed park is implemented as planned, new shadow from either the proposed project or the variant would reach this location. **Table 4.6.10: Annual Shadow Results for the Proposed 11th & Natoma Park** shows quantitative results for existing conditions plus the proposed project and existing conditions plus the variant, summarized as a percentage of theoretically available sunlight.

Table 4.6.10: Annual Shadow Results for the Proposed 11th & Natoma Park

	Existing Conditions ¹	Existing plus Proposed Project	Existing plus Variant
<i>Theoretically Available Annual Sunlight = 72,928,025 sfh²</i>			
Annual shadow (sfh)	15,160,278	16,358,292	16,208,824
<i>Difference</i>		<i>+1,198,014</i>	<i>+1,048,546</i>
Annual Shadow as a Percentage of TAAS	20.788%	22.43%	22.228%
<i>Difference</i>		<i>+1.643%</i>	<i>+1.438%</i>

Notes:

sfh = square foot–hours; TAAS = theoretically available annual sunlight

¹ Existing presents the amount of shadow that would be cast on the park if the park existed under current conditions.

² Based on the City’s annualized TAAS factor.

Sources: FASTCAST, *10 South Van Ness Shadow Technical Memorandum*, January 17, 2018; and FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018.

As shown in Table 4.6.10, if the proposed 11th & Natoma Park existed today, it would have 72,928,025 square foot–hours of theoretically available annual sunlight. Existing shadow on the proposed park would be approximately 15,160,278 square foot–hours, which is 20.788 percent of theoretically available annual sunlight.

The proposed project would cast new shadow on the proposed 11th & Natoma Park between March 22 and September 20. During this period, the largest new shadow (based on area) would occur on August 16 and April 26 at 6 p.m., lasting until sunset, approximately 7:45 p.m., and covering 65.97 percent of the proposed park area. **Figure 4.6.26: Proposed Project’s Largest New Shadow on the Proposed 11th & Natoma Park (65.97 percent on August 16 at 6 p.m.)** shows the shadow on August 16, which would be identical to shadow on April 16. Outside the period from March 22 through September 20, the proposed project would not cast new shadow on the proposed park.

The variant would add 1,048,546 square foot–hours of net new shadow on the proposed 11th & Natoma Park, a 1.438 percent increase in annual shadow as a percentage of theoretically available annual sunlight (Table 4.6.10). The variant would cast new shadow on the proposed park between March 22 and September 20. During this period, the largest new shadow (based on area) would occur on July 12 and May 31, at 6 p.m., and would last until sunset, approximately 8:25 p.m. (see **Figure 4.6.27: Variant’s Largest New Shadow on the Proposed 11th & Natoma Park (59.6 percent on July 12 at 6 p.m.)**). The largest new shadow would cover 11,679 square feet (59.60 percent) of the proposed park.



Figure 4.6.26: Proposed Project's Largest New Shadow on the Proposed 11th & Natoma Park (65.97 percent on August 16 at 6 p.m.)

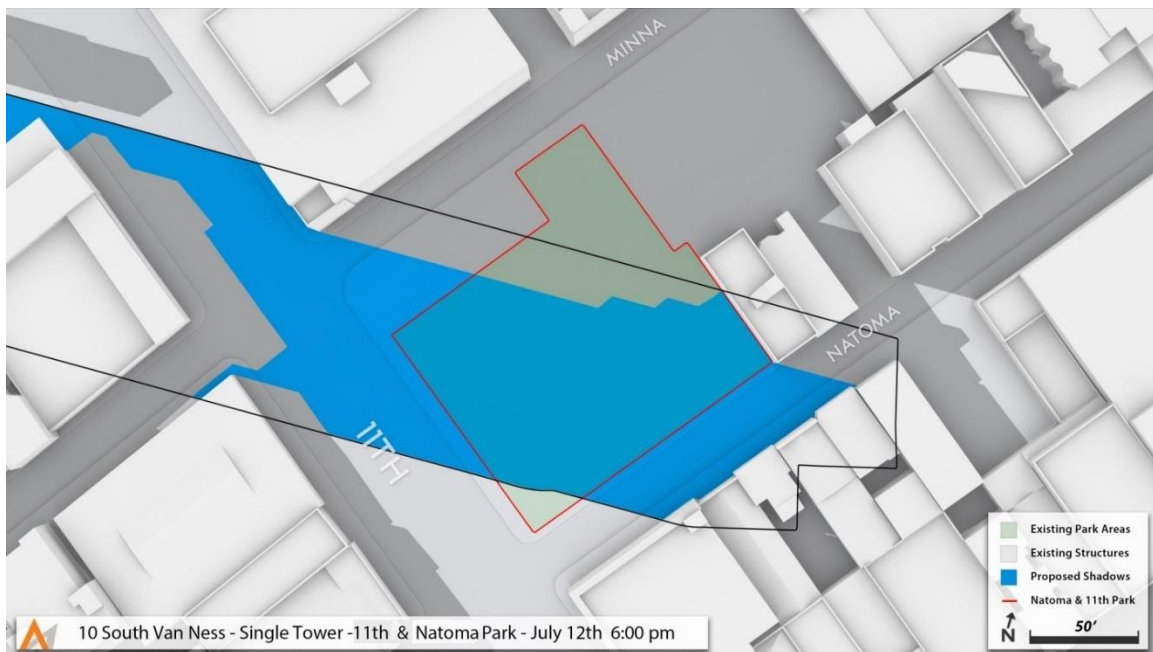


Figure 4.6.27: Variant's Largest New Shadow on the Proposed 11th & Natoma Park (59.6 percent on July 12 at 6 p.m.)

As stated in the 10 South Van Ness Shadow – Variant Technical Memorandum, in the future, cumulative projects developed in the area, including the project variant, would increase shadow on the proposed 11th & Natoma Park by 1.290 percent of theoretically available annual sunlight, compared to existing conditions.¹⁰ The largest shadows under cumulative conditions generally would be during summer afternoons.

¹⁰ FASTCAST, *10 South Van Ness Shadow—Variant Technical Memorandum*, January 17, 2018, pp. 34-35.

5. ALTERNATIVES

5.1 INTRODUCTION

Chapter 5, Alternatives, evaluates alternatives to the proposed project and variant and examines the potential environmental impacts associated with each alternative. By comparing these alternatives to the proposed project and variant, the relative environmental advantages and disadvantages of each may be analyzed and weighed. California Environmental Quality Act (CEQA) Guidelines section 15126.6(a) states that an environmental impact report (EIR) must describe and evaluate a reasonable range of alternatives to the proposed project and variant that would feasibly attain most of the proposed project's basic objectives and avoid or substantially lessen any identified significant adverse environmental impacts of the proposed project.

The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those potentially feasible alternatives necessary to foster informed public participation and an informed and reasoned choice by the decision-making body (CEQA Guidelines section 15126.6(f)). Therefore, an EIR does not need to address every conceivable alternative or consider infeasible alternatives. CEQA generally defines "feasible" to mean the ability to be accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. The following factors may also be considered: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (CEQA Guidelines section 15126.6(f)(1)). An EIR does not need to consider an alternative whose impact cannot be reasonably ascertained and whose implementation is remote and speculative.

The following alternatives are described and analyzed in Sections 5.2 through 5.6.

- No Project Alternative – Alternative 1
- Proposed Project Full Preservation Alternative – Alternative 2
- Proposed Project Partial Preservation Alternative – Alternative 3
- Variant Full Preservation Alternative – Alternative 4
- Variant Partial Preservation Alternative – Alternative 5

Table 5.1: Comparison of the Proposed Project and Variant to Alternatives, compares the main features and the impacts of the proposed project and variant to those of the alternatives.

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

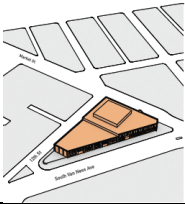
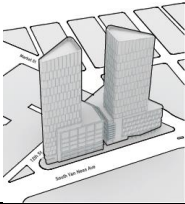
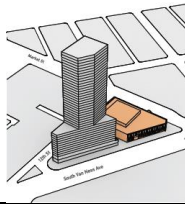
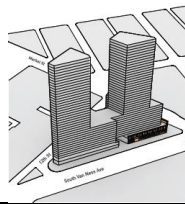
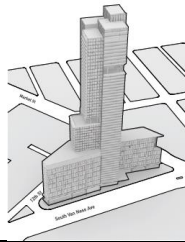
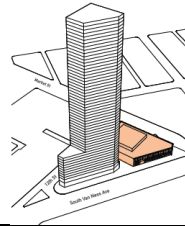
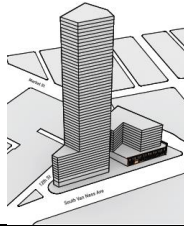
	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
							
Retail/Commercial (gsf)	91,088	30,350	64,900	31,400	30,450	64,400	28,100
Residential (gsf)	—	935,745	435,700	707,600	935,250	619,900	770,300
Parking (gsf)	—	102,000	47,900	73,500	101,992	65,000	78,400
Total gsf ¹	91,088	1,071,095	548,500	812,500	1,072,989	749,300	876,800
Residential (nsf)	—	671,380	295,700	486,200	696,468	430,100	543,700
Tower Efficiency ²	—	73% North Tower/72% South Tower	72%	72% North Tower/68% South Tower	77%	74%	73%
Net Unit Size	—	682	682	682	682	702	702
Dwelling Units							
Studio		375	166	272	347	213	270
1 Bedroom		461	203	334	449	276	349
2 Bedroom		100	44	72	166	102	129
3 Bedroom		48	21	35	22	14	17
Total Units		984	434	713	984	605	765
Parking Spaces	—	518	239	367	518	325	392
Bicycle Spaces							
Class 1		336	192	257	325	235	270
Class 2		61	33	48	61	41	49
Total		386	225	305	386	276	319

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
Podium Height (Max.)	–	114 Feet North Podium/120 Feet South Podium	120 Feet Podium	120 Feet Podium	139 Feet Podium/164 Feet Podium (120 Feet Average)	120 Feet Podium	120 Feet Podium
Building Height	30 – 45 Feet	400 Feet	400 Feet	400 Feet	590 Feet	590 Feet	590 Feet
Stories	2	41	41	41	55	55	55
Existing GSF Retained	91,088 plus All Façades	–	59,400 plus North Façades	North Façades	–	59,400 plus North Façades	North Façades
Excavation Required (yd ³)	–	100,000 (Full Site)	50,000 (Partial Site ³)	70,000 (Full Site)	100,000 (Full Site)	60,000 (Partial Site ³)	80,000 (Full Site)
Ability to Meet Project Sponsor's Objectives?	No	Yes	Most	Most	Yes	Most	Most
Comparison of Significant Impacts							
<i>Cultural Resources (Historic Architectural)</i>							
CR-1: The proposed demolition of the building at 10 South Van Ness Avenue would cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines.	None	SUM	LTS	SUM	SUM	LTS	SUM

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
<i>Transportation and Circulation – Cumulative Construction Impacts</i>							
C-TR-7: The duration and magnitude of temporary construction activities for the proposed project, the variant, or the straight-shot streetscape option, in combination with construction of past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in a significant cumulative impact from potentially hazardous conditions to which the proposed project or variant would contribute considerably.	None	SUM	SUM	SUM	SUM	SUM	SUM

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
<i>Noise</i>							
NO-1: Proposed project or variant construction would generate noise levels in excess of standards and would result in substantial temporary increases in ambient noise levels.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
NO-2: Operation of the proposed project or variant would generate noise levels in excess of standards or result in substantial temporary increases in ambient noise levels, above levels existing without the project.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
C-NO-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative construction noise.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
<i>Air Quality</i>							
AQ-3: Construction and operation of the proposed project or variant could generate toxic air contaminants, including diesel particulate matter, exposing sensitive receptors to substantial air pollutant concentrations.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM
C-AQ-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would contribute to cumulative health risk impacts on sensitive receptors.	None	LTSM	LTSM	LTSM	LTSM	LTSM	LTSM

Table 5.1: Comparison of Characteristics and Significant Impacts of the Proposed Project and Variant to the Alternatives

	No Project Alternative 1	Proposed Project	Proposed Project Full Preservation Alternative 2	Proposed Project Partial Preservation Alternative 3	Variant	Variant Full Preservation Alternative 4	Variant Partial Preservation Alternative 5
<i>Wind</i>							
C-WI-1: The proposed project or variant, in combination with other past, present, and reasonably foreseeable future projects, would alter wind in a manner that would make a cumulatively considerable contribution to a significant cumulative wind impact.	None	SUM	SUM	SUM	SUM	SUM	<i>SUM</i>

Notes:

¹ Total gsf includes parking gsf and excludes rooftop mechanical.² A typical residential tower has an efficiency factor of 70–80%, assuming a typical residential core.³ Size and geometry of basement levels create highly inefficient layouts and may not be able to accommodate parking, bicycle parking, and necessary infrastructure.Source: SWCA/10SVN, LLC, *10 South Van Ness Avenue Preservation Alternatives Report*, prepared by Page & Turnbull, Inc., January 30, 2018. Case No. 2015-004568ENV.

Selection of EIR Alternatives

As evaluated and identified in Section 4.1, Cultural Resources (Historic Architectural), for the proposed project and variant, demolition of the existing building at 10 South Van Ness Avenue would result in a significant and unavoidable impact on the historical resource. Thus, in developing the alternatives to be analyzed in this EIR, the planning department has considered a range of feasible design configurations and development programs that could avoid or lessen the significant impact on the historical resource, while optimizing the development potential on the project site. This chapter evaluates five alternatives based on the preservation alternatives report prepared by historical resources consultant Page and Turnbull.¹ Preliminary concepts for the preservation alternatives presented in this report were reviewed by the Architectural Review Committee of the Historic Preservation Commission, which determined that these alternatives are adequate.²

Under CEQA, projects that comply with the Standards for Rehabilitation benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historical resource.³ Projects that do not comply with all of the rehabilitation standards may cause either a substantial or less-than-substantial adverse change in the significance of a historical resource. Thus, in some circumstances, a project may not be required to comply with all 10 standards for rehabilitation in order for the historical resource's material integrity to be retained such that the property will continue to convey its historic significance and retain its eligibility for listing in the California Register of Historical Resources.

During the review of each of the full and partial preservation alternatives, the following standards from the Secretary of the Interior's Standards for Rehabilitation were reviewed. According to section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project complies with the standards, the project's impact "will generally be considered mitigated below a level of significance and thus is not significant."

Rehabilitation Standard 1: A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

¹ Page and Turnbull, 10 South Van Ness Avenue Preservation Alternatives Report, San Francisco, California, January 30, 2018.

² Preliminary concepts for the preservation alternatives presented in this report were reviewed by the Architectural Review Committee of the Historic Preservation Commission, which determined that these are adequate. San Francisco Planning Department, *Memorandum: Meeting Notes from the Review and Comment at the October 4, 2017 ARC meeting for the 10 South Van Ness Avenue Preservation Alternatives for Draft EIR, Case No. 2015-004568ENV*.

³ CEQA Guidelines, section 15064.5(b)(3).

Rehabilitation Standard 2: The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

Rehabilitation Standard 3: Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

Rehabilitation Standard 4: Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

Rehabilitation Standard 5: Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

Rehabilitation Standard 6: Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Rehabilitation Standard 7: Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

Rehabilitation Standard 8: Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

Rehabilitation Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

Rehabilitation Standard 10: New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As indicated in **Table 5.2: Summary of Rehabilitation Standards Met by Preservation Alternatives**, the proposed project and variant would not comply with any of the applicable rehabilitation standards, except for rehabilitation standard 8 (archeological resources). Both of the partial preservation alternatives would comply with 6 of the 10 standards. Both full preservation alternatives would comply with 9 of the 10 standards. None of the full or partial preservation alternatives would comply with all 10 rehabilitation standards.

Table 5.2: Summary of Rehabilitation Standards Met by Preservation Alternatives

Rehabilitation Standard	Proposed Project	Variant	No Project Alternative	Proposed Project		Variant	
				Full Preservation Alternative – Alternative 2	Partial Preservation Alternative – Alternative 3	Full Preservation Alternative – Alternative 4	Partial Preservation Alternative – Alternative 5
1	-	-	N/A	+	+	+	+
2	-	-	N/A	+	-	+	-
3	N/A	N/A	N/A	+	+	+	+
4	-	-	N/A	+	+	+	+
5	-	-	N/A	+	-	+	-
6	-	-	N/A	+	+	+	+
7	N/A	N/A	N/A	+	+	+	+
8	+	+	N/A	+	+	+	+
9	-	-	N/A	-	-	-	-
10	-	-	N/A	+	-	+	-

Note: N/A = not applicable; + = standard met; - = standard not met.

Source: Data compiled by AECOM in 2018

The full preservation alternatives to the proposed project and variant would call for a reduced intensity of demolition and new construction and would substantially reduce the residential and commercial land use program. As such, they would also act to reduce significant and unavoidable impacts identified for the proposed project and variant related to transportation, wind, and air quality. For these reasons, it was not necessary to develop and present separate EIR alternatives specifically for the purposes of avoiding or reducing these significant and unavoidable impacts of the proposed project and variant.

As with the proposed project and variant, the straight-shot streetscape option could be implemented with any of the alternatives studied in this chapter. There are no significant environmental impacts identified for the straight-shot streetscape option that would be different from, or unique to, that option. As such, no further analysis of the straight-shot streetscape option in the context of these alternatives is necessary.

This chapter identifies Alternative 2, the Proposed Project Full Preservation Alternative, as the environmentally superior alternative to the proposed project (i.e., the alternative that would result in the least adverse effect on the physical environment) and Alternative 4, the Variant Full Preservation Alternative, as the environmentally superior alternative to the variant. It concludes with a discussion of five alternatives that were considered but not analyzed further because they were rejected as infeasible or failed to meet the basic project objectives.

5.2 NO PROJECT ALTERNATIVE – ALTERNATIVE 1

CEQA Guidelines section 15126.6(e) requires that a “no project” alternative be evaluated: “The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.” CEQA Guidelines section 15126.6(e)(2) requires that the no project alternative analysis “discuss the existing conditions...as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and policies and consistent with the available infrastructure and community services.” As noted in CEQA Guidelines section 15126.6, an EIR for “a development project on identifiable property” typically analyzes a no project alternative, i.e., “the circumstance under which the project does not proceed. Such a discussion would compare the environmental effects of the property remaining in its existing state against environmental effects that would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed.”

Description

Under the No Project Alternative, the existing conditions at the project site would not change. The existing building would remain along with the existing ingress and egress points, and the proposed project or variant would not be constructed. As such, the proposed housing units, commercial square footage, parking, and streetscape improvements would not be implemented.

Impacts

Under the No Project Alternative, the existing structure and use of the project site would not change and the existing physical conditions, as described in detail for each environmental topic in Chapter 4, Environmental Setting and Impacts, would remain the same. As such, under the No Project Alternative, none of the impacts associated with the proposed project or variant, as described in Chapter 4, would occur. However, development and growth would continue in the vicinity of the project site as reasonably foreseeable future projects are approved, constructed, and occupied. These projects could contribute to cumulative impacts in the vicinity, but under the No Project Alternative, land use activity on the project site would not contribute to these cumulative impacts beyond existing levels.

Historic Architectural Resources

Under the No Project Alternative, the existing building on the project site would not be demolished. The building, which was constructed in 1927, is the former home of the Fillmore

West concert venue and is considered to be a historical resource.⁴ Therefore, compared to the proposed project or variant, which would result in a significant and unavoidable project-level impact, the No Project Alternative would have no impact related to historic architectural resources.

Transportation and Circulation

Under the No Project Alternative, existing conditions on the project site would not change. The project site would continue to operate as it currently does and there would be no changes to traffic, transit, pedestrian, bicycle, loading, emergency vehicle access, or parking conditions compared to existing conditions. Therefore, compared to the proposed project, which would have less-than-significant project-level transportation and circulation impacts and would contribute considerably to a significant and unavoidable cumulative construction traffic impact, the No Project Alternative would have no impacts related to transportation and circulation.

Improvement Measures I-TR-2a: Monitoring and Abatement of Queues and I-TR-2b: Active Garage Driveway Controls and Curbside Management, pp. 4.2.41-4.2.42, and I-TR-6: Coordination of Freight Loading/Service Vehicle Activities, p. 4.2.50, identified for the proposed project or variant in Section 4.2, Transportation and Circulation, would not be applicable to this alternative because it would result in no changes to existing site conditions.

Noise

Under the No Project Alternative there would be no demolition or construction activities and no new operational sources of noise on the project site. Noise conditions in the area would remain the same as under existing conditions. Because potential noise impacts that would occur under the proposed project would not occur under this alternative, implementing noise mitigation measures would not be necessary.

Air Quality

Under the No Project Alternative there would be no demolition or construction activities and no new operational sources of air pollutants within the project site. Existing stationary sources of air pollution near the project site and major roadways contributing to air pollution in the project vicinity would remain as in existing conditions. Because potential air quality impacts that would

⁴ The Historic Resources Evaluation (Part I Historic Resource Evaluation, Final Version: 10 South Van Ness Avenue [2015-004568ENV] City and County of San Francisco, California) prepared for the project found the existing Honda dealership and service center at 10 South Van Ness Avenue to be eligible for listing in the California Register of Historic Places under Criterion 1 (events) for its association with the Fillmore West concert venue and Criterion 2 (persons) for its association with prominent San Francisco music promoter Bill Graham.

occur under the proposed project would not occur under this alternative, implementing air quality mitigation measures would not be necessary.

Wind

Under the No Project Alternative, there would be no change in existing wind conditions on or around the project site. The No Project Alternative would not result in the construction of any new buildings or structures that would intercept overhead wind currents, redirect them downward, and alter ground-level wind conditions. Compared to the proposed project, which would result in a cumulatively considerable contribution to significant cumulative wind impacts, the No Project Alternative would have no impacts related to wind.

Shadow

Under the No Project Alternative, there would be no change in existing sunlight conditions on any of the nearby Recreation and Park Commission properties and other public open spaces. The No Project Alternative would not cast net new shadow on open spaces or other public areas. Compared to the proposed project, which would result in a less-than-significant project-level shadow impact and a less-than-significant cumulatively considerable contribution to significant cumulative shadow impacts, the No Project Alternative would have no impacts related to shadow.

Other Topics

The initial study concluded that the proposed project or variant would have no impacts or less-than-significant impacts in the following analysis areas:

- Land use and land use planning (all topics)
- Population and housing (all topics)
- Cultural resources (archeological resources, human remains, and tribal cultural resources)
- Greenhouse gas emissions (all topics)
- Recreation (all topics)
- Utilities and service systems (all topics)
- Public services (all topics)
- Biological resources (all topics)
- Geology and soils (all topics)
- Hydrology and water quality (all topics)
- Hazards and hazardous materials (all topics)
- Mineral and energy resources (all topics)
- Agriculture and forestry resources (all topics)

The No Project Alternative would result in no impacts related to any of the above-listed environmental topics, because this alternative would result in no changes to existing site conditions. Therefore, mitigation measures presented in the initial study (EIR Appendix B) would not be required under the No Project Alternative.

Conclusion

Under the No Project Alternative, the existing conditions at the project site would not change. The existing building would be retained in its current condition and no large residential complex with ground-floor retail would be constructed on the site. The No Project Alternative would have no significant and unavoidable impacts related to historical resources, or cumulative impacts related to transportation (during construction) or wind; would have no impacts related to transportation and circulation, air quality, noise, or shadow; would have no impacts related to topics determined in the initial study to be either less than significant or less than significant with mitigation under the proposed project or variant; and would not require mitigation measures.

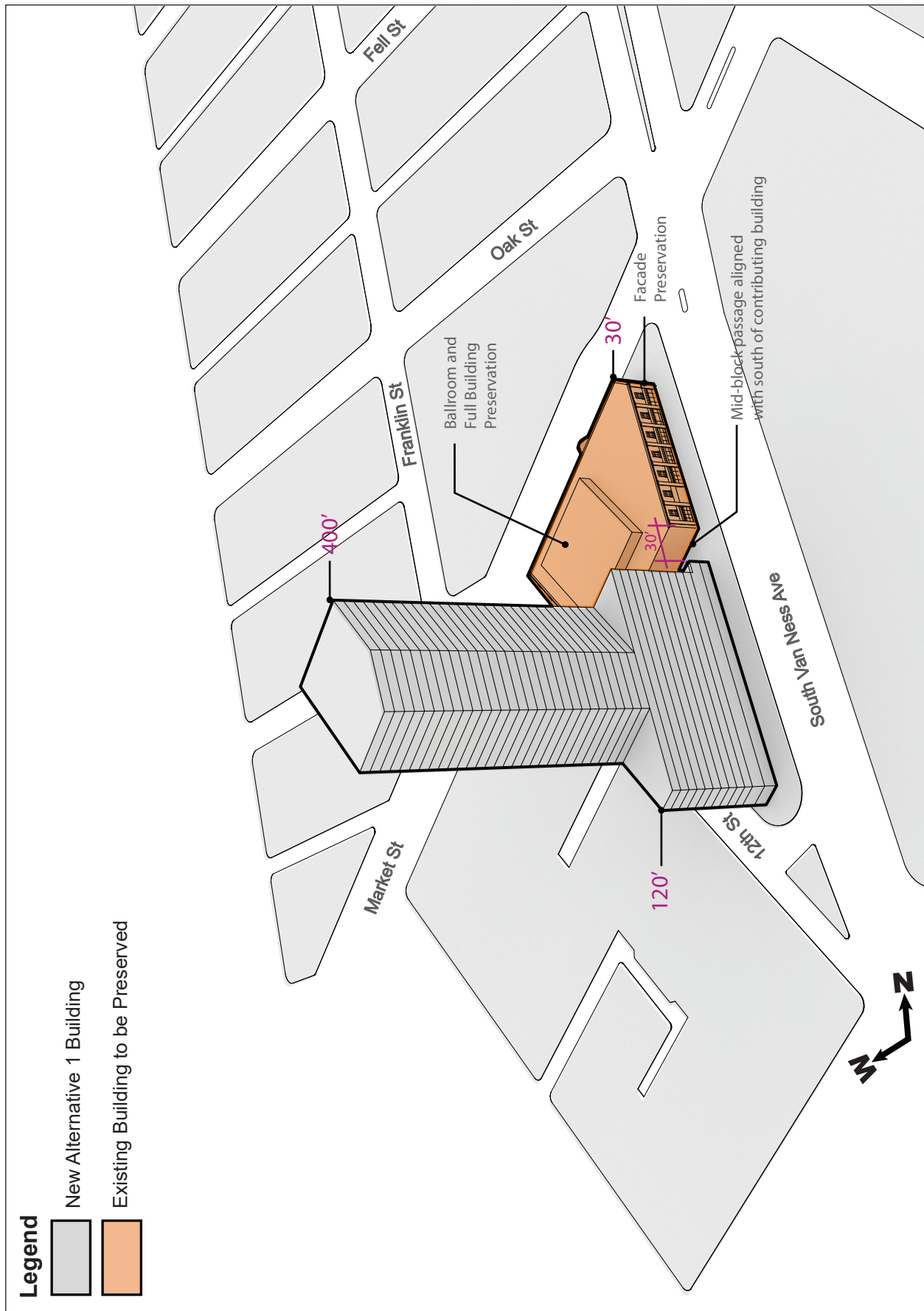
5.3 PROPOSED PROJECT FULL PRESERVATION ALTERNATIVE – ALTERNATIVE 2

Description

As explained in Historic Preservation Commission Resolution No. 0746 (March 18, 2015), a full preservation alternative “should fully preserve the features of the resource that convey its historic significance while still meeting most of the basic objectives of the project.”⁵ Under the Proposed Project Full Preservation Alternative (Alternative 2), the existing building at 10 South Van Ness, a historical resource, would undergo some changes (described below in the Historic Architectural Resources discussion under “Impacts”) but it would retain all of its exterior and interior character-defining features. (See **Figure 5.1: Proposed Project Full Preservation-Alternative 2.**)

A single tower design would preserve the adjacent historical resource by maintaining the historically significant ballroom on the northern portion of the project site, including its concrete construction, orientation, footprint, massing, facades, windows, and detailing. The non-contributing southern garage addition portion of the existing building would be demolished and a new mixed-use building would be constructed in its place. Construction of the single tower avoids the need for deep excavation surrounding the existing building because the existing building would be retained in place, while still adhering to the load requirements above the Bay Area Rapid Transit (BART) easement at the north end of the project site.

⁵ San Francisco Planning Department, Historic Preservation Commission Resolution No. 0746, March 18, 2015, p. 2.



10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT

2015-004568ENV

FIGURE 5.1: PROPOSED PROJECT FULL PRESERVATION - ALTERNATIVE 2

The new building under Alternative 2 includes an approximately 548,500-gross-square-foot, 41-story single tower (400-feet-tall plus an additional 20 feet for roof screens and elevator penthouses) constructed with a trapezoidal footprint situated over a 120-foot-tall podium.

The Proposed Project Full Preservation Alternative would provide more retail and/or commercial space square footage than the proposed project or variant would (see Table 5.1, p. 5.2) because the existing building would be devoted to retail/commercial uses (the second floor would not be suitable for residential use) and both the historic building and the new building would include active ground-floor uses.⁶ Overall, Alternative 2 would provide a total of about 64,900 gross square feet of retail and/or commercial space, with ground-floor access along Market Street, South Van Ness Avenue, 12th Street, and the newly created mid-block passage that would be aligned south of the historical resource building. The historic building would provide a total of about 59,400 gross square feet of retail and/or commercial space, with no residential uses. Under the Proposed Project Full Preservation Alternative, the new building would include approximately 435,700 gross square feet of residential use on the upper floors of the tower, with a total of 434 residential units (166 studio, 203 one-bedroom, 44 two-bedroom, and 21 three-bedroom). The tower would have 72 percent *tower efficiency*.⁷

Alternative 2 would require 50,000 cubic yards less excavation than the proposed project (50,000 cubic yards, compared to 100,000 cubic yards for the proposed project) for below-grade foundation and structural work, and for the two-level parking garage/basement. The garage/basement, which would be accessed from 12th Street, would contain approximately 47,900 gross square feet of parking area, including 239 parking spaces provided in stackers and 192 Class 1 bicycle parking spaces. Thirty-three Class 2 bicycle parking spaces would also be provided on the sidewalk. As with the proposed project and variant, the garage/basement would include off-street loading spaces.

Construction of the Proposed Project Full Preservation Alternative is expected to follow a 36-month construction schedule as would the proposed project. The same discretionary project approvals identified for the proposed project in Chapter 2, Project Description, on pp. 2.49-2.51 would be required for this alternative.

⁶ The second floor of the historic building would not be suitable for residential use because the potential reuse of the ballroom as a performance venue would be incompatible with residential use. Additionally, the floor plate dimension of the historic building (approximately 150 feet by 200 feet wide) is unsuitable for residential layout, as there would need to be major penetration with a light well in the structure to provide required light and air for residential use. This would involve the loss of interior character-defining features of the historic building.

⁷ Tower efficiency is the ratio of net residential floor area to gross floor area for an average residential floor, which describes how much of an average floor would be rentable. A typical residential tower has an efficiency factor of 80–85 percent, assuming a typical residential core.

Impacts

Historic Architectural Resources

Section 4.1, Cultural Resources (Historic Architectural), concluded that demolition of the ballroom portion of the building at 10 South Van Ness would cause a substantial adverse change in the significance of a historical resource. The planning department has determined that the southern portion of the existing building, a garage addition to the original ballroom, does not exhibit the exterior character-defining features of the historical resource as identified in the Historic Resource Evaluation,⁸ nor does it possess the character-defining interior features associated with the Fillmore West, its founder Bill Graham, and the San Francisco counter-cultural music scene of the late-sixties and early-seventies. For this reason, the garage addition is not considered a character-defining feature of the 10 South Van Ness historical resource.

The Proposed Project Full Preservation Alternative would comply, on balance, with the Secretary of the Interior's Standards for Rehabilitation by retaining and reusing the original ballroom building at the northern end of the project site. The non-contributing garage addition would be demolished and replaced with a new residential building on the southern portion of the project site. According to section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project complies with the standards, the project's impact "will generally be considered mitigated below a level of significance and thus is not significant."

Under this alternative, the historic northern portion of the existing building, including its concrete construction, orientation, footprint, massing, façades, windows, and detailing, as well as the ballroom and its associated interior features, would be retained and restored. The non-historic metal screens that span the historic façades would be removed, and the non-historic storefronts would be retained. The non-contributing southern garage addition portion of the existing building would be demolished and a new mixed-use building would be constructed in its place, including a new 30-foot-wide mid-block passage. This east-west mid-block passage would provide access between South Van Ness Avenue and 12th Street and would visually separate the existing two-story historic building from the new building. The historic northern portion of the existing building has a southern wall that would be exposed after the removal of the non-historic southern portion of the building, which would comprise the historic building's façade along the mid-block passage.

Compared to the proposed project and variant, which would demolish the existing historical resource, the Proposed Project Full Preservation Alternative would retain and rehabilitate the historic ballroom resource. Demolition of the garage addition on the southern portion of the project site would not eliminate a character-defining feature of the resource. Although new

⁸ Page and Turnbull, 10 South Van Ness Avenue Preservation Alternatives Report, San Francisco, California, January 30, 2018, Footnote 13 on p. 6.

construction on the southern portion of the project site would alter the resource's immediate visual context by replacing the non-contributing garage addition with a new 41-story residential tower, the significance of the ballroom building on the northern portion of the project site is not premised on it possessing a cohesive visual relationship with its immediate surroundings.

This alternative would retain the historic building's character-defining interior and exterior features. As such, the historic building would retain its ability to convey its historic and architectural significance. Therefore, the Proposed Project Full Preservation Alternative would not cause material impairment and, unlike the proposed project, would not result in a significant and unavoidable impact related to demolition of a historical resource. Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse (pp. 4.1.24-4.1.27) would not be applicable under this alternative.

Transportation and Circulation

The Proposed Project Full Preservation Alternative would include 550 fewer residential units than the proposed project (984 for the proposed project and variant, 434 for this alternative). However, the alternative would include about 34,500 more square feet of commercial use. The alternative would generate more vehicular trips than under the proposed project, as shown in **Table 5.3:**

Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Proposed Project Full Preservation Alternative (Alternative 2).

Table 5.3: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Proposed Project Full Preservation Alternative (Alternative 2)

Project/Alternative	Person Trips					Vehicle Trips
	Auto	Transit	Walk	Other ^a	Total	
Weekday PM Peak Hour						
Proposed Project/Variant ^b	497	585	377	292	1,750	445
Proposed Project Full Preservation Alternative	740	344	283	101	1,467	468

Notes:

^a Other mode includes bicycles, motorcycles, and taxis.

^b As discussed in Section 4.2, Transportation and Circulation, p. 4.2.34, the variant's land uses would be the same as those in the proposed project, but with approximately 100 additional gross square feet of retail use and a slightly different mix of residential units (the total number of units would remain the same). These differences, however, would result in a negligible increase in the overall travel demand for the variant, which would be similar to that of the proposed project.

Sources: CHS Consulting, 2017 (for the proposed project/variant) and San Francisco Planning Department, 2018 (for the alternative)

Like the proposed project, the Proposed Project Full Preservation Alternative would include construction of one vehicular access to the parking garage from 12th Street. The alternative would also include a transportation demand management program aimed at reducing vehicular trips by encouraging trips by other transportation modes, as would the proposed project and the

variant. All other on-street transportation improvements proposed under the project would also be applicable with Alternative 2, and the straight-shot streetscape option could be included.

VEHICLE MILES TRAVELED AND INDUCED AUTOMOBILE TRAVEL

Like the proposed project, Alternative 2 would be located in Transportation Analysis Zone 578 (see Section 4.2, Transportation and Circulation, pp. 4.2.8-4.2.9). The data in Table 4.2.7: Average Daily Vehicle Miles Traveled per Capita – Existing Conditions, p. 4.2.39, show that the project site is in an area (Transportation Analysis Zone 578) where existing VMT per capita for the proposed uses is less than the corresponding existing regional average per capita minus 15 percent. As with the proposed project, the Full Preservation Alternative would meet the screening criterion for proximity to transit stations, which further indicates that it would not cause substantial additional VMT under both project and cumulative conditions.

Alternative 2 would also not include any project elements that would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network. As such, Alternative 2 would have less-than-significant project and cumulative impacts on induced automobile travel, similar to the proposed project.

TRAFFIC HAZARD IMPACTS

Alternative 2 would include similar improvements to the project site. Vehicular access to the parking garage would be from a similar driveway on 12th Street as with the proposed project. Although vehicle trips would be incrementally increased compared to the proposed project, Alternative 2 would have less-than-significant project and cumulative impacts related to traffic hazards and could implement improvement measures identified for the proposed project (I-TR-2a: Monitoring and Abatement of Queues and I-TR-2b: Active Garage Driveway Controls and Curbside Management, pp. 4.2.41-4.2.42) to further reduce less-than-significant traffic hazard impacts.

OTHER TRANSPORTATION TOPICS

Alternative 2 would result in an increase in bicyclists, pedestrians, and transit users in the project area. It would also result in the need for loading spaces and emergency vehicle access. Nonetheless, similar to the proposed project, Alternative 2 would not include any design features that would create hazards for pedestrians and bicyclists. Additionally, like the proposed project, Alternative 2 would not increase the numbers of riders to a level that would exceed established significance thresholds. As such, Alternative 2 would result in less-than-significant project and cumulative impacts related to these other transportation topics, as would the proposed project.

CONSTRUCTION CUMULATIVE IMPACTS RELATED TO TRANSPORTATION

Under cumulative conditions, construction activities for Alternative 2 would be less than under the proposed project or variant. However, the timing of cumulative project construction may overlap with other construction activities in the study area for transportation improvement projects (e.g., Better Market Street, Van Ness Bus Rapid Transit [BRT] project) and other development projects (e.g., 1629 Market Street, 30 Otis Street, One Oak Street, 1546-1564 Market Street, 1500 Mission Street, 1601 Mission Street, 30 Van Ness Avenue, and 1 South Van Ness Avenue). While the timing for cumulative project construction is variable and subject to change, the duration and potential magnitude of construction activities for these projects could substantially interfere with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in potentially hazardous cumulative construction conditions. In some instances, concurrent construction activities may not result in significant impacts. However, given the magnitude of expected construction activities and the concentration of many such activities in a small geographic area, cumulative construction-related impacts on transportation and circulation are conservatively deemed significant. Implementing a coordinated construction management plan as required by the City would reduce but not fully mitigate these impacts, which would be significant and unavoidable for Alternative 2, similar to the proposed project.

Noise

Noise impacts under Alternative 2 would be similar in character to, but reduced from, those identified for the proposed project in Section 4.3, Noise due to the lower intensity and duration of demolition and construction activities, and the reduced intensity of land uses under this alternative. As with the proposed project, implementation of Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan, pp. 4.3.25-4.3.27, and Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy, p. 4.3.33, would reduce the impacts of construction and operational noise to less-than-significant levels. Implementation of Mitigation Measure M-NO-1 would also reduce the contribution to significant cumulative construction noise to a less-than-considerable level, as described for the proposed project under Impact C-NO-1.

Air Quality

Alternative 2 would have substantially fewer residential units and less residential building area than the proposed project (434 under Alternative 2 and 984 under the proposed project). As such, impacts related to air quality would be reduced from those identified for the proposed project in Section 4.4, Air Quality. Like the proposed project, this alternative would not result in a significant impact related to construction and operational criteria pollutants, construction PM_{2.5} and toxic air contaminants (TACs) (with implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions, and Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Diesel Equipment), operational PM_{2.5} and

TACs, or odors. While this alternative would involve less construction activity than would the proposed project or variant, it would still contribute considerably to significant cumulative health risk effects on sensitive receptors. The contribution would be reduced to a less-than-considerable level with implementation of Mitigation Measure M-AQ-3a, as for the proposed project.

Wind

Under Alternative 2, due to the absence of the north tower and podium, wind conditions are expected to be reduced in comparison with the proposed project, particularly to the immediate north of the project site. The full preservation alternative would also reduce the level of downdrafts onto South Van Ness Avenue and thus would be anticipated to have a lesser impact.⁹ In any case, planning code section 148 would require wind tunnel testing to ensure that the design would not result in new wind hazard exceedances. The wind canopies and street trees under the proposed project could also be implemented for the new building under this alternative and would be expected to improve wind conditions under the full preservation alternative. However, like the proposed project, it is expected that Alternative 2 would make a cumulatively considerable contribution to a significant cumulative wind impact. Implementing Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts, in Section 4.5, Wind, p. 4.5.15, would reduce the impact, but not to a less-than-significant level.

Shadow

Due to the absence of the north tower and podium under this alternative, shadow impacts on public open spaces would be reduced in comparison with the proposed project. To the extent that new shading on Recreation and Park Commission properties and other public open spaces would occur the area affected by, and the duration of, net new shadow would be reduced from that of the proposed project. As with the proposed project, this alternative would result in a less-than-significant impact related to shadow.

Other Topics

The initial study concluded that the proposed project would have no impacts or less-than-significant impacts in the analysis areas/topics listed on p. 5.13.

The Proposed Project Full Preservation Alternative would occupy the same building site as the proposed project and would have a similar, though less intensive, land use development program overall (1,071,095 gross square feet of development under the proposed project and 548,500 gross square feet under this alternative). As a result, the construction and operational impacts of Alternative 2 for each of the initial study environmental topics noted on p. 5.13 would be similar to, but reduced from, those of the proposed project.

⁹ BMT Fluid Mechanics, 10 South Van Ness Avenue – Preservation Alternatives, August 24, 2018.

The Proposed Project Full Preservation Alternative would not result in any new potentially significant impacts for the environmental topics identified in the initial study for the proposed project. Therefore, the conclusions in the initial study for these environmental topics would remain applicable to this alternative. The mitigation measures presented in the initial study for the proposed project (Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, M-CR-2: Tribal Cultural Resources Interpretive Program, and M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources) would also be applicable to the Proposed Project Full Preservation Alternative.

Conclusion

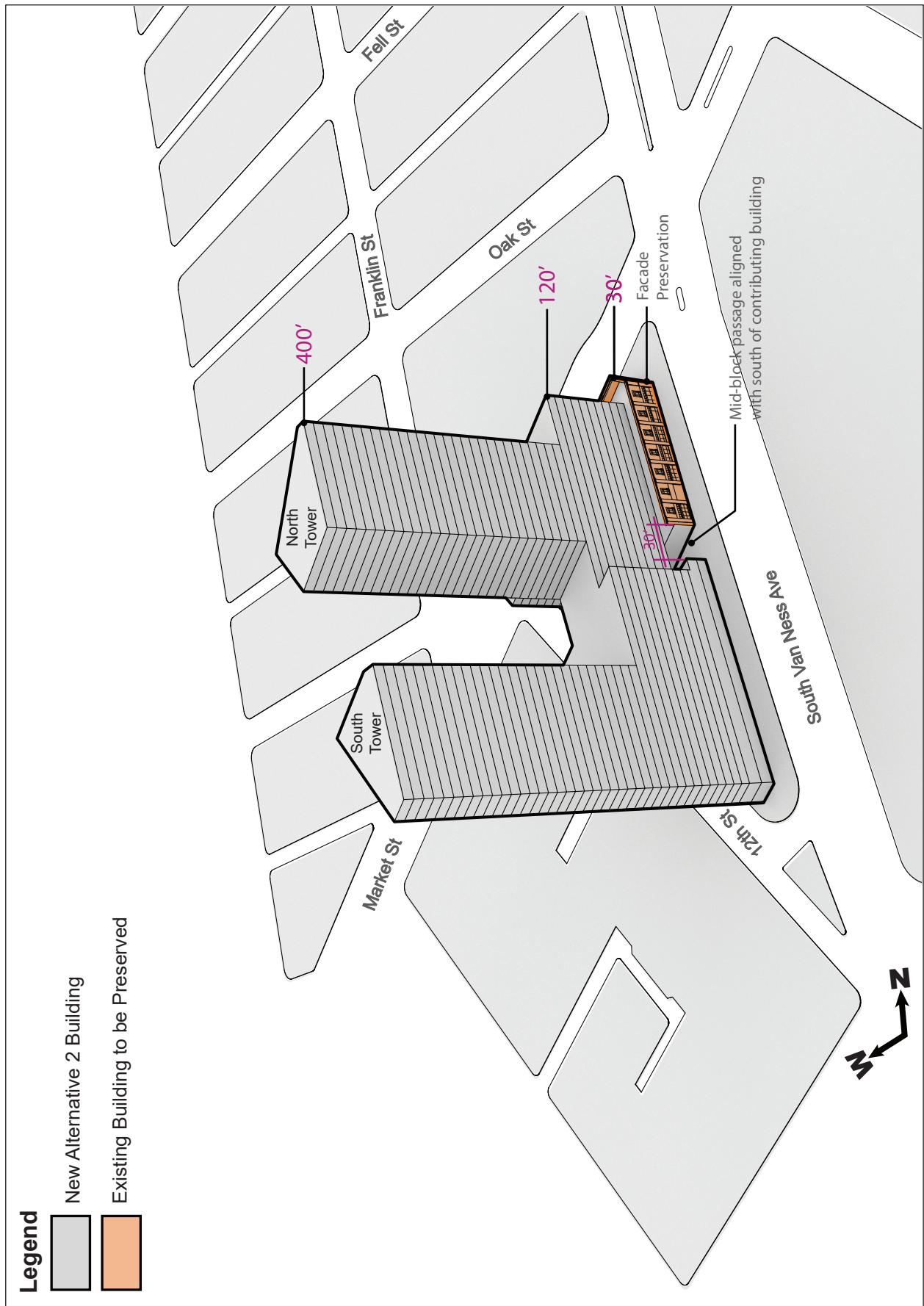
By retaining the existing historic building, the Proposed Project Full Preservation Alternative would avoid the significant and unavoidable impact related to demolition of a historical resource. Therefore, there would be no significant impact related to historic architectural resources, and Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse, identified for the proposed project, would not apply.

As with the proposed project, the Proposed Project Full Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, less-than-significant impacts related to air quality and noise with mitigation, and less-than-significant impacts related to other transportation subtopics and shadow.

5.4 PROPOSED PROJECT PARTIAL PRESERVATION ALTERNATIVE – ALTERNATIVE 3

Description

The purpose of the Proposed Project Partial Preservation Alternative is to consider a project that would lessen the significant impacts of the proposed project on the existing historical resource while accommodating more of the land development program than the Proposed Project Full Preservation Alternative would. The Proposed Project Partial Preservation Alternative would retain historically significant portions of the existing building at 10 South Van Ness Avenue and adapt the property for residential use by adding two new buildings. Although all interior character-defining features would be removed, the only main exterior character-defining feature that would be partially compromised is the massing. The majority of the exterior character-defining features would be retained, including the concrete walls, orientation, footprint, façades, windows, and detailing. (See **Figure 5.2: Proposed Project Partial Preservation-Alternative 3.**)



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FIGURE 5.2: PROPOSED PROJECT PARTIAL PRESERVATION - ALTERNATIVE 3

The Proposed Project Partial Preservation Alternative would involve the construction of two new towers (the north tower and the south tower) and would partially retain the historic building on site. The two new towers would both be 41 stories and 400 feet tall (420 feet total, including roof screens and elevator penthouses) constructed above a 120-foot-tall podium. The north tower would incorporate the historic façades portion of the historical resource and would have a much small trapezoidal footprint that would be situated above the southeastern portion of the podium. The south tower would have a podium with a triangular footprint and a tower with a smaller triangular footprint situated above the southern wedge portion of the podium. Under the Proposed Project Partial Preservation Alternative, the north and south podiums would be separated by the mid-block passage at the ground and second floors and connected on the upper podium floors. The north tower would have 72 percent tower efficiency, and the south tower would have 68 percent tower efficiency.¹⁰ The façades of the two proposed buildings under the Proposed Project Partial Preservation Alternative would be designed with modern materials, such as steel and glazing.

The Proposed Project Partial Preservation Alternative would have a total of approximately 812,500 gross square feet (including parking and excluding rooftop mechanical). The two new buildings under the Proposed Project Partial Preservation Alternative would have a total of about 31,400 gross square feet of retail and/or commercial space on the ground floor with access along Market Street, South Van Ness Avenue, 12th Street. There would be about 707,600 gross square feet (486,200 net square feet) of residential uses across both buildings on the upper floors (also including residential lobbies on the ground floor), with a total of 713 residential units (272 studio, 334 one-bedroom, 72 two-bedroom, and 35 three-bedroom units).

Below grade, the buildings would be connected via a two-level parking garage/basement accessed from 12th Street, and there would be about 73,500 gross square feet of parking with 367 parking spaces (in stackers) and 257 Class 1 bicycle parking spaces. Forty-eight Class 2 bicycle parking spaces would also be provided on the sidewalk. As with the proposed project and variant, the garage/basement would include off-street loading spaces. Alternative 2 would require 30,000 cubic yards less excavation than the proposed project (70,000 cubic yards, compared to 100,000 cubic yards for the proposed project) for below-grade foundation and structural work, and for the two-level parking garage/basement.

Construction of the Proposed Project Partial Preservation Alternative would be expected to follow a 36-month construction schedule as would the proposed project. The same discretionary project approvals identified in Chapter 2, Project Description, on pp. 2.49-2.51 would be required for this alternative.

¹⁰ A typical residential tower has an efficiency factor of 80-85 percent, assuming a typical residential core.

Impacts

Historic Architectural Resources

Under Alternative 3, the three historic northern façades and the historic windows of the existing building at 10 South Van Ness Avenue would be retained and rehabilitated. The historic interior, including the double-height ballroom volume, the southeast wall, and the roof of the historic northern portion of the building be demolished. The non-historic metal screens that span the historic façades would be removed, although the non-historic storefronts would be retained.

Compared to the proposed project which would demolish the existing historical resource, Alternative 3 would construct a new mixed-use building directly behind and attached to the historic façades, although the new building volume above the historic façades would be set back 20–60 feet. The non-historic southern portion of the existing building would be demolished and a second new mixed-use building would be constructed in its place, also allowing for a new 30-foot-wide mid-block passage. As a result, this east-west mid-block passage would provide access between South Van Ness Avenue and 12th Street, and would visually separate the historic façade from the new building façade at the southern portion of the property.

By retaining the historic northern façades of the historical resource, the impact of the Proposed Project Partial Preservation Alternative on historical resources would be less than the impact of the proposed project, because it would partially retain the resource. Nevertheless, as with the proposed project, this alternative would involve demolition of the original second-floor ballroom interiors associated with the Fillmore West and with Bill Graham. As a result, this alternative would materially impair the historical resource, and, like the proposed project, would not avoid the significant and unavoidable impacts on historical resources. Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse would remain applicable under this alternative, but would not reduce this impact to a less-than-significant level.

Transportation and Circulation

The Proposed Project Partial Preservation Alternative would include 271 fewer residential units than the proposed project (984 for the proposed project, 713 for this alternative). This alternative would also include about 1,050 more square feet of commercial uses. Therefore, the alternative would generate fewer vehicular trips than under the proposed project, as shown in **Table 5.4: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Proposed Project Partial Preservation Alternative (Alternative 3)**.

Table 5.4: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Proposed Project Partial Preservation Alternative (Alternative 3)

Project/Alternative	Person Trips					Vehicle Trips
	Auto	Transit	Walk	Other ^a	Total	
Weekday PM Peak Hour						
Proposed Project/Variant ^b	497	585	377	292	1,750	445
Proposed Project Partial Preservation Alternative	562	442	245	147	1,395	417

Notes:

^a Other mode includes bicycles, motorcycles, and taxis.

^b As discussed in Section 4.2, Transportation and Circulation, p. 4.2.34, the variant's land uses would be the same as those in the proposed project, but with approximately 100 additional gross square feet of retail use and a slightly different mix of residential units (the total number of units would remain the same). These differences, however, would result in a negligible increase in the overall travel demand for the variant, which would be similar to that of the proposed project.

Sources: CHS Consulting, 2017 (for the proposed project/variant) and San Francisco Planning Department, 2018 (for the alternative)

Like the proposed project, the Proposed Project Partial Preservation Alternative would include one vehicular access to the parking garage from 12th Street. The alternative would also include a transportation demand management program aimed at reducing vehicular trips by encouraging trips by other transportation modes, as would the proposed project. All other on-street transportation improvements proposed under the project (including the straight-shot streetscape option) would be applicable to Alternative 3.

CONSTRUCTION CUMULATIVE IMPACTS

Under cumulative conditions, construction activities for Alternative 3 would be less than under the proposed project or variant. However, the timing of cumulative project construction may overlap with other construction activities in the study area for transportation improvement projects (e.g., Better Market Street, Van Ness Bus Rapid Transit [BRT] project) and other development projects (e.g., 1629 Market Street, 30 Otis Street, One Oak Street, 1546-1564 Market Street, 1500 Mission Street, 1601 Mission Street, 30 Van Ness Avenue, and 1 South Van Ness Avenue). While the timing for cumulative project construction is variable and subject to change, the duration and potential magnitude of construction activities for these various projects could substantially interfere with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in potentially hazardous cumulative construction conditions. In some instances, concurrent construction activities may not result in significant impacts. However, given the magnitude of expected construction activities and the concentration of many such activities close to each other in a small geographic area, cumulative construction-related impacts on transportation and circulation are conservatively deemed significant. Implementing a coordinated construction management plan as required by the City would reduce but not fully mitigate these impacts, which would be significant and unavoidable for Alternative 3, similar to the proposed project.

Noise

Noise impacts under Alternative 3 would be similar in character to, but reduced from, those identified for the proposed project in Section 4.3, Noise due to the lower intensity and duration of demolition and construction activities, and the reduced intensity of land uses under this alternative. As with the proposed project, implementation of Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan, pp. 4.3.25-4.3.27, and Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy, p. 4.3.33, would reduce the impacts of construction and operational noise to less-than-significant levels. Implementation of Mitigation Measure M-NO-1 would also reduce the contribution to significant cumulative construction noise to a less-than-considerable level, as described for the proposed project under Impact C-NO-1.

Air Quality

Alternative 3 would construct a somewhat smaller building (812,500 gsf compared to 1,071,095 gsf) and would have fewer residential units (713 compared to 984 under the proposed project). As such, impacts related to air quality would be slightly reduced from the less-than-significant impacts identified for the proposed project in Section 4.4. Like the proposed project, this alternative would not result in a significant impact related to construction and operational criteria pollutants, construction PM_{2.5} or TACs (with implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions, and Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Diesel Equipment), operational PM_{2.5} or TACs, and odors. While this alternative would involve less construction activity than would the proposed project or variant, it would still contribute considerably to significant cumulative health risk effects on sensitive receptors. The contribution would be reduced to a less-than-considerable level with implementation of Mitigation Measure M-AQ-3a, as for the proposed project.

Wind

Under Alternative 3 wind conditions in and around the site would be expected to be generally comparable to those of the proposed project, with the possible exception of localized effects (e.g., building corners along the walkway separating both towers), which could be captured via wind tunnel testing.¹¹ In any case, planning code section 148 would require wind tunnel testing to ensure that the design would not result in wind hazard exceedances. The wind canopies and street trees under the proposed project could be implemented for the new building under this alternative and would be expected to improve wind conditions under this alternative. However, like the proposed project, it is expected that Alternative 3 would make a cumulatively considerable contribution to a significant cumulative wind impact. Implementing Mitigation Measure

¹¹ BMT Fluid Dynamics, 10 South Van Ness Avenue – Preservation Alternatives, August 24, 2018.

M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts, in Section 4.5, Wind, p. 4.5.15, would reduce the impact, but not to a less-than-significant level.

Shadow

The two-tower scheme under the Proposed Project Partial Preservation Alternative would be substantially similar in height and configuration to the proposed project. As such, shadow impacts on open spaces would be similar to those described for the proposed project in Section 4.6, Shadow. As with the proposed project, this alternative would result in a less-than-significant impact related to shadow.

Other Topics

The initial study concluded that the proposed project would have no impacts or less-than-significant impacts in the analysis areas/topics listed on p. 5.13.

The Proposed Project Partial Preservation Alternative would occupy the same building site as the proposed project and would have a similar, though reduced, land use development program overall (1,071,095 gross square feet of development under the proposed project and 812,500 gross square feet under this alternative). As a result, the construction and operational impacts of Alternative 3 for each of the initial study environmental topics noted above on p. 5.13 would be similar to, but reduced from, those of the proposed project.

The Proposed Project Partial Preservation Alternative would not result in any new potentially significant impacts for the environmental topics identified in the initial study for the proposed project. Therefore, the conclusions in the initial study for these environmental topics would remain applicable to the alternative. The mitigation measures presented in the initial study for the proposed project (Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, M-CR-2: Tribal Cultural Resources Interpretive Program, and M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources) would also be applicable to the Proposed Project Partial Preservation Alternative.

Conclusion

Like the proposed project, the Proposed Project Partial Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, less-than-significant impacts related to noise and air quality with mitigation, and less-than-significant impacts related to other transportation subtopics and shadow.

Alternative 3 would also not avoid the significant and unavoidable impact on historical resources since the historic interior, including the ballroom, the southeast wall, and the roof of the historic north portion of the resource, would be demolished, resulting in a significant and unavoidable impact with mitigation. If Alternative 3 is chosen, mitigation measures for this alternative would

be tailored to ensure that the Secretary of the Interior's Standards for documentation of historical resources are met.

5.5 VARIANT FULL PRESERVATION – ALTERNATIVE 4

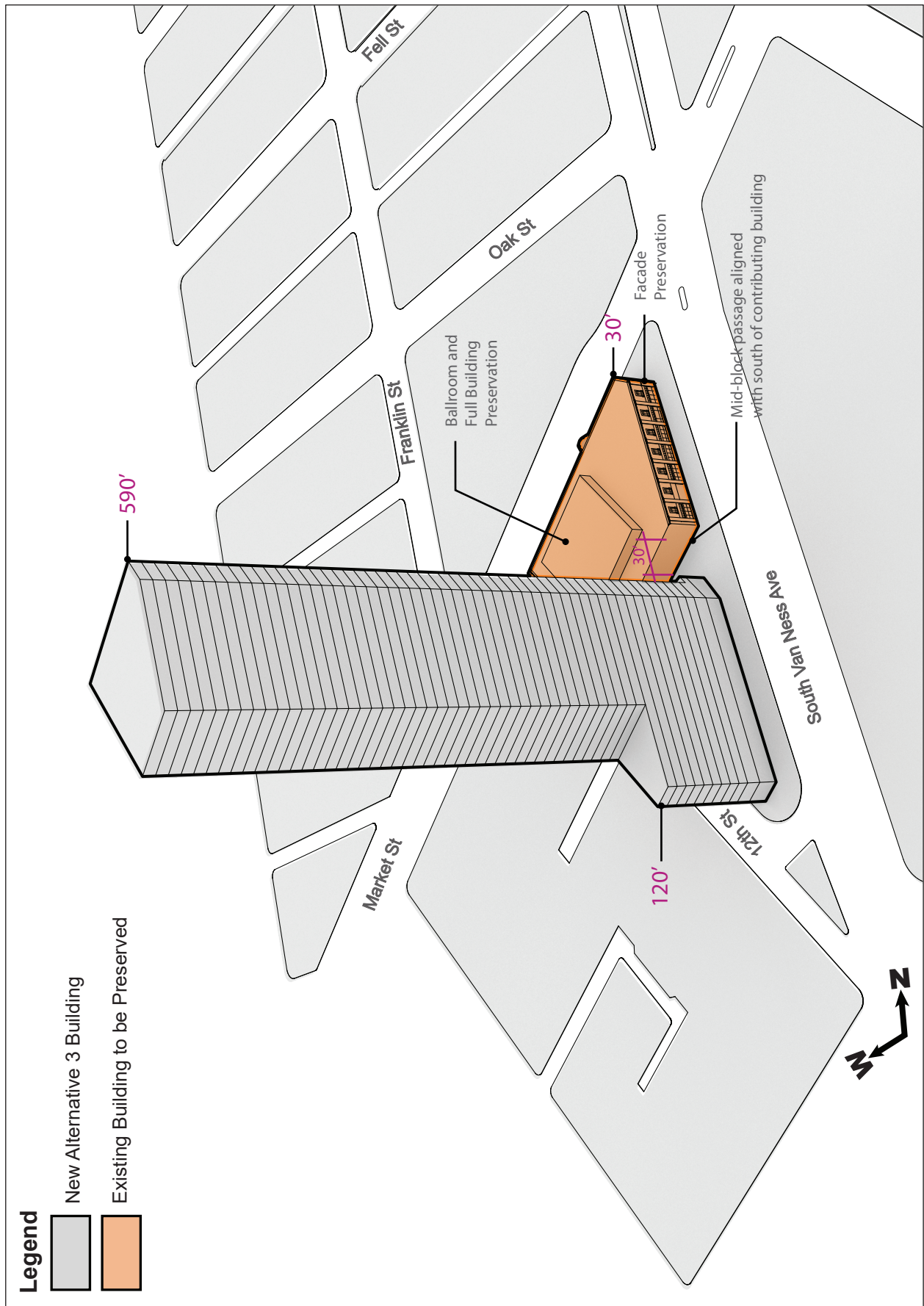
The purpose of Alternative 4 is to consider a plan that would lessen the significant impacts of the proposed variant on the existing historical resource. Alternative 4 would retain the significant portions of the existing historic building at 10 South Van Ness Avenue and adapt the property for residential use by adding a new building on the southern portion of the site. Alternative 4 would retain all character-defining features of the historic building.

Description

Alternative 4 would include a new building while retaining the existing historical resource on the northern portion of the project site. Under the Variant Full Preservation (Alternative 4), the existing historical resource at 10 South Van Ness, would undergo some changes (described below in the Historic Architectural Resources discussion under Impacts) but it would retain all of its exterior and interior character-defining features. (See **Figure 5.3: Variant Full Preservation-Alternative 4.**)

Alternative 4 would include a 55-story single tower (590-feet-tall plus an additional 20 feet for roof screens and elevator penthouses) constructed with a trapezoidal footprint situated over a 120-foot-tall podium with a triangular footprint. The single tower design would preserve the adjacent historical resource, since construction of the single tower avoids the need for deep excavation surrounding the existing building while still adhering to the BART easement at the north end of the site. The façades of the new building would be clad in modern materials, such as steel and glazing.

The Variant Full Preservation Alternative would provide more retail and/or commercial space square footage than the variant (see Table 5.1, p. 5.2) because the existing building would be devoted to retail/commercial uses (the second floor would not be suitable for residential use) and both the historic building and the new building would include active ground-floor uses. Overall, Alternative 4 would provide a total of about 64,400 gross square feet of retail and/or commercial space, with ground-floor access along Market Street, South Van Ness Avenue, 12th Street, and the newly created mid-block passage that would be aligned south of the existing historical resource. The historic building would be used for retail and/or commercial space, with no residential uses. Under the Variant Full Preservation Alternative, the new building would include approximately 619,900 gross square feet of residential use on the upper floors of the tower, with a total of 605 residential units (213 studio, 276 one-bedroom, 102 two-bedroom, and 14 three-bedroom).



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FIGURE 5.3: VARIANT FULL PRESERVATION - ALTERNATIVE 4

Alternative 4 would require 40,000 cubic yards less excavation than the variant (60,000 cubic yards, compared to 100,000 cubic yards for the variant) for below grade foundation and structural work, and for the two-level parking garage/basement. The garage/basement, which would be accessed from 12th Street, would contain approximately 65,000 gross square feet of parking area, including 325 parking spaces provided in stackers, and 235 Class 1 bicycle parking spaces. Forty-one Class 2 bicycle parking would also be provided on the sidewalk. As with the variant, the garage/basement would include off-street loading spaces.

Construction of the Proposed Project Full Preservation Alternative would be expected to follow a 36-month construction schedule as would the variant. The same discretionary project approvals identified in Chapter 2, Project Description, on pp. 2.49-2.51 would be required for this alternative.

Impacts

Historic Architectural Resources

Section 4.1, Cultural Resources (Historic Architectural), concluded that demolition of the ballroom portion of the building at 10 South Van Ness would cause a substantial adverse change in the significance of a historical resource. The planning department has determined that the southern portion of the existing building, a garage addition to the original ballroom does not exhibit the exterior character-defining features of the historical resource as identified in the Historic Resource Evaluation,¹² nor does it possess the character-defining interior features associated with the Fillmore West, its founder Bill Graham, and the San Francisco counter-cultural music scene of the late-sixties and early-seventies. For this reason, the garage addition is not considered a character-defining feature of the 10 South Van Ness historical resource.

The Variant Full Preservation Alternative would comply, on balance, with the Secretary of the Interior's Standards for Rehabilitation by retaining and reusing the building at the northern end of the project site, including the original ballroom. The non-contributing garage addition would be demolished and replaced with a new residential building on the southern portion of the project site. According to section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project complies with the standards, the project's impact "will generally be considered mitigated below a level of significance and thus is not significant."

¹² Page and Turnbull, 10 South Van Ness Avenue Preservation Alternatives Report, San Francisco, California, January 30, 2018, Footnote 13 on p. 6.

Under this alternative, the historic northern portion of the existing building, including its concrete construction, orientation, footprint, massing, façades, windows, and detailing, as well as the ballroom and associated interior features, would be retained and restored. The non-historic metal screens that span the historic façades would be removed, and the non-historic storefronts would be retained. The non-contributing southern garage addition would be demolished and a new mixed-use building would be constructed in its place, also allowing for a new 30-foot-wide mid-block passage. This east-west mid-block passage would provide access between South Van Ness Avenue and 12th Street, and would visually separate the two-story historic building from the new building. Because of the existing building's original construction, the historic northern portion has a southeast wall that would be exposed after the removal of the non-historic southern portion of the building and used as the façade along the mid-block passage.

The Variant Full Preservation Alternative would retain and rehabilitate the existing historic ballroom resource. Demolition of the garage addition on the southern portion of the project site would not eliminate a character-defining feature of the historical resource. Although new construction on the southern portion of the project site would alter the resource's immediate visual context by replacing the non-contributing garage addition with a new 55-story residential tower, the significance of the ballroom building on the northern portion of the project site is not premised on its possessing a cohesive visual relationship with its immediate visual surroundings.

This alternative would retain the historic building's character-defining interior and exterior features. As such, the historic building would retain its ability to convey its historic and architectural significance. Therefore, the Variant Full Preservation Alternative would not materially impair the existing historical resource and, unlike the variant, would not result in a significant and unavoidable impact. Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse would not be applicable under this alternative.

Transportation and Circulation

Alternative 4 would have 379 fewer residential units than the proposed project (984 for the proposed project, 605 for Alternative 4) and 33,950 gross square feet more commercial square feet. Alternative 4 would therefore generate fewer vehicular trips for residential uses and potentially more trips for commercial uses as shown in **Table 5.5: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Variant Full Preservation Alternative (Alternative 4)**.

Table 5.5: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Variant Full Preservation Alternative (Alternative 4)

Project/Alternative	Person Trips					Vehicle Trips
	Auto	Transit	Walk	Other ^a	Total	
Weekday PM Peak Hour						
Proposed Project/Variant ^b	497	585	377	292	1,750	445
Variant Full Preservation Alternative	808	441	320	135	1,705	534

Note:

^a Other mode includes bicycles, motorcycles, and taxis.

^b As discussed in Section 4.2, Transportation and Circulation, p. 4.2.34, the variant's land uses would be the same as those in the proposed project, but with approximately 100 additional gross square feet of retail use and a slightly different mix of residential units (the total number of units would remain the same). These differences, however, would result in a negligible increase in the overall travel demand for the variant, which would be similar to that of the proposed project.

Sources: CHS Consulting, 2017 (for the proposed project/variant) and San Francisco Planning Department, 2018 (for the alternative)

Like the proposed project, Alternative 4 would include a transportation demand management program aimed at reducing vehicular trips and encouraging the use of alternative transportation modes.

Alternative 4 would result in impacts related to transportation topics that would be substantially similar to those of Alternative 2 and the proposed project or variant, as it would be located in the same low-vehicle-miles-traveled area, and would include a transportation demand management program and similar pedestrian and bicycle improvements. Additionally, Alternative 4 would result in traffic hazards and emergency vehicle access and transit impacts similar to those of Alternative 2 and the proposed project or variant because it would include similar project elements. (For an in-depth discussion, see the discussion of Alternative 2 impacts on pp. 5.18-5.20.) Thus, the impacts of Alternative 4 on transportation and circulation would be less than significant.

Additionally, similar to the proposed variant and Alternative 2, implementing a coordinated construction management plan as required by the City would reduce but not fully mitigate cumulative construction impacts, which would be significant and unavoidable under Alternative 4, as with the proposed project.

Noise

Noise impacts under Alternative 4 would be similar in character to, but reduced from, those identified for the variant in Section 4.3, Noise due to the lower intensity and duration of demolition and construction activities, and the reduced intensity of land uses under this alternative. As with the variant, implementation of Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan, pp. 4.3.25-4.3.27, and Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy, in Section 4.3, Noise, p. 4.3.33, would reduce the impacts of construction and operational noise to less-than-significant levels. Implementation of Mitigation Measure M-NO-1

would also reduce the contribution to significant cumulative construction noise impacts to a less-than-considerable level.

Air Quality

Alternative 4 would have fewer residential units (605 residential units compared to 984 under the variant). As such, impacts related to air quality would be reduced from those identified for the variant. Like the variant, this alternative would not result in a significant impact related to construction and operational criteria pollutants, construction PM_{2.5} or TACs (with implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions, and Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Diesel Equipment), operational PM_{2.5} or TACs, and odors. Also like the variant, implementation of Mitigation Measure M-AQ-3a would reduce the contribution of this alternative to significant cumulative construction-related health risk impacts to a less-than-considerable level.

Wind

Under Alternative 4, differences from the variant tower orientation and the changes in massing of the podium could result in higher winds driven down the tower façades, which are more exposed to prevailing westerly winds compared to the variant tower and would likely create more downdrafts resulting in increases in the number of hazard hours within the passage and on the opposite side of South Van Ness Avenue.¹³ In any case, planning code section 148 would require wind tunnel testing to ensure that the design would not result in wind hazard exceedances. The wind canopies and tree plantings included with the variant could be implemented for the new building under this alternative and would be expected to improve wind conditions under the variant full preservation alternative. However, like the variant, it is expected that Alternative 4 would make a cumulatively considerable contribution to a significant cumulative wind impact. Implementing Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts, in Section 4.5, Wind, p. 4.5.15, would reduce the impact, but not to a less-than-significant level.

Shadow

Due to the more southerly position of 590-foot-tall tower within the project site under Alternative 4 compared to that of the variant, shadow impacts on public open spaces would be reduced somewhat. To the extent that new shading on Recreation and Park Commission properties and other public open spaces would occur, the duration of shadow on public open spaces under the Alternative 4 would be slightly less overall than that of the variant. As with the variant, this alternative would result in a less-than-significant impact related to shadow.

¹³ BMT Fluid Mechanics, 10 South Van Ness Avenue – Preservation Alternatives, August 24, 2018.

Other Topics

The initial study concluded that the variant would have no impacts or less-than-significant impacts in the analysis areas/topics listed on p. 5.13.

The Variant Full Preservation Alternative would occupy the same building site as the variant and would have a similar, though less intensive, land use development program overall (1,072,989 gross square feet of development under the variant and 749,300 gross square feet under this alternative). As a result, the construction and operational impacts of Alternative 4 for each of the initial study environmental topics noted above on p. 5.10 would be similar to, but reduced from, those of the variant.

The Variant Full Preservation Alternative would not result in any new potentially significant impacts for the environmental topics identified in the initial study for the variant. Therefore, the conclusions in the initial study for these environmental topics would remain applicable to this alternative. The mitigation measures identified in the initial study for the variant (Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, M-CR-2: Tribal Cultural Resources Interpretive Program, and M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources) would also be applicable to the Variant Full Preservation Alternative.

The Variant Full Preservation Alternative would not result in any new potentially significant impacts for the environmental topics identified in the initial study for the variant. Therefore, the conclusions in the initial study for these environmental topics would remain applicable to the alternative. The mitigation measures presented in the initial study for the variant (Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, M-CR-2: Tribal Cultural Resources Interpretive Program, and M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources) would also be applicable to the Variant Full Preservation Alternative.

Conclusion

By retaining the existing historic building, the Variant Full Preservation Alternative would avoid the significant and unavoidable impact related to the demolition of this historical resource. Unlike the variant, there would be no significant impact related to historic architectural resources, and Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse would not apply.

As with the variant, the Variant Full Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, less-than-significant impacts related to air quality and noise with mitigation, and less-than-significant impacts related to other transportation subtopics and shadow.

5.6 VARIANT PARTIAL PRESERVATION – ALTERNATIVE 5

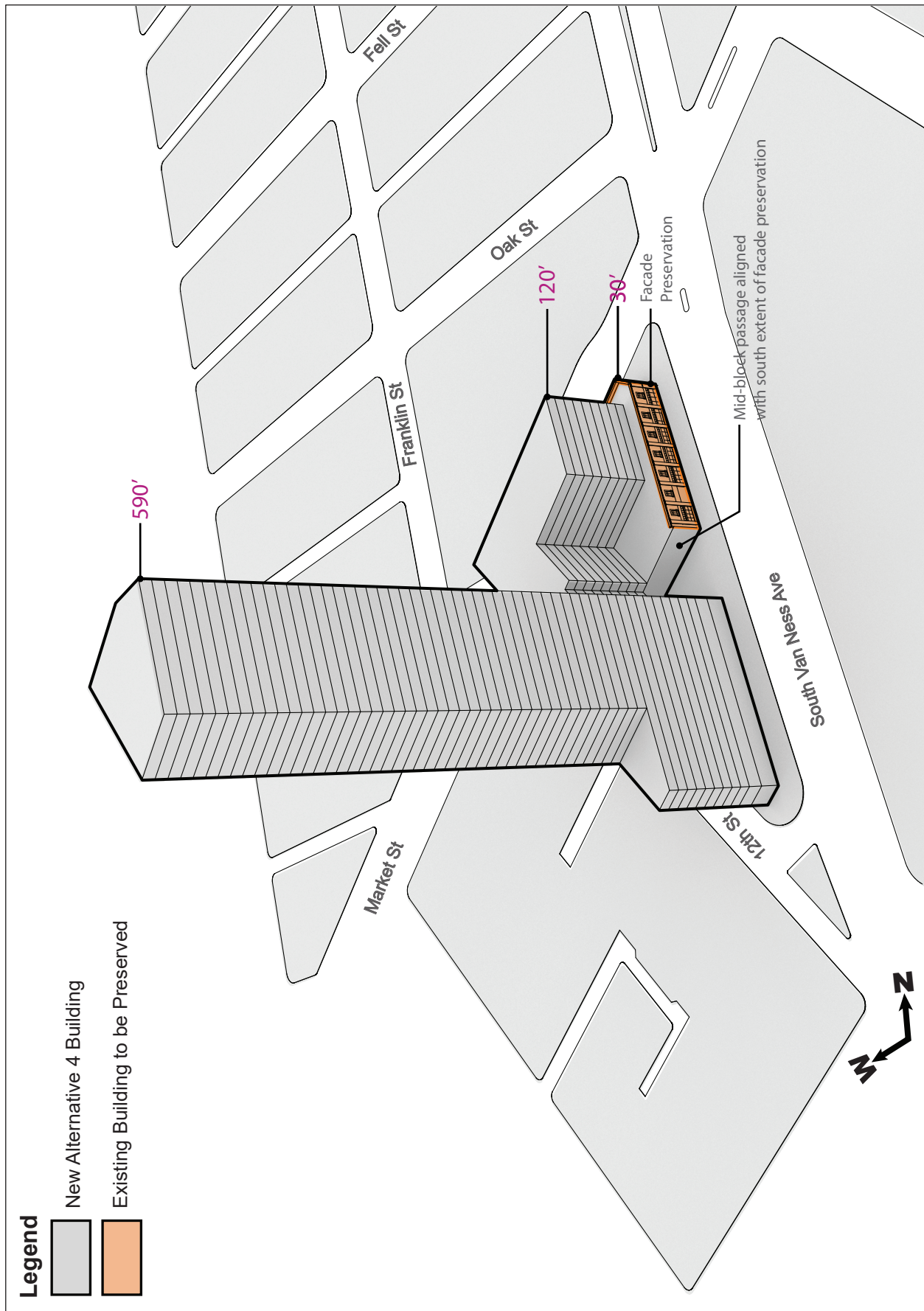
The purpose of the Variant Partial Preservation Alternative is to consider a project that would lessen the significant impacts of the variant on the existing historical resource. The Variant Partial Preservation Alternative would retain the historically significant portions of the existing building at 10 South Van Ness Avenue and adapt the property for residential use by adding a new building. Although all interior character-defining features would be removed, the character-defining features of the building's exterior would be partially retained, including the concrete walls, orientation, footprint, façades, windows, and detailing.

Description

The Variant Partial Preservation Alternative would include construction of a new tower on the southern portion of the project site. It would partially retain the historic building on site while accommodating more of the land development program than the Proposed Project Partial Preservation Alternative. The new tower would be 55 stories and 590 feet tall (610 feet including roof screens and elevator penthouses) constructed above a 120-foot-tall podium, with a triangular footprint. (See **Figure 5.4: Variant Partial Preservation- Alternative 5.**) In the northern portion of the project site, the podium would be retained and would incorporate the historic façades of the historical resource. Under the Variant Partial Preservation Alternative, the north and south podiums would be separated by a mid-block passage. The façades of the tower under the Variant Partial Preservation Alternative would be designed with modern materials, such as steel and glazing.

The Variant Partial Preservation Alternative would have a total of approximately 876,800 gross square feet (including parking and excluding rooftop mechanical). The new building under the Variant Partial Preservation Alternative would have a total of about 28,100 gross square feet of retail and/or commercial space on the ground floor with access along Market Street, South Van Ness Avenue, and 12th Street. There would be about 770,300 gross square feet (543,700 net square feet) of residential use across both buildings on the upper floors (also including residential lobbies on the ground floor), with a total of 765 residential units (270 studio, 349 one-bedroom, 129 two-bedroom, and 17 three-bedroom units).

Below grade, the building would include a two-level parking garage/basement accessed from 12th Street, and there would be about 78,400 gross square feet of parking with 392 parking spaces (in stackers) and space for 270 Class 1 bicycle parking spaces. Forty-nine Class 2 bicycle parking spaces would also be provided on the sidewalk. As with the variant, the garage/basement would include off-street loading spaces. Alternative 5 would require 30,000 cubic yards less excavation than the variant (70,000 cubic yards, compared to 100,000 cubic yards for the variant) for below-grade foundation and structural work and for the two-level parking garage/basement.



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2015-004568ENV

FIGURE 5.4: VARIANT PARTIAL PRESERVATION - ALTERNATIVE 5

Construction of the Variant Partial Preservation Alternative would be expected to follow a 36-month construction schedule as would the proposed project. The same discretionary project approvals identified in Chapter 2, Project Description, on pp. 2.49-2.51 would be required for this alternative.

Impacts

Historic Architectural Resources

Under Alternative 5, the three historic northern façades and the historic windows of the existing building at 10 South Van Ness Avenue would be retained and rehabilitated. The historic interior, including the double-height ballroom volume, the southeast wall, and the roof of the historic northern portion of the building, would be demolished. The non-historic metal screens that span the historic façades would be removed, although the non-historic storefronts would be retained.

Compared to the variant, which would demolish the existing historical resource, Alternative 5 would construct a new mixed-use building directly behind and attached to the historic façades; the new building volume above the historic façades would be set back 20–60 feet. The non-historic southern portion of the existing building would be demolished and a second new mixed-use building would be constructed in its place, allowing for a new 30-foot-wide mid-block passage. This east-west mid-block passage would provide access between South Van Ness Avenue and 12th Street, and would visually separate the historic façade from the new building façade at the southern portion of the property.

By retaining the historic northern façades of the historical resource, the Variant Partial Preservation Alternative would improve upon the impact of the variant, because it would partially retain the historical resource. Nevertheless, as with the variant, because this alternative would require demolition of the original second-floor ballroom interiors associated with the Fillmore West and with Bill Graham, it would materially impair the historical resource, and therefore would result in significant and unavoidable impacts on historical resources. Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse would remain applicable under this alternative, but would not reduce this impact to a less-than-significant level.

Transportation and Circulation

The Variant Partial Preservation Alternative would have 219 fewer residential units than the variant (984 for the variant, 765 for Alternative 5) and a similar number of commercial square feet. Alternative 5 would generate fewer vehicular trips for residential uses and a similar number of trips for commercial uses as shown in **Table 5.6: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Variant Partial Preservation Alternative (Alternative 5).**

Table 5.6: Trip Generation by Mode – Weekday PM Peak Hour, Proposed Project and Variant Partial Preservation Alternative (Alternative 5)

Project/Alternative	Person Trips					Vehicle Trips
	Auto	Transit	Walk	Other ^a	Total	
Weekday PM Peak Hour						
Proposed Project/Variant ^b	497	585	377	292	1,750	445
Variant Partial Preservation Alternative	558	471	248	158	1,435	425

Notes:

^a Other mode includes bicycles, motorcycles, and taxis.

^b As discussed in Section 4.2, Transportation and Circulation, p. 4.2.34, the variant's land uses would be the same as those in the proposed project, but with approximately 100 additional gross square feet of retail use and a slightly different mix of residential units (the total number of units would remain the same). These differences, however, would result in a negligible increase in the overall travel demand for the variant, which would be similar to that of the proposed project.

Sources: CHS Consulting, 2017 (for the proposed project/variant) and San Francisco Planning Department, 2018 (for the alternative)

Like the variant, Alternative 5 would include a transportation demand management program aimed at reducing vehicular trips and encouraging the use of alternative transportation modes.

Alternative 5 would result in impacts related to transportation topics that would be similar to those with the variant, as it would be located in the same low-vehicle-miles-traveled area and would include a transportation demand management program and similar pedestrian and bicycle improvements. Additionally, Alternative 5 would result in impacts similar to that of the proposed project and the variant related to traffic hazards and emergency vehicle access and transit, because it would include similar project elements. Thus, impacts of the Variant Partial Preservation Alternative on these resource areas would be less than significant.

CONSTRUCTION CUMULATIVE IMPACTS

Under cumulative conditions, construction activities for Alternative 5 would be less than under the proposed project or variant. However, the timing of cumulative project construction may overlap with other construction activities in the study area for transportation improvement projects (e.g., Better Market Street, Van Ness Bus Rapid Transit [BRT] project) and other development projects (e.g., 1629 Market Street, 30 Otis Street, One Oak Street, 1546-1564 Market Street, 1500 Mission Street, 1601 Mission Street, 30 Van Ness Avenue, and 1 South Van Ness Avenue). While timing for cumulative project construction is variable and subject to change, duration and potential magnitude of construction activities for these projects could substantially interfere with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas, thereby resulting in potentially hazardous cumulative construction conditions. In some instances, concurrent construction activities may not result in significant impacts. However, given the magnitude of expected construction activities and the concentration of many such activities close to each other in a small geographic area, cumulative construction-related impacts on transportation and circulation are conservatively deemed significant. Implementing a coordinated construction management plan as required by the City would reduce but not fully

mitigate these impacts, which would be significant and unavoidable for Alternative 5, similar to the variant.

Noise

Noise impacts under Alternative 5 would be similar in character to, but reduced from, those identified for the variant in Section 4.3, Noise due to the lower intensity and duration of demolition and construction activities, and the reduced intensity of land uses under this alternative. As with the variant, implementation of Mitigation Measure M-NO-1: Prepare and Implement Construction Noise Plan, pp. 4.3.25-4.3.27, and Mitigation Measure M-NO-2: Require that Exterior Mechanical Equipment Comply with Noise Ordinance Prior to Certificate of Occupancy, p. 4.3.33, would reduce the impacts of construction and operational noise to less-than-significant levels. Implementation of Mitigation Measure M-NO-1 would also reduce the contribution to significant cumulative construction noise impacts to a less-than-considerable level.

Air Quality

Alternative 5 would have fewer residential units (765 residential units compared to 984 under the variant). As such, impacts related to air quality would be somewhat reduced from those identified for variant. Like the variant, this alternative would not result in a significant impact related to construction and operational criteria pollutants, construction PM_{2.5} or TACs (with implementation of Mitigation Measure M-AQ-3a: Minimize Off-Road Construction Equipment Emissions, and Mitigation Measure M-AQ-3b: Implement Best Available Control Technology for Diesel Equipment), operational PM_{2.5} or TACs, and odors. Also like the variant, implementation of Mitigation Measure M-AQ-3a would reduce the contribution of this alternative to significant cumulative construction-related health risk impacts to a less-than-considerable level.

Wind

Under Alternative 5, differences from the variant tower orientation and changes in massing of the podium could result in higher winds driven down the tower façades, which are more exposed to prevailing westerly winds compared to the variant tower and could result in increases in the number of hazard hours within the passage and on the opposite side of South Van Ness Avenue.¹⁴ In any case, planning code section 148 would require wind tunnel testing to ensure that the design would not result in new wind hazard exceedances. The wind canopies and tree plantings could be implemented for the new building under this alternative and would be expected to improve wind conditions under the Variant Full Preservation Alternative. However, like the variant, it is expected that Alternative 5 would make a cumulatively considerable contribution to a significant cumulative wind impact. Implementing Mitigation Measure M-C-WI-1: Design Measures to

¹⁴ BMT Fluid Mechanics, 10 South Van Ness Avenue – Preservation Alternatives, August 24, 2018.

Reduce Cumulative Off-Site Wind Impacts, in Section 4.5, Wind, p. 4.5.15, would reduce the impact, but not to a less-than-significant level.

Shadow

Due to the more southerly position of the 590-foot-tall tower within the project site under Alternative 5 compared to that of the variant, shadow impacts on public open space would be reduced somewhat. To the extent that new shading on Recreation and Park Commission properties and other public open spaces would occur, the duration of tower shadow on public open spaces under the Alternative 5 would be slightly less overall than that of the variant. As with the variant, this alternative would result in a less-than-significant impact related to shadow.

Other Topics

The initial study concluded that the variant would have no impacts or less-than-significant impacts in the analysis areas/topics listed on p. 5.13.

The Variant Partial Preservation Alternative would occupy the same building site as the variant and would have a similar, though less intensive, land use development program overall (1,072,989 gross square feet of development under the variant and 876,800 gross square feet under this alternative). As a result, the construction and operational impacts of Alternative 5 for each of the initial study environmental topics noted above on p. 5.13 would be similar to, but reduced from, those of the variant.

The Variant Partial Preservation Alternative would not result in any new potentially significant impacts for the environmental topics identified in the initial study for the variant. Therefore, the conclusions in the initial study for these environmental topics would remain applicable to the alternative. The mitigation measures presented in the initial study for the variant (Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, M-CR-2: Tribal Cultural Resources Interpretive Program, and M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources) would also be applicable to the Variant Partial Preservation Alternative.

Conclusion

Like the variant, the Variant Partial Preservation Alternative would result in a significant and unavoidable impact related to cumulative transportation (construction traffic) and cumulative wind conditions, less-than-significant impacts related to noise and air quality with mitigation, and less-than-significant impacts related to other transportation subtopics and shadow.

Alternative 5 would also not avoid the significant and unavoidable impact on historical resources, since the historic interior, including the ballroom, the southeast wall, and the roof of the historic north portion of the resource, would be demolished, thus resulting in a significant and

unavoidable impact with mitigation measures. If Alternative 5 is chosen, mitigation measures for this alternative would be tailored to ensure that the Secretary of the Interior's Standards for documentation of historical resources are met.

5.7 RELATIONSHIP TO PROJECT OBJECTIVES

The project sponsor's objectives for the proposed project and variant are presented in Chapter 2, Project Description, pp. 2.2-2.3.

The No Project Alternative – Alternative 1 would not meet any of the basic project objectives.

The Proposed Project Full Preservation Alternative – Alternative 2 could feasibly attain most of the project sponsor's objectives. However, this alternative would provide 550 fewer residential units than the proposed project (434 units with the alternative, compared to 984 units with the proposed project), so this alternative would not maximize the opportunity to increase the supply of housing in an area designated for higher residential density due to its proximity to downtown and accessibility to local and regional transit.

The Proposed Project Partial Preservation Alternative – Alternative 3 could feasibly attain most of the project sponsor's objectives. However, this alternative would provide 271 fewer residential units than the proposed project (713 units with the alternative, compared to 984 units with the proposed project) and would not maximize the opportunity to increase the supply of housing in an area designated for higher residential density due to its proximity to downtown and accessibility to local and regional transit.

The Variant Full Preservation Alternative – Alternative 4 could feasibly attain most of the project sponsor's objectives. However, this alternative would provide 379 fewer residential units than the proposed project (605 units with the alternative, compared to 984 units with the variant) and would not maximize the opportunity to increase the supply of housing in an area designated for higher residential density due to its proximity to downtown and accessibility to local and regional transit.

The Variant Partial Preservation Alternative – Alternative 5 could feasibly attain most of the project sponsor's objectives. However, this alternative would provide 219 fewer residential units than the variant (765 units with the alternative, compared to 984 units with the proposed project). Compared to the variant, this alternative would not maximize the opportunity to increase the supply of housing in an area designated for higher residential density due to its proximity to downtown and accessibility to local and regional transit.

The ability of each alternative to meet the objectives of the Proposed Project is presented in **Table 5.7: Ability of Alternatives to Meet Project Objectives.**

Table 5.7: Ability of Alternatives to Meet Project Objectives

Project Objective	Alternative 1 – No Project Alternative	Alternative 2 – Proposed Project Full Preservation	Alternative 3 – Proposed Project Partial Preservation	Alternative 4 – Variant Full Preservation	Alternative 5 – Variant Partial Preservation
	Would the alternative meet this objective?				
1. Redevelop a large, underused site at a prominent location with a residential tower that will serve as an iconic addition to the City’s skyline demarking the Market Street and Van Ness Avenue intersection and including a range of residential unit types and neighborhood-serving retail uses.	No	Yes	Yes	Yes	Yes
2. Provide the maximum number of dwelling units on a site that currently has no housing, and was designated through community planning processes for higher density due to its proximity to downtown and accessibility to local and regional transit, in order to increase the city’s supply of housing, contribute to the City’s General Plan Housing Element goals, and the Association of Bay Area Governments’ Regional Housing Needs Allocation for San Francisco.	No	Less than the proposed project ^a	Less than the proposed project ^b	Less than the proposed project ^c	Less than the proposed project ^d
3. Implement the objectives and policies of the Market & Octavia Area Plan and the proposed Market Street Hub Plan by activating a key site along the Van Ness Avenue and Market Street transit corridors, providing small business and employment opportunities, building housing that is affordable to a range of incomes, improving the quality and safety of the open space and streetscape, and providing other public benefits that would strengthen the mixed-use character of the neighborhood.	No	Yes	Yes	Yes	Yes
4. Promote transit ridership by constructing a substantial number of new housing units at a major transit hub at the development density and building	No	Less than the proposed project	Less than the proposed project	Less than the proposed project	Less than the proposed project

Table 5.7: Ability of Alternatives to Meet Project Objectives

Project Objective	Alternative 1 – No Project Alternative	Alternative 2 – Proposed Project Full Preservation	Alternative 3 – Proposed Project Partial Preservation	Alternative 4 – Variant Full Preservation	Alternative 5 – Variant Partial Preservation
	Would the alternative meet this objective?				
heights anticipated by the Market & Octavia Area Plan and the proposed Market Street Hub Plan.					
5. Encourage pedestrian activity and increase connectivity to the proposed Brady Park by creating a welcoming mid-block passageway that connects either South Van Ness Avenue to 12th Street under the proposed project or Market Street to 12th Street under the single tower project variant.	No	Yes	Yes	Yes	Yes
6. Construct a project that qualifies as an Environmental Leadership Development Project (as defined by the California Jobs and Economic Improvement Through Environmental Leadership Act [AB 900], as amended) to promote environmental sustainability, transportation efficiency, greenhouse gas reduction, stormwater management using green technology, substantial economic investment, and job creation.	No	Unknown	Unknown	Unknown	Unknown
7. Encourage and enliven pedestrian activity by improving 12th Street with wider sidewalks, street trees, special sidewalk paving, and bulb-outs, and developing ground-floor retail and public amenity space that serves neighborhood residents and visitors and responds to future users who will be accessing the site and future Bus Rapid Transit (BRT) stations in the area.	No	Yes	Yes	Yes	Yes
8. Improve the architectural and urban design character of the project site by replacing the existing utilitarian structures with a prominent residential tower	No	Yes	Yes	Yes	Yes

Table 5.7: Ability of Alternatives to Meet Project Objectives

Project Objective	Alternative 1 – No Project Alternative	Alternative 2 – Proposed Project Full Preservation	Alternative 3 – Proposed Project Partial Preservation	Alternative 4 – Variant Full Preservation	Alternative 5 – Variant Partial Preservation
	Would the alternative meet this objective?				
or towers that provide a transition between two planning districts and increase building heights at the corner of Market Street and Van Ness Avenue to demarcate the significance of this intersection.					
9. Provide publicly accessible open space on a site that would be privately owned by the project sponsor.	No	Yes	Yes	Yes	Yes
10. Provide well-designed parking, loading, and other transportation facilities and amenities with adequate access to serve the needs of the project's residents, employees, and guests, and respond to the neighborhood context and location.	No	Yes	Yes	Yes	Yes
11. Construct a high-quality project with enough residential floor area to produce a return on investment sufficient to attract private capital and construction financing.	No	Less than the proposed project	Less than the proposed project	Less than the proposed project	Less than the proposed project

Notes:

- ^a Alternative 2 provides 44% of the units proposed for the project).
- ^b Alternative 3 provides 72% of the units proposed for the project).
- ^c Alternative 4 provides 61% of the units proposed for the project).
- ^d Alternative 5 provides 78% of the units proposed for the project).
- ^e The size and geometry of the basement levels in Alternatives 2 and 4 result in less efficient layouts and may not be able to accommodate parking, bicycle parking, and necessary infrastructure.

5.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Pursuant to CEQA Guidelines section 15126.6(e)(2), an EIR is required to identify the environmentally superior alternative (the alternative that has the fewest environmental impacts) from among the alternatives evaluated if the proposed project or variant has significant impacts that cannot be mitigated to a less-than-significant level.

The No Project Alternative would not result in any change to existing environmental conditions. This alternative is considered the overall environmentally superior alternative, because the significant impacts associated with implementation of the proposed project or variant would not occur with the No Project Alternative. If the No Project Alternative is found to be the environmentally superior alternative, CEQA requires selection of the “environmentally superior alternative other than the no project alternative” from among the other alternatives.

Here, Alternative 2, the Proposed Project Full Preservation Alternative, would be the environmentally superior alternative to the proposed project. Alternative 4, the Variant Full Preservation Alternative, would be the environmentally superior alternative to the variant. Either of these full preservation alternatives would avoid a significant impact resulting from the demolition of the 10 South Van Ness historical resource. They would also result in the least intensive trip generation among all of the remaining alternatives, and would create the least shadow on public spaces. However, alternatives 2 and 4 would still contribute to cumulatively considerable wind and construction transportation impacts.

5.9 ALTERNATIVES CONSIDERED AND REJECTED

Section 15126.6(c) of the CEQA Guidelines provides that an EIR should “identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.” This section identifies alternatives that were considered by the San Francisco Planning Department as lead agency but were rejected as infeasible during design development, and presents the reasons underlying this determination.

Off-Site Alternative

An off-site alternative was eliminated from consideration as an alternative to the proposed project and variant. The project site is already controlled by the project sponsor. To the extent that other suitable development sites may be available in the vicinity, the project sponsor holds no ownership, option, or development interest in any such parcel and has not indicated any plans to acquire such development rights in the near future. Additionally, an off-site alternative would not necessarily create high-density housing on a prominent site which is designated for high-density use due to its proximity to downtown and local and regional transit.

Full Preservation Alternative with Tower Addition on Top of Existing Building

A full preservation alternative involving the construction of a tower above the existing historic building was considered as a potential alternative to preserve and maintain the existing historical resource, including the character-defining ballroom. Such an alternative was rejected from consideration as an EIR alternative due to BART easement soil constraints. Construction of this preservation alternative would require that any structure built within the BART easement and within the zone of influence (where the ballroom is located) be constructed to avoid imposing greater stresses on the surrounding ground than the existing pressure. To add new weight above the BART easement, soil under the existing building would need to be removed to create the weight offset. This would require deep excavation (up to two floors deep of soil removal), which would not be possible without destroying the existing historical resource building onsite.

Further, even if it were possible to excavate under the existing building to remove soil, to develop a space above the ballroom, a system of one-story-deep transfer trusses would be needed to carry conventionally framed levels above the existing column-free long spans. This would not be structurally feasible given commercially reasonable construction costs. Thus, preserving the ballroom as part of a full preservation alternative would prohibit the development of new building area, including a tower addition, above the existing building.

Full Preservation Alternative with Cantilevered Tower

A full preservation alternative that would concentrate more mass directly over the historic northern section of the building by way of a cantilevered tower was considered as a potential alternative to preserve and maintain the existing historical resource, including the character-defining ballroom. The intent of this full preservation alternative was to retain the historic building, including the ballroom, while developing a two-tower project design that would align more closely with the proposed project. The concept under this alternative included two towers because there would have been no added value or advantage to a single tower over the ballroom from a tower efficiency perspective. The variant's full preservation alternative (Alternative 4) already achieves the maximum floor plate permitted by the bulk control requirements set forth in the San Francisco Planning Code. Additionally, a cantilevered design was found to be structurally infeasible, given commercially reasonable construction costs. Further, creating the two-tower design seen in the cantilevered tower study would have resulted in unconventional and inefficient tower floor plates of approximately 5,800 gross square feet for the northern tower and approximately 4,300 gross square feet for the southern tower.

Full and Partial Preservation Alternatives with No Mid-Block Passage

Full and partial preservation alternative designs without a mid-block passage were considered as design options to maintain or partially preserve the historical resource while constructing a connecting tower. However, these alternative designs were rejected because they do not meet the requirements of San Francisco Planning Code section 270.2, which states that projects with frontages more than 300 feet in length provide a “mid-block” alleyway with a minimum width of 20 feet from building face to building face, and a minimum clearance height from grade of 15 feet at all points. A setback of not less than 10 feet above a height of 25 feet would also be required (planning code section 270.2[e][14]). The purpose of this requirement is to “break up” large lots and building mass and to decrease pedestrian walking times.

The planning code does not permit a waiver of the mid-block passageway requirement. Therefore, alternatives that did not include such a passage were rejected because they did not meet the requirements of the planning code.

Full and Partial Preservation Alternatives with Reduced Height

Full and partial preservation alternatives with various configurations of a reduced tower height were considered but a shorter building would not reduce the significant and unavoidable impact of the proposed project or variant on the 10 South Van Ness historical resource. The height of the replacement construction is immaterial to the significant and unavoidable impact resulting from the demolition of the historical resource under the proposed project or variant.

Further, the Market & Octavia Area Plan encourages the development of high-density residential towers at the intersection of Market Street and Van Ness Avenue, and specifically calls out the project site as a location of future residential towers, because of the site’s proximity to downtown and accessibility to local and regional transit. The Market & Octavia Area Plan increased the permitted building height at the project site from 120 to 400 feet, and the proposed Hub Plan proposes to increase the permitted building height further, to maximize the number of dwelling units that can be produced at the site. In addition, the Market & Octavia Area Plan and the proposed Hub Plan call for the construction of towers with iconic building heights, to signal the Market Street/Van Ness Avenue intersection from vantage points around the city. Finally, the Hub Plan calls for maximizing the density of dwelling units, to maximize development impact fees for affordable housing and infrastructure improvements, accordingly, alternatives that considered nonresidential towers or towers shorter than 400 feet in height were rejected.

6. OTHER CEQA CONSIDERATIONS

Chapter 6, Other CEQA Considerations, discusses growth-inducing impacts, significant unavoidable impacts, significant irreversible impacts, and areas of known controversy related to the proposed project and project variant.

6.1 GROWTH-INDUCING IMPACTS

The CEQA Guidelines require that an EIR evaluate the growth-inducing impacts of a proposed action (section 15126.2(d)). A growth-inducing impact is defined in the CEQA Guidelines section 15126.2(d) as:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth ... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involves construction of new housing that would result in new residents moving to the area. A project can have indirect growth-inducement potential if it were to establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it were to involve a substantial construction effort with substantial short-term employment opportunities and indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it were to remove an obstacle to additional growth and development, such as removing a constraint on required public services, utilities, or infrastructure facility. Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

Examples of projects likely to have substantial or adverse growth-inducing effects include expansion of infrastructure systems beyond what is needed to serve current demand in the project vicinity, and development of new residential uses in areas that are currently sparsely developed or undeveloped. The following discussion considers whether implementation of the proposed project could potentially affect growth elsewhere in San Francisco and in the region. The proposed project also includes a variant that the project sponsor may choose to implement. The discussion of growth inducement for the proposed project and variant are the same.

The proposed project would intensify development on the project site by introducing new residential, commercial, and open space uses. Population growth within the project site would be a direct impact of the proposed project. Among the basic objectives of the proposed project is to increase the city's supply of housing on a site that was designated through community planning

processes for higher density due to its proximity to downtown and accessibility to local and regional transit. As such, the proposed project would contribute to the San Francisco General Plan Housing Element goals, and ABAG's Regional Housing Needs Allocation for San Francisco. Moreover, the project site is located in the Market-Octavia/Upper Market Priority Development Area of Plan Bay Area 2040.¹ If the proposed project were implemented, the addition of 984 residential units would increase the population on the project site by approximately 2,155 residents.² Although this increase would result in a residential population increase of approximately 39 percent over the existing population within Census Tract 201, an increase of approximately 9 percent over the existing population of the project area, and approximately 0.26 percent over the existing citywide population, population growth attributable to the proposed project would be consistent with city and regional population projections. The 984 housing units would represent a negligible percentage (0.14 percent) of the projected household growth in the region (700,067 households) between 2010 and 2040.³ Although the new residential units would increase the city's overall housing stock, implementation of the proposed project or project variant would not represent significant growth in housing in the context of the city as a whole.

The project site is located in an urban area that is already served by the city's municipal infrastructure and public services as well as retail and other services for residential uses. No substantial expansion to municipal infrastructure or public services is included as part of the project and none would be required to accommodate new development associated with the proposed project, either directly or indirectly.

The proposed project would provide for high-density residential growth supported by existing community facilities, public services, transit service and infrastructure, and public utilities. To the extent that this growth would have been otherwise accommodated at other Bay Area locations, the proposed project would focus growth on an underused infill site near existing regional employment centers and existing and planned transit facilities, infrastructure, retail services, and cultural and recreational facilities.

The proposed project would contribute to meeting ABAG's regional housing objectives and would conform with ABAG's regional goals to focus growth and development by creating compact communities with a diversity of housing, jobs, activities, and services; increasing

¹ Association of Bay Area Governments, Priority Development Area Showcase, <http://gis.abag.ca.gov/website/PDAShowcase/>.

² Based on an average San Francisco household size of 2.19 persons. See the Initial Study, p. 67, (Appendix B to this EIR) for more detail.

³ ABAG, Projections 2013, p. 19.

housing supply; and improving housing affordability by meeting the city's inclusionary affordable housing requirements in compliance with the city's Inclusionary Affordable Housing Program (San Francisco Planning Code Section 415).^{4, 5}

As discussed in the Initial Study on pp. 69-71 under Impact C-PH-1 (see Appendix B to this EIR), the employment-related housing demand associated with the cumulative development projects could be accommodated by the city's projected housing growth of 84,910 units between 2015 and 2040. Furthermore, the cumulative development projects would add to the city's housing stock and could potentially accommodate some of the new employment-related housing demand. This estimated cumulative employment growth would account for less than 1 percent of projected citywide household growth between 2015 and 2040.

Cumulative projects would not result in the displacement of substantial numbers of housing units, as the majority of the approved and proposed projects would demolish vacant non-residential buildings, construct new buildings on surface parking lots, or otherwise intensify land uses, and the proposed project or variant would not displace any housing units. Although cumulative projects would increase the population and employment in the area, they would not induce substantial population and employment growth beyond what was planned for and anticipated.

Based on the preceding discussion and analysis, the proposed project or variant would not have a substantial growth-inducing impact, and no mitigation measures are necessary.

6.2 SIGNIFICANT UNAVOIDABLE IMPACTS

In accordance with section 21067 of CEQA and with section 15126(b) and section 15126.2(b) of the CEQA Guidelines, the purpose of this section is to identify significant environmental impacts that could not be eliminated or reduced to less-than-significant levels by implementation of mitigation measures included in the proposed project or identified in **Chapter 4, Environmental Setting and Impacts**, and set forth in a mitigation monitoring and reporting program. The findings of significance in this EIR are subject to final determination by the San Francisco Planning Commission (planning commission) as part of the certification process for this EIR. If necessary, this chapter will be revised in the Final EIR to reflect the findings of the planning commission.

⁴ Projects of five or more residential units are required to contribute to the creation of BMR housing, either through direct development of BMR residential units on the project site (equal to 12 percent of the project's overall residential units), within a separate building within 1 mile of the project site (equal to 20 percent of the project's overall residential units), or through an in-lieu payment to the Mayor's Office of Housing.

⁵ ABAG administers the FOCUS program, in partnerships with the Metropolitan Transportation Commission, the Bay Conservation and Development Commission, and the Bay Area Air Quality Management District. FOCUS is a regional development and conservation strategy that promotes more compact land use patterns in the Bay Area.

The proposed project or project variant would result in significant and unavoidable project-level and cumulative impacts described below.

- **Cultural Resources Impacts (Historical Architectural Resources):** The proposed project or variant would require demolition of the existing building at 10 South Van Ness Avenue, which is a historical resource for the purposes of CEQA. As identified in Impact CR-1 in Section 4.1, Historic Architectural Resources, the proposed project or variant would cause a substantial adverse change in the significance of a historical resource that would result in a significant impact. Implementing Mitigation Measures M-CR-1a: Documentation, M-CR-1b: Interpretation, and M-CR-1c: Salvage Architectural Materials from the Site for Public Information or Reuse, would reduce the impact, but not to a less-than-significant level.
- **Transportation and Circulation Impacts:** As identified in Impact C-TR-7 in Section 4.2, Transportation and Circulation, the duration and magnitude of temporary construction activities for the proposed project, the variant, or the straight-shot streetscape option, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in substantial interference with pedestrian, bicycle, or vehicular circulation and accessibility to adjoining areas. Therefore, the potential exists for hazardous conditions, resulting in a significant and unavoidable impact. Implementing Mitigation Measures M-C-TR-7a: Cumulative Construction Coordination, M-C-TR-7b: Construction Truck Deliveries During Off-Peak Periods, and M-C-TR-7c: Construction Management Plan would reduce the impact, but not to a less-than-significant level.
- **Wind Impacts:** The proposed project or variant, in combination with other past, present, and reasonably foreseeable future projects, would alter wind in a manner that would make a cumulatively considerable contribution to a significant cumulative wind impact. Implementing Mitigation Measure M-C-WI-1: Design Measures to Reduce Cumulative Off-Site Wind Impacts, would reduce the impact, but not to a less-than-significant level.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL IMPACTS

In accordance with Section 21100 (b)(2)(B) of CEQA, and Section 15126.2(c) of the CEQA Guidelines, an EIR must identify any significant irreversible environmental changes that could result from implementation of the proposed project. This may include current or future uses of non-renewable resources and secondary or growth-inducing impacts that commit future generations to similar uses. According to the CEQA Guidelines, irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified. The CEQA Guidelines describe three distinct categories of significant irreversible changes: 1) changes in land use that would commit future generations, 2) irreversible changes from environmental actions, and 3) consumption of nonrenewable resources. Each of these categories is discussed below in relation to the proposed project.

Changes in Land Use That Would Commit Future Generations

As described throughout this EIR, implementation of the proposed project would occur within an urbanized area and would entail the demolition of an existing building and the construction of two 41-story towers. The towers would be 400 feet tall (420 feet total, including roof screens and elevator penthouses) and would contain a total of 984 dwelling units and retail space on the ground floor. (With the project variant, a single 55-story, up to 590-foot-tall tower [610 feet total, including roof screens and elevator penthouses] over a podium structure would be constructed. The single tower would have the same number of dwelling units as the proposed project.)

The major change on the project site under the proposed project or variant would be related to the construction of new high-rise residential towers (proposed project) or single tower (variant) and the introduction of new uses (residential and ground-floor retail) on the project site. The proposed project and variant would both include 984 dwelling units. The project site is currently occupied by the San Francisco Honda dealership, a two-story, 30- to 45-foot-high building, and the southern end of the site encompasses a small, undeveloped area. Implementation of the proposed project would result in development intensification on the project site that would commit future generations living or working in San Francisco or visiting San Francisco to the environmental effects caused by the operation of the proposed new buildings for the duration of the life of the buildings. These environmental effects include an increase in residential population as discussed in this EIR and the Initial Study (EIR Appendix B). Future generations could benefit from the addition of new open space in the form of a new pedestrian-oriented right-of-way (or alley) that would run through the block from either Market Street or South Van Ness Avenue to 12th Street.

Development of the proposed project, an infill project within a developed urban area, would not substantially alter the pattern of land use or transportation in the project vicinity and therefore would not commit future generations to any particular land use or transportation pattern, nor would it mean that the project site could not be feasibly redeveloped again at some unknown date in the future. Therefore, the proposed project or variant would not constitute a significant adverse effect on changes in land use that would commit future generations.

Irreversible Changes from Environmental Actions

No significant irreversible environmental damage, such as an accidental spill or explosion of hazardous materials, is anticipated to occur with implementation of the proposed project. Compliance with federal, state, and local regulations related to residential and retail uses and the mitigation measures identified in the Initial Study, Section E, Hazards and Hazardous Materials (see Appendix B to this EIR) would reduce the possibility that hazardous substances from the demolition, construction, and operation of the proposed project would cause significant and unavoidable environmental damage. Compliance with BART's Zone of Influence guidelines for

construction would be required. The site excavation for the proposed project would not irreversibly alter the topography of the project site.

No other irreversible permanent changes such as those that might result from construction of a large-scale mining project, hydroelectric dam, or other industrial project would result from development of the proposed project.

Consumption of Nonrenewable Resources

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands to urban uses, and loss of access to mineral reserves. No agricultural lands would be converted and no access to mining reserves would be lost due to construction on the project site.

Construction of the proposed project would require the use of energy, including energy produced from non-renewable resources, and energy would be consumed during the operational period of the proposed project. Construction would also require the commitment of construction materials, such as steel, aluminum, and other metals, concrete, masonry, lumber, sand and gravel, and other such materials, as well as water. However, new buildings in California are required to conform to energy conservation standards specified in *California Code of Regulations* (CCR) Title 24, which are among the most stringent in the United States. The standards establish energy budgets for different types of residential and nonresidential buildings with which all new buildings must comply. Specific aspects of the proposed project or variant would be as energy efficient as possible, as the development would be built to meet Leadership in Energy and Environmental Design (LEED) Gold certification standards.

In addition, to ensure that all buildings are healthy, sustainable places to live, work, and learn, the *San Francisco Green Building Code* requirements are designed to reduce energy and water use, divert waste from landfills, encourage alternate modes of transportation, and support the health and comfort of building occupants in San Francisco. New construction in San Francisco must meet all applicable California and local building codes, provide on-site facilities for recycling and composting, and meet the City's green building requirements tied to the LEED and GreenPoint Rated green building rating systems, all of which would ensure that natural resources are conserved or recycled to the maximum extent feasible and that greenhouse gas emissions resulting from the project would be minimized.

Even with implementation of conservation measures, the consumption of natural resources, including electricity and natural gas, would generally increase with implementation of the proposed project. However, the proposed project would not involve the wasteful, inefficient, or unnecessary consumption of energy resources, as discussed in the initial study (see Appendix B). Overall, the proposed project or variant would be expected to use less energy and water over the lifetime of the project than comparable structures not built to these same standards.

As further described in the initial study (Appendix B) under Topic E.10, Utilities and Service Systems, Impact UT-2, while the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase in demand would be accommodated within available water supplies and current water supply planning. While potable water use would increase, the proposed project would be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the San Francisco Green Building Ordinance and the City's Non-potable Water Ordinance. In compliance with Article 12C of the San Francisco Health Code, the proposed project or variant would employ a blackwater recycling system, which would recycle wastewater generated by the building for onsite nonpotable uses, including toilet flushing, irrigation, and HVAC/cooling demand.

During construction activities, water may be used for soil compaction and dust control activities. However, as discussed in Section 4.4, Air Quality, San Francisco Public Works Code Article 21 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction, unless permission is obtained from the San Francisco Public Utilities Commission. Therefore, while the consumption of water would increase as the result of construction and operation, the proposed project or variant would not involve the wasteful, inefficient, or unnecessary use of water resources, as discussed in the initial study (see Appendix B).

6.4 AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

The San Francisco Planning Department published a Notice of Preparation of an EIR on July 12, 2017 (Appendix A to this EIR), announcing its intent to prepare and distribute an EIR. Publication of the NOP initiated a 30-day public review and comment period that began on July 12, 2017, and ended on August 11, 2017. The mailing list for the notice of preparation included federal, state, and local agencies; regional and local interest groups; and property owners within 300 feet of the project site.

An initial study was published on May 2, 2018 initiating a second public review period from May 3, 2018 to June 4, 2018 (Appendix B to this EIR). During the public review and comment periods, 12 comment letters, comment cards, and emails were submitted to the San Francisco Planning Department by interested parties.

On the basis of public comments on the NOP and the initial study potential areas of controversy for the proposed project include the following:

- Vehicular access
- Transportation impact study
- Encroachment permit
- Parking
- Public transportation
- Building height
- Open space
- Wind
- Unit mix
- Design options
- Loading and transportation network companies
- Vehicle miles traveled
- Cumulative impacts
- Bicycle transportation
- Access to public scoping meeting
- Pedestrian transportation mode and safety
- Loading and transportation network companies
- Housing supply and affordability
- Traffic and private shuttle buses
- Parking garage hours
- Truck traffic
- Housing supply and demand
- Cultural resources mitigation

See **Chapter 1, Introduction**, pp. 1.4-1.7, for a list of issues raised by comments on the NOP/IS and where those issues are addressed in the EIR.

CEQA Section 21099(d) directs that the aesthetic and parking impacts of mixed-use residential infill projects located in transit priority areas are not considered impacts on the environment under CEQA. The proposed project meets the definition of a residential, mixed-use infill project in a transit priority area. Accordingly, this EIR does not contain a separate discussion of the topic of aesthetics. The EIR nonetheless provides visual simulations for informational purposes as part of Chapter 2, Project Description.

CEQA Section 21099(b)(1) requires that the State Office of Planning and Research (OPR) develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that promote the “reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” CEQA Section 21099(b)(2) states that upon certification of the revised CEQA Guidelines for determining transportation impacts pursuant to Section 21099(b)(1), automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, OPR published for public review and comment a *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*⁶ (proposed transportation impact guidelines) recommending that transportation impacts for projects be measured using a vehicle miles traveled (VMT) metric. VMT measures the amount and distance that a project might cause people to drive, accounting for the number of passengers within a vehicle.

⁶ This document is available online at: https://www.opr.ca.gov/s_sb743.php.

OPR's proposed transportation impact guidelines provides substantial evidence that VMT is an appropriate standard to use in analyzing transportation impacts to protect environmental quality and a better indicator of greenhouse gas, air quality, and energy impacts than automobile delay. Acknowledging this, San Francisco Planning Commission Resolution 19579, adopted on March 3, 2016:

- Found that automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall no longer be considered a significant impact on the environment pursuant to CEQA, because it does not measure environmental impacts and therefore it does not protect environmental quality.
- Directed the Environmental Review Officer to remove automobile delay as a factor in determining significant impacts pursuant to CEQA for all guidelines, criteria, and list of exemptions, and to update the Transportation Impact Analysis Guidelines for Environmental Review and Categorical Exemptions from CEQA to reflect this change.
- Directed the Environmental Planning Division and Environmental Review Officer to replace automobile delay with VMT criteria which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses; and consistent with proposed and forthcoming changes to the CEQA Guidelines by OPR.

Planning Commission Resolution 19579 became effective immediately for all projects that have not received a CEQA determination and all projects that have previously received CEQA determinations, but require additional environmental analysis.

Accordingly, this EIR does not contain a discussion of automobile delay impacts. Instead, a VMT and induced automobile travel impact analysis is provided in Section 4.2, Transportation and Circulation. Nonetheless, automobile delay may be considered by decision-makers, independent of the environmental review process, as part of their decision to approve, modify, or disapprove the proposed project.

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7. LIST OF PREPARERS AND CONTRIBUTORS

7.1 CEQA LEAD AGENCY

San Francisco Planning Department, Environmental Planning Division (Environmental Impact Report)

Environmental Review Officer: Lisa Gibson

Principal Environmental Planner: Rick Cooper

Senior Environmental Planner: Rachel Schuett

Cultural Resources Planners: Jørgen Cleeman and Allison Vanderslice

Transportation Planners: Rachel Schuett and Manoj Madhavan

Noise Planner: Chris Thomas

Air Resources Planners: Melinda Hue and Jessica Range

Water Resources Planner: Chris Thomas

7.2 OTHER AGENCY CEQA SUPPORT¹

San Francisco Municipal Transportation Agency (Transportation Impact Study)

Senior Transportation Planner: Charles Rivasplata

Transportation Planners/Engineers:

Mari Hunter

Scott Jefferis

Paul Kniha

Erin Miller

James Shahamiri

Adam Smith

Alex Snyder

Dustin White

¹ Although other local, regional, state, and federal agencies are involved in the separate permitting processes related to the project, this list of agencies is limited to those that provided input and review related to data included in the EIR.

San Francisco Public Utilities Commission (Water Supply Assessment)

Director of Water Resources: Paula Kehoe

Water Resources Planner: Fan Lau

7.3 PROJECT SPONSORS

10 SVN, LLC

Project Director: Adam Tartakovsky

Project Manager: Andrew Dewitt

J. Abrams Law, P.C.

James Abrams, Esq.

Dana Lovisolo, Esq.

7.4 CEQA CONSULTANTS

SWCA Environmental Consultants (EIR)

Project Manager/Senior Planner: Mike Kometani

Senior Technical Director: Barbara W. Sahm

Senior Planner: Julie Barlow

Planner: Juliana Lehnen

Air Quality Specialist: Carlos M. Ituarte-Villarreal

Senior Research Editor: S. Elizabeth Haines

AECOM (Notice of Preparation/Initial Study/Draft EIR)

Project Director: David Reel

Project Manager: Florentina Craciun

Deputy Project Manager: Elliott Schwimmer

Editing: Julie Nichols and Beth Duffey

Word Processing: Renata Crockett and Deborah Jew

Graphics: Elliott Schwimmer

QA/QC: Rodney Jeung

Fastcast (Shadow Study)

Report Manager/Analyst: Adam Noble

BMT Fluid Mechanics (Wind Study)

Report Managers/Analysts: Max Lee and Yiqing Wang

SWCA Environmental Consultants (Historic Resources Evaluation)

Senior Architectural Historian: Debi Howell-Ardila

Architectural Historian: Steven Treffers

Research Assistance: Natalie Loukianoff

Page & Turnbull (Preservation Alternatives Report)

Report Manager: Christina Dikas

Report Director: Carolyn Hartnett

Report Analyst: Maggie Smith

CHS Consulting (Transportation Impact Study)

Report Manager: Andrew Kluter

Report Planner: Charles Felder

Graphics: Greg Nelson

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APPENDIX A

Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting



SAN FRANCISCO PLANNING DEPARTMENT

Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting

Date: July 12, 2017
Case No.: 2015-004568ENV
Project Title: 10 South Van Ness Avenue Mixed-Use Project
Zoning: C-3-G (Downtown-General Commercial)
Van Ness and Market Downtown Residential Special Use District
120-R-2/120/400-R-2 Height and Bulk Districts
Plan Area: Market and Octavia Area Plan
Block/Lot: 3506/004 and 003A
Lot Size: 51,150 square feet (1.17 acres)
Project Sponsor: 10 SVN, LLC
c/o Jim Abrams, J. Abrams Law, P.C. – (415) 999-4402
jabrams@jabramslaw.com
Lead Agency: San Francisco Planning Department
Staff Contact: Rachel Schuett – (415) 575-9030
rachel.schuett@sfgov.org

1650 Mission St
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

INTRODUCTION

The project sponsor, 10 SVN, LLC, proposes to redevelop the 1.17 acre property located at 10 South Van Ness Avenue at the southwest corner of South Van Ness Avenue and Market Street in the South of Market neighborhood of San Francisco. The proposed project would include construction of two 400-foot-tall (420 feet total, inclusive of roofs screens and elevator penthouses), 41-story buildings containing a total of 984 dwelling units and retail space on the ground floor (see Table 1). Above grade, the proposed project would consist of two separate structures, each consisting of a tower above a podium. Below grade, the two structures would be connected on basement Levels B1 and B2.

In addition, two variants are proposed: a project design variant (herein after referred to as the “single tower project variant”) which would feature one tower, up to 590 feet in height (610 feet total, inclusive of roofs screens and elevator penthouses), and a streetscape variant (herein after referred to as the “straight-shot streetscape variant”) for 12th Street. The single tower project variant would include construction of a single 590-foot-tall, (55-stories) tower over a podium structure, which would also contain 984 dwelling units, ground floor retail space, and two levels of underground parking. Both the proposed project and the single tower variant would include a mid-block alley, which would be open-air, accessible to the public, and would serve as a pedestrian connection across the site. Under the proposed project, the mid-block alley would provide access from South Van Ness Avenue to 12th Street. Under the single tower variant, the mid-block alley would provide access from Market Street to 12th Street.

TABLE 1
PROPOSED PROJECT CHARACTERISTICS

Lot	Dimensions		
Size	51,150 square feet		
Length	475 feet (South Van Ness Avenue)/288 feet (Market Street)/450 feet (12th Street)		
Proposed Building	Area (gross square feet [gsf])		
Residential ¹	935,745		
Ground Floor Retail	30,350		
Parking ²	102,000		
Rooftop Mechanical	3,000		
Total	1,071,095		
Building Characteristics	Description		
Stories	North Tower/Podium	41 stories/12 stories	
	South Tower/Podium	41 stories /12 stories	
Height	North Tower/Podium	400 feet (up to 420 feet inclusive of the elevator penthouse ³)/114 feet	
	South Tower/Podium	400 feet (up to 420 feet inclusive of the elevator penthouse)/120 feet	
Ground Floor	Retail: 30,350 gsf multiple tenant spaces Residential: 2 residential lobbies, and 336 class I bicycle parking spaces		
Basement	518 vehicle parking spaces		
Proposed Units	Amount (Approx. Percent)		
Dwelling Units	984		
	North Tower	South Tower	Total
Studio	267 (27%)	108 (11%)	375 (38%)
1-Bedroom	294 (30%)	167 (17%)	461 (47%)
2-Bedroom	51 (5%)	49 (5%)	100 (10%)
3-Bedroom	19 (2%)	29 (3%)	48 (5%)
Vehicle Parking Spaces ⁴	518		
Bicycle Parking Spaces ⁵	397		
Open Space ⁶	Area (sf)		
Publicly-accessible	2,975		
Common	45,176		
Private	0		

Source: 10 South Van Ness LLC, 2017.

Notes:

1 Includes first-floor non-retail uses and second-floor residential amenity uses.

2 Includes parking and basement mechanical equipment.

3 Consistent with the Planning Code Height and Bulk designations for the project site, the building height is 400 feet. Up to 20 feet for the elevator penthouse, roof screes, and other rooftop appurtenances are exempt from this height limit.

4 Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.

5 Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.

6 Provided in compliance with Planning Code Section 736.93 Usable Open Space Per Residential Unit.

The straight-shot streetscape variant would exceed the Market and Octavia Plan and San Francisco Planning Department streetscape standards by extending the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 feet to 40 feet in width. The proposed project's streetscape design and the straight-shot streetscape variant design were a result of coordination between the project sponsor, the San Francisco Planning Department, the San Francisco Municipal Transportation Agency (SFMTA), and the project sponsor for the adjacent 1629 Market Street development to create a "Living Street"¹ on 12th Street between Market Street and South Van Ness Avenue. Both the proposed streetscape design and the straight-shot streetscape variant would adhere to the Better Streets Plan and the Better Market Street Project.² The straight shot streetscape design could be developed with the proposed project or the single tower project variant.

PROJECT DESCRIPTION

This section provides a description of the project location and site characteristics, the existing conditions, and the proposed project characteristics.

Project Location and Site Characteristics

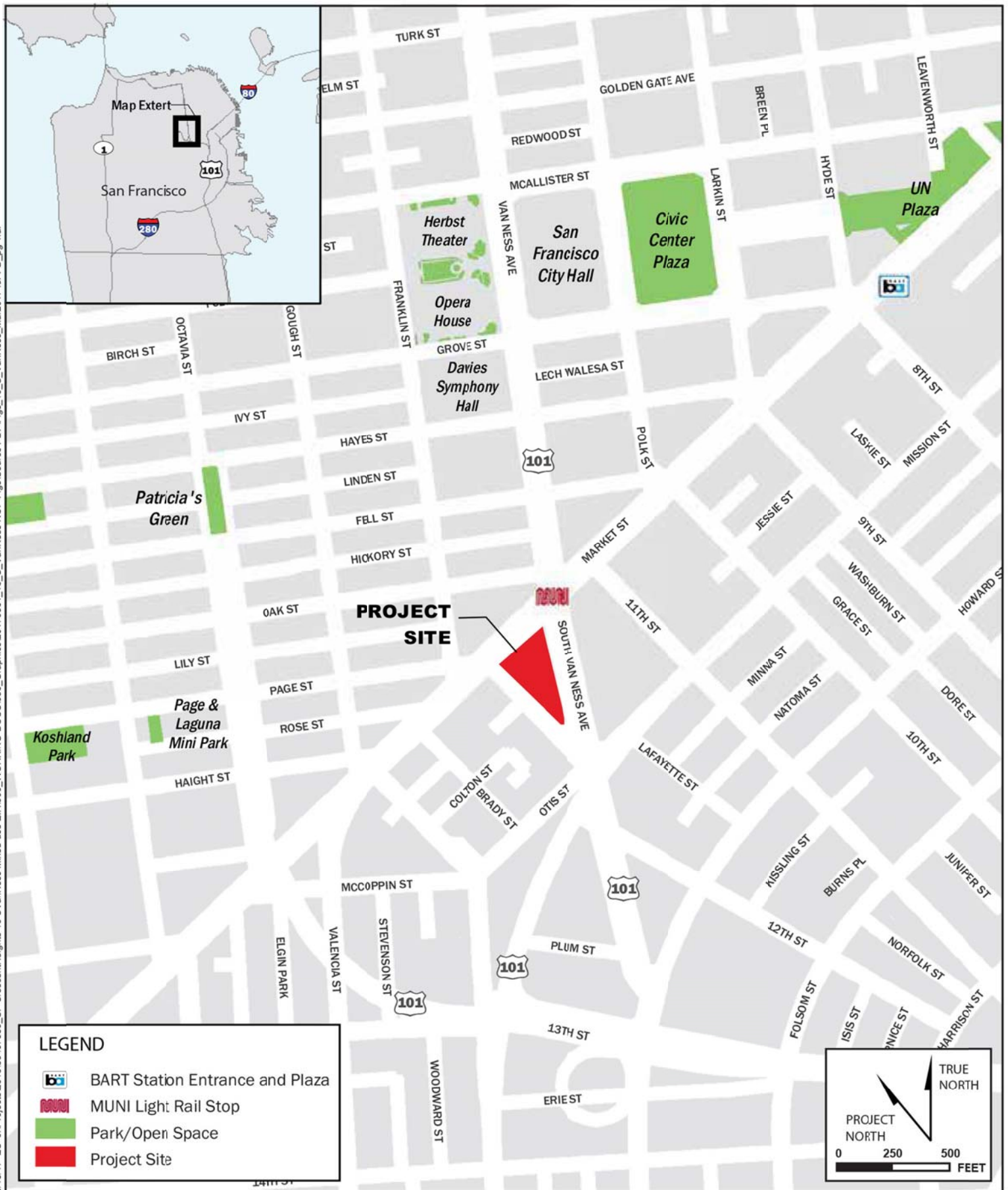
As shown on Figure 1, the approximately 51,150-square-foot parcel is located at the southwest corner of Market Street and South Van Ness Avenue, and comprises the entire block bound by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west.³ The project site is comprised of Assessor's Block 3506, Lots 004 and 003a and is roughly triangular in shape.

The project site is located within the Market and Octavia Area Plan area, the Downtown-General (C-3-G) zoning district, and the Van Ness and Market Downtown Residential Special Use District (SUD). The northern portion of the site is in the 120-R-2 height and bulk district; and the southern portion of the site is in the 120/400-R-2 height and bulk district. These height districts allow for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower of up to 400 feet in height on the southern portion of the site. The R-2 bulk district does not set bulk restrictions for buildings under 120 feet in height. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in Planning Code Section 270(e)(2).

¹ A "Living Street" or "Living Alley" is an alley into which special paving, traffic calming, lighting, seating, greening, and other elements are introduced to create a shared space that prioritizes pedestrian access over vehicle use. More information is available at: <http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/>. Accessed June 23, 2017.

² The Better Market Street Project is currently undergoing environmental review. More information is available at: <http://www.bettermarketstreetsf.org/>. Accessed May 15, 2017.

³ For purposes of describing project site location, this document uses a project north/south axis aligned with 12th Street, such that Market Street forms the northern boundary of the project site, 12th Street forms the western boundary, and South Van Ness Avenue forms the southwestern boundary.



Source: AECOM, 2017

Figure 1: Project Location

Per Planning Code Section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gsf. Per Planning Code Section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by ten percent from the maximum floor plate. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the R-2 bulk district. The permitted floor area ratio (FAR) in the C-3-G zone is 6:1.⁴ The existing FAR of the project site is approximately 2:1.

Both South Van Ness Avenue and Market Street are major roadways through the Downtown/Civic Center and South of Market neighborhoods. South Van Ness Avenue, which becomes Van Ness Avenue north of Market Street, is a major north-south arterial through San Francisco and is considered U.S. Highway 101 (U.S. 101) between the Lombard Street and the Central Freeway portions of U.S. 101. Adjacent to the project site, South Van Ness Avenue has three travel lanes in each direction and parallel parking on both sides of the street. Market Street is a major east-west roadway through San Francisco that connects The Embarcadero and the Twin Peaks neighborhood. Market Street operates as a two-way roadway, generally with two travel lanes, for motorized modes of travel. Adjacent to the project site, eastbound Market Street has one mixed-flow travel lane, one dedicated-transit/taxi lane, and a bicycle lane. In the westbound direction, Market Street has two mixed-flow travel lanes⁵ and bicycle lane.

The regional roadways that serve the project site are U.S. 101, Interstate 80 (I-80), and Interstate 280 (I-280). U.S. 101 provides access to and from the site vicinity via the adjacent South Van Ness Avenue, an on-ramp at South Van Ness Avenue and Division Street, and an off-ramp at Mission Street and Duboce Avenue. The intersection of South Van Ness Avenue and Market Street is also connected to the transit network via the subsurface Market Street and South Van Ness Avenue Muni station, which is accessible from an entrance located along the Market Street frontage of the project site. This Muni station is served by the J, KT, L, M, and N Muni light rail lines, and the above-ground Market Street and Van Ness Avenue Muni stops. These stops are served by the K-Owl, L-Owl, N-Owl, 6, 7, 7R, 14, 47, 49, 90, and 800 bus routes and the historic F line streetcar. The Civic Center Bay Area Rapid Transit (BART) station is also located 0.4 miles east of the project site on Market Street.

Existing Conditions

The project site slopes gently downward to the south. The ground surface elevation of the project site is approximately 40 feet above mean sea level (msl) along Market Street and approximately 32 feet above msl at the southern boundary of the site. As shown on Figure 2, the project site is currently occupied by the 91,088-square-foot San Francisco Honda Dealership and Service Center, which consists of a two-story building, ranging from 30 to 45 feet in height (Lot 004), and a small, undeveloped area at the southern end of the site (Lot 003A). The existing building was constructed in 1927. The northern third of the project site includes a subsurface easement for the existing BART tunnel, which is located 19.62 feet below grade. The invert of the BART tunnels is approximately 85 feet below ground surface.^{6,7} The Muni tunnels and station are located beneath Market Street

⁴ FAR is the gross floor area of a building or buildings on a zoning plot divided by the area of such zoning plot. FAR is calculated to determine whether the mass and scale of a structure is compatible with zoning district requirements. In the Van Ness & Market Downtown Residential Special Use District, increased FAR is allowed with payment of in-lieu fees (the Van Ness Inclusionary Affordable Housing Fee and the Van Ness and Market Neighborhood Infrastructure Fee).

⁵ Mixed-flow travel lanes are traffic lanes that allow the use of personal vehicles, trucks, taxis, and public transportation vehicles.

⁶ "Invert" refers to the bottom of the tunnels.

approximately 30 feet north of the property line. The perimeter of the project site includes six curb cuts and associated driveways: three curb cuts along South Van Ness Avenue, and three along 12th Street. There are eight street trees along South Van Ness Avenue, six along Market Street, and fourteen along 12th Street.

Along the western side of South Van Ness Avenue, there are 11 metered vehicle parking spaces, with five spaces subject to restricted hours for commuter shuttles, pursuant to the San Francisco Municipal Transportation Agency (SFMTA) Commuter Shuttle Program (6:00 a.m. to 10:00 a.m. Monday to Friday). The eastern side of 12th Street along the project frontage has 10 general metered parking spaces, and one metered commercial loading space with restricted loading hours. Across 12th Street from the project site, there are five general metered parallel parking spaces, 16 angled general metered parking spaces, three metered commercial loading spaces with restricted loading hours, one passenger loading space, and one parking space with Americans with Disabilities Act (ADA) access. Improvements to Van Ness Avenue between Aquatic Park and Mission Street are currently underway as part of the Van Ness Improvement Project. The Van Ness Improvement Project includes replacement of the water and sewer networks and infrastructure improvements to support the Van Ness Bus Rapid Transit (BRT) system.⁸

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height districts) range from 40 feet to 400 feet (see Figure 3). Several large, mixed-use commercial, office, and residential buildings are located along Van Ness Avenue and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses. The scale of the built environment generally increases in height traveling eastward along Market Street from the project site.

⁷ Langan Treadwell Rollo, 2017. Geotechnical Consultation 10 South Van Ness Avenue. March 2017. This document and all other documents, unless otherwise noted, are available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, as part of Case File No. 2015-004568E.

⁸ https://www.sfmta.com/sites/default/files/projects/2017/VN_Newsltr_17.02_170502.pdf. Accessed July 5, 2017.



Source: Handel Architects, 2016

Figure 2: Project Site



Source: City and County of San Francisco, 2017

Figure 3: Zoning Districts and Height and Bulk Districts

Proposed Project Characteristics

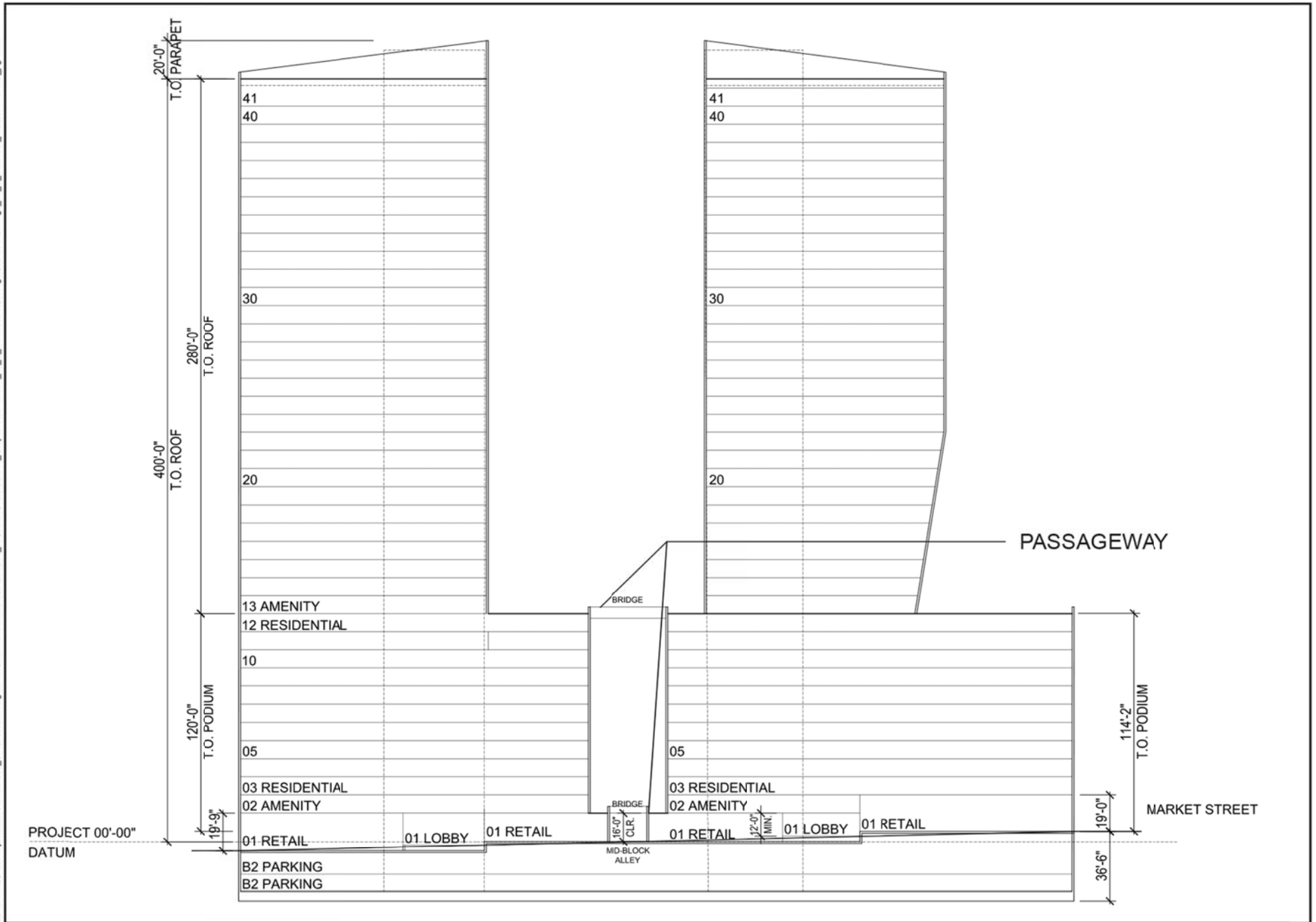
The proposed project would result in the demolition of the existing 91,088 square-foot, two-story, 30- to 45-foot-tall Honda Dealership and Service Center, and construction of a new approximately 1,071,100 gross square feet (gsf), 984-unit, 41-story mixed-use residential building. The proposed project would construct a building with one below-grade structure and two separate above-grade structures. Above grade, each structure would consist of a tower on top of a podium. A section of the proposed project is shown on Figure 4, and elevations of the proposed project are shown on Figures 5 and 6.

The tower with frontage along Market Street is referred to as the north tower, and the tower adjacent to the intersection of South Van Ness Avenue and 12th Street is referred to as the south tower. Likewise, the more northerly podium is referred to as the north tower podium, and the more southerly podium is referred to as the south tower podium. Each tower would have its own building core. Two passageways would be constructed to serve as a connection between the two podiums across the mid-block alley, one at Level 2 and one at Level 13. Below Ground Level, the building would consist of a single, two-level parking garage/basement (see Figure 7). The building would have a single foundation supporting all project structures. Each tower would have a maximum height of 400 feet (420 feet total, inclusive of roof screens and the elevator penthouse on each tower).⁹ The ground floor through Level 12 would be located in the tower podiums, and Levels 13 through 41 would be located in the towers. The towers would be separated by a minimum of 115 feet. The north tower podium would be approximately 114 feet in height, and the south tower podium would be approximately 120 feet in height.¹⁰ Both podiums would include retail uses and residential lobbies at the Ground Level (see Figure 8).

The proposed project would include a total of approximately: 935,745 gsf of residential uses, 30,350 gsf of retail uses; 3,000 gsf of rooftop mechanical equipment; and 102,000 gsf of parking with up to 518 vehicle parking spaces, as shown in Table 1.

⁹ Pursuant to Planning Code Section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

¹⁰ A height of 114 feet and 120 feet for the north and south tower podiums, respectively, is consistent with the height and bulk district for this portion of the site (120-R-2).



Source: 10 SVN LLC, 2017

Figure 4: Proposed Project – Building Section Looking West toward Project Site from South Van Ness Avenue



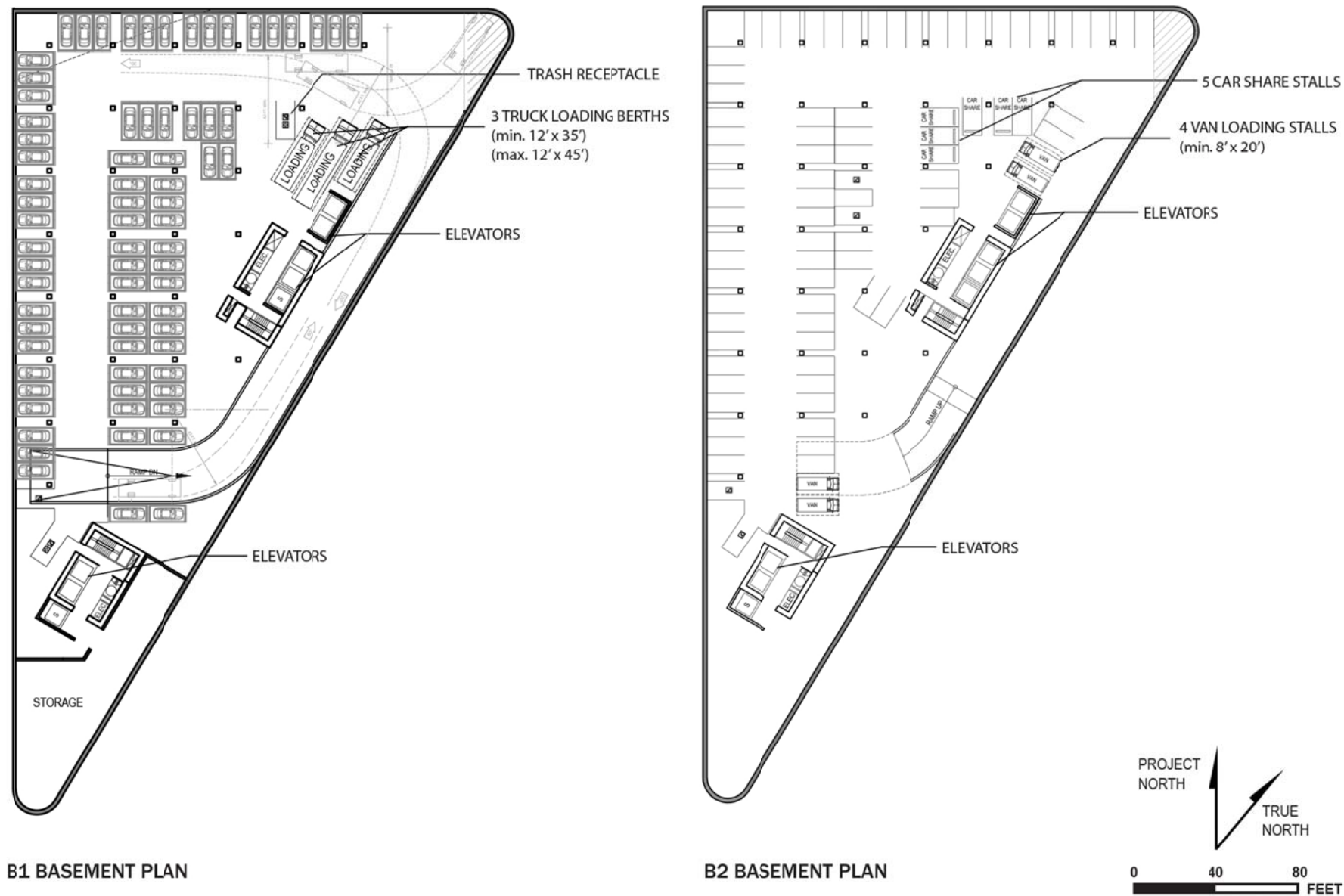
Source: 10 SVN LLC, 2017

Figure 5: Proposed Project – Building Elevation Looking West toward Project Site from South Van Ness Avenue



Source: 10 SVN LLC, 2017

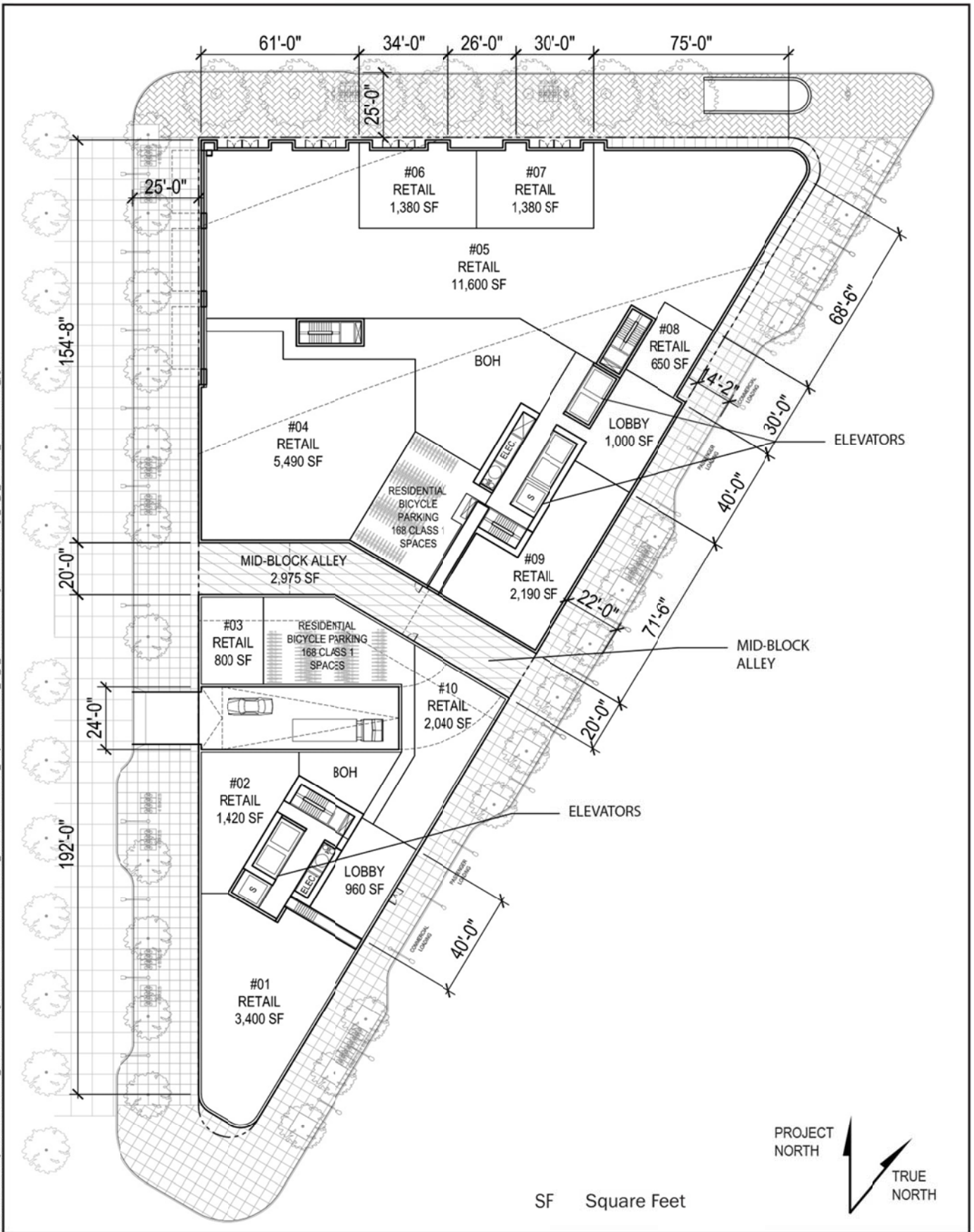
Figure 6: Proposed Project – Building Elevation Looking South Toward Project Site from Market Street



Source: Handel Architects, 2016 and SITELAB Urban Studio, 2017

Figure 7: Proposed Project – Parking Garage/Basement Plan

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Source: Handel Architects, 2016

Figure 8: Proposed Project – Ground Floor Plan

The proposed project would include up to 984 residential units comprised of: 375 studios, 461 one-bedroom units, 100 two-bedroom units, and 48 three-bedroom units. The north tower would include approximately: 267 studios, 294 one-bedroom units, 51 two-bedroom units, and 19 three-bedroom units. The south tower would include approximately: 108 studios, 167 one-bedroom units, 49 two-bedroom units, and 29 three-bedroom units. In both towers, residential amenities would be provided on Level 2, and residential units would be provided on Levels 3-41 (see Figures 9 through 12). Residential lobbies and building services would comprise approximately 16,670 gsf. The residential entrances would be at the approximate center of each tower podium's frontage on South Van Ness Avenue.

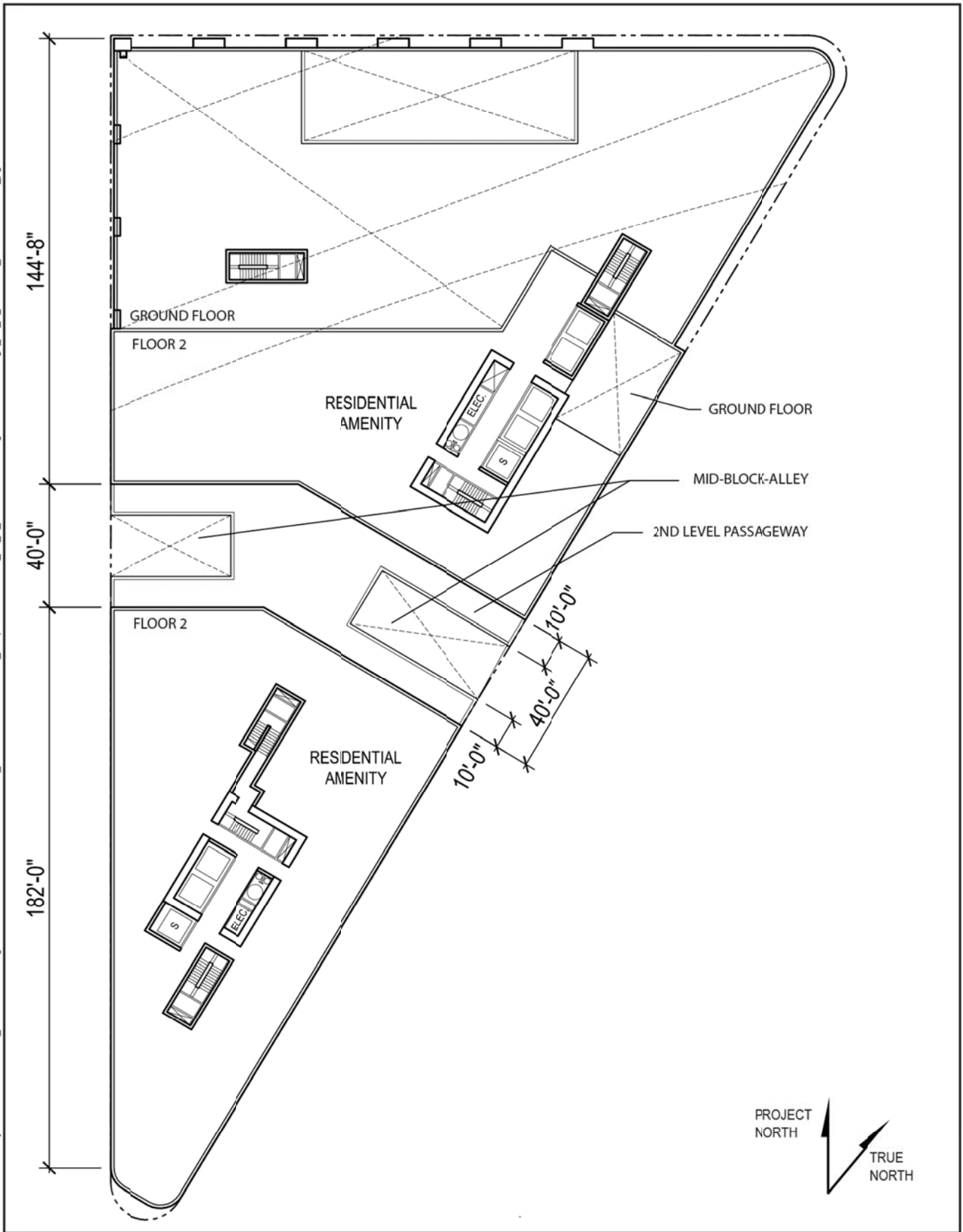
The ground floor of each tower podium would include approximately 30,350 gsf of retail space for use by multiple tenants. The retail spaces, as currently designed, are illustrated in Figure 8; there are a total of ten retail spaces ranging from 800 square feet to 11,600 square feet. The retail uses would front onto South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The retail spaces would have a minimum floor-to-ceiling height of 19 feet in both tower podiums.

Open Space. The proposed project would include approximately 48,150 square feet of usable open space per Planning Code Section 736.93, which would be provided through a combination of publically-accessible open spaces, and common useable open spaces.^{11,12} As shown on Figures 4 and 8, publicly-accessible open space would include the 2,975-square-foot mid-block alley between the two tower podiums, which would provide a pedestrian connection between South Van Ness Avenue and 12th Street. Private common open spaces would include amenity terraces on Level 2 of both tower podiums, Levels 3 and 11 of the north tower, Level 13 of the south tower, and on the roofs of both towers, as depicted in Figure 13.

Parking/Loading and Mechanical Equipment. The proposed project would include 102,000 gsf of parking and building services, with up to 519 vehicle parking spaces, in two basement levels, as shown on Figure 7. Ingress and egress to the secured garage/basement would be provided through a single curb cut on 12th Street. The building owner would provide a valet service within the on-site garage ramp to manage resident and employee parking maneuvers within the building, with the intent of facilitating inbound vehicle flow and reducing queue spillover onto 12th Street. The 24-hour, fully-staffed valet would serve residents, visitors, and car-share users. Valet staff would also direct delivery and moving trucks.

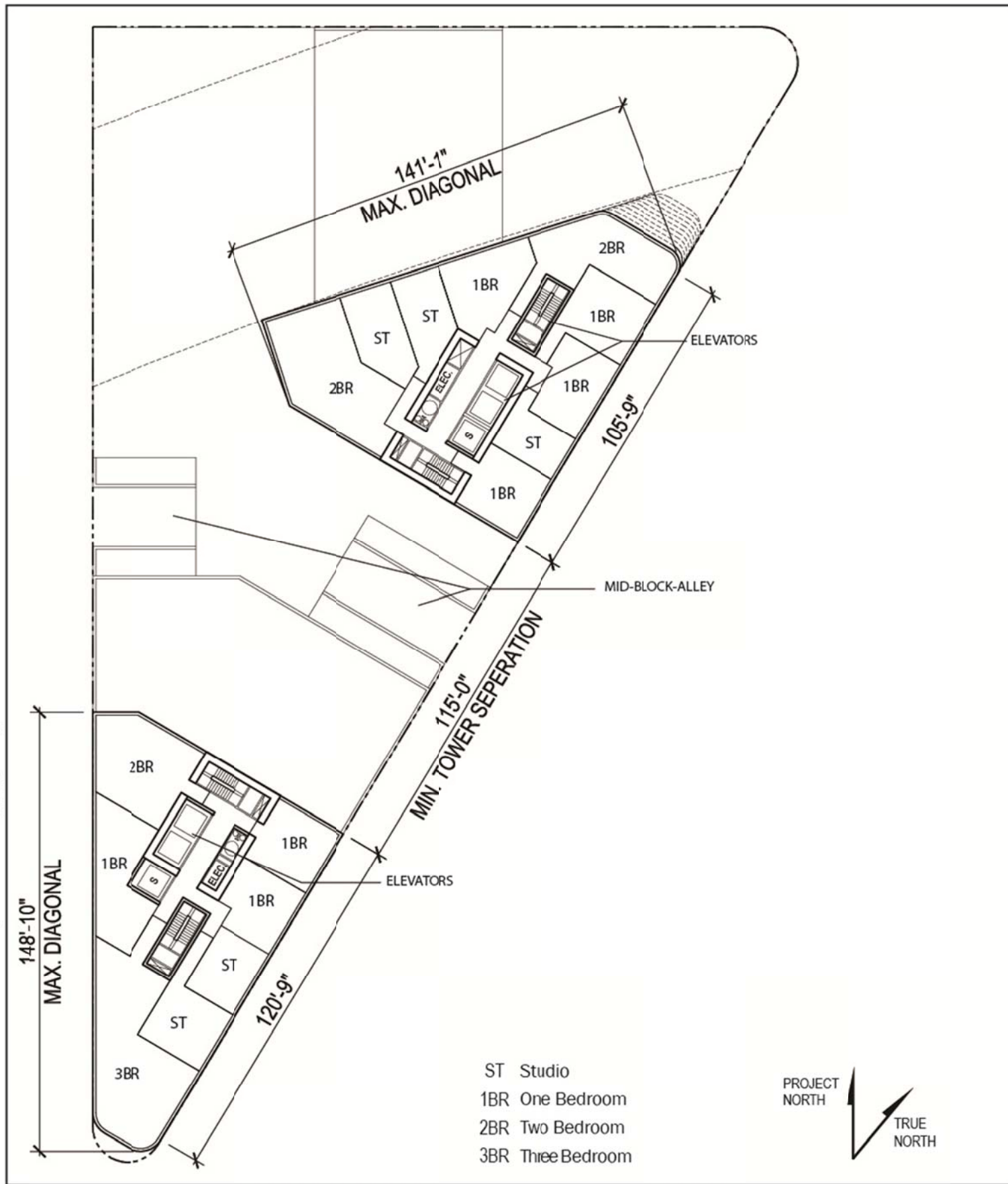
¹¹As defined in Planning Code section 135, common useable open space includes open space that is easily accessible from a dwelling unit or from a common area of a building or lot. Common useable open space is accessible to building occupants only, but, as opposed to private useable open space, is accessible to all building occupants rather than a select group of units. In C-3 Districts, new buildings are required to provide privately-owned public open spaces (POPOS) meeting the requirements of Planning Code Section 138. These open spaces must be accessible to the general public.

¹² Planning Code Section 135 requires the provision of 36 square feet of private open space or 47.88 square feet of commonly accessible open space per residential unit. The proposed project would require 47,114 square feet of common usable open space.



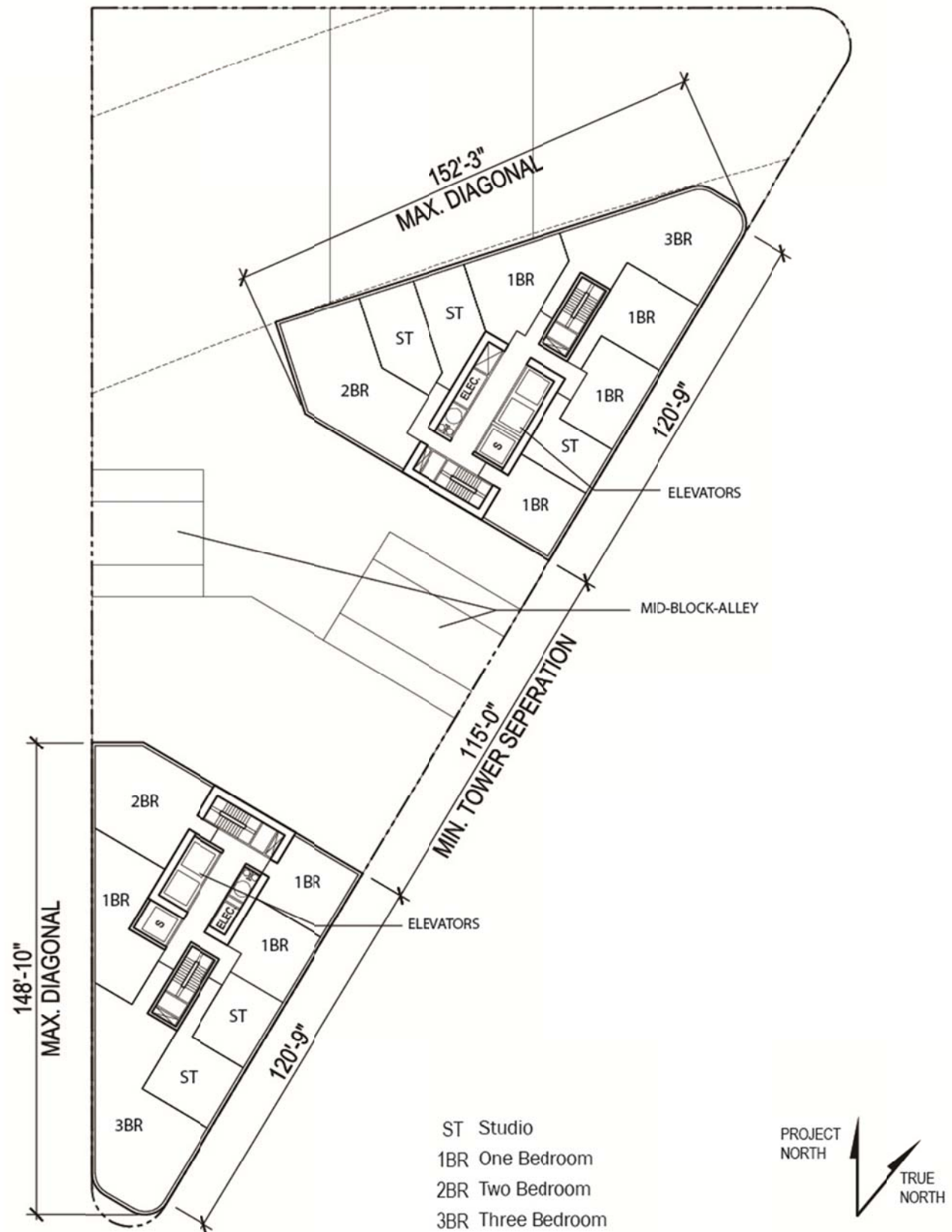
Source: Handel Architects, 2016

Figure 9: Proposed Project – Level 2 Floor Plan



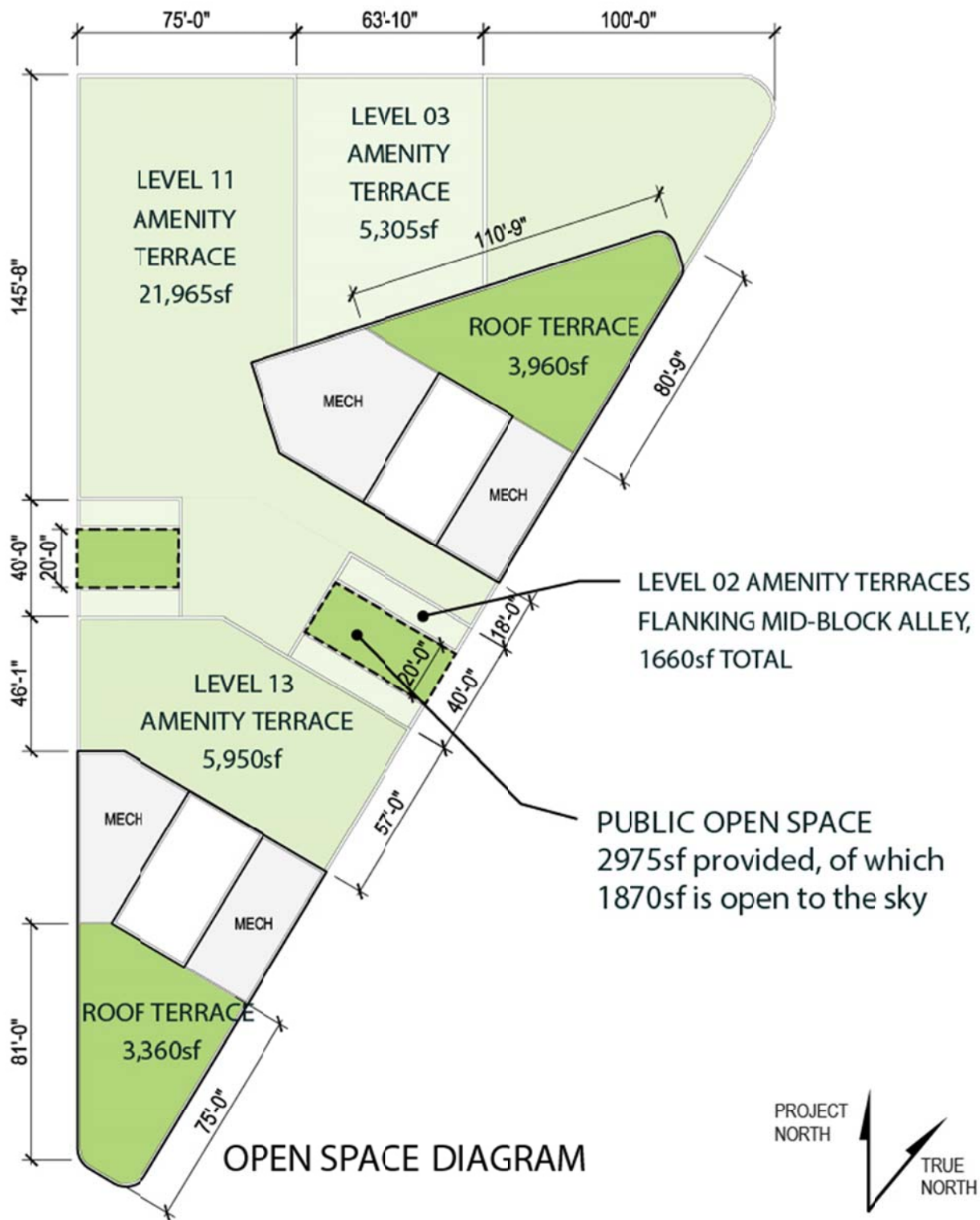
Source: Handel Architects, 2016

Figure 11: Proposed Project – Levels 13 through 22 Representative Floor Plan



Source: Handel Architects, 2017

Figure 12: Proposed Project – Levels 23-41 Representative Floor Plan



Source: 10 SVN LLC, 2017

Figure 13: Proposed Project – Open Space Plan

Up to 518 off-street vehicle parking spaces would be provided for the proposed project, consisting of 491 spaces for residential use, 14 spaces for retail use, and six spaces for car-share vehicles. In addition, a total of seven off-street freight-loading spaces would be located in the two basement levels, three of which would be standard freight-loading spaces, and four of which would be service vehicle spaces. One freight-loading space would accommodate up to a 45-foot-long vehicle. On the ground floor of the north tower podium, 336 class I bicycle parking spaces¹³ would be provided: 332 for residential use and four for retail use. On-street bicycle parking would include 61 class II bicycle parking spaces: 49 for residential use and 12 for retail use.

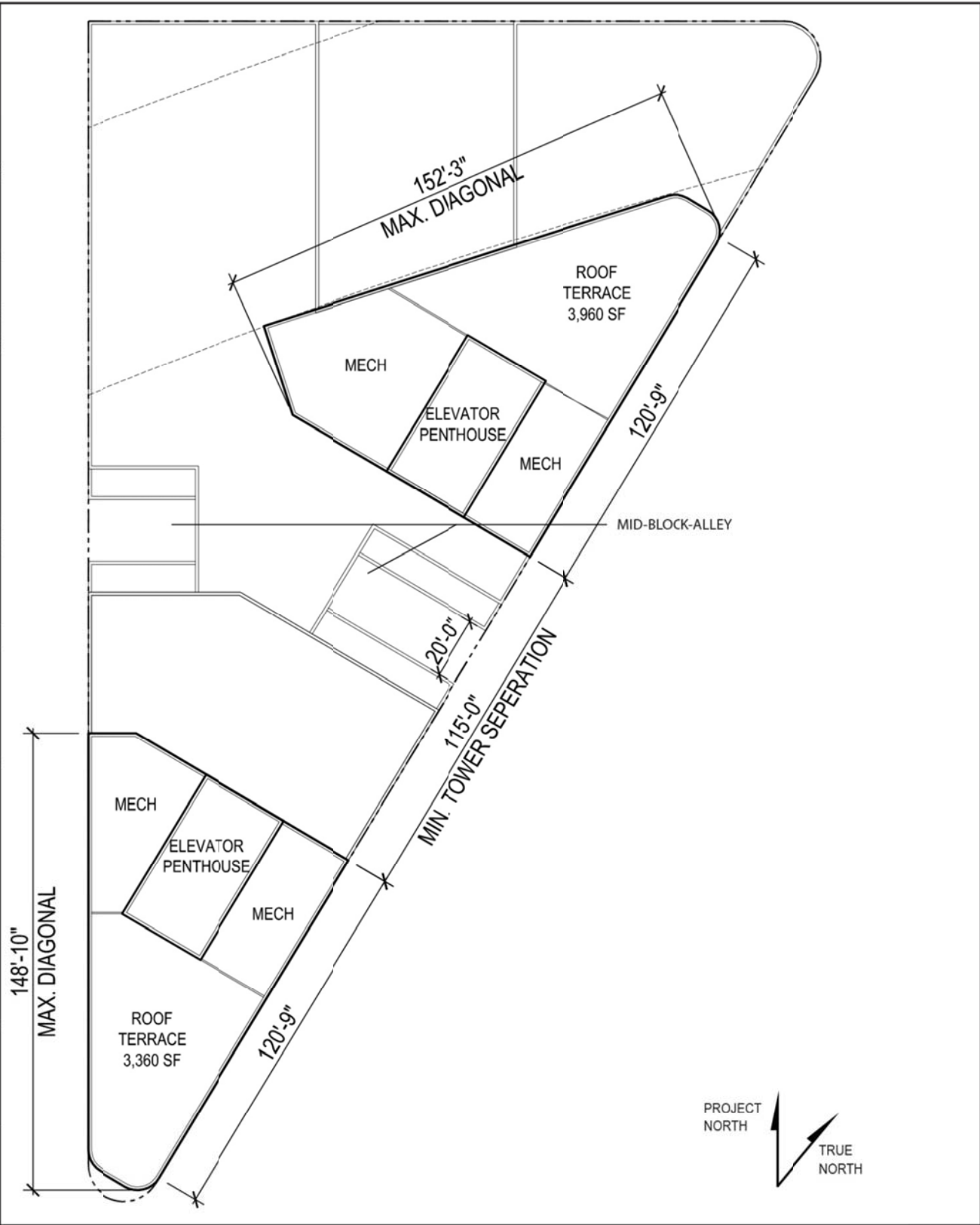
The proposed project would include one 1,500-kW diesel-powered emergency generator and other mechanical equipment in the garage/basement. Trash storage would also be located in the garage/basement, adjacent to an accessible loading area. The garage/basement would be secured, and would be accessible only to residents and retailers. Approximately 3,000 gsf of the roof area would be reserved for heating, ventilation, and air conditioning (HVAC) mechanical equipment. The proposed project's roof plan is shown on Figure 14.

Circulation and Access. The project site currently has six curb cuts, three of which are along South Van Ness Avenue and three of which are on 12th Street. The proposed project would remove the three existing curb cuts on South Van Ness Avenue, and the three curb cuts on 12th Street. A new curb cut would be installed along 12th Street to provide vehicle access to the two-level, below-grade parking garage/basement, as shown on Figure 7. Vehicular access to the proposed building, for both retail and residential users would be provided by a new, 20-foot curb cut on 12th Street, which would allow access to the 24-hour valet service in the garage.

In addition to stairs, two elevators would provide access to the residential lobbies from the parking garage/basement. From the residential lobbies, a second elevator would provide access to each tower. Elevator access may also be available between the below-grade parking garage/basement and the ground-floor retail space. As described above, two street-level residential entrances, one for each tower, would be located along South Van Ness Avenue. Access to the retail spaces would be from South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The proposed mid-block alley would also provide public access through the project site between South Van Ness Avenue and 12th Street.

¹³ Section 155.1(a) of the Planning Code defines class I bicycle spaces as "spaces in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, nonresidential occupants, and Employees" and defines class II bicycle spaces as "spaces located in a publicly-accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use."

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Source: Handel Architects, 2017

Figure 14: Proposed Project – Roof Plan

Transportation Demand Management. The proposed project would result in more than 10 dwelling units; therefore, the proposed project would be required to comply with San Francisco Planning Code Section 169, Transportation Demand Management Program (added by Ordinance 34-17, approved February 2017). As required under Planning Code Section 169, the project sponsor is required to develop a Transportation Demand Management (TDM) plan describing strategies the project sponsor/property owner would adopt to reduce single-occupancy driving to/from the project site, promote car-sharing, and promote use of nearby transit, bicycle, and pedestrian facilities to access the project site. Compliance with the project's TDM plan would be included as a Condition of Approval for the proposed project and would be monitored by Planning Department staff for the life of the project.¹⁴

The project sponsor has agreed to implement the following TDM measures; these measures comprise the required TDM plan:

PKG-1: Unbundle Parking

Unbundle¹⁵ parking in transportation analysis zone (TAZ) 578, where the project site is located.

PKG-4: Parking Supply

Provide parking at a rate that is less than or equal to 80 percent and greater than 70 percent of the neighborhood residential parking rate. The project parking rate is 0.5 vehicles per unit, which is 76 percent of the neighborhood residential parking rate of 0.65 vehicles per unit in transportation analysis zone 578 where the project site is located.

ACTIVE-1: Improve Walking Conditions

Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by: widening the sidewalk along the east side of 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed.

¹⁴ Planning Code Section 169 requires, prior to issuance of a certificate of occupancy, that a property owner facilitate a site inspection by the Planning Department and document implementation of applicable aspects of the TDM Plan, maintain a TDM Coordinator, allow for Department inspections, and submit periodic compliance reports throughout the life of the project.

¹⁵ Where the cost of a parking space is separated from the cost of rent, lease or ownership.

The streetscape improvements would meet TDM ordinance criteria by providing the following ten streetscape elements defined in Table 1 of Planning Code Section 138.1:¹⁶

- High-visibility crosswalks; Special crosswalk treatments; Midblock crosswalks; Raised crosswalks; Extended bulbouts; Midblock bulbouts; Reuse of parkways and excess right-of-way; Shared public ways; Pedestrian-only streets; and Above-ground landscaping.

ACTIVE-2: Bicycle Parking

Provide class I and class II bicycle parking spaces as required by the Planning Code. The proposed project is providing 332 Class I and 49 class II bicycle spaces for the residential use, and four class I and 12 class II bicycle spaces for the retail use, both of which meet the Planning Code, and TDM measure requirements.

ACTIVE-5A: Bicycle Repair Station

Provide on-site tools and space for bicycle repair. The proposed project would provide this repair station within the class I bicycle parking area on the building's ground floor.

CSHARE-1: Car-Share Parking

Provide car-share space parking as required by the Planning Code. To meet this requirement, the proposed project would provide six car-share spaces, to be located on Level B2.

DELIVERY-1: Delivery Supportive Amenities

The proposed project would facilitate delivery services by providing a staffed reception area for receipt of deliveries, and offering one of the following: (1) clothes lockers for delivery services, or (2) temporary storage for package deliveries, laundry deliveries, and other deliveries. These amenities would be provided on Level B1.

FAMILY-1: Family TDM Amenities

The proposed project would provide an on-site secure location on Level B1 for storage of personal car seats, strollers, and cargo bicycles or other large bicycles.

INFO-1: Multimodal Wayfinding Signage

The proposed project would provide multimodal wayfinding signage in key locations to support access to transportation services and infrastructure, including: transit, bike share, car-share parking, bicycle parking and amenities (including repair stations and fleets), showers and lockers, taxi stands, and shuttle/carpool/vanpool pick-up/drop-off locations.

INFO-2: Real Time Transportation Information Displays

The proposed project would provide real time transportation information on displays in prominent locations on the project site and within the buildings to highlight sustainable transportation options and support informed trip-making.

¹⁶ Table 1: Pedestrian and Streetscape Elements per the Better Streets Plan (Section 138.1)

[http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$sync=1](http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sync=1)

INFO-3: Tailored Transportation Marketing Services

The property owner would provide promotions and welcome packets to all new residents/employees, personal consultation for each new resident/employee, and request commitment to try new transportation options.

Streetscape Improvements. The proposed project's streetscape plan called the "Market Octavia Streetscape Plan" would conform to Market and Octavia Plan and San Francisco Planning Department Standards and is shown on Figures 15 and 16. The eastern and western sidewalks of 12th Street would be expanded from 15 feet to a width of 21 feet (four feet of frontage, eight feet of pedestrian throughway, and nine feet of pedestrian furnishing space), as shown on Figure 16. Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets. A raised crosswalk would be installed at the intersection of 12th and Stevenson streets. The "pedestrian island" at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection.

Two 60-foot-long white and yellow loading zones¹⁷ are proposed along the South Van Ness Avenue frontage, near the entrances to the residential lobbies, to provide an area for passenger drop-off and pick up, and commercial loading activities. Proposed changes to the right-of-way are described below. Four passenger and commercial loading zones are proposed on 12th Street, one 100-foot-long loading zone and one 40-foot -long loading zone on each side of 12th Street. Each 100 foot loading zone would be comprised of one ADA loading space, one ADA parking space, one passenger loading space, one commercial loading space, and one regular parking space. Each 40 foot loading zone would be comprised of one passenger loading space and one commercial loading space.

In addition to the streetscape improvements described above, the proposed project would install 33 net new street trees and class II bicycle racks along South Van Ness Avenue, Market Street, and 12th Street, in compliance with the City's Better Streets Plan.

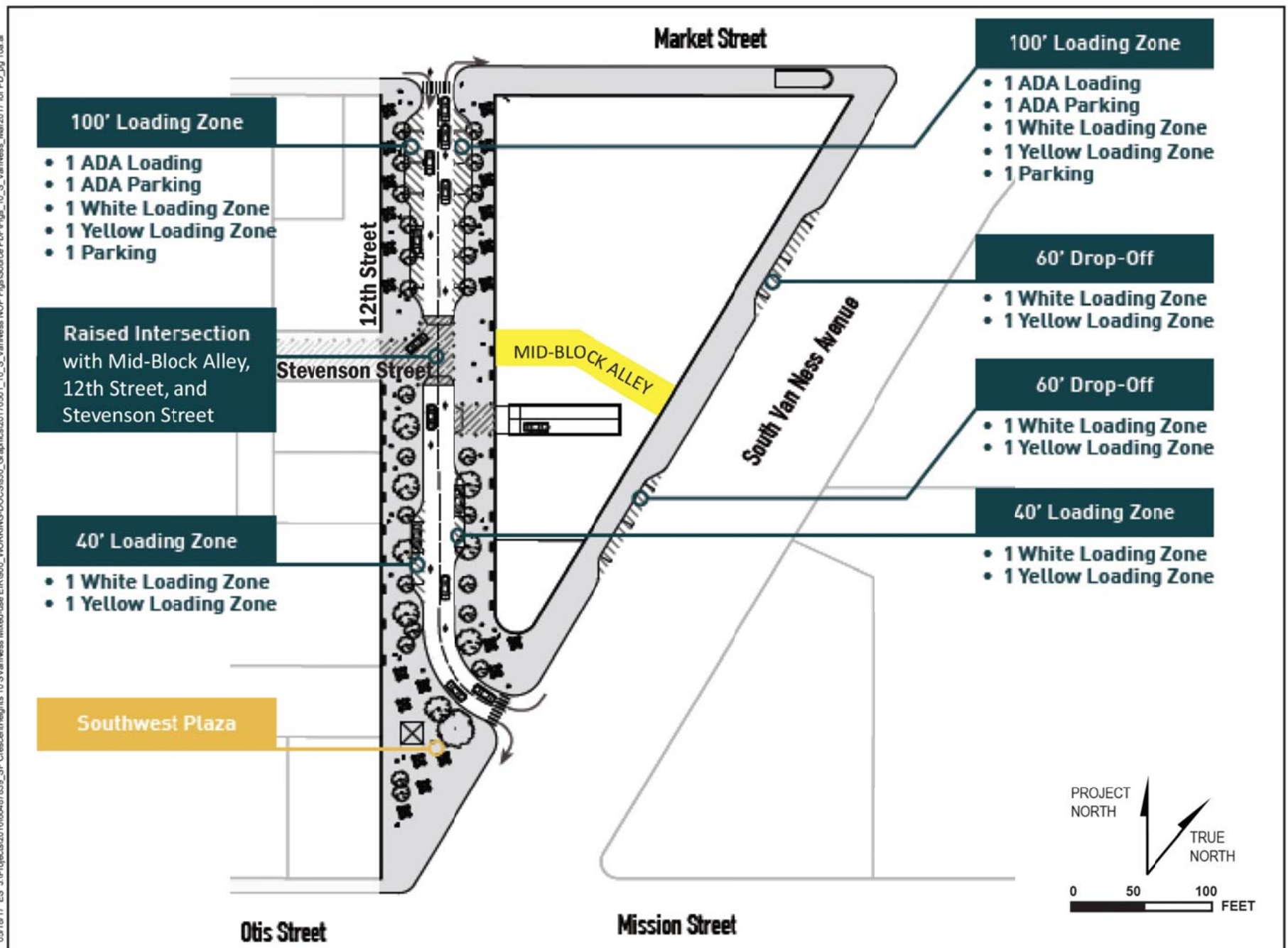
Sustainability. The San Francisco Building Code includes a chapter on Green Building Requirements; these requirements establish either Leadership in Energy and Environmental Design (LEED)¹⁸ certification levels or Green Point Rated¹⁹ system points for types of proposed residential and commercial buildings. The proposed project would seek LEED silver certification, which includes measures applicable to both construction and operation of the proposed project. The proposed project would incorporate a number of sustainability features, including stormwater and rainwater collection features and a wastewater treatment system. The wastewater treatment system would be sized to treat and utilize recycled water from the proposed building for non-potable uses in the building, including flushing toilets, irrigation, and make-up water for the HVAC system. The proposed project would remove the existing 28 trees along the project frontage. In compliance with Public Works Code Section 806(c)(2), the proposed project would install new 61 street trees at every 20 feet along the proposed project frontage for a total of 33 net new street trees along the project frontage.

¹⁷ White zones are for passenger loading and unloading during certain hours, with a time limit of 5 minutes. Yellow zones are for commercial loading activities.

¹⁸ LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which involves third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, indoor air quality, use of recycled materials, and proximity to public transportation.

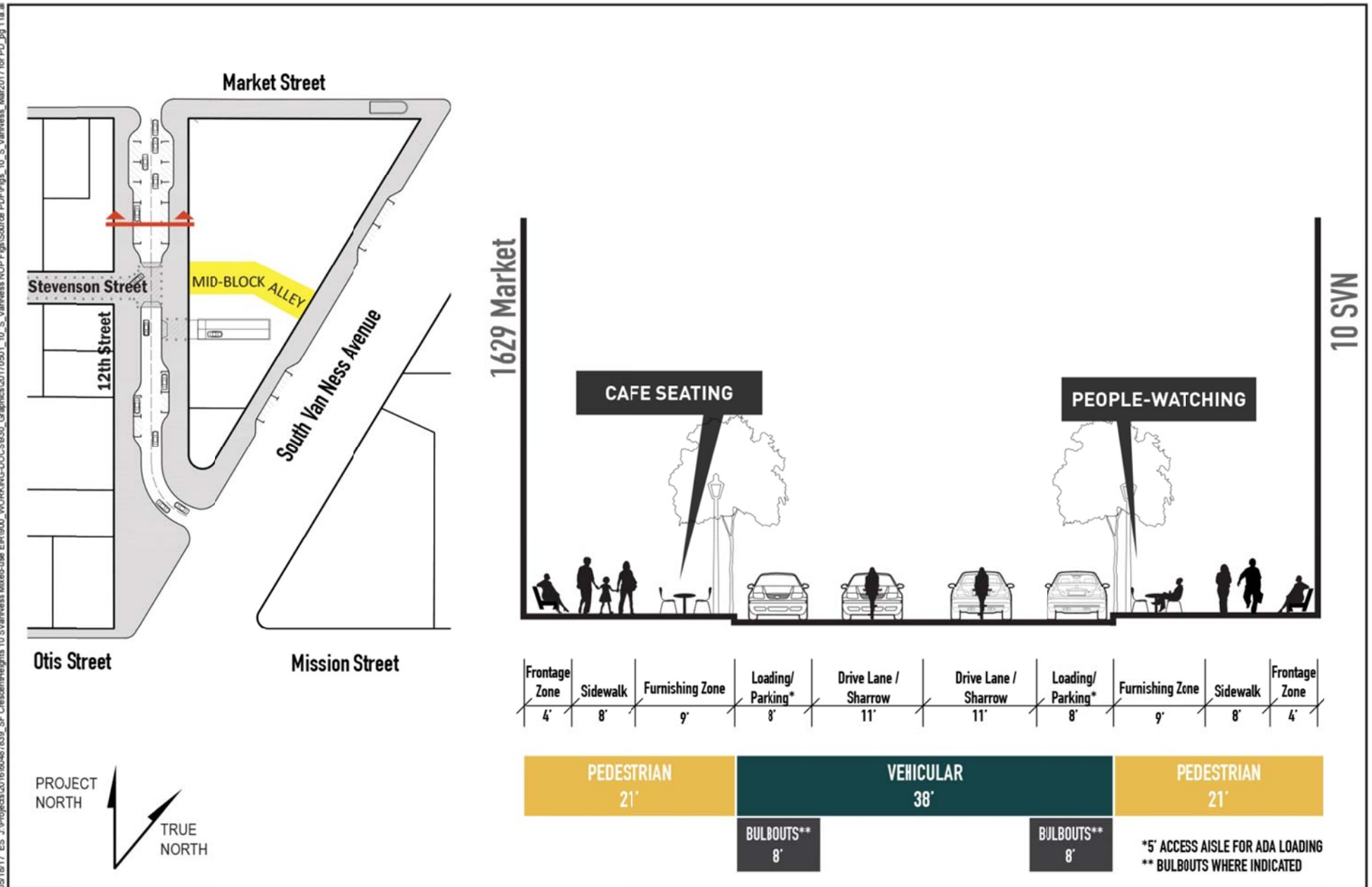
¹⁹ Green Point Rated is a program of Build it Green, established for evaluating residential building performance in the areas of resource conservation, indoor air quality, water conservation, energy efficiency, and livable communities (infill development, increased density, diversity of land uses).

The project sponsor plans to submit an application to the Governor's office seeking certification of the proposed project as an Environmental Leadership Development Project (ELDP) pursuant to Assembly Bill 900, Jobs and Economic Improvement through Environmental Leadership Act of 2011, and CEQA Section 21178 et seq. An ELDP is a project that does not result in any net greenhouse gas (GHG) emissions and achieves a 10 percent higher standard for transportation efficiency than comparable projects. The ELDP certification process is separate from the environmental review process conducted for the proposed project.



Source: SITE LAB Urban Studio, 2017

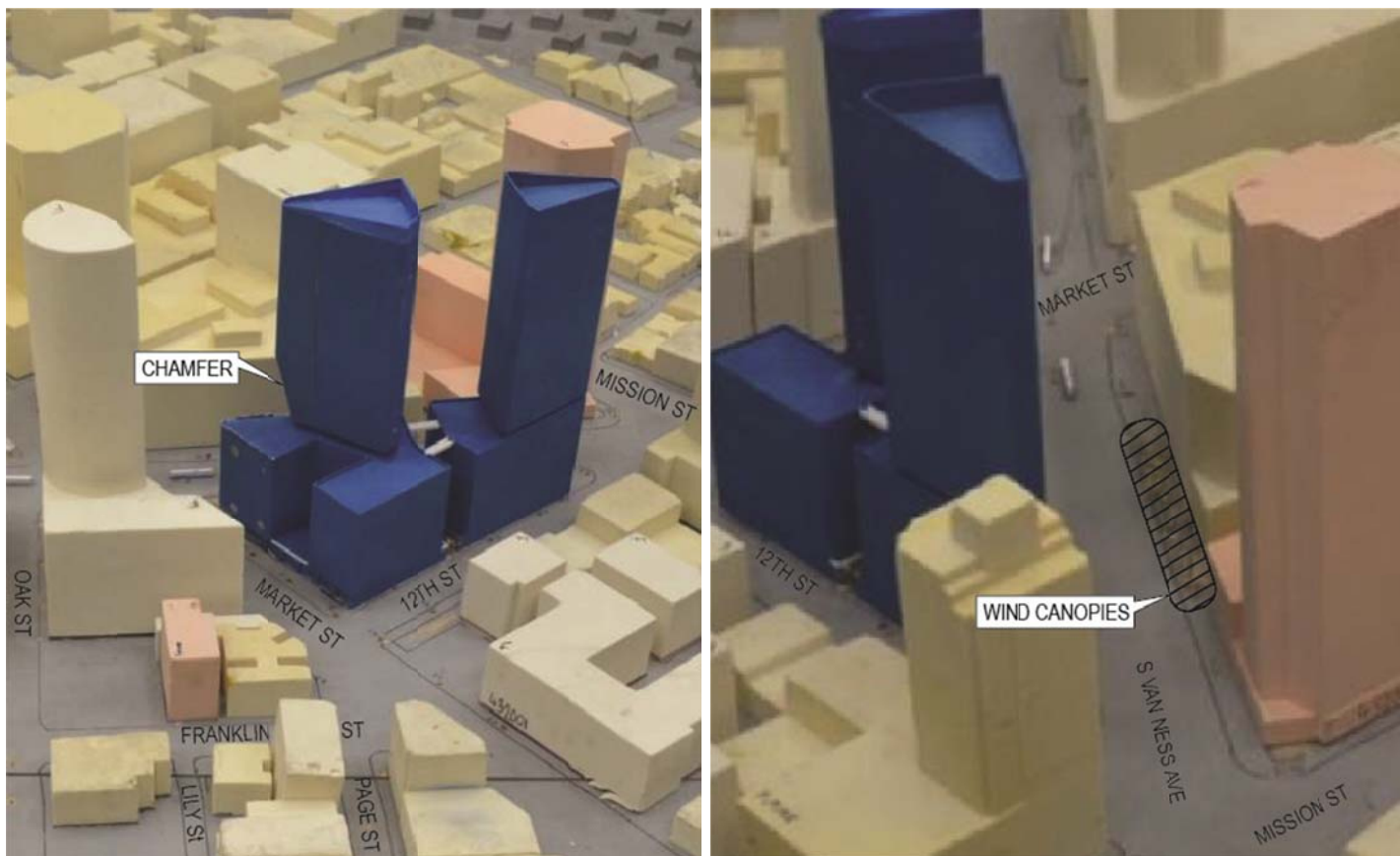
Figure 15: Proposed Project - Market Octavia Streetscape Plan (Plan View)



Source: SITELAB Urban Studio, 2017

Figure 16: Proposed Project - Market Octavia Streetscape Plan (12th Street Right-of-Way Section)

Other Design Features. As a result of preliminary wind test modelling in accordance with Planning Code Section 148, the north face of the proposed north tower would be chamfered²⁰ from Level 13 to Level 22, and 75% porous wind canopies would be constructed at the sidewalk level along the east side of South Van Ness Avenue between Market Street and Mission Street to provide protection to the public from hazardous wind conditions, as shown in Figure 17. The canopies would be freestanding trellis-like structures with cantilevered segments, supported by vertical columns. The grouping of discontinuous canopies would measure approximately 230 feet long in total from northeast to southwest at the sidewalk and would be up to approximately 15 to 20 feet tall. The proposed project also includes construction of similar porous canopies at both ends of the proposed mid-block alley in between the two towers. A porous free-standing canopy would also be located at the northwest corner of the proposed project and a solid awning would extend from the northwest corner of the north tower for approximately 10 feet on the ground floor.



Source: BMT Fluid Mechanics 2017

Figure 17: Proposed Project Design Features

²⁰ A chamfer is a flat surface resulting from cutting off the edge of a volume or a symmetrical sloping surface at an edge or corner.

Construction. This section describes the construction activities associated with the proposed project. Construction is anticipated to occur over approximately 36 months, and would include the following phases: (1) demolition; (2) shoring and excavation; (3) foundation and podium construction; (4) superstructure/skin; and (5) interior work. Construction hours would typically be from 7:00 a.m. to 8:00 p.m., Monday through Thursday; and 7:00 a.m. to 5:00 p.m. on Fridays and Saturdays. Limited evening work (between 8:00 p.m. to 7:00 a.m.) and work on weekends (7:00 a.m. to 5:00 p.m.) would be required for Phases 3 and 4.

As discussed previously, a subsurface BART easement runs underneath the northern portion of the project site, as shown on Figure 2. In this portion of the site, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnels. The northern half of the project site is within the BART zone of influence (ZOI). The portion of the structure within the BART easement would be supported by a concrete mat foundation, which would ensure that the existing load imposed on the BART tunnels is maintained. Outside of the easement, but within the BART ZOI, the tower and podium structures would be supported by a deep foundation consisting of double-cased, drilled cast-in-place piers. The installation of drilled cast-in-place piers involves digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving is required. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation.²¹

The project site would be excavated up to approximately 40 feet below grade in the northern portion and 50 feet below grade in the southern portion of the site. The deep foundation cast-in-place piers would be constructed well below 50 feet, to the appropriate design depth. Excavation in the northern portion would be to a shallower depth due to the presence of the subsurface BART easement. The project would require approximately 100,000 cubic yards of excavated soil be removed from the project site and disposed of at an appropriate facility.

Construction activities would require temporary sidewalk and parking-lane closures for the entire construction period. The proposed project would develop and implement a construction management plan to anticipate and minimize transportation-related impacts of various construction activities associated with the proposed project. The construction management plan would ensure that overall circulation in the project area is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle access and connectivity. The program would supplement and expand, rather than modify or supersede, any manual, regulations, or provisions set forth by the SFMTA, the Department of Public Works or other City departments and agencies, and the California Department of Transportation.

²¹ Langan Treadwell Rollo, 2017a. Geotechnical Consultation 10 South Van Ness Avenue. March 2017. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, as part of Case File No. 2015-004568E.

PROJECT VARIANTS

This section describes the proposed single tower project variant and the straight-shot streetscape variant. As discussed above, the straight shot streetscape design could be included with the proposed project or with the single tower project variant.²²

Single Tower Project Variant

The project sponsor is also considering a taller building design consisting of a single tower and podium (see Figure 18). The single tower project variant would include construction of a 590-foot-tall, 55-story building (see Table 2).²³ Similar to the proposed project, the single tower project variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 610 feet.²⁴ The podium would vary in height, from approximately 90 to 139 feet along the Market Street frontage and up to approximately 164 feet along the southern frontage of the site, as shown on Figure 18.

The ground floor would contain the same uses as the proposed project, with comparable retail uses (see Figure 19), and a single residential lobby. As with the proposed project, 336 class I bicycle spaces would be provided on the ground floor for project residents and ground-floor retail spaces, and 61 class II bicycle spaces would be provided on the sidewalk adjacent to the project site. These bicycle spaces would meet Planning Code requirements. Vehicle parking would be the same as under the proposed project, with 518 vehicle parking spaces provided in a two-level subgrade parking garage/basement with an entrance off of 12th Street.

The single tower project variant would include up to approximately 984 dwelling units in a combination of studios and one-, two-, and three-bedroom units, similar to the proposed project. However, with the single tower project variant, the mix of units would consist of approximately 347 studios, 449 one-bedroom units, 166 two-bedroom units, and 22 three-bedroom units (typical floor plans are shown on Figures 20 and 21). Residential uses would be provided on Levels 3 through 55, with Level 2 serving as an amenity floor for the proposed residential uses. The pedestrian entrances to the residential lobby would be located on South Van Ness Avenue, and on the mid-block alley. One elevator from the parking garage/basement would provide access to the residential lobby. From the residential lobby, a second elevator would provide access to the tower. Elevator access may be available between the below-grade parking garage/basement and the retail spaces.

²² Although on Figures 22 and 23, the straight-shot streetscape variant is shown with a mid-block alley connecting South Van Ness Avenue to 12th Street, if the straight-shot streetscape variant were combined with the single tower project variant, the mid-block alley would be reconfigured to connect Market Street with 12th Street, as shown on Figure 19.

²³ The Van Ness and Market Downtown Residential Special Use District (SUD) encourages transit-oriented, high-density, mixed-use residential neighborhood development around the intersections of Market Street and Van Ness Avenue and Mission Street and Van Ness. The current height limit for building towers ranges from 250 to 400 feet. The Project Variant is intended to reflect the potential changes to the existing height limits proposed by the Market Street Hub Project (Hub Project). The Hub Project is expected to propose changes to existing height limits on certain parcels, including the project site, to provide greater variation in the heights of buildings proposed at the intersection of Market Street and Van Ness Avenue and to better ensure that the area's growth supports the City's goals for housing, transportation, the public realm, and the arts. The specific changes to the existing height limits proposed by the Hub Project have not yet been established.

²⁴ Pursuant to Planning Code Section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

**TABLE 2
PROPOSED PROJECT AND SINGLE TOWER PROJECT VARIANT CHARACTERISTICS**

Lot	Proposed Project			Single Tower Project Variant
	Dimensions			
Size	51,150 square feet			
Length	475 feet (South Van Ness Avenue)/288 feet (Market Street)/450 feet (12th Street)			
Proposed Building	Area (gsf)			
Residential ¹	935,745			935,250
Ground Floor Commercial (Retail)	30,350			30,450
Parking ²	102,000			101,992
Rooftop Mechanical	3,000			5,297
Total	1,071,095			1,072,989
Building Characteristics	Description			
Stories	North Tower/Podium	41 stories/12 stories		55 stories /15 stories (Tower/Podium)
	South Tower/Podium	41 stories /12 stories		
Height	North Tower/Podium	400 feet (up to 420 feet inclusive of the elevator penthouse ³)/114 feet		590 feet (up to 610 feet inclusive of the elevator penthouse ³)/164 feet (Tower/Podium)
	South Tower/Podium	400 feet (up to 420 feet inclusive of the elevator penthouse ³)/120 feet		
Ground Floor	Retail: 30,350 gsf multiple tenant spaces Residential: 2 residential lobbies, and 336 class I bicycle parking spaces			Retail: 30,450 gsf multiple tenant spaces Residential: 1 residential lobby, and 336 class I bicycle parking spaces
Basement	518 vehicle parking spaces			518 vehicle parking spaces
Proposed Units	Amount (Approx. Percent)			
Dwelling Units	984			984
	North Tower	South Tower	Total	
Studio	267 (27%)	108 (11%)	375 (38%)	347 (35%)
1-Bedroom	294 (30%)	167 (17%)	461 (47%)	449 (46%)
2-Bedroom	51 (5%)	49 (5%)	100 (10%)	166 (17%)
3-Bedroom	19 (2%)	29 (3%)	48 (5%)	22 (2%)
Vehicle Parking Spaces ⁴	518			518
Bicycle Parking Spaces ⁵	397			397
Open Space ⁶	Area (sf)			
Publicly-accessible	2,975			12,091
Common	45,176			25,565
Private	0			9,550

Source: 10 South Van Ness LLC, 2017.

Notes:

1 Includes first-floor non-retail uses and second-floor residential amenity uses.

2 Includes parking and basement mechanical equipment.

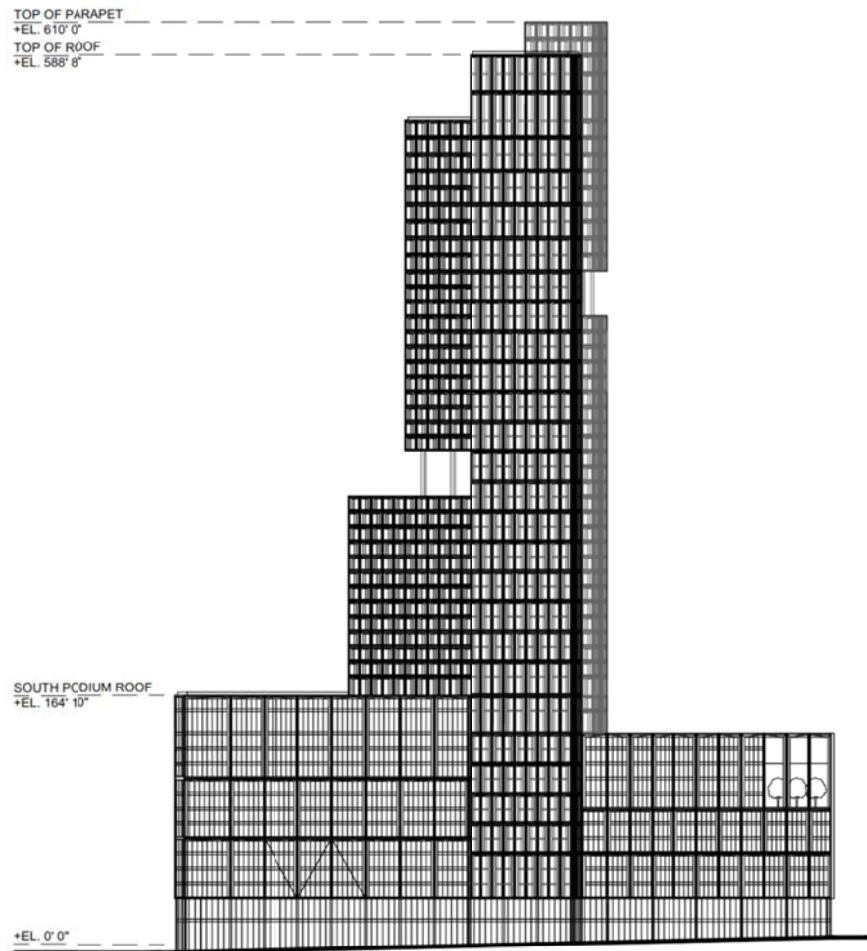
3 The Planning Code Height and Bulk designations for the project site exempt elevator penthouse, roof screens, and other rooftop appurtenances from height limits.

4 Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.

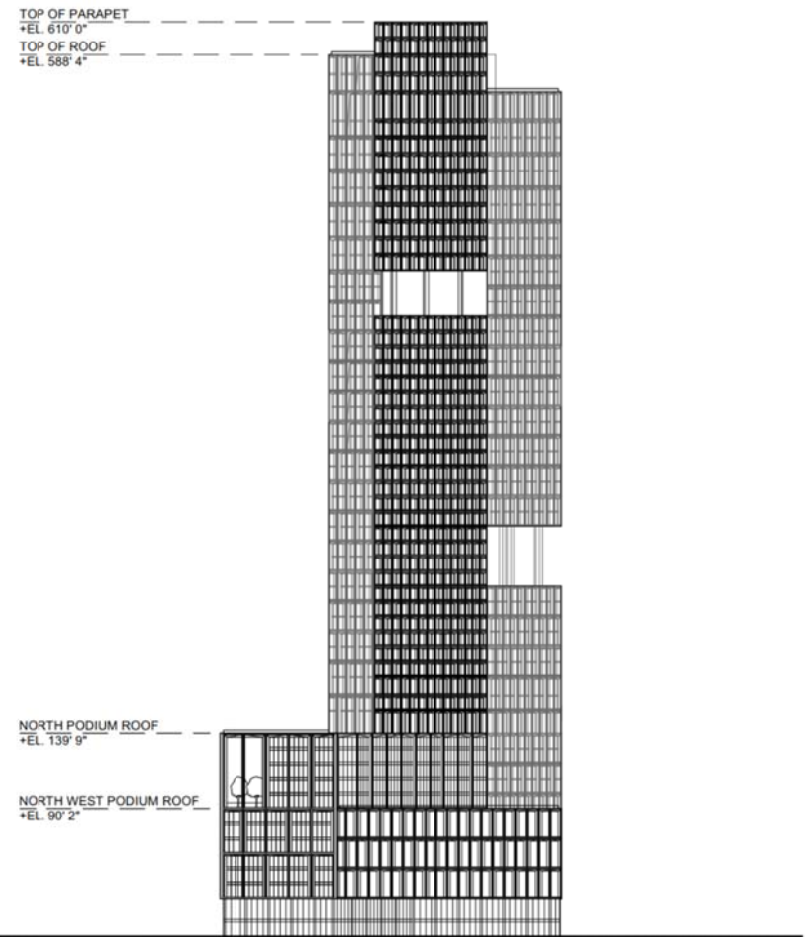
5 Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.

6 Provided in compliance with Planning Code Section 736.93 Usable Open Space Per Residential Unit.

ELEVATIONS



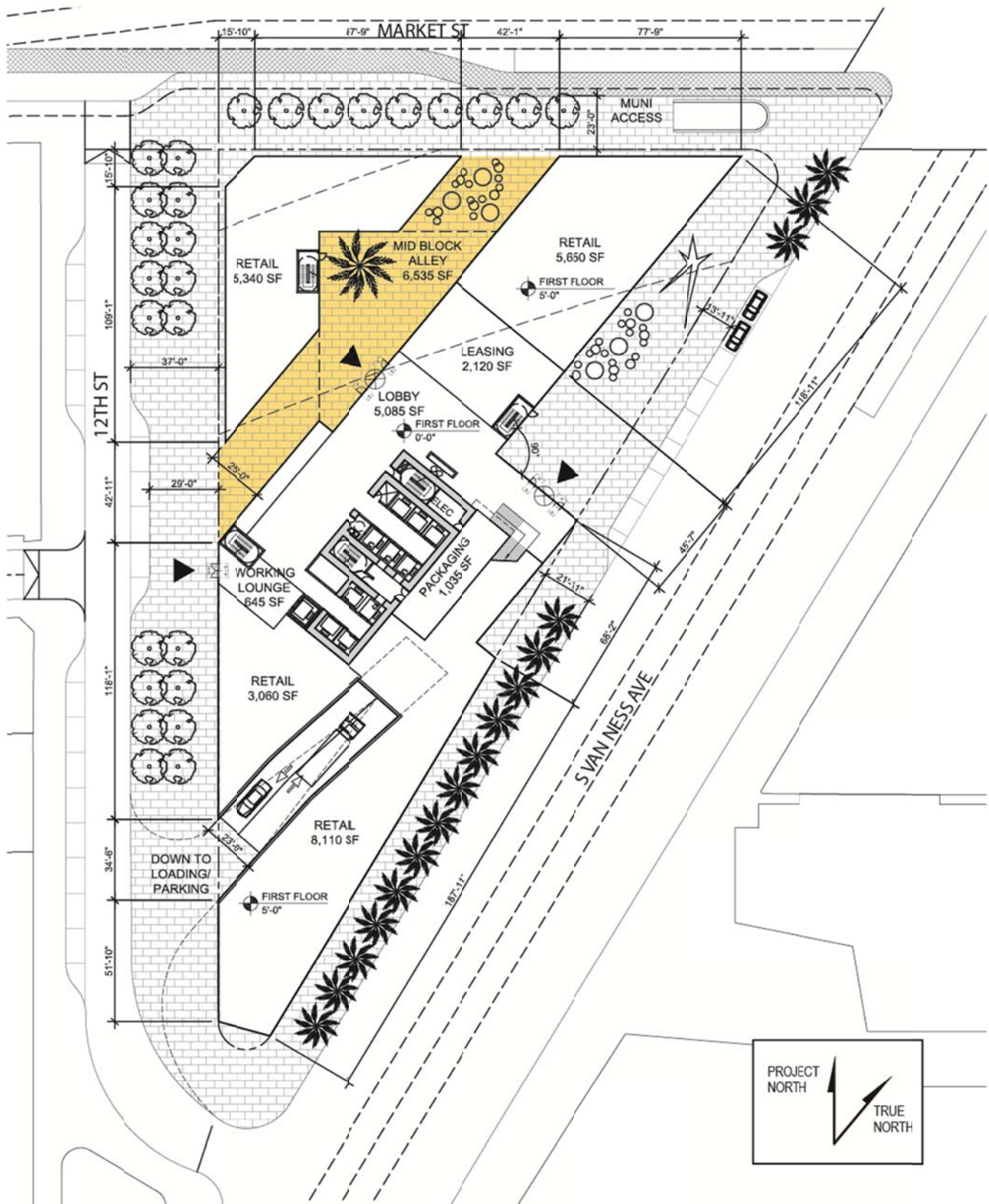
SOUTH VAN NESS ELEVATION



MARKET ELEVATION

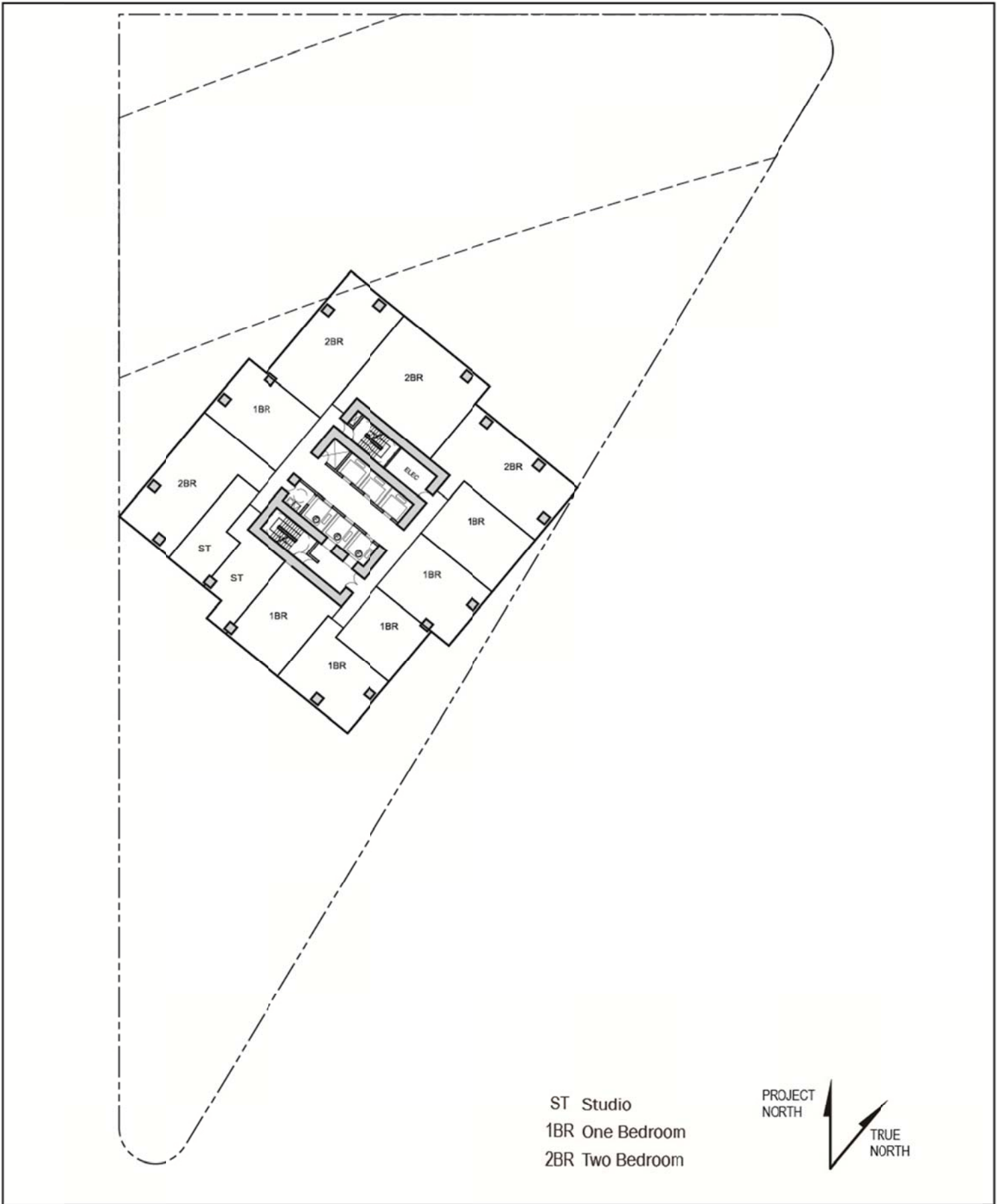
Source: KPF Associates, 2017

Figure 18: Single Tower Project Variant – Building Elevations Looking West and South Toward Project Site from South Van Ness Avenue and Market Street



Source: KPF Associates, 2017

Figure 19: Single Tower Project Variant – Ground Floor Plan



Source: KPF Associates, 2017

Figure 21: Single Tower Project Variant – Levels 29-48 Representative Floor Plans

Open Space. The project variant would include usable open space in a combination of publically-accessible open spaces (12,091 square feet), common useable open spaces (25,565 square feet), and private open space (9,550 square feet) for a total of 47,206 square feet.²⁵ The publically-accessible open space would consist of a mid-block alley connecting Market Street to 12th Street and a pedestrian plaza along the northeasterly South Van Ness Avenue frontage, as shown on Figure 19. The common useable open space would be provided on Levels 14, 16, 29, 37, and 49.

Parking/Loading and Mechanical Equipment. The single tower project variant would include the same parking and loading facilities and mechanical equipment as the proposed project. As with the proposed project the generator would be located in the basement with the intake at the ground level.

Circulation and Access. The single tower project variant would include the same circulation and access as the proposed project, with the exception of the location of lobby entrances and the configuration of the mid-block alley. For the project variant, there would be two entrances to the single residential lobby provided, one off of the mid-block alley and one off of South Van Ness Avenue. The proposed mid-block alley would provide public access through the project site between Market Street and 12th Street.

Transportation Demand Management. The single tower project variant would include the same TDM plan as the proposed project.

Streetscape Improvements and On-Street Parking. The single tower project variant would include the same streetscape improvements and on-street parking and loading as the proposed project.

Sustainability. The single tower project variant would incorporate the same sustainability features as the proposed project. The project sponsor would also seek ELDP certification for the single tower project variant.

Other Design Features. Wind features for the single tower project variant would be designed, if needed, as part of the final wind tunnel testing for the variant.

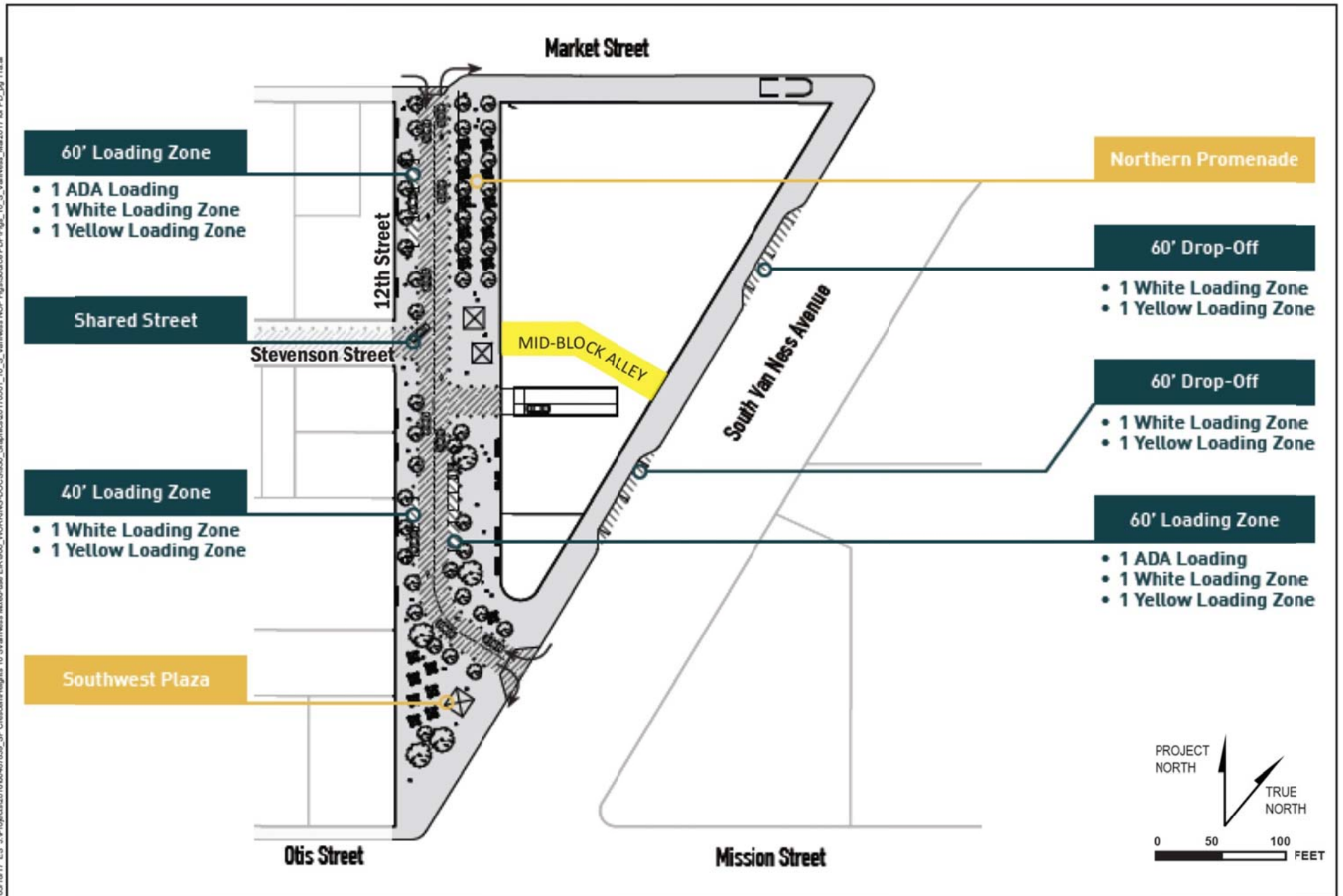
Construction. Construction activities would be the same under the single tower project variant as under the proposed project, in terms of phasing, duration and potential for temporary sidewalk and roadway closures. Like the proposed project, the portion of the structure within the BART easement would be supported by a concrete mat foundation. Outside of the easement, but within the BART ZOI, the tower and podium structures would be supported by a deep foundation consisting of double-cased, drilled cast-in-place piers. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation.²⁶ During construction of the single tower project variant, pile driving would not be performed.

²⁵ Private open space is open space only accessible to one unit or a certain group of units.

²⁶ Langan Treadwell Rollo, 2017b. Geotechnical Investigation 10 South Van Ness Avenue. June 2017. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, as part of Case File No. 2015-004568E.

Straight-shot Streetscape Variant

The straight-shot streetscape variant, shown on Figures 22 and 23, would exceed Market and Octavia Plan and San Francisco Planning Department standards by extending the eastern sidewalk and pedestrian promenade adjacent to the proposed project on 12th Street to 40 feet in width (see Figure 23). The design would include one 60-foot-long loading zone, comprised of one ADA loading space, one passenger loading space, and one commercial loading space on each side of 12th Street, as well as one 40-foot-long loading zone, comprised of one commercial loading space and one passenger loading space on the west side of 12th Street. The straight-shot streetscape variant would also include a pedestrian plaza on the southwest corner of the project site as is proposed under the Market Octavia Streetscape Plan. On 12th Street, the eastern sidewalk would be expanded to a width of 40 feet (nine feet of pedestrian throughway, 25 feet for a pedestrian plaza, and an additional six feet of pedestrian throughway), while the western sidewalk would be expanded to a width of 18 feet (four feet of buffer, 10 feet of pedestrian throughway, and an additional four feet of buffer), as shown on Figure 23. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction.



Source: SITELAB Urban Studio, 2017

Figure 22: Straight-Shot Streetscape Variant (Plan View)

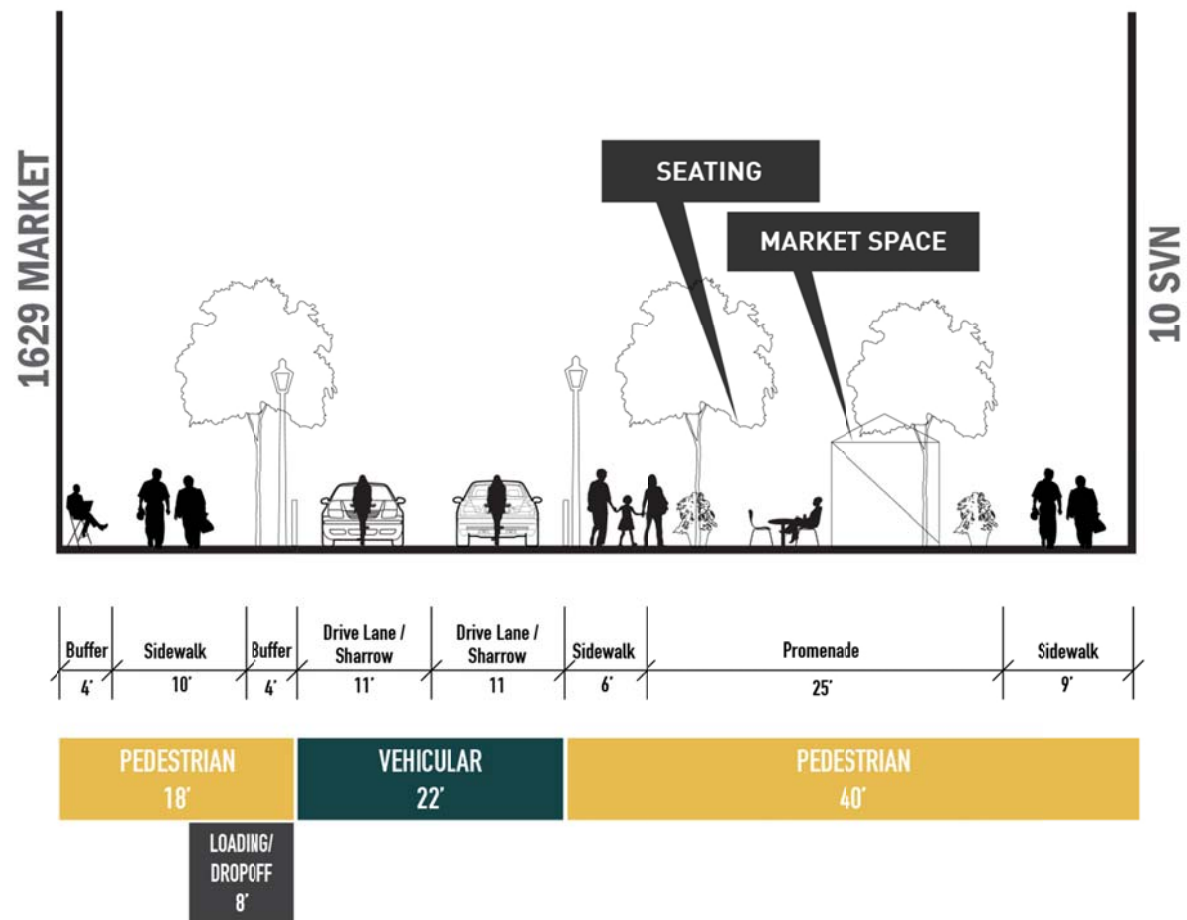


Figure 23: Straight-Shot Streetscape Variant (12th Street Right-of-Way Section)

REQUIRED APPROVALS

This section describes the approvals that would be required for the proposed project and variants.

Approvals Required for the Proposed Project and Variants

Actions by the Planning Commission

- Approval of a Downtown Project Authorization by the Planning Commission per *Planning Code* Section 309 for projects within a C-3 zoning district more than 50,000 square feet in area or more than 75 feet in height, and for granting an exception to the requirements of certain sections of *Planning Code* Section 146(a) related to sunlight access to certain sections of Market Street.
- Approval of a Conditional Use Authorization by the Planning Commission per *Planning Code* Section 309(a)(4) to permit accessory residential parking in an amount greater than one car parked for each four dwelling units. *Planning Code* Section 309(a)(4).
- Approval of the project under *Planning Code* Section 309, including possible exceptions with regard to ground-level winds.
- Approval of an In-Kind Improvements Agreement under *Planning Code* Section 424.3(c) for community improvements for the neighborhood infrastructure portion of the Van Ness and Market Downtown Residential Special Use District Neighborhood Infrastructure Fee.

Actions by Other City Departments

- *Planning Department and Department of Building Inspection (DBI)* – Approval of the site permit and addenda thereto.
- *DBI* – Approval of demolition, grading, and building permits for the demolition of the existing buildings and construction of the new building. Permit for underpinning of adjacent structures. Night Noise Permit for nighttime construction.
- *SFMTA Board of Directors* – Approval of the proposed curb modifications, parking space removal, and bicycle corrals on South Van Ness Avenue, Market Street, and 12th Street;
- *SFMTA Department of Parking and Traffic* - Approval of a Special Traffic Permit for use of a public street space during project construction; approval of foundation, shoring, and dewatering systems as they relate to the Muni Zone-of-Influence.
- *SFMTA Color Cub Program* - Approval of a request for on-street loading spaces on South Van Ness Avenue and 12th Street.
- *Bureau of Streets and Mapping, San Francisco Public Works* – Subdivision and condominium map approval and encroachment permits for sidewalk underground vaults. Permit for removal and planting of street trees; approval of a Street Space Permit for use of a public street space during project construction (including construction of the proposed wind canopies); street and sidewalk permits for any modifications to public streets, sidewalks, or curb cuts.

- *Department of Public Works* - Street Encroachment Permit, to be approved by the Director of Public Works, and by the Board of Supervisors if required by the Director, for a wind canopy to be located in the public right-of-way.
- *San Francisco Public Utilities Commission* – Approval of any changes to sewer laterals. Approval of an erosion and sediment control plan prior to commencing construction, and compliance with post-construction stormwater design guidelines, including a stormwater control plan.
- *San Francisco Department of Public Health* – Approval of a dust control plan because the site is in excess of 0.5 acre (Article 22B). Approval of a ventilation plan, in compliance with San Francisco Health Code, Article 38, because the proposed project site is located within an area that is identified in the Air Pollutant Exposure Zone Map.²⁷ Approval of a Site Mitigation Plan under the Maher Ordinance (Article 22A), since the proposed project is located within the Maher Ordinance Area.²⁸
- *Board of Supervisors* – Approval of sidewalk widening.
- *Recreation and Park Commission* - Joint determination with the Planning Commission that the project complies with the requirements of Planning Code Section 295.

Actions by Other Agencies

- *Bay Area Air Quality Management District* – Issuance of permits for the installation and operation of an emergency generator.
- *BART* – Plan review and approval of shoring and foundation within the BART ZOI, and issuance of a permit to work within or adjacent to the right-of-way.
- Governor’s approval of project sponsor’s Assembly Bill 900 (AB 900) application.

Additional Approvals Required for the Single Tower Project Variant

Actions by the Board of Supervisors

- *Planning Code Amendments for Height District Reclassification*: The building height of the single tower project variant would exceed the height limit of the existing 400-R-2 Height and Bulk District. The Board of Supervisors would need to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to Planning Code Section 302.

Actions by the Planning Commission

- *Planning Code Amendments for Height District Reclassification*: Recommendation to the Board of Supervisors to Approve the Amendments for Height District Reclassification, as described above.

²⁷ SFDPH, 2014. Air Pollutant Exposure Zone Map.

<https://www.sfdph.org/dph/files/EHSdocs/AirQuality/AirPollutantExposureZoneMap.pdf>

²⁸ SFDPH, 2015. Maher Ordinance Map. <https://www.sfdph.org/dph/eh/HazWaste/hazWasteSiteMitigation.asp>

SUMMARY OF POTENTIAL ENVIRONMENTAL ISSUES

The proposed project, single tower project variant, and straight-shot streetscape variant, could result in potentially significant environmental impacts. This section describes how the San Francisco Planning Department (Planning Department) will prepare an initial study and environmental impact report (EIR) to evaluate the potential physical environmental impacts of the proposed project and project variants. An initial study will assess both project-specific and cumulative impacts for all topics required under the California Environmental Quality Act (CEQA). As required by CEQA, an EIR will further examine those issues identified in the initial study to have potentially significant impacts, identify mitigation measures, and analyze whether the proposed mitigation measures would reduce potentially significant environmental impacts to a less-than-significant level. The Initial Study will be published as a separate document with a 30-day public review period and will also be included as an appendix to the EIR.

The Planning Department will convene a public scoping meeting at which public comment will be solicited on the issues that will be covered in the EIR (see “Public Scoping Process” of this Notice of Preparation (NOP) for more details). It is anticipated that the EIR will address the following environmental topics: cultural resources (specifically historic resources), transportation and circulation, and wind. Environmental impacts related to land use and land use planning, population and housing, cultural resources (specifically archaeological resources, tribal resources, and human remains), noise, air quality, greenhouse gas emissions, shadow, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral and energy resources, and agricultural and forest resources are anticipated to be analyzed in the initial study, unless significant impacts are identified that cannot be mitigated to a less-than-significant level, in which case, analysis of any such impacts will be included in the EIR. The environmental issues to be addressed in the initial study are described briefly below. For all topics below, whether included in the initial study or also in the EIR, the analysis will consider the impacts of the proposed project and the variants impacts individually as well as cumulative impacts resulting from other reasonably foreseeable projects.

Since the proposed project and variant meet the requirements of a transit-oriented infill development project under Senate Bill 743, aesthetics and parking will not be considered in determining if the proposed project or variant has the potential to result in potentially significant environmental impacts. However, visual renderings will be included within the initial study and EIR project description for reference.

Land Use and Land Use Planning

The Land Use and Land Use Planning initial study analysis will describe existing land uses on the project site and in the project vicinity and analyze whether the proposed project or variants would physically divide an established community or result in conflicts with the Market and Octavia Area Plan or other land use plans adopted for the purpose of mitigating an environmental effect.

Population and Housing

The Population and Housing initial study analysis will analyze the potential for the proposed project or variants to result in impacts related to direct or indirect population growth, employment and housing provision and balance, and residential displacement.

Cultural Resources

The Cultural Resources initial study analysis will address historic resources, archaeological resources, tribal resources, and human remains. The building on the project site is considered a historic resource for the purpose of CEQA review. The proposed project and single tower project variant would demolish the existing building onsite. The historic significance of the existing building and the proposed project's impacts on the resource are described in the Historic Resource Evaluation (HRE) report,²⁹ prepared by a qualified consultant and independently evaluated by the Planning Department's Preservation staff, who issued a Historic Resource Evaluation Response (HRER).³⁰ The EIR will describe the historic resources on the project site, summarize applicable portions of the HRE and HRER, and identify the potential impacts on historic resources. The initial study will analyze potential effects on archaeological resources, tribal cultural resources, and human remains.

Transportation and Circulation

The proposed project and single tower project variant would generate new vehicle trips, generating additional vehicle miles traveled (VMT) to and from the project site. The proposed project and variant would also result in increases in transit ridership, pedestrian and bicycle activity, and loading demand. A Transportation Impact Study (TIS) has been prepared for the proposed project and variant in accordance with the Planning Department's Transportation Impact Analysis Guidelines for Environmental Review (October 2002) and the Planning Commission Resolution 19579, which established VMT as the appropriate transportation review metric. The initial study will analyze transit conditions, vehicle miles traveled, traffic hazards, pedestrian and bicycle conditions, freight loading, emergency vehicle access, and construction-related transportation impacts and determine mitigation measures for impacts that are determined to be significant. The EIR will include an analysis of potentially significant operation and construction impacts on the transportation and circulation system.

Noise

The Noise initial study analysis will include analysis of short-term construction-related noise and vibration impacts that could result from the proposed project and the single tower project variant. The analysis will evaluate the potential for noise generated by the proposed project to adversely affect nearby sensitive land uses and include a discussion of noise compatibility standards for the proposed residential and retail land uses.

Air Quality

The Air Quality initial study analysis will include an analysis of the proposed project's and variant's consistency with applicable air quality plans and a quantitative analysis of the potential for the proposed

²⁹ SWCA Environmental Consultants/Turnstone, 2016. Part I Historic Resources Evaluation. Final. September 2016.

³⁰ San Francisco Planning Department, 2016. Historic Resource Evaluation Response, 10 South Van Ness Avenue. November 16, 2016.

project to result in emissions of criteria air pollutants and other toxic air contaminants (TACs) that may affect sensitive populations. The analysis will also discuss the potential for the proposed project or variant to result in sources of odor. The Air Quality analysis will discuss air pollutant emissions during both construction and operation. The analysis will also summarize the results of a health risk assessment, which will be prepared to evaluate potential long-term health effects of emissions from both project construction and operation.

Greenhouse Gas Emissions

The Greenhouse Gas Emissions initial study analysis will address the proposed project's and variant's consistency with the City's Greenhouse Gas Reduction Strategy. The analysis will determine if the proposed project or variant could result in greenhouse gas emissions that would result in a significant impact on the environment.

Wind and Shadow

The proposed project and variant would change wind conditions at the project site and in the vicinity in such a way that would substantially affect public areas. A Wind Microclimate Study (WMS) will be prepared for the proposed project and variant to evaluate the existing wind conditions at and around the project site and the extent to which the proposed project or variant would result in wind conditions substantially affecting public areas. The EIR will summarize the results of the WMS, include an analysis of ground-level wind impacts, and determine mitigation measures for wind impacts that are determined to be significant.

The Shadow initial study analysis will include an evaluation of the potential for the proposed project or variant to result in shadow impacts on City parks and other publically-accessible open spaces. The analysis will be supported by a Shadow Technical Memorandum, evaluating the extent to which shadows cast by the proposed project or variant could adversely affect City parks and publically-accessible open spaces.

Recreation

The Recreation initial study analysis will analyze whether the proposed project or variant would physically degrade existing parks and recreational facilities or require the construction or expansion of parks and recreational facilities that could have a physical effect on the environment.

Utilities and Service Systems

The Utilities and Service Systems initial study analysis will include a discussion of potable water and wastewater treatment capacity as well as disposal capacity of solid waste that would be generated by the proposed project or variant. This topic will also include an assessment of whether the proposed project or variant would require the construction of new water supply, wastewater treatment, and/or stormwater drainage facilities, and, if so, whether that construction could result in adverse environmental impacts. A

Water Supply Assessment was adopted for the proposed project and variant in accordance with CEQA Guidelines Section 15155 and sections 10910 to 10915 of the California Water Code.³¹

Public Services

The Public Services initial study analysis will analyze whether existing public service providers (e.g., police and fire protection, schools, etc.) would be adversely affected by the proposed project and variant so as to require new or physically altered facilities, the construction of which could cause significant environmental impacts.

Biological Resources

The Biological Resources initial study analysis will discuss the existing biological resources or habitats that could be affected by the proposed project or variant, such as trees or the movement of any native resident or migratory bird species, and the potential for the proposed project or variant to result in a substantial adverse effect on these biological resources or habitats.

Geology and Soils

The Geology and Soils initial study analysis will evaluate the susceptibility of the project site to seismic activity, liquefaction, landslides, erosion, soil stability, and risks to life or property. The analysis will also include whether or not the proposed project or variant would substantially change the topography or any unique geologic or physical features of the site, or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. In addition, the analysis will also discuss plan review requirements with respect to construction above the BART tunnels that pass beneath the project site. Because the project site is located within the BART zone of influence (ZOI), BART engineering would review the project plans as well as supporting documentation, including but not limited to the geotechnical report, dewatering monitoring and recharging plans, a vibration monitoring plan, a foundation plan, and an excavation plan for any area within the ZOI.

Hydrology and Water Quality

The Hydrology and Water Quality initial study analysis will evaluate the proposed project's or variant's potential to violate water quality standards or waste discharge requirements or result in adverse effects to groundwater supplies. The analysis will also consider any affects to drainage patterns resulting from the proposed project or variant and evaluate the potential to create water runoff that could affect stormwater drainage systems. The analysis will also consider the potential of the proposed project or variant to place housing within an identified flood hazard area.

Hazards and Hazardous Materials

The Hazards and Hazardous Materials initial study analysis will evaluate the potential for the proposed project or variants to create a significant hazard to the public or the environment related to hazards hazardous materials through location on a hazardous materials site, the routine transport, use, or disposal of hazardous materials, the emission or release of hazardous soils or groundwater, or interference with an emergency response plan.

³¹ San Francisco Public Utilities Commission (SFPUC), 2017. Water Supply Assessment for the 10 South Van Ness Project. February 2, 2017.

Mineral and Energy Resources

The Mineral and Energy Resources initial study analysis will analyze potential impacts of the proposed project and variants related to existing mineral and energy resources.

Agricultural and Forest Resources

The Agricultural and Forest Resources initial study analysis will analyze potential impacts of the proposed project and variants related to existing agricultural and forest resources.

FINDING

This project may have a significant effect on the environment and an EIR is required. This determination is based upon the criteria of the State CEQA Guidelines, Sections 15064 (Determining Significant Effect) and 15065 (Mandatory Findings of Significance). The purpose of the EIR is to provide information about potential significant physical environmental impacts of the proposed project and variant, to identify possible ways to minimize the potentially significant impacts, and to describe and analyze possible alternatives to the proposed project. Preparation of an EIR notice of preparation, initial study, or EIR does not indicate a decision by the City to approve or disapprove a proposed project. However, prior to making any such decision, the decision makers must review and consider the information contained in the EIR.

ALTERNATIVES

Alternatives to be evaluated in the EIR for the proposed project will include, but not be limited to, a No Project Alternative, which will assume no change to the existing conditions on the project site, one or more alternatives that preserve all or most of the historic resources on the project site, and additional alternatives to address other significant effects of the proposed project or variants that are identified in the EIR. The alternatives considered and the analysis thereof is based upon the criteria of the State CEQA Guidelines, Section 15126.6 (Consideration and Discussion of Alternatives to the Proposed Project).

PUBLIC SCOPING PROCESS

Pursuant to the State of California Public Resources Code Section 21083.9 and California Environmental Quality Act Guidelines Section 15206, a public scoping meeting will be held to receive oral comments concerning the scope of the EIR. The meeting will be held on **August 2, 2017, from 6 p.m. to 8 p.m.** at **One South Van Ness Avenue, 2nd Floor Atrium**. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please contact the staff contact listed above at least 72 hours in advance of the meeting. Written comments will also be accepted at this meeting and until 5 p.m. on **August 11, 2017**. Written comments should be sent or emailed to Rachel Schuett, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103 or rachel.schuett@sfgov.org and should reference the project title and case number that is provided on the front of this notice.

State Agencies: If you work for a responsible State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR

when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.

July 6, 2017
Date

for Lisa Gibson
Environmental Review Officer

APPENDIX B

Notice of Availability/Initial Study



SAN FRANCISCO PLANNING DEPARTMENT

PUBLIC NOTICE Availability of Initial Study

Date: May 2, 2018
Case No.: 2015-004568ENV
Project Title: 10 South Van Ness Avenue Mixed-Use Project
Zoning: C-3-G (Downtown-General Commercial)
Van Ness and Market Downtown Residential Special Use District 120-R-
2/120/400-R-2 Height and Bulk Districts
Plan Area: Market and Octavia Area Plan
Block/Lot: 3506/004 and 003A
Lot Size: 51,150 square feet (1.17 acres)
Project Sponsor: 10 SVN, LLC
c/o Jim Abrams, J. Abrams Law, P.C. – (415) 999-4402
jabrams@jabramslaw.com
Lead Agency: San Francisco Planning Department
Staff Contact: Rachel Schuett – (415) 575-9030
rachel.schuett@sfgov.org

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

To Responsible Agencies, Trustee Agencies, and Interested Parties:

RE: NOTICE OF AVAILABILITY OF THE INITIAL STUDY FOR THE 10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT; PLANNING DEPARTMENT CASE NO. 2015-004568ENV; STATE CLEARINGHOUSE NO. 2017072018

This notice is to inform you of the availability of the Initial Study for the 10 South Van Ness Avenue Mixed-Use Project, described below. The Planning Department previously determined that this project could have a significant effect on the environment, and required that an Environmental Impact Report (EIR) be prepared. A Notice of Preparation of an EIR was circulated for a 30-day public review period on July 12, 2017. The Planning Department held a public scoping meeting to receive comments on the scope and content of the environmental analysis on August 2, 2017. An Initial Study has now been prepared to provide more detailed information regarding the impacts of the proposed project and to identify the environmental issues to be considered in the Draft EIR. The Initial Study is either attached or is available upon request from **Rachel Schuett**, the project environmental review coordinator, whom you may reach at (415) 575-9030, at rachel.schuett@sfgov.org, or at the address to the right. The report may also be viewed on-line at <http://www.sf-planning.org/index.aspx?page=1570>, starting on May 2, 2018. Referenced materials are available for review by appointment at the Planning Department's office at 1650 Mission Street, Suite 400 (call 415-558-6377).

Project Description: The project sponsor proposes to redevelop the 51,150-square-foot (1.17-acre) property at South Van Ness Avenue and Market Street in the South of Market (SoMa) neighborhood of San Francisco. The project site is occupied by a two-story, up to 45-foot-high building, and a small vacant lot. The northern portion of the on-site building was constructed in 1927, and is considered an individual historical resource. The building is occupied by the San Francisco Honda Dealership.

The project sponsor proposes to demolish the building and construct a mixed-use, 984-unit residential building with ground-floor retail space and two below-grade levels for parking and loading, accessed from 12th Street. Up to 518 vehicle parking spaces and seven freight loading spaces would be provided. Two project design options are being considered: a two-tower design (the “proposed project”) with two separate 41-story 400-foot-tall towers (420 feet at the top of the elevator penthouses) on top of podiums; and a “project variant” with a single 55-story, 590-foot-tall tower (610 feet at the top of the elevator penthouses) on top of a podium. The proposed project would be approximately 1,071,100 gsf, with 48,150 sf of open space including a mid-block pedestrian alley between South Van Ness Avenue and 12th Street. The project variant would be approximately 1,073,000 gsf, with 47,210 sf of open space including a similar mid-block pedestrian alley between Market and 12th streets. Additional details regarding the project and its variant are in this Initial Study and will be subsequently analyzed in the EIR.

A Notice of Preparation of an EIR and Public Scoping Meeting was issued on July 12, 2017, and a public scoping meeting was held on August 2, 2017. Based on the comments received, the Planning Department has determined that preparation of an Initial Study would be appropriate to focus the scope of the EIR. Preparation of an Initial Study or EIR does not indicate a decision by the City to approve or to disapprove the project.

Further comments concerning environmental review of the proposed project and the scope of the EIR are welcomed, based on the content of the Initial Study. In order for your comments to be considered fully, we would appreciate receiving them by **June 4, 2018**. Please send written comments to **Rachel Schuett**, Senior Planner, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103. Comments may also be submitted via e-mail to rachel.schuett@sfgov.org.

If you work for an agency that is a Responsible or a Trustee Agency, we need to know the views of your agency as to the scope and content of the environmental information that is relevant to your agency’s statutory responsibilities in connection with the proposed project. Your agency may need to use the Initial Study/EIR when considering a permit or other approval for this project. We will also need the name of the contact person for your agency.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department’s website or in other public documents.

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Acronyms and Other Abbreviations

ABAG	Association of Bay Area Governments
ADA	Americans with Disabilities Act
ADRP	archeological data recovery plan
ATP	archeological testing plan
BART	Bay Area Rapid Transit
bgs	below ground surface
BMP	best management practice
BMR	below-market-rate
CARB	California Air Resources Board
C-3-G	Downtown-General zoning
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
DBI	Department of Building Inspection
EIR	environmental impact report
EO	Executive Order
ERO	Environmental Review Officer
FAR	floor area ratio
GHG	greenhouse gas
gsf	gross square feet
Housing Element	Housing and Urban Design Element
Hub Project	Market Street Hub Project
HVAC	heating, ventilation, and air conditioning
K-12	kindergarten through 12th grade
LEED	Leadership in Energy and Environmental Design
MGD	million gallons per day
Muni	San Francisco Municipal Railway
PCB	polychlorinated biphenyl
RPD	San Francisco Recreation and Parks Department
sf	square foot/feet
SFMTA	San Francisco Municipal Transportation Agency
SFPUC	San Francisco Public Utilities Commission
SFUSD	San Francisco Unified School District
SoMa	South of Market
SUD	special use district
SWPPP	storm water pollution prevention plan
TDM	transportation demand management
U.S. 101	U.S. Highway 101
VMT	vehicle miles traveled
ZOI	zone of influence

A. PROJECT DESCRIPTION

The project sponsor, 10 SVN, LLC, proposes to redevelop the 1.17-acre (51,150-square-foot) triangle-shaped property located at 10 South Van Ness Avenue at the southwest corner of South Van Ness Avenue and Market Street in the South of Market (SoMa) neighborhood of San Francisco. The project site is currently occupied by the San Francisco Honda dealership, a two-story, 30- to 45-foot-high building at the northern end of the site, and by a small, undeveloped area at the southern end of the site. The proposed project would involve the construction of two 41-story buildings that would be 400 feet tall (420 feet total, including roof screens and elevator penthouses) and would contain a total of 984 dwelling units and retail space on the ground floor (Table 1). Above grade, the proposed project's two separate towers would be above a podium. Below grade, the two structures would be connected on basement Levels B1 and B2 with a single foundation.

In addition, a project design variant (hereinafter the "variant") is proposed that would feature one tower, up to 590 feet in height (610 feet total, including roof screens and elevator penthouses). The proposed variant would involve constructing a single 55-story tower over a podium structure. The proposed variant would also contain 984 dwelling units, ground-floor retail space, and two levels of underground parking. Both the proposed project and the variant would include a mid-block alley, which would be open-air and accessible to the public, and would serve as a pedestrian connection across the site. Under the proposed project, the mid-block alley would provide access from South Van Ness Avenue to 12th Street. Under the proposed variant, the mid-block alley would provide access from Market Street to 12th Street.

A streetscape option (the "straight-shot streetscape option") is also proposed for 12th Street. The straight-shot streetscape option would exceed the Market & Octavia Area Plan and Planning Department streetscape standards by extending the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 feet to 40 feet in width on 12th Street. The western sidewalk on 12th Street would be expanded to a width of 18 feet. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. The straight-shot streetscape option could be developed with either the proposed project or the variant.

Project Location and Site Characteristics

As shown in Figure 1, the 51,150-square-foot parcel is located at the southwest corner of Market Street and South Van Ness Avenue, and comprises the entire block bounded by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west (Figure 2).¹ The project site comprises Assessor's Block 3506, Lots 004 and 003a, and is roughly triangular in shape.

Both South Van Ness Avenue and Market Street are major roadways through the Downtown/Civic Center and SoMa neighborhoods. South Van Ness Avenue, which becomes Van Ness Avenue north of Market Street, is a major north-south arterial through San Francisco and is considered U.S. Highway 101 (U.S. 101) between the Lombard Street and the Central Freeway portions of U.S. 101. Adjacent to the project site, South Van Ness Avenue has three travel lanes in each direction and parallel parking on both sides of the street. Market Street is a major east-west roadway through San Francisco that connects The Embarcadero and the Twin Peaks neighborhood. Market Street operates as a two-way roadway, generally with two travel lanes, for motorized modes of travel. Adjacent to the project site, eastbound Market Street has one mixed-flow travel lane, one

¹ For purposes of describing project site location, this document uses a project north/south axis aligned with 12th Street, such that Market Street forms the northern boundary of the project site, 12th Street forms the western boundary, and South Van Ness Avenue forms the southwestern boundary.

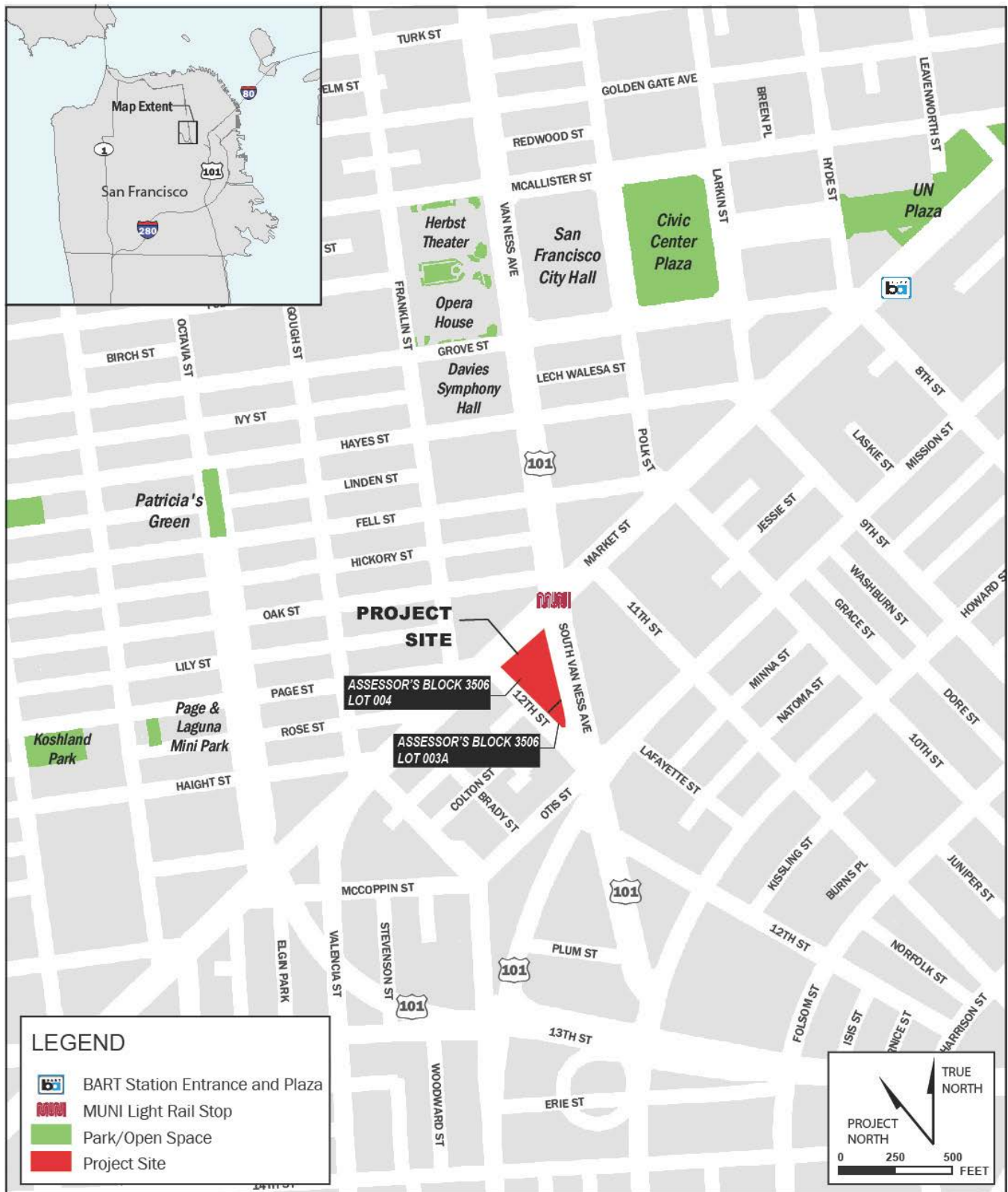
dedicated-transit/taxi lane, and a bicycle lane. In the westbound direction, Market Street has two mixed-flow travel lanes² and a bicycle lane.

The regional roadways that serve the project site are U.S. 101, Interstate 80, and Interstate 280. U.S. 101 provides access to and from the site via the adjacent South Van Ness Avenue, an on-ramp at South Van Ness Avenue and Division Street, and an off-ramp at Mission Street and Duboce Avenue. The intersection of South Van Ness Avenue and Market Street is also connected to the transit network via the subsurface San Francisco Municipal Railway (Muni) station at Market Street and South Van Ness Avenue, which is accessible from an entrance located along the Market Street frontage of the project site. This Muni station is served by the J, KT, L, M, and N Muni light rail lines, and the aboveground Market Street and South Van Ness Avenue Muni stops. These stops are served by the K-Owl, L-Owl, N-Owl, 6, 7, 7R, 14, 47, 49, 90, and 800 bus routes and the historic F line streetcar. The Civic Center Bay Area Rapid Transit (BART) station is also located 0.4 mile east of the project site on Market Street.

Existing Zoning/Height & Bulk Requirements

The project site is within the South of Market (SoMa) neighborhood of San Francisco, which borders the Civic Center neighborhood. The project site is also within the Market & Octavia Area Plan area, the Downtown-General (C-3-G) zoning district, and the Van Ness and Market Downtown Residential Special Use District (SUD). The northern portion of the site is in the 120-R-2 height and bulk district; and the southern portion of the site is in the 120/400-R-2 height and bulk district (see Figure 3). These height and bulk districts allow for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower, or towers, of up to 400 feet in height on the southern portion of the site. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in Planning Code section 270(e)(2).

² Mixed-flow travel lanes are traffic lanes that allow the use of personal vehicles, trucks, taxis, and public transportation vehicles.



Source: AECOM, 2017

Figure 1: Project Location



Source: Handel Architects, 2016

Figure 2: Project Site



Source: City and County of San Francisco, 2017

Figure 3: Zoning Districts and Height and Bulk Districts

Per Planning Code section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gross square feet (gsf). Per Planning Code section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate, unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the controls for the R-2 bulk district. The permitted floor area ratio (FAR) in the C-3-G zone is 6:1.³ The existing FAR of the project site is approximately 2:1.

Existing Conditions

The project site slopes gently downward to the south. The ground surface elevation of the project site is approximately 40 feet above mean sea level along Market Street and approximately 32 feet above mean sea level at the southern boundary of the site. As shown in Figure 2, the project site is currently occupied by the 91,088-square-foot San Francisco Honda dealership, which consists of a two-story building, ranging from 30 to 45 feet in height (Lot 004), and a small, undeveloped area at the southern end of the site (Lot 003A). The existing building, which was constructed in 1927, was the former home of the Fillmore West concert venue, and is considered to be a historic resource.⁴ The Muni tunnel and station are located beneath Market Street approximately 30 feet north of the property line. The northern third of the project site includes a subsurface easement for the existing BART tunnel, which is located 19.62 feet below grade. The invert of the BART tunnel is approximately 85 feet below ground surface.^{5, 6} The perimeter of the project site includes six curb cuts and associated driveways: three curb cuts along South Van Ness Avenue, and three along 12th Street. There are no curb cuts along Market Street.

Along the west side of South Van Ness Avenue, there are 11 metered vehicle parking spaces, with five spaces subject to restricted hours for street cleaning (no parking between 12:01 a.m.–6:00 a.m.). The east side of 12th Street along the project frontage has 10 general metered parking spaces, and one metered commercial loading space with restricted loading hours. Across 12th Street from the project site, there are five general metered parallel parking spaces, 16 angled general metered parking spaces, three metered commercial loading spaces with restricted loading hours, one passenger loading space, and one parking space with Americans with Disabilities Act (ADA) access. Improvements to Van Ness Avenue between Aquatic Park and Mission Street are currently underway as part of the Van Ness Improvement Project. The Van Ness Improvement Project includes

³ FAR is the gross floor area of a building or buildings on a zoning plot divided by the area of such zoning plot. FAR is calculated to determine whether the mass and scale of a structure is compatible with zoning district requirements. In the Van Ness and Market Downtown Residential SUD, increased FAR is allowed with payment of in-lieu fees (the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee).

⁴ The Historic Resources Evaluation (*Part I Historic Resource Evaluation, Final Version: 10 South Van Ness Avenue [2015-004568ENV] City and County of San Francisco, California*) prepared for the project found the existing Honda dealership and service center at 10 South Van Ness Avenue to be eligible for listing in the California Register of Historic Places under Criterion 1 (events) for its association with the Fillmore West concert venue and Criterion 2 (persons) for its association with prominent San Francisco music promoter Bill Graham.

⁵ “Invert” refers to the bottom of the tunnel.

⁶ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation, 10 Van Ness Avenue*, March 16, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2015-004568ENV.

replacement of the water and sewer networks and infrastructure improvements to support the Van Ness Bus Rapid Transit system, which is currently under construction.⁷

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height and bulk districts) range from 40 feet to 400 feet (see Figure 3). Several large, mixed-use commercial, office, and residential buildings are located along Van Ness Avenue and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses. The scale of the built environment generally increases in height traveling eastward along Market Street from the project site.

Proposed Project Characteristics

The proposed project is at the site of the San Francisco Honda dealership. The service center relocated in 2017, but the dealership remains open. To construct the proposed project, the dealership would also relocate and the existing 91,088-square-foot, two-story, 30- to 45-foot-tall building would be demolished. The proposed project would result in construction of a new 1,071,095-gsf, 984-unit development consisting of two 41-story, mixed-use residential buildings. The proposed project would construct two separate above-grade towers that are connected below grade. Above grade, each structure would consist of a tower on top of a podium. A section of the proposed project is shown in Figure 4, and elevations of the proposed project are shown in Figures 5 and 6.

The tower with frontage along Market Street is referred to as the north tower, and the tower adjacent to the intersection of South Van Ness Avenue and 12th Street is referred to as the south tower. Likewise, the more northerly podium is referred to as the north tower podium, and the more southerly podium is referred to as the south tower podium. Each tower would have its own building core. Two passageways would be constructed to serve as a connection between the two podiums across the mid-block alley, one at Level 2 and one at Level 13. The buildings would be connected below ground via a single, two-level parking garage/basement (see Figure 7).

The proposed project would have a single foundation supporting all of the project structures. Each tower would have a maximum height of 400 feet (420 feet total, including roof screens and the elevator penthouse on each tower).⁸ The ground floor through Level 12 would be located in the tower podiums, and Levels 13–41 would be located in the towers. The towers would be separated by a minimum of 115 feet. The north tower podium would be 114 feet in height, and the south tower podium would be 120 feet in height.⁹ Both podiums would include retail uses and residential lobbies at the ground level (see Figure 8).

As shown in Table 1 below, the proposed project would include a total of 935,745 gsf of residential uses, 30,350 gsf of retail uses; 3,000 gsf of rooftop mechanical equipment; and 102,000 gsf of parking with up to 518 accessory vehicle parking spaces. In both towers, residential amenities would be provided on Level 2, and residential units would be provided on Levels 3–41 (see Figures 9 through 12). Residential amenities would include a community space, a game room, a children’s room, and a music room. Level 2 of both towers would also include a retail mezzanine space. Residential lobbies and building services would occupy 16,670 gsf. The

⁷ San Francisco Municipal Transportation Agency, Van Ness Improvement Project, Spring 2017, https://www.sfmta.com/sites/default/files/projects/2017/VN_News1tr_17.02_170502.pdf, accessed August 9, 2017.

⁸ Pursuant to Planning Code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

⁹ A height of 114 feet and 120 feet for the north and south tower podiums, respectively, is consistent with the height and bulk district for the site (120-R-2).

residential entrances would be at the approximate center of each tower podium's frontage on South Van Ness Avenue.

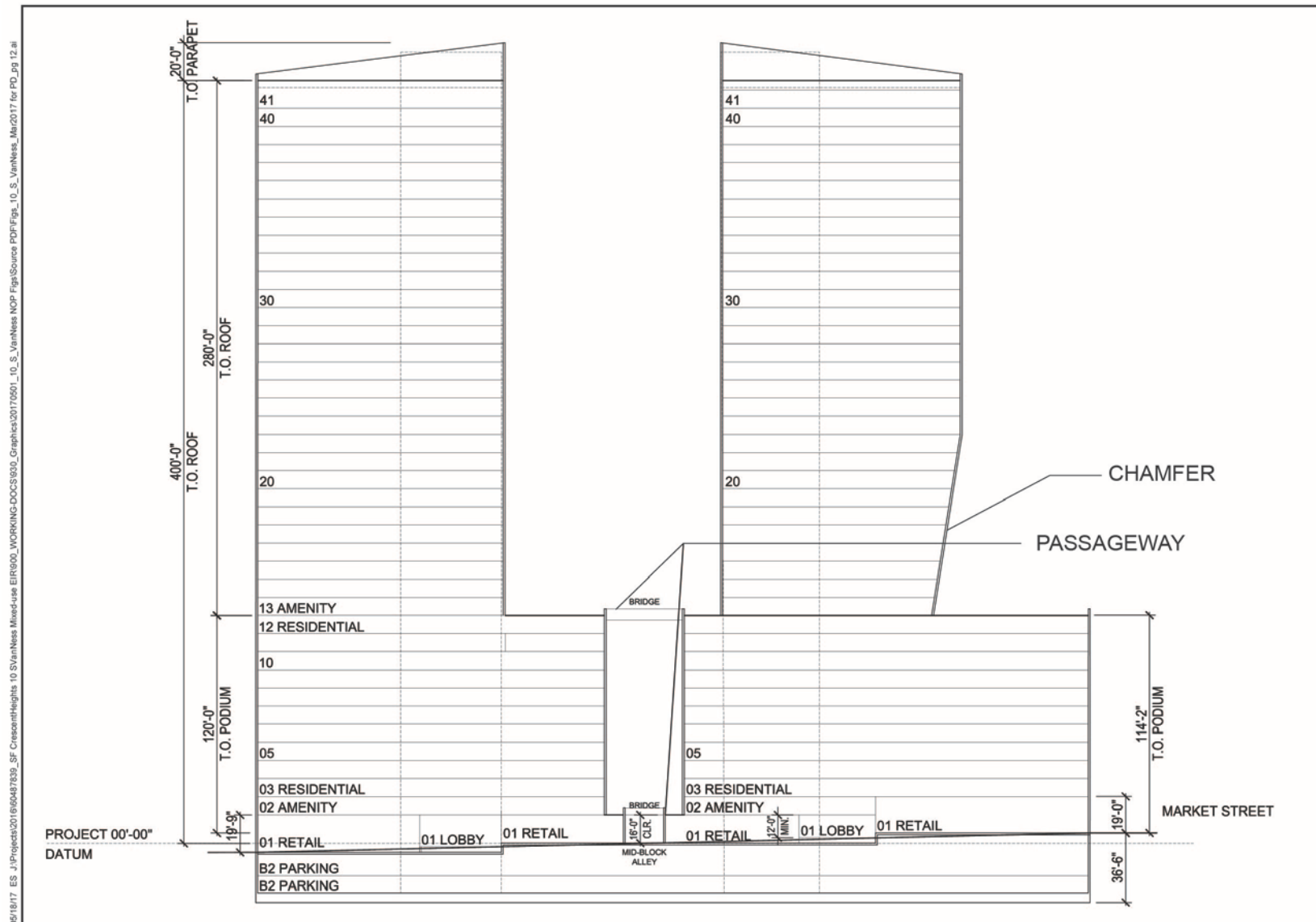
Table 1: Proposed Project Characteristics

Lot		Dimensions	
Size		51,150 square feet	
Length		475 feet (South Van Ness Avenue)/288 feet (Market Street)/450 feet (12th Street)	
Proposed Building		Area (gross square feet)	
Residential ¹		935,745	
Ground-Floor Retail		30,350	
Parking ²		102,000	
Rooftop Mechanical		3,000	
Total		1,071,095	
Building Characteristics		Description	
Stories	North Tower/Podium	41 stories/12 stories	
	South Tower/Podium	41 stories /12 stories	
Height	North Tower/Podium	400 feet (up to 420 feet including the elevator penthouse ³)/114 feet	
	South Tower/Podium	400 feet (up to 420 feet including the elevator penthouse)/120 feet	
Ground Floor		Retail: 30,350 gross square feet with multiple tenant spaces Residential: Two residential lobbies and 336 class I bicycle parking spaces	
Basement		518 vehicle parking spaces	
Proposed Units		Amount (Approx. Percent)	
		984	
Dwelling Units		North Tower	South Tower Total
Studio		267 (27%)	108 (11%) 375 (38%)
1-Bedroom		294 (30%)	167 (17%) 461 (47%)
2-Bedroom		51 (5%)	49 (5%) 100 (10%)
3-Bedroom		19 (2%)	29 (3%) 48 (5%)
Vehicle Parking Spaces ⁴		518	
Bicycle Parking Spaces ⁵		397	
Open Space ⁶		Area (square feet)	
Publicly accessible		2,975	
Common		45,176	
Private		0	

Notes:

1. Includes first-floor nonretail uses and second-floor residential amenity uses.
2. Includes parking and basement mechanical equipment.
3. Consistent with the Planning Code height and bulk designations for the project site, the building height is 400 feet. Up to 20 feet for the elevator penthouse, roof screens, and other rooftop appurtenances are exempt from this height limit.
4. Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.
5. Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.
6. Provided in compliance with Planning Code section 736.93, Usable Open Space Per Residential Unit.

Source: 10 South Van Ness LLC, 2017



Source: 10 SVN LLC, 2017

Figure 4: Proposed Project – Building Section Looking West toward Project Site from South Van Ness Avenue



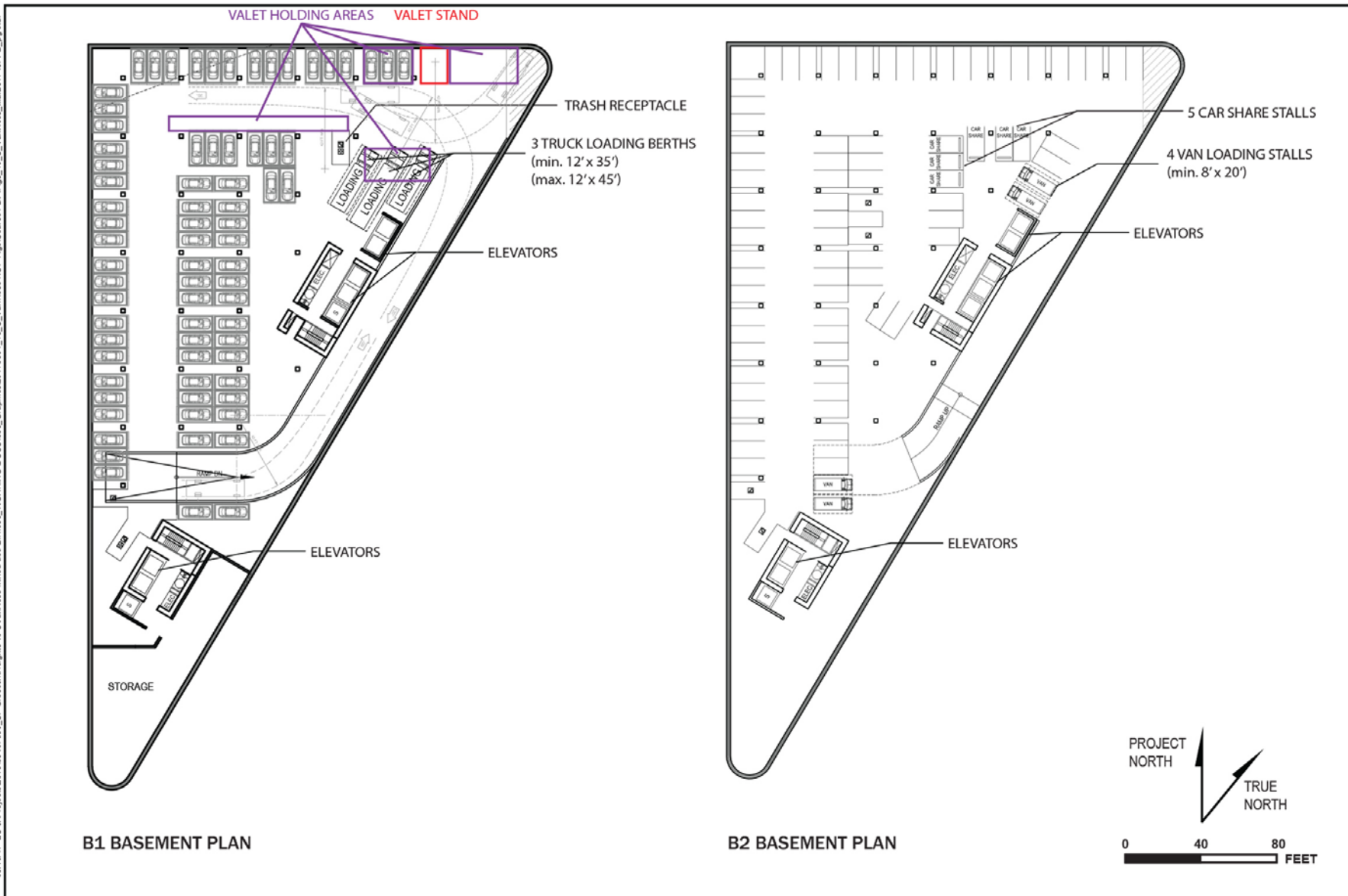
Source: 10 SVN LLC, 2017

Figure 5: Proposed Project – Building Elevation Looking West toward Project Site from South Van Ness Avenue



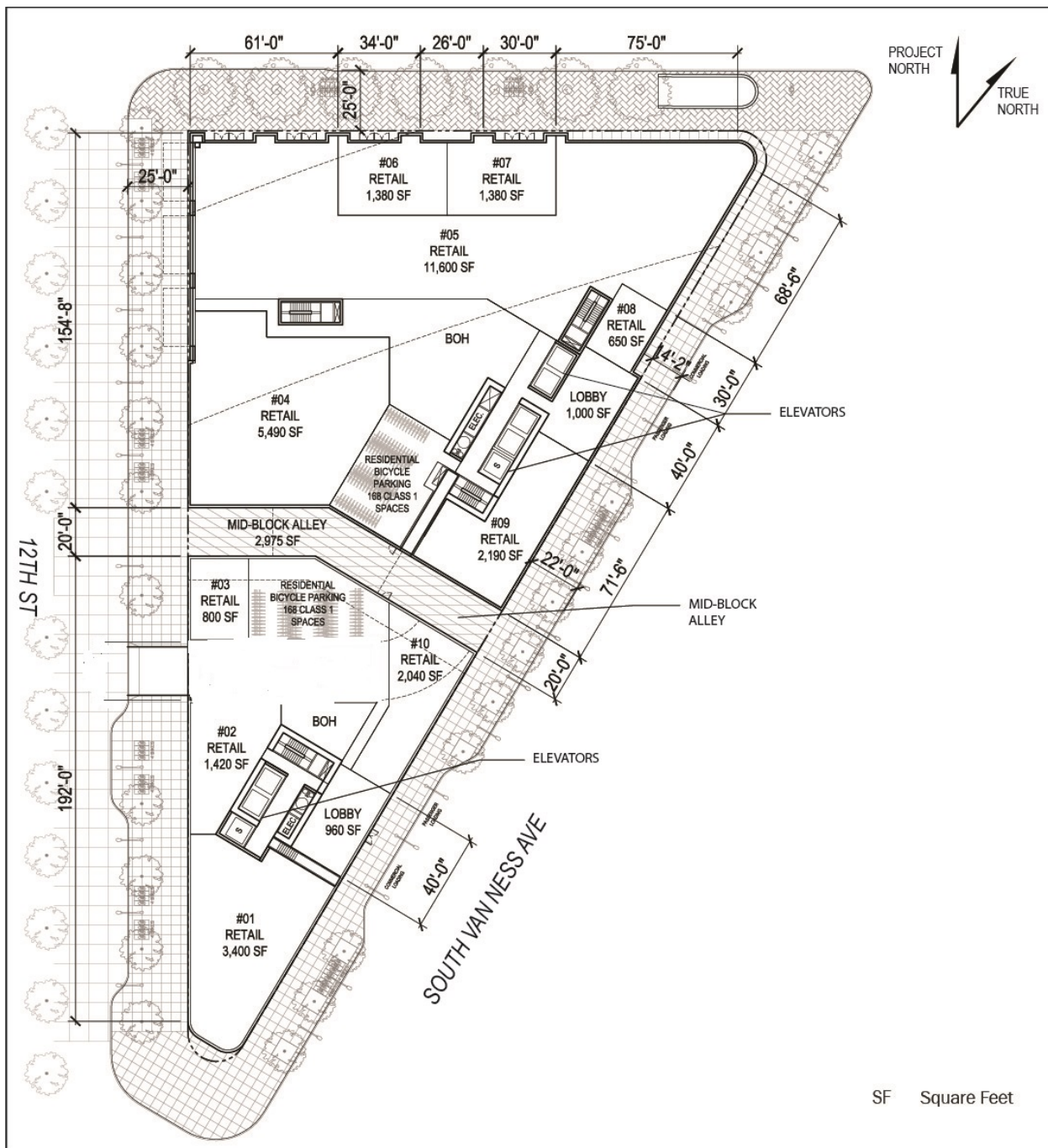
Source: 10 SVN LLC, 2017

Figure 6: Proposed Project – Building Elevation Looking South toward Project Site from Market Street



Source: Handel Architects, 2016 and SITELAB Urban Studio, 2017

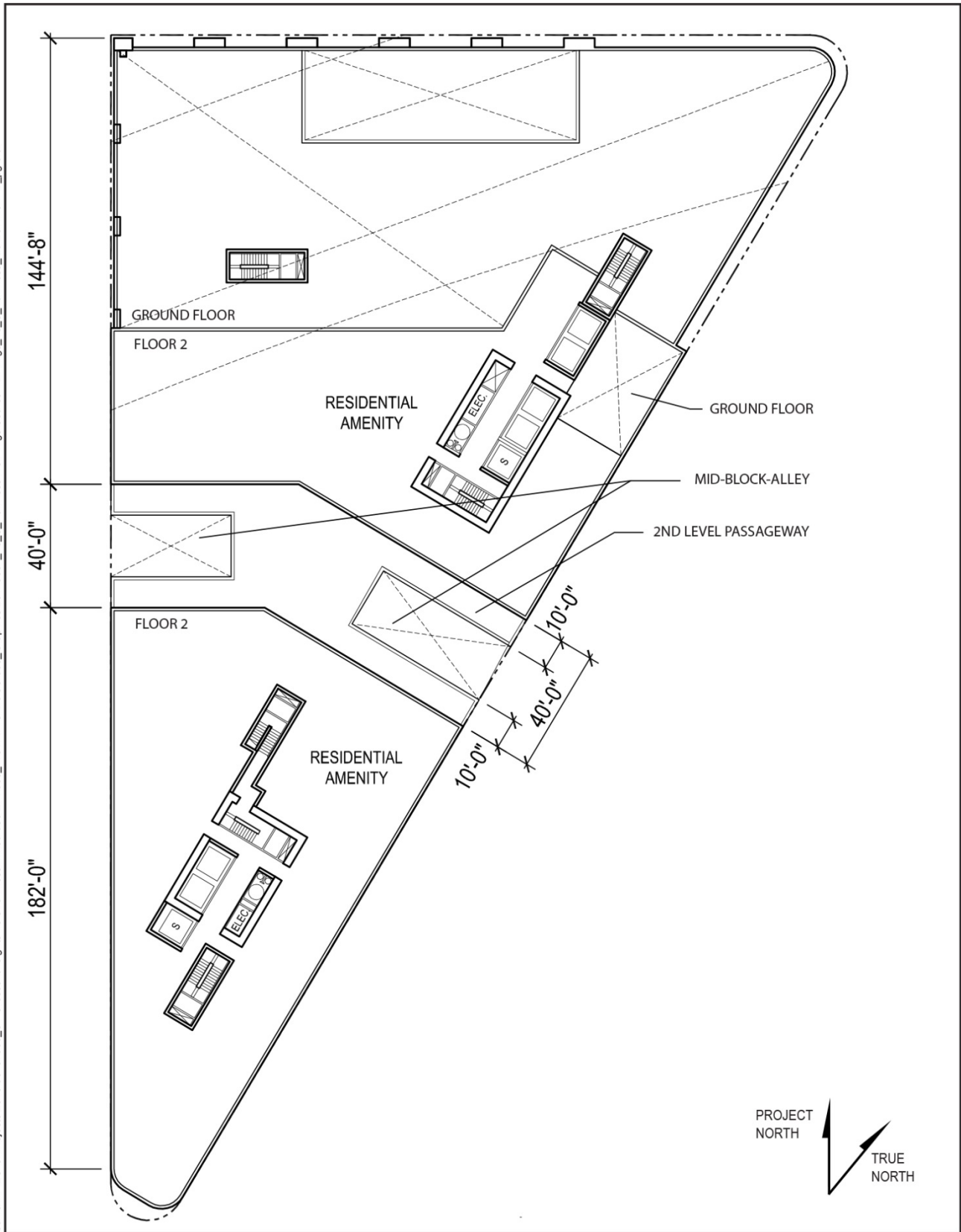
Figure 7: Proposed Project – Parking Garage/Basement Plan



Source: Handel Architects, 2016

Figure 8: Proposed Project – Ground-Floor Plan

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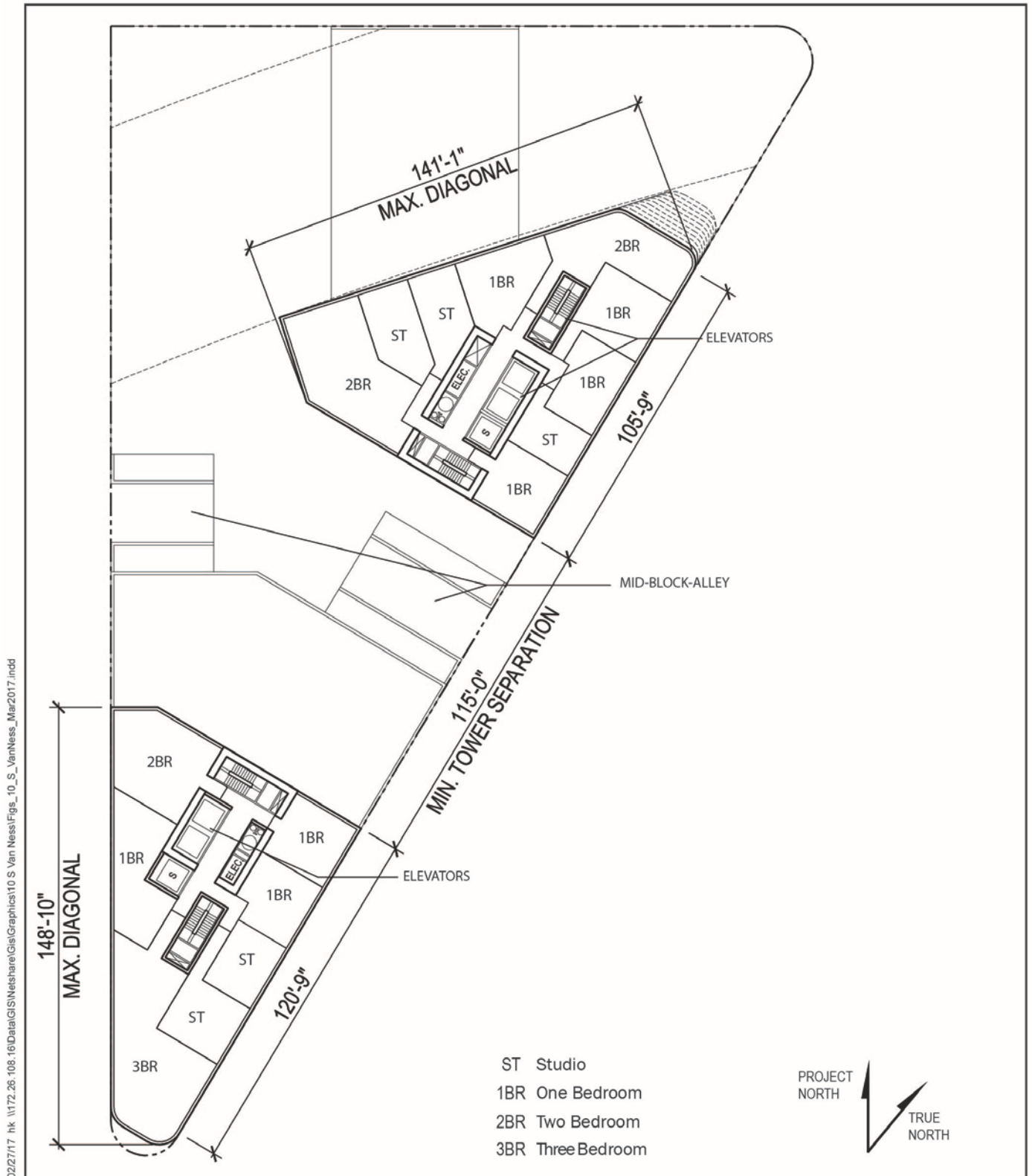
Source: Handel Architects, 2016

Figure 9: Proposed Project – Level 2 Floor Plan



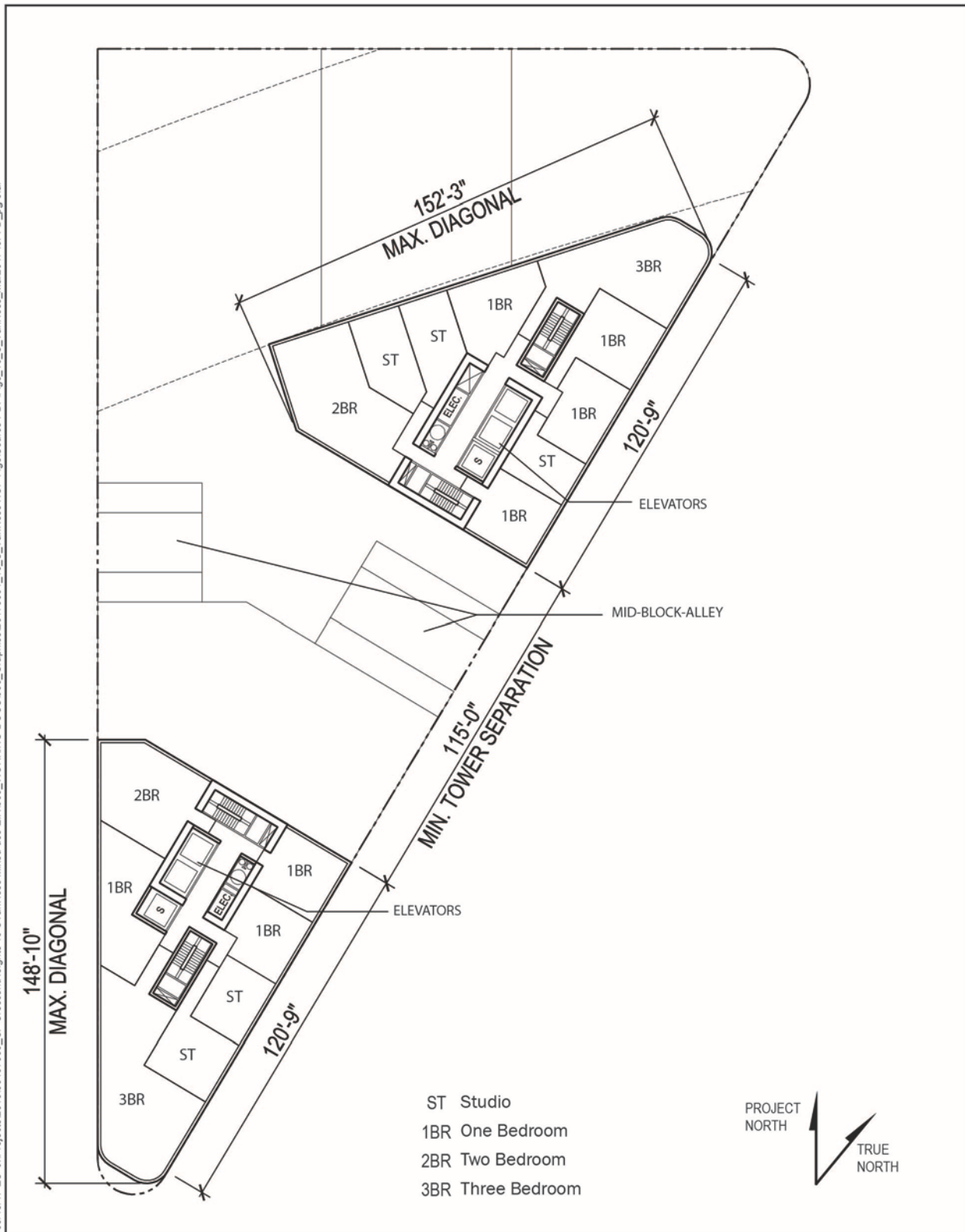
Source: Handel Architects, 2016

Figure 10: Proposed Project – Representative Floor Plans for Levels 3–12



Source: Handel Architects, 2016

Figure 11: Proposed Project – Representative Floor Plans for Levels 13–22



Source: Handel Architects, 2017

Figure 12: Proposed Project – Representative Floor Plans for Levels 23–41

The ground floors of the tower podiums, considered together, would include 30,350 gsf of retail space for use by multiple tenants. The retail spaces, as currently designed, include 10 retail spaces ranging in size from 800 square feet (sf) to 11,600 sf, as shown in Figure 8. The retail uses would front onto South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The retail spaces would all have a minimum floor-to-ceiling height of 19 feet.

Open Space. The proposed project would include 48,150 sf of usable open space per Planning Code section 736.93, which would be provided through a combination of publicly accessible open spaces, and common usable open spaces.^{10,11} As shown in Figures 4 and 8, publicly accessible open space would include the 2,975-square-foot mid-block alley between the two tower podiums, which would provide a pedestrian connection between South Van Ness Avenue and 12th Street. Privately accessible common open spaces would include amenity terraces on Level 2 of both tower podiums, Levels 3 and 11 of the north tower, Level 13 of the south tower, and on the roofs of both towers, as shown in Figure 13.

Parking/Loading and Mechanical Equipment. The proposed project would include 102,000 gsf of parking and building services, with up to 518 accessory vehicle parking spaces, in two basement levels, as shown in Figure 7. Ingress and egress for the secured garage would be provided via a single curb cut on 12th Street. The proposed project would include 491 spaces for residential use, 14 spaces for retail use, and six spaces for car-share vehicles. In addition, a total of seven off-street freight-loading spaces would be located in the two basement levels, three of which would be standard freight-loading spaces, and four of which would be service vehicle spaces. One freight-loading space would accommodate up to a 45-foot-long vehicle.

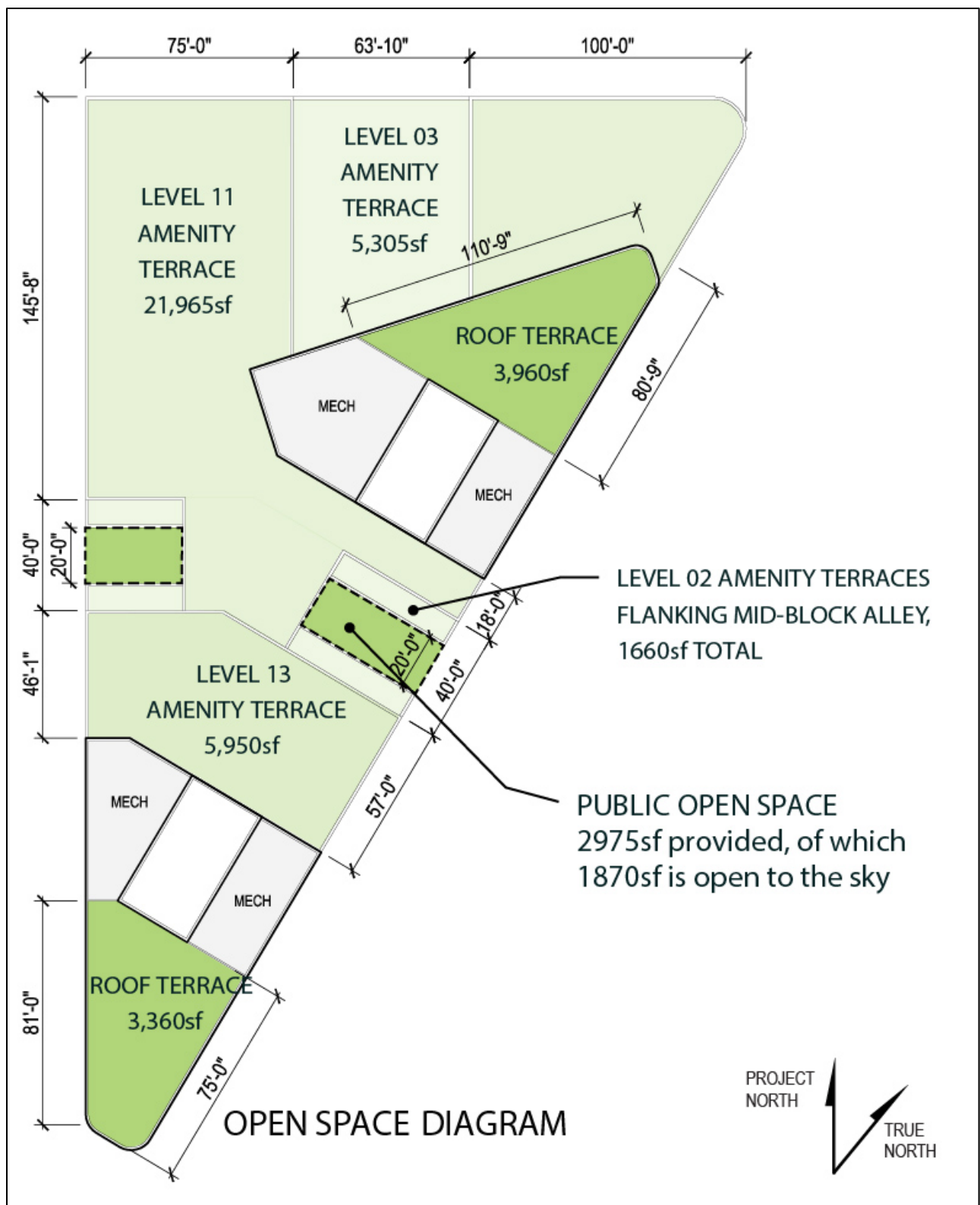
The majority of the parking spaces would be provided in stackers and would not be independently accessible. The garage would be staffed 24 hours per day, seven days per week by a valet service, via a valet station within the garage to manage resident and employee parking maneuvers, with the intent of facilitating inbound vehicle flow. The valet would serve residents, visitors, and car-share users. Valet staff would also direct delivery and moving trucks.

The proposed project would also provide 336 class I bicycle parking spaces,¹² which would be provided in two secure bicycle rooms on the north tower podium ground floor: 332 for residential use and four for retail use. On-street bicycle parking would include 61 class II bicycle parking spaces: 49 for residential use and 12 for retail use, which would be located with the public right-of-way along Market Street, 12th Street and South Van Ness Avenue.

¹⁰ As defined in Planning Code section 135, common usable open space includes open space that is easily accessible from a dwelling unit or from a common area of a building or lot. Common usable open space is accessible to building occupants only, but, as opposed to private usable open space, is accessible to all building occupants rather than a select group of units. In C-3 districts, new buildings are required to provide privately owned public open spaces meeting the requirements of Planning Code section 138. These open spaces must be accessible to the general public.

¹¹ Planning Code section 135 requires the provision of 36 square feet of private open space or 47.88 square feet of commonly accessible open space per residential unit. The proposed project would require 47,114 square feet of common usable open space.

¹² Section 155.1(a) of the Planning Code defines class I bicycle spaces as “spaces in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, nonresidential occupants, and Employees” and defines class II bicycle spaces as “spaces located in a publicly-accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use.”



Source: 10 SVN LLC, 2017

Figure 13: Proposed Project – Open Space Plan

The proposed project would include one 1,500-kilowatt diesel-powered emergency generator and other mechanical equipment in the garage/basement. Trash storage would also be located in the garage/basement, adjacent to an accessible loading area. The garage/basement would be secured, and would be accessible only to residents and retailers. Approximately 3,000 gsf of the roof area would be reserved for heating, ventilation, and air conditioning (HVAC) mechanical equipment. The proposed project's roof plan is shown in Figure 14.

Circulation and Access. The proposed project would remove the existing curb cuts along South Van Ness Avenue and 12th street and replace them with a new 20-foot-wide curb cut along 12th Street. This would provide vehicle access to the parking garage, for both retail and residential users (two 10-foot-wide lanes for two-way, bi-directional traffic). In addition to stairs, two elevators would provide access to the residential lobbies from the parking garage/basement. From the residential lobbies, a second elevator would provide access to each tower. Elevator access would also be available between the below-grade parking garage/basement and the ground-floor retail space. As described above, two street-level residential entrances, one for each tower, would be located along South Van Ness Avenue. Pedestrian access to the retail spaces would be from South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The proposed mid-block alley would also provide public access through the project site between South Van Ness Avenue and 12th Street.

Class I and II bicycle facilities currently run along Market Street in both directions. Access to the class I bicycle parking spaces would be provided via a secured doorway on the mid-block alleyway to the bicycle room located near 12th Street. The class I bicycle parking spaces would be for residents and retail users and the bicycle storage room would also be connected to the building's lobby. A bicycle repair station would be located within the building. The location of the class II bicycle parking would be along Market Street, 12th Street, and South Van Ness Avenue and would be installed within the sidewalk areas. The nearest San Francisco Bike Share station is approximately 120 feet to the east of the project site on the east side of South Van Ness Avenue, directly across the street from the project site. The on-site class 1 bicycle parking is accessible to the Market Street bike lane via 12th Street and the mid-block alley.

Transportation Demand Management. The proposed project would result in more than 10 dwelling units and, thus, would be required to comply with San Francisco Planning Code section 169, Transportation Demand Management Program. As required under Planning Code section 169, the project sponsor is required to develop a transportation demand management (TDM) plan including measures that the property owner would implement to reduce single-occupancy driving to and from the project site. Compliance with the project's TDM plan would be included as a Condition of Approval for the proposed project and would be subject to monitoring by the Planning Department for the life of the project.¹³

The following TDM measures would comprise the TDM plan for the proposed project:

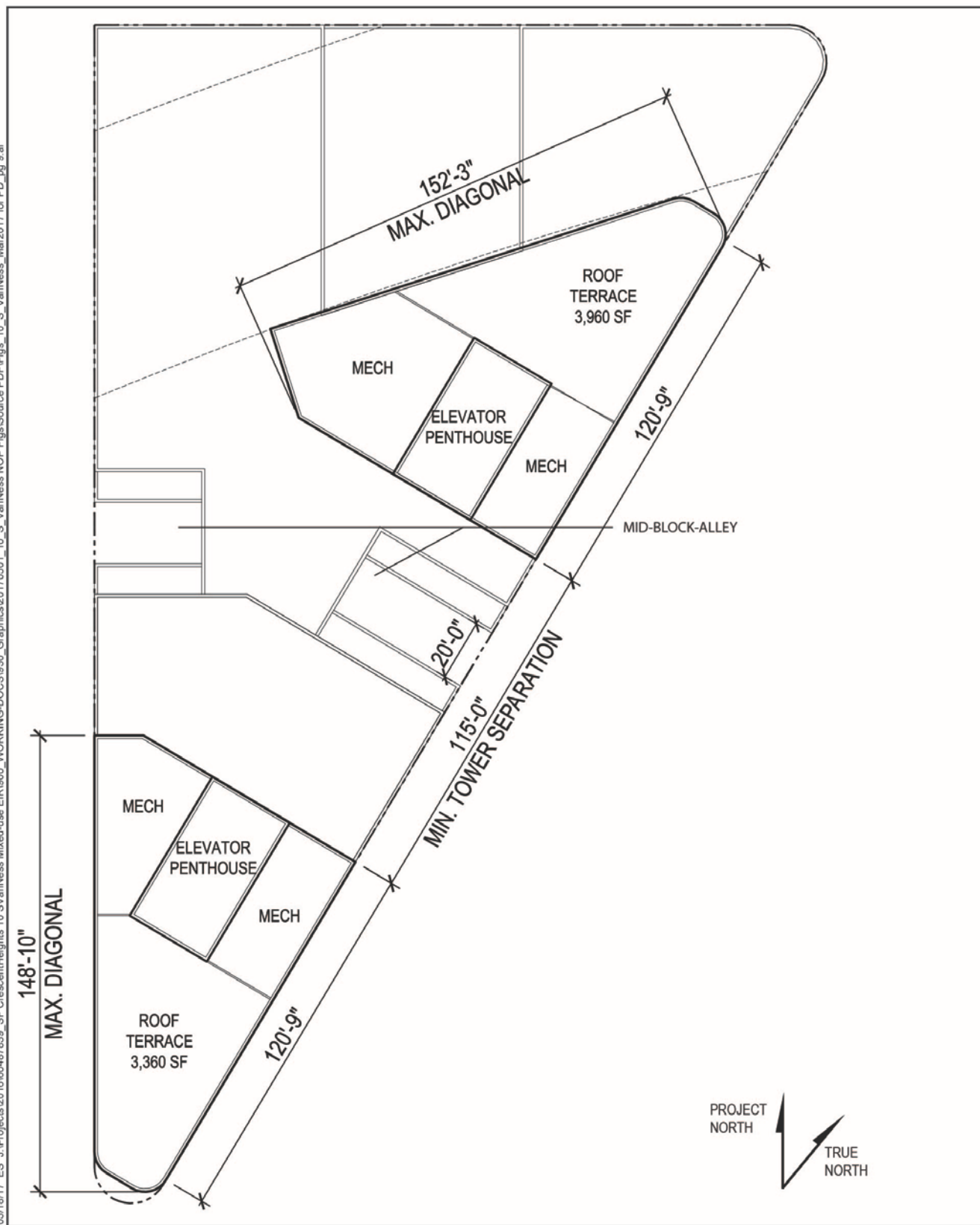
PKG-1: Unbundle Parking

Unbundle¹⁴ parking in transportation analysis zone 578, where the project site is located.

¹³ According to Planning Code section 169, a property owner must facilitate a site inspection by the Planning Department before issuance of a certificate of occupancy, and must document implementation of applicable aspects of the TDM plan, maintain a TDM coordinator, allow for department inspections, and submit periodic compliance reports throughout the life of the project.

¹⁴ Where the cost of a parking space is separated from the cost of rent, lease, or ownership.

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Source: Handel Architects, 2017

Figure 14: Proposed Project – Roof Plan

PKG-4: Parking Supply

Provide parking at a rate that is less than or equal to 80 percent and greater than 70 percent of the neighborhood residential parking rate. The project parking rate is 0.5 accessory parking spaces per unit, which is 76 percent of the neighborhood residential parking rate of 0.65 parking spaces per unit in transportation analysis zone 578 where the project site is located.

ACTIVE-1: Improve Walking Conditions

Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by: widening the sidewalk along the east side of 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed.

The streetscape improvements would meet TDM ordinance criteria by providing the following 10 streetscape elements defined in Table 1 of Planning Code section 138.1:¹⁵

- High-visibility crosswalks
- Special crosswalk treatments
- Mid-block crosswalks
- Raised crosswalks
- Extended bulb-outs¹⁶
- Mid-block bulb-outs
- Reuse of “pork chop islands”¹⁷ and excess right-of-way
- Shared public ways
- Pedestrian-only streets
- Aboveground landscaping

ACTIVE-2: Bicycle Parking

Provide class I and class II bicycle parking spaces as required by the Planning Code. The proposed project is providing 332 class I and 49 class II bicycle spaces for the residential use, and four class I and 12 class II bicycle spaces for the retail use, both of which meet the Planning Code, and TDM measure requirements.

ACTIVE-5A: Bicycle Repair Station

Provide on-site tools and space for bicycle repair. The proposed project would provide this repair station within the class I bicycle parking area on the building’s ground floor.

CSHARE-1: Car-Share Parking

Provide car-share space parking as required by the Planning Code. To meet this requirement, the proposed project would provide six car-share spaces, to be located on Level B2.

¹⁵ Table 1, Pedestrian and Streetscape Elements per the Better Streets Plan, in section 138.1 of the San Francisco Planning Code, [http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$sync=1](http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sync=1), accessed August 3, 2017.

¹⁶ A bulb-out is a [traffic calming](#) measure that reduces the crossing distance for pedestrians by extending the sidewalk.

¹⁷ Pork chop islands are irregularly shaped, raised islands placed between a right-turn slip lane and through-travel lanes.

DELIVERY-1: Delivery Supportive Amenities

The proposed project would facilitate delivery services by providing a staffed reception area for receipt of deliveries, and offering one of the following: (1) clothes lockers for delivery services, or (2) temporary storage for package deliveries, laundry deliveries, and other deliveries. These amenities would be provided on Level B1.

FAMILY-1: Family TDM Amenities

The proposed project would provide an onsite secure location on Level B1 for storage of personal car seats, strollers, and cargo bicycles or other large bicycles.

INFO-1: Multimodal Wayfinding Signage

The proposed project would provide multimodal wayfinding signage in key locations to support access to transportation services and infrastructure, including: transit, bike share, car-share parking, bicycle parking and amenities (including repair stations and fleets), showers and lockers, taxi stands, and shuttle/carpool/vanpool pick-up/drop-off locations.

INFO-2: Real Time Transportation Information Displays

The proposed project would provide real time transportation information on displays in prominent locations on the project site and within the buildings to highlight sustainable transportation options and support informed trip-making.

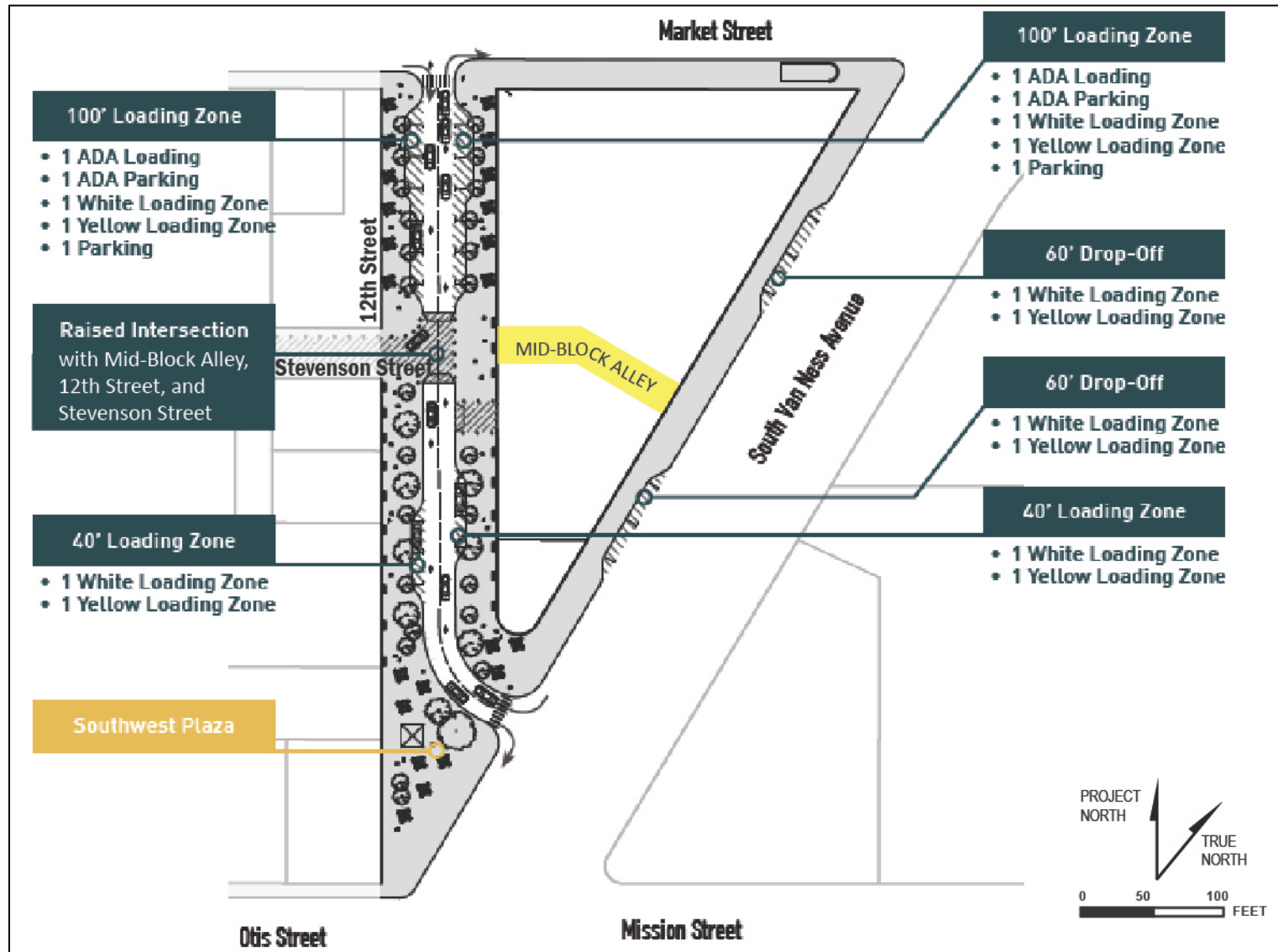
INFO-3: Tailored Transportation Marketing Services

The property owner would provide promotions and welcome packets to all new residents/employees, personal consultation for each new resident/employee, and request commitment to try new transportation options.

Streetscape Improvements. The proposed streetscape plan, called the “Market Octavia Streetscape Plan,” would conform to Market & Octavia Area Plan and Planning Department standards and is shown in Figures 15 and 16. Under the Market Octavia Streetscape Plan, the eastern and western sidewalks along 12th Street would be expanded from 15 feet to a width of 21 feet (4 feet of frontage, 8 feet of pedestrian throughway, and 9 feet of pedestrian furnishing space), as shown in Figure 16. Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets. A raised crosswalk would be installed at the intersection of 12th and Stevenson streets. The “pedestrian island” at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection.

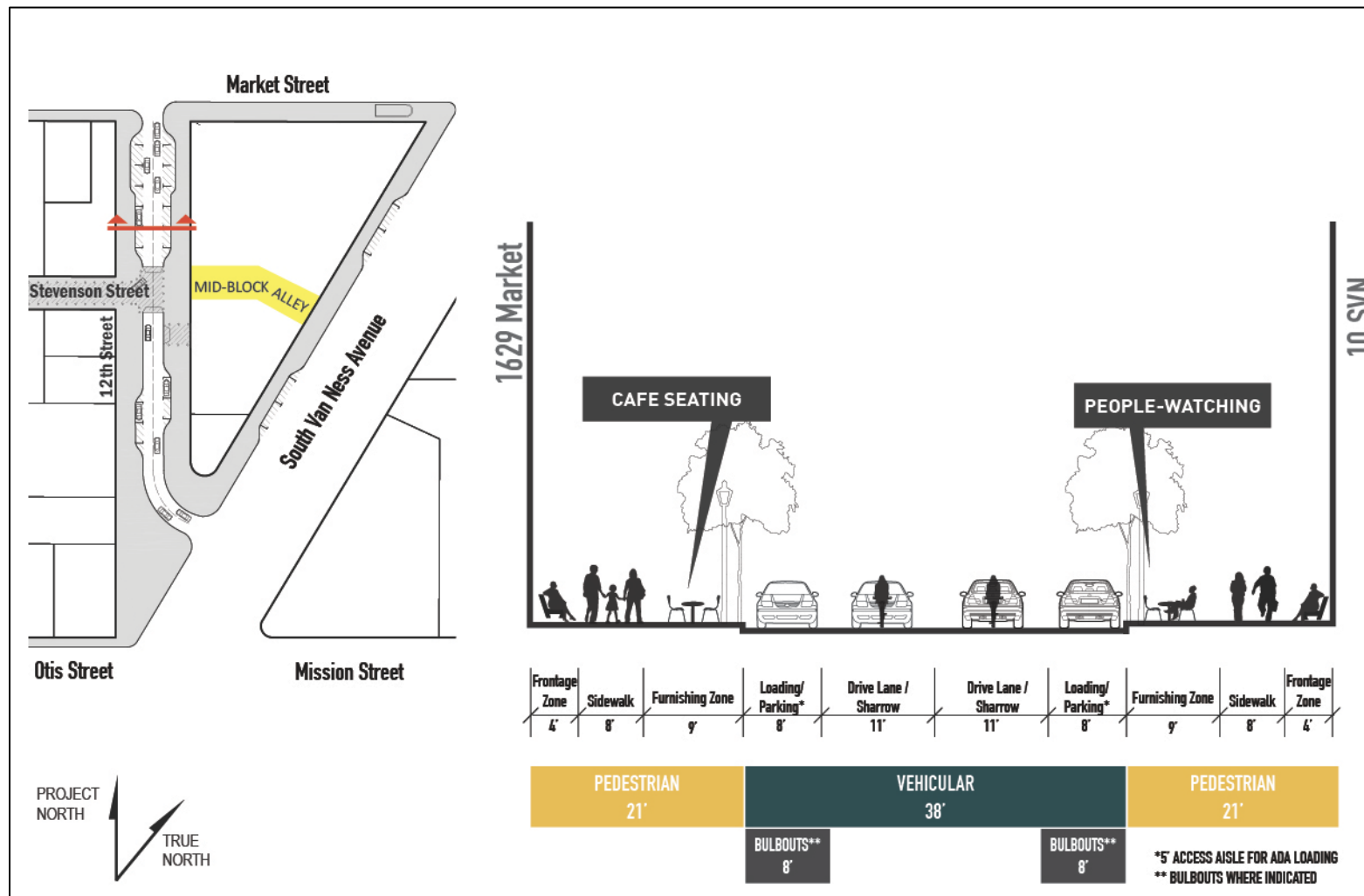
Two 60-foot-long white and yellow loading zones¹⁸ are proposed along the South Van Ness Avenue frontage, near the entrances to the residential lobbies, to provide an area for passenger drop-off and pick up, and commercial loading activities. Proposed changes to the right-of-way are described below. Four passenger and commercial loading zones are proposed on 12th Street, one 100-foot-long loading zone and one 40-foot-long loading zone on each side of 12th Street. Each 100-foot loading zone would include one ADA loading space, one ADA parking space, one passenger loading space, one commercial loading space, and one regular parking space. Each 40-foot loading zone would include one passenger loading space and one commercial loading space.

¹⁸ White zones are for passenger loading and unloading during certain hours, with a time limit of five minutes. Yellow zones are for commercial loading activities.



Source: SITELAB Urban Studio, 2017

Figure 15: Proposed Project – Market Octavia Streetscape Plan (Plan View)



Source: SITELAB Urban Studio, 2017

Figure 16: Proposed Project – Market Octavia Streetscape Plan (12th Street Right-of-Way Section)

In addition to the streetscape improvements described above, the proposed project would install 33 net new street trees and class II bicycle racks with capacity for 61 bicycles along South Van Ness Avenue, Market Street, and 12th Street, in compliance with the City's Better Streets Plan.

Sustainability. The San Francisco Building Code includes a chapter on requirements for green buildings; these requirements establish either Leadership in Energy and Environmental Design (LEED)¹⁹ certification levels or Green Point Rated²⁰ system points for types of proposed residential and commercial buildings. The proposed project would seek LEED Silver certification, which includes measures applicable to both construction and operation of the proposed project. The proposed project would incorporate a number of sustainability features, including stormwater and rainwater collection features and a wastewater treatment system. The wastewater treatment system would be sized to treat and utilize recycled water from the proposed building for nonpotable uses in the building, including flushing toilets, irrigation, and cooling tower water for the HVAC system. The proposed project would remove the existing 28 trees along the perimeter of the project site frontage on all three sides of the property. In compliance with Public Works Code section 806(c)(2), the proposed project would install 61 new street trees, with one tree every 20 feet along the perimeter of the project site frontage for a total of 33 net new street trees.

The project sponsor has submitted an application to the Governor's Office seeking certification of the proposed project as an environmental leadership development project pursuant to Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, and the California Environmental Quality Act (CEQA) section 21178 et seq. An environmental leadership development project does not result in any net increase in greenhouse gas (GHG) emissions and achieves a 10 percent higher standard for transportation efficiency than comparable projects. The California Air Resources Board (ARB) provided a letter of determination on December 18, 2017, that the proposed project would not result in any net additional GHG emissions and authorized the governor to certify the project. The governor's signature was received on December 21, 2017, certifying that the project is an environmental leadership development project.²¹

Other Design Features. As a result of preliminary wind test modelling in accordance with Planning Code section 148, the north face of the proposed north tower would be chamfered²² from Level 13 to Level 22, and 75 percent porous wind canopies (see Figure 17) would be constructed at the sidewalk level along the east side of South Van Ness Avenue between Market Street and Mission Street. This would provide protection to pedestrians and bicyclists from hazardous wind conditions. The chamfer is evident in Figure 4.

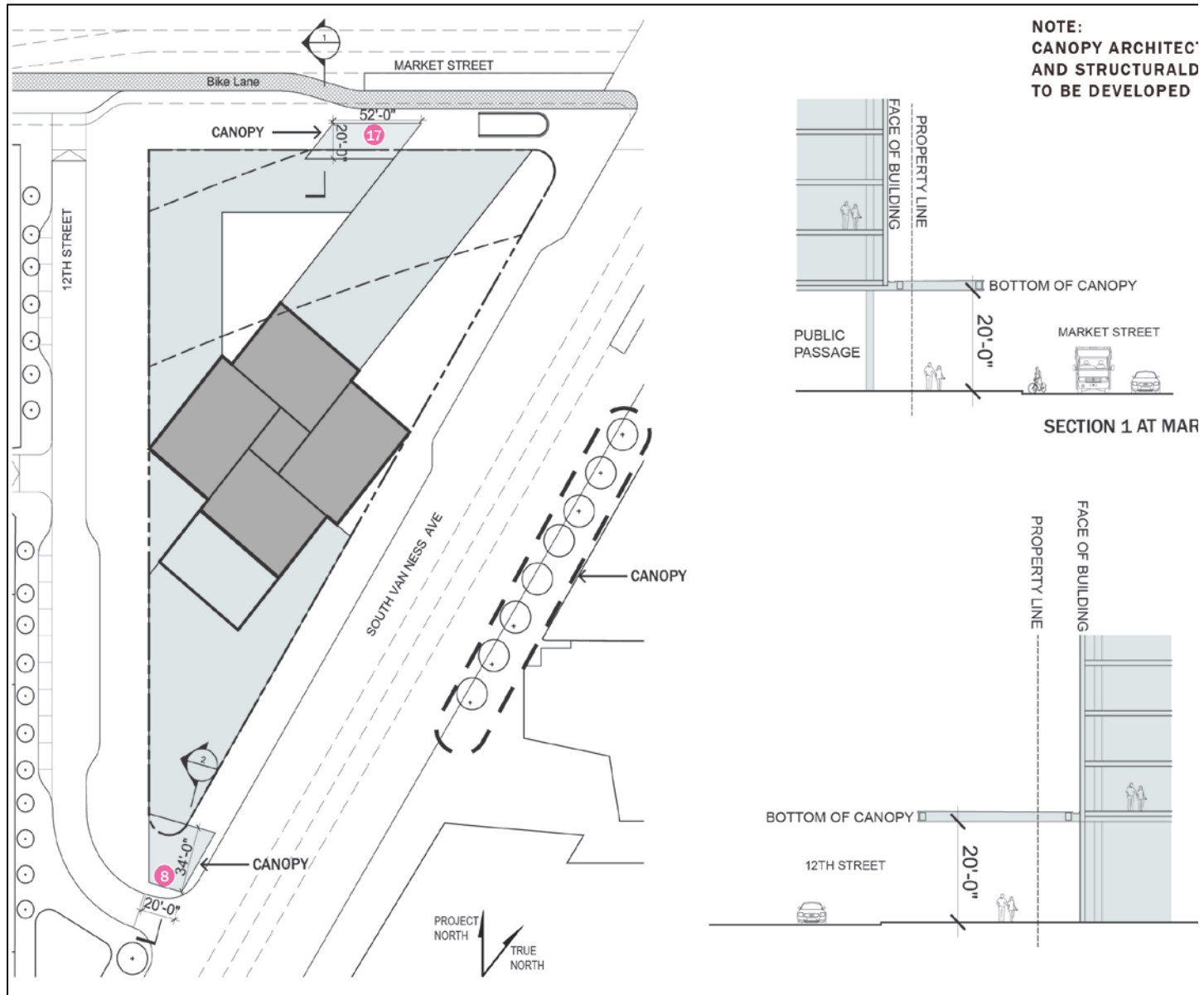
The proposed project would include canopies that would extend from the base of the building at strategic locations to improve wind conditions along the street. Figure 17 below indicates the wind canopy locations for the proposed project. The canopies would be trellis-like porous structures attached to the buildings with cantilevered segments, supported by vertical columns to a height of approximately 20 feet.

¹⁹ LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which involves third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, indoor air quality, use of recycled materials, and proximity to public transportation.

²⁰ Green Point Rated is a program of Build it Green, established for evaluating residential building performance in the areas of resource conservation, indoor air quality, water conservation, energy efficiency, and livable communities (infill development, increased density, diversity of land uses).

²¹ The certification process for environmental leadership development projects is separate from the environmental review process conducted for the proposed project.

²² A chamfer is a flat surface resulting from cutting off the edge of a volume or a symmetrical sloping surface at an edge or corner.



Source: BMT Fluid Mechanics 2017

Figure 17: Canopy Locations for Wind Reduction

Construction. This section describes the construction activities associated with the proposed project. Construction is anticipated to occur over approximately 36 months, and would include the following phases: (1) demolition; (2) shoring and excavation; (3) foundation and podium construction; (4) superstructure/skin; and (5) interior work. Construction hours would typically be from 7 a.m. to 8 p.m., Monday through Thursday; and 7 a.m. to 5 p.m. on Fridays and Saturdays. Limited evening work (8 p.m. to 7 a.m.) and work on weekends (7 a.m. to 5 p.m.) would be required for phases 3 and 4.

As discussed previously, a subsurface BART easement runs underneath the northern portion of the project site, as shown in Figure 2. In this portion of the site, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnel. The northern half of the project site is within the BART zone of influence (ZOI). The portion of the structure within the BART easement would be supported by a concrete mat foundation, which would ensure that the existing load imposed on the BART tunnel is maintained. Outside of the easement, but within the BART ZOI, the tower and podium structures would be supported by a deep foundation consisting of double-cased, drilled cast-in-place piers. The installation of drilled cast-in-place piers involves digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving would be required. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation.²³ Construction methods for the proposed project, including construction depth, techniques and approval processes are discussed in detail in the Geology and Soils Section below.

Construction activities would require temporary sidewalk and parking-lane closures for the entire construction period. The proposed project would develop and implement a construction management plan to anticipate and minimize transportation-related impacts of various construction activities associated with the proposed project. The construction management plan would ensure that overall circulation in the project area is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle access and connectivity. The program would supplement and expand, rather than modify or supersede, any manual, regulations, or provisions set forth by the SFMTA, the San Francisco Public Works or other city departments and agencies, and the California Department of Transportation.

Variant

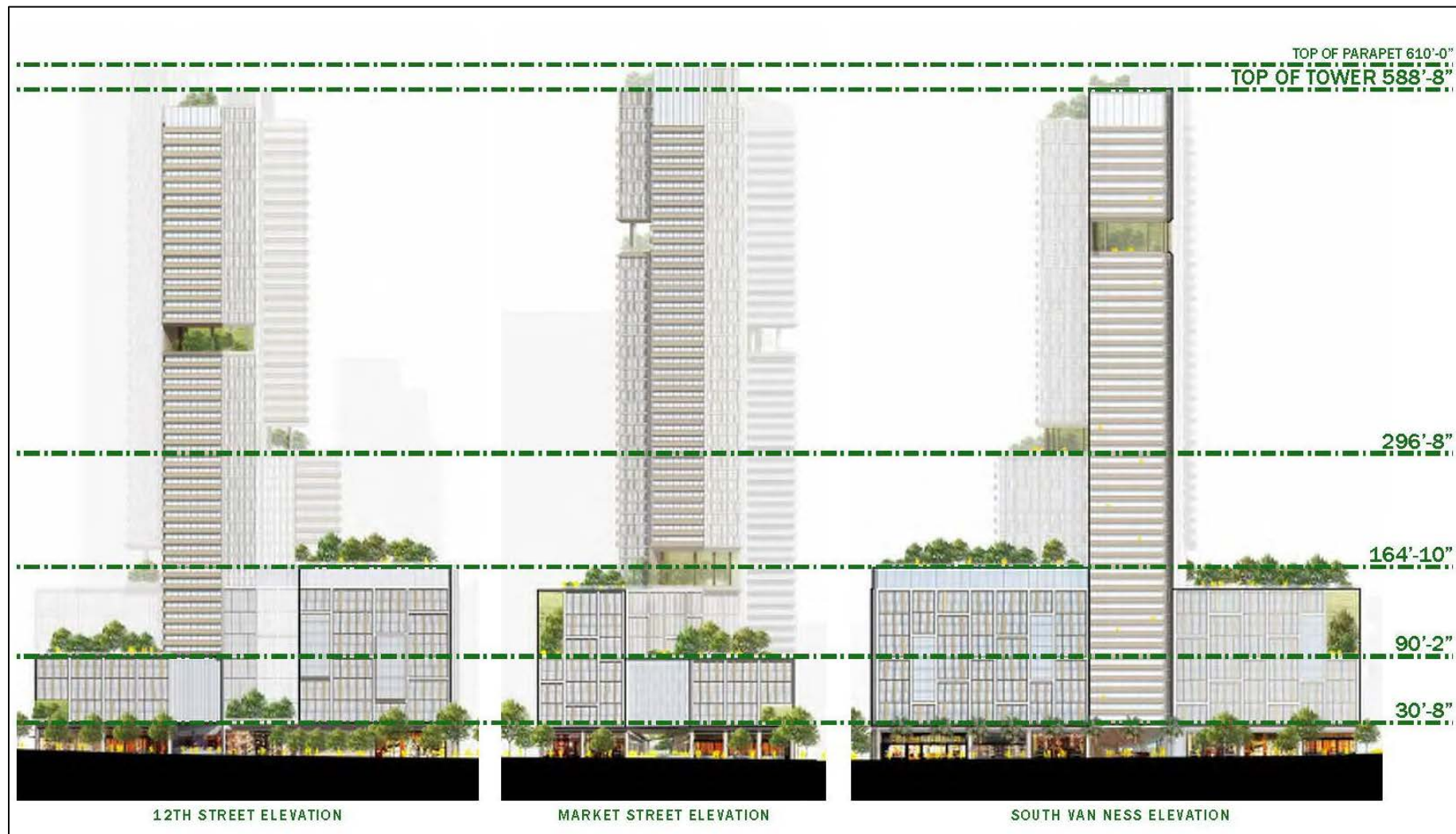
The project sponsor is also considering a taller building design consisting of a single tower and podium (see Figure 18). Elevations for 12th Street, Market Street, and South Van Ness Avenue are presented in Figure 18, while variant renderings are included in the project EIR. As shown in Table 2, the proposed variant would include construction of a single 590-foot-tall, 55-story building.²⁴ Similar to the proposed project, the variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 610 feet.²⁵ The podium would vary in height, from 90 to 139 feet along the Market Street frontage and up to 164

²³ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation, 10 Van Ness Avenue, San Francisco California*, March 16, 2017.

²⁴ The Van Ness and Market Downtown Residential SUD encourages transit-oriented, high-density, mixed-use residential neighborhood development around the intersections of Market Street and Van Ness Avenue and Mission Street and Van Ness Avenue. The current height limit for building towers ranges from 250 to 400 feet. The project variant is intended to reflect the changes to the existing height limits proposed by the Market Street Hub Project. The Hub Project includes changes to existing height limits to provide greater variation in the heights of buildings proposed at the intersection of Market Street and Van Ness Avenue and to better ensure that the area's growth supports the City's goals for housing, transportation, the public realm, and the arts.

²⁵ Pursuant to Planning Code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

feet along the southern frontage of the site, as shown in Figure 18. The ground floor would contain the same uses as the proposed project, with comparable retail uses (see Figure 20) and a single residential lobby. As with the proposed project, 336 class I bicycle spaces would be provided on the ground floor for project residents and ground-floor retail spaces, and 61 class II bicycle spaces would be provided on the sidewalk adjacent to the project site, to meet Planning Code requirements. Vehicle parking would be the same as for the proposed project, with 518 vehicle parking spaces provided in a two-level subgrade parking garage/basement with an entrance off 12th Street (see Figure 21).



Source: KPF Associates, 2017

Figure 18: Variant – Building Elevations from 12th Street, Market Street, and South Van Ness Avenue

Table 2: Characteristics of Proposed Project and Variant

Lot	Proposed Project			Variant
	Dimensions			
Size	51,150 square feet			
Length	475 feet (South Van Ness Avenue)/288 feet (Market Street)/450 feet (12th Street)			
Proposed Building	Area (gross square feet)			
Residential ¹	935,745			935,242
Ground-Floor Commercial (Retail)	30,350			30,450
Parking ²	102,000			102,000
Rooftop Mechanical	3,000			5,297
Total	1,071,095			1,072,989
Building Characteristics	Description			
Stories	North Tower/Podium	41 stories/12 stories		55 stories/15 stories (Tower/Podium)
	South Tower/Podium	41 stories/12 stories		
Height	North Tower/Podium	400 feet (up to 420 feet including the elevator penthouse ³)/114 feet		590 feet (up to 610 feet including the elevator penthouse ³)/164 feet (Tower/Podium)
	South Tower/Podium	400 feet (up to 420 feet including the elevator penthouse)/120 feet		
Ground Floor	Retail: 30,350 gross square feet multiple tenant spaces Residential: Two residential lobbies and 336 class I bicycle parking spaces			Retail: 30,450 gross square feet multiple tenant spaces Residential: 1 residential lobby, and 336 class I bicycle parking spaces
Basement	518 vehicle parking spaces			518 vehicle parking spaces
Proposed Units	Amount (Approx. Percent)			
Dwelling Units	984			984
	North Tower	South Tower	Total	
Studio	267 (27%)	108 (11%)	375 (38%)	347 (35%)
1-Bedroom	294 (30%)	167 (17%)	461 (47%)	449 (46%)
2-Bedroom	51 (5%)	49 (5%)	100 (10%)	166 (17%)
3-Bedroom	19 (2%)	29 (3%)	48 (5%)	22 (2%)
Vehicle Parking Spaces ⁴	518			518
Bicycle Parking Spaces ⁵	397			397
Open Space ⁶	Area (square feet)			
Publicly accessible	2,975			12,091
Common	45,176			25,565
Private	0			9,550

Notes:

1 Includes first-floor nonretail uses and second-floor residential amenity uses.

2 Includes parking and basement mechanical equipment.

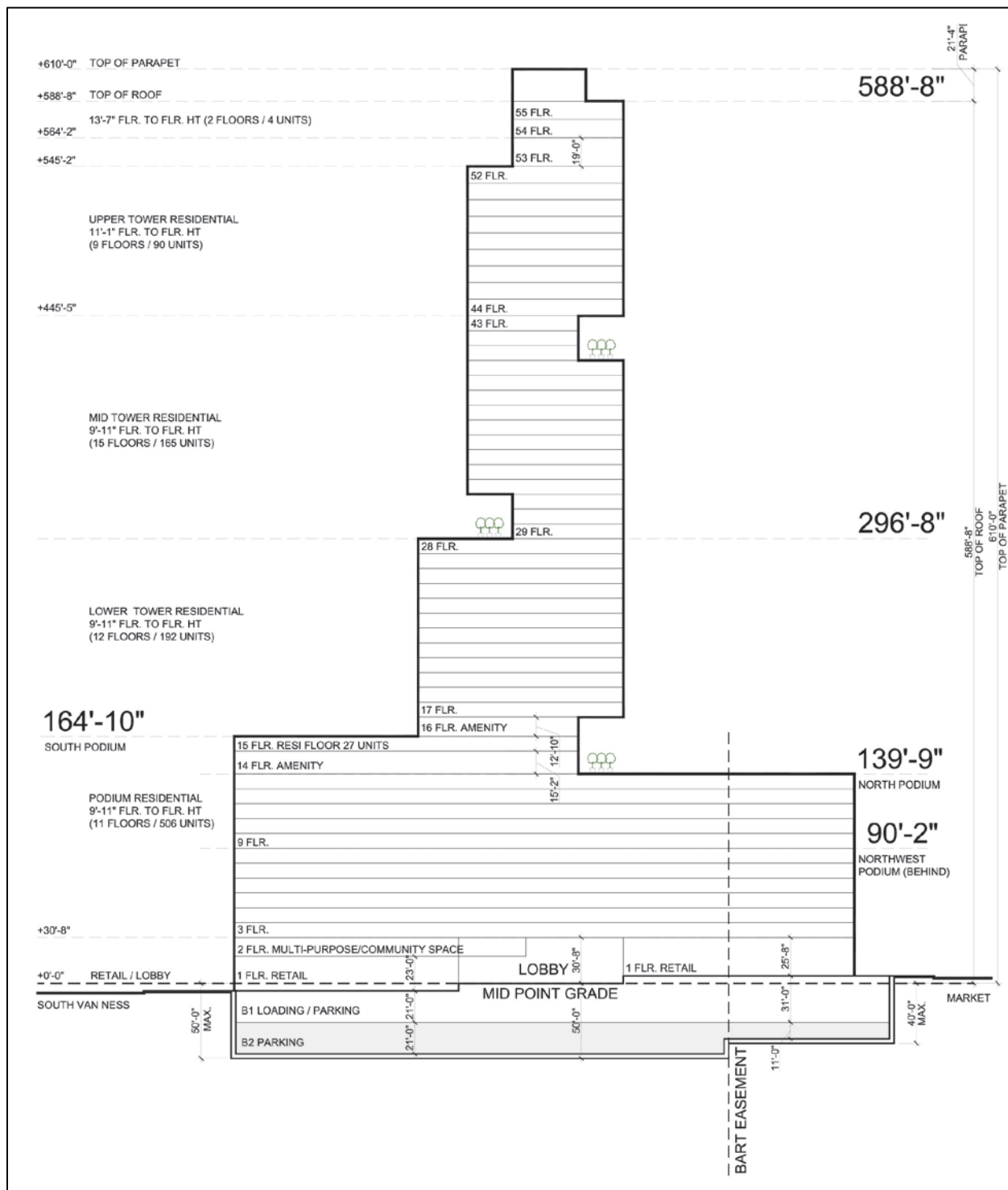
3 The Planning Code height and bulk designations for the project site exempt elevator penthouse, roof screens, and other rooftop appurtenances from height limits.

4 Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.

5 Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.

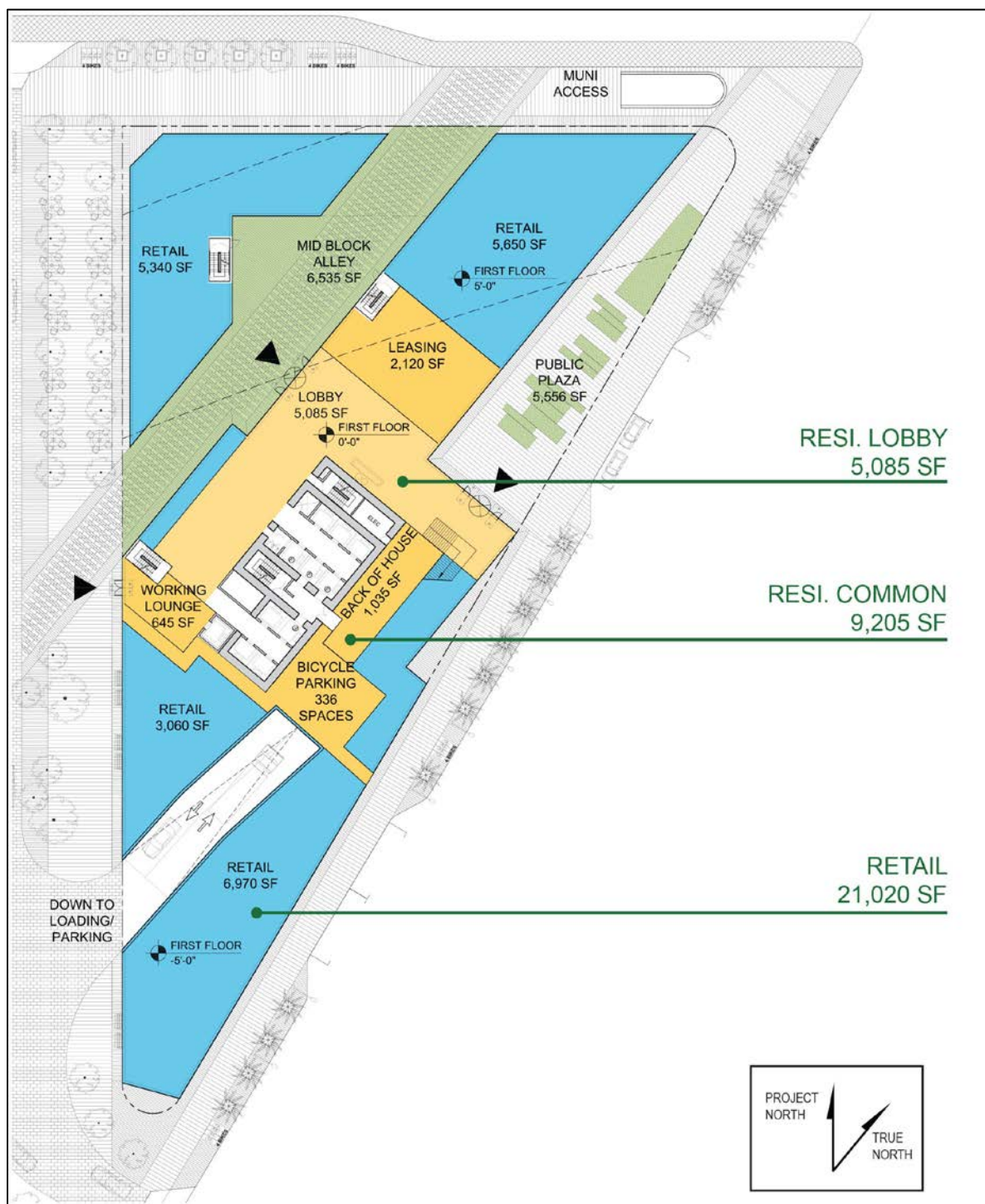
6 Provided in compliance with Planning Code section 736.93, Usable Open Space per Residential Unit.

Source: 10 South Van Ness LLC, 2017



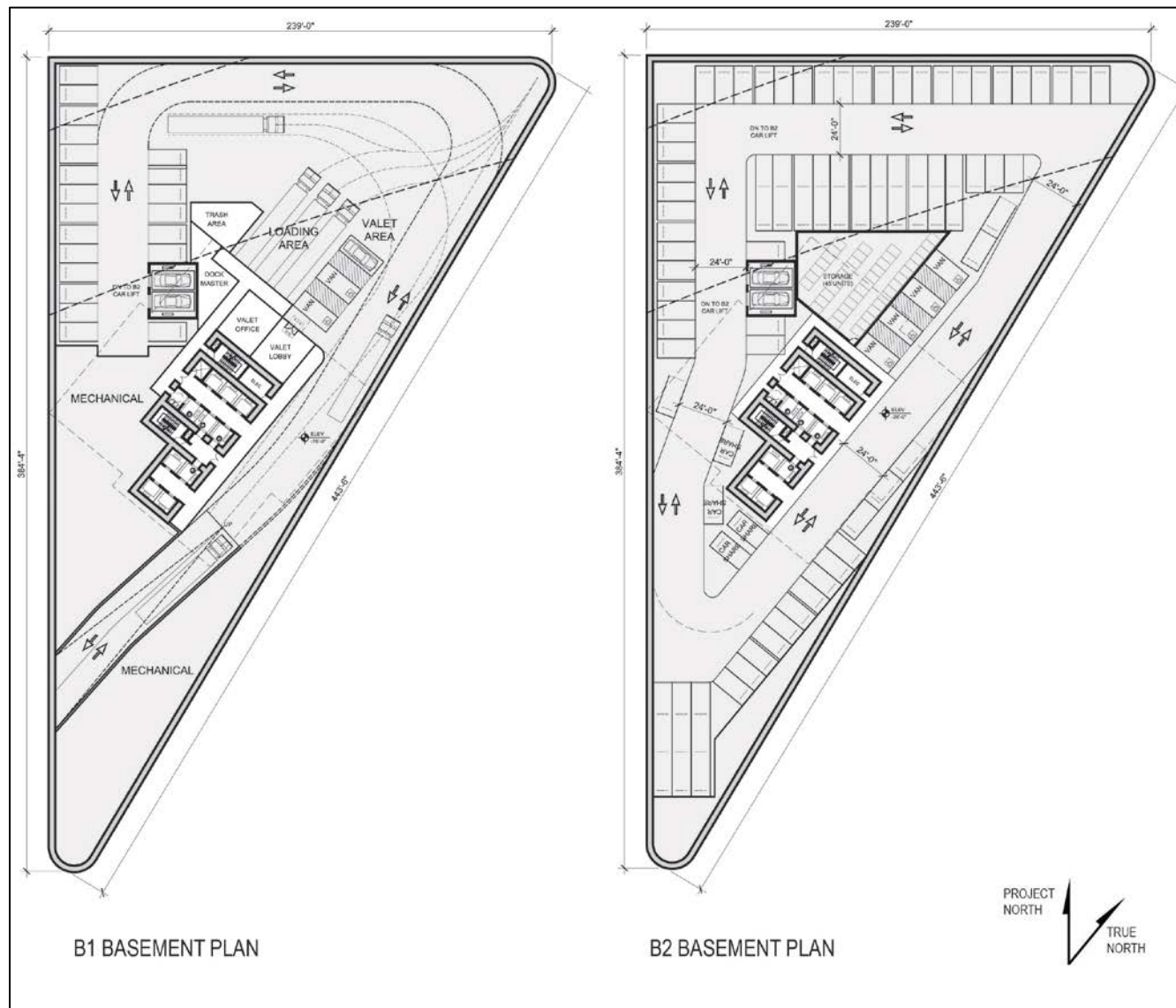
Source: KPF Associates, 2017

Figure 19: Variant – Section



Source: KPF Associates, 2017

Figure 20: Variant – Ground-Floor Plan



Source: KPF Associates, 2017

Figure 21: Variant – Basement Garage Floor Plans

The proposed variant would include approximately 984 dwelling units in a combination of studios and one-, two-, and three-bedroom units, similar to the proposed project. However, with the proposed variant, the mix of units would consist of approximately 347 studios, 449 one-bedroom units, 166 two-bedroom units, and 22 three-bedroom units (representative floor plans are shown in Figures 20 through 26). Residential uses would be provided on Levels 3 through 55, with Level 2 serving as an amenity floor for the proposed residential uses. The pedestrian entrances to the residential lobby would be located on South Van Ness Avenue and on the mid-block alley. One elevator from the parking garage/basement would provide access to the residential lobby. From the residential lobby, a second elevator would provide access to the tower. Elevator access may also be available between the below-grade parking garage/basement and the retail spaces.

Green roofs and open space are provided on several levels throughout the building. In addition to open space on the ground floor, podium levels and rooftop, voids located throughout the tower integrate green space. These voids have been designed to break up the building massing and balance programming, mechanical requirements, open space and green roofs at various levels, as depicted in the elevations shown in Figure 18. The voids were also designed to improve wind conditions and were located in strategic areas on the building based on the results of numerous wind tunnel tests.

Open Space. The proposed variant would include usable open space in a combination of publicly accessible open space (12,091 sf), common usable open space (25,565 sf), and private open space (9,550 sf) for a total of 47,206 sf.²⁶ The open space would be dispersed throughout the building as depicted in Figures 26 and 27. The publicly accessible open space would consist of a mid-block alley connecting Market Street to 12th Street and a pedestrian plaza along the northeasterly South Van Ness Avenue frontage, as shown in Figure 20. The common usable open space would be provided on Levels 14, 16, 29, 41, and 53.

Parking/Loading and Mechanical Equipment. The proposed variant would include the same parking and loading facilities and mechanical equipment as the proposed project. As with the proposed project the generator would be located in the basement with the air intake at the ground level.

Circulation and Access. The proposed variant would include the same circulation and access as the proposed project, with the exception of the location of lobby entrances and the configuration of the mid-block alley. For the proposed variant, there would be two entrances to the single residential lobby provided, one off the mid-block alley and one off South Van Ness Avenue. The proposed mid-block alley would provide public access through the project site between Market Street and 12th Street.

Transportation Demand Management. The proposed variant would include the same TDM plan as the proposed project.

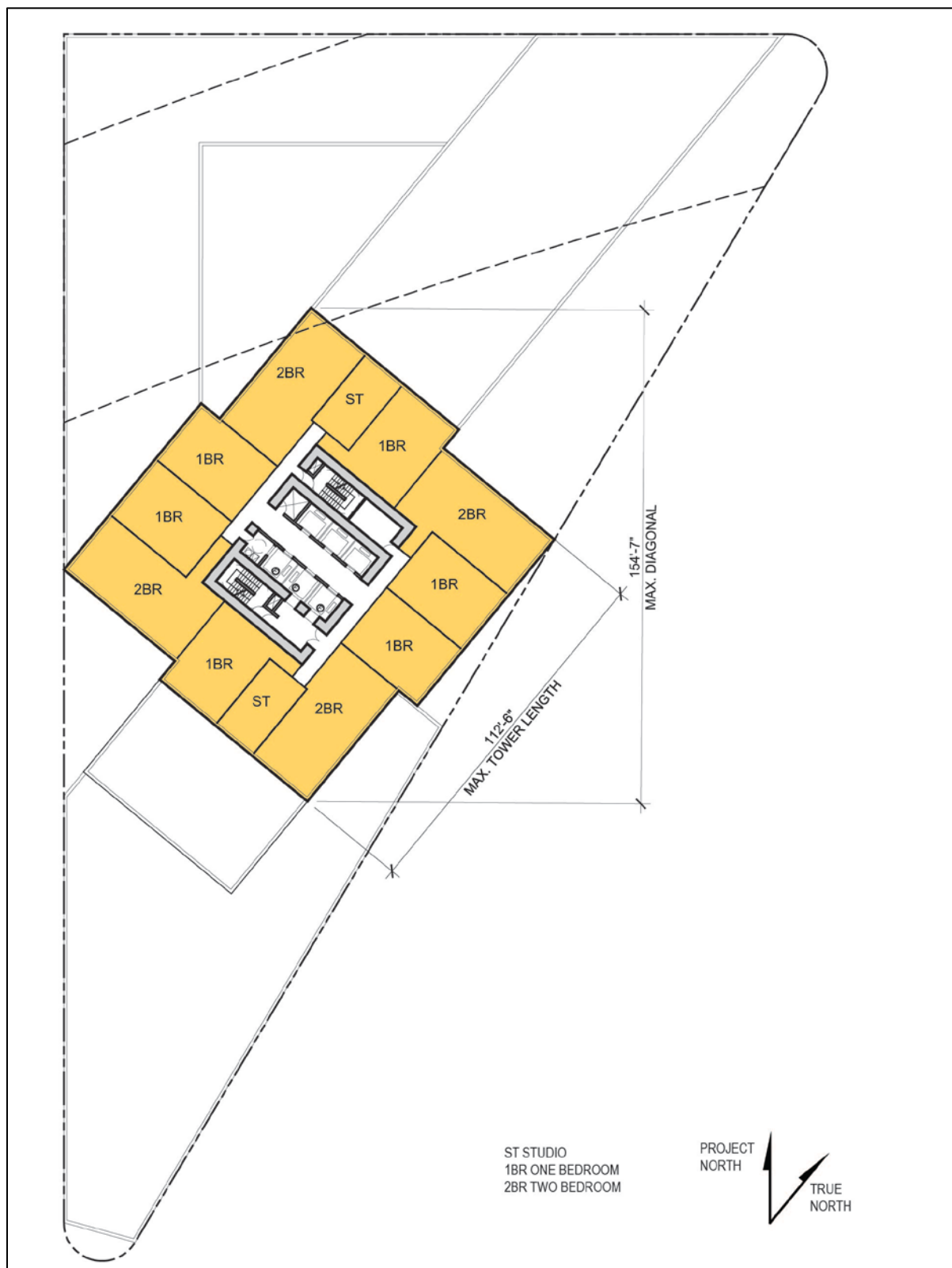
Streetscape Improvements and On-Street Parking. The proposed variant would include the same streetscape improvements and on-street parking and loading as the proposed project.

²⁶ Private open space is open space only accessible to one unit or a certain group of units.



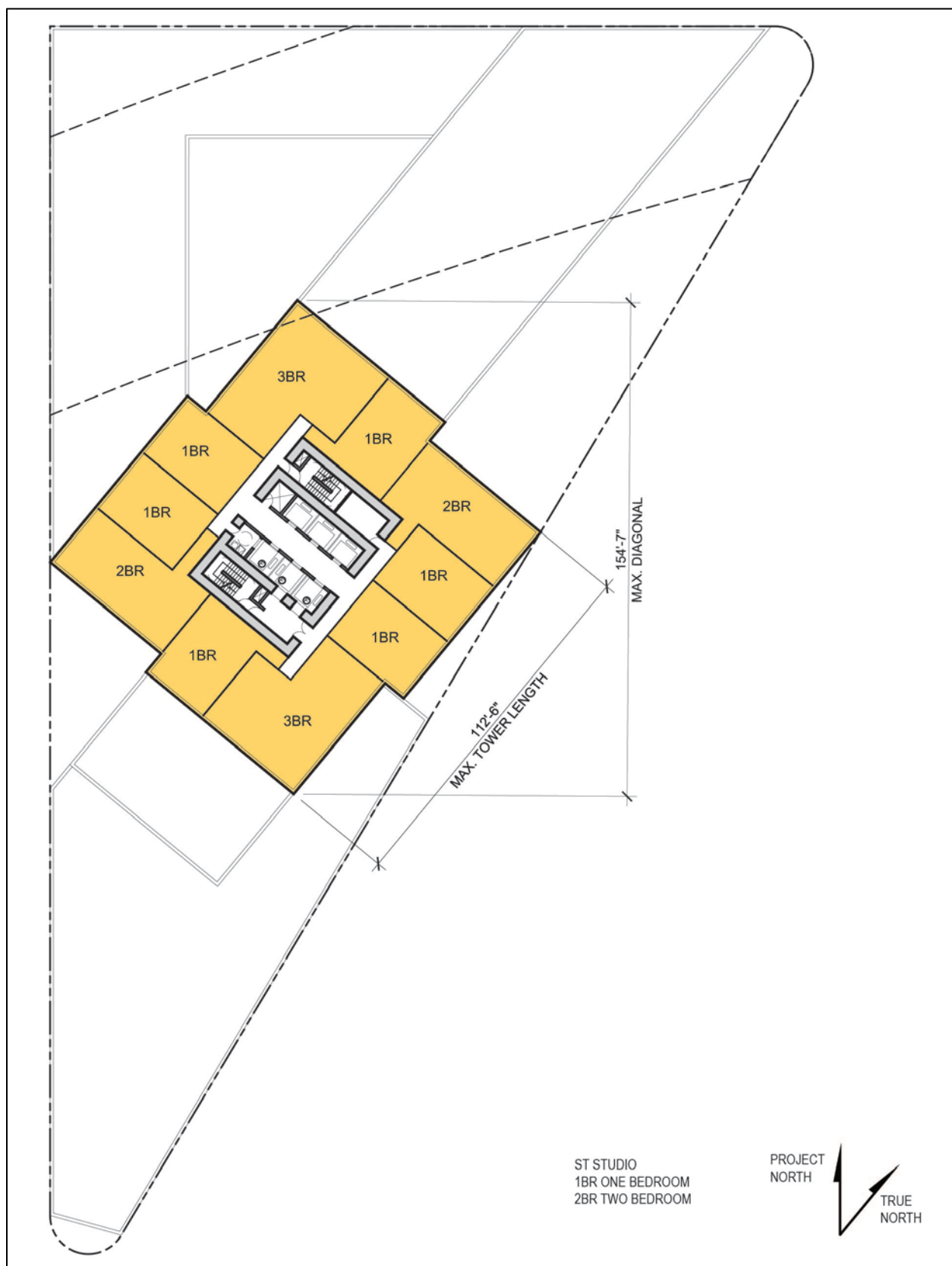
Source: KPF Associates, 2017

Figure 23: Variant – Representative Floor Plans for Levels 29–31



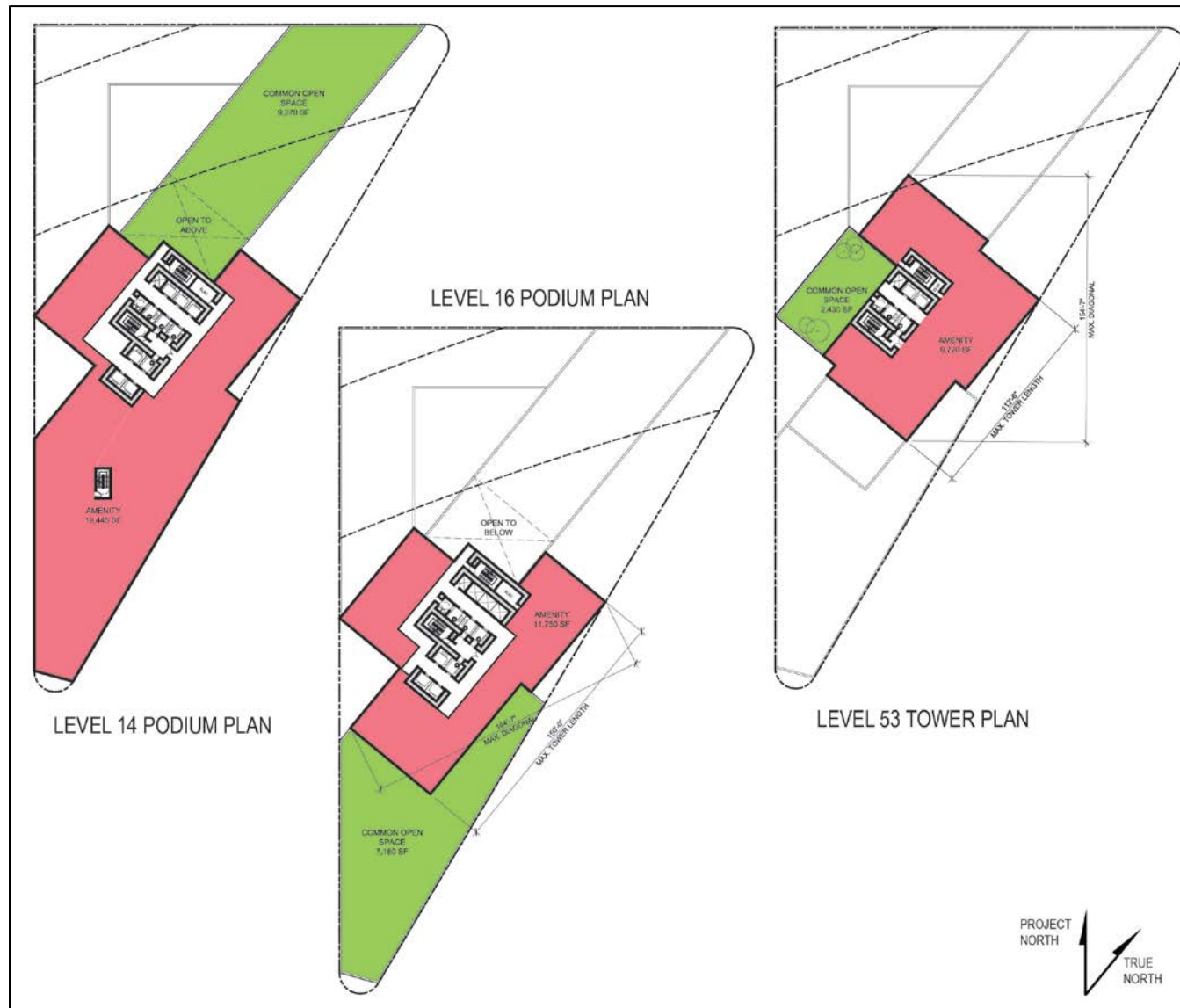
Source: KPF Associates, 2017

Figure 24: Variant – Representative Floor Plans for Levels 32–40



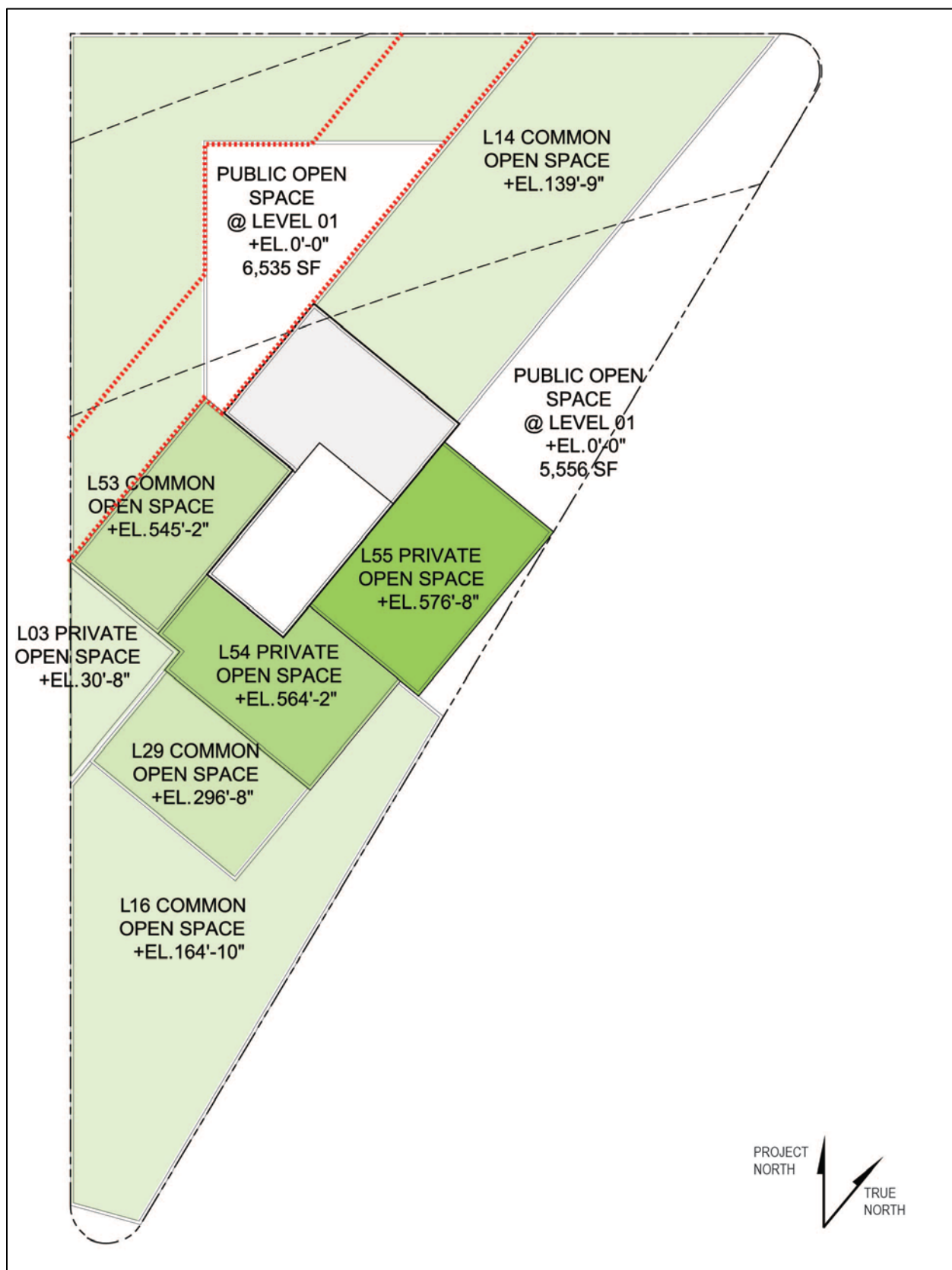
Source: KPF Associates, 2017

Figure 25: Variant – Representative Floor Plans for Levels 44–52



Source: KPF Associates, 2017

Figure 26: Variant – Amenity and Common Open Space Plans



Source: KPF Associates, 2017

Figure 27: Variant – Open Space Diagram

Sustainability. The proposed variant would incorporate the same sustainability features as the proposed project. As with the proposed project, the variant is also certified as an environmental leadership development project. The proposed variant would also remove the existing 28 trees along the perimeter of the project site frontage on all three sides of the property, and install 61 new street trees in compliance with Public Works Code section 806(c)(2), for a total of 33 net new street trees.

Other Design Features. Wind features for the proposed variant would be in the same locations as described for the proposed project. The tower has been designed with voids on various levels to break up the building massing, provide common and private open space amenities, and improve wind conditions. The voids in the tower massing help reduce wind down-drafting and acceleration around the tower by creating space for the wind to naturally flow through the tower. Absent these voids, stronger winds would occur at the pedestrian level at the base of the tower on 12th Street due to downdrafts and across South Van Ness Avenue due to wind acceleration around the tower massing.

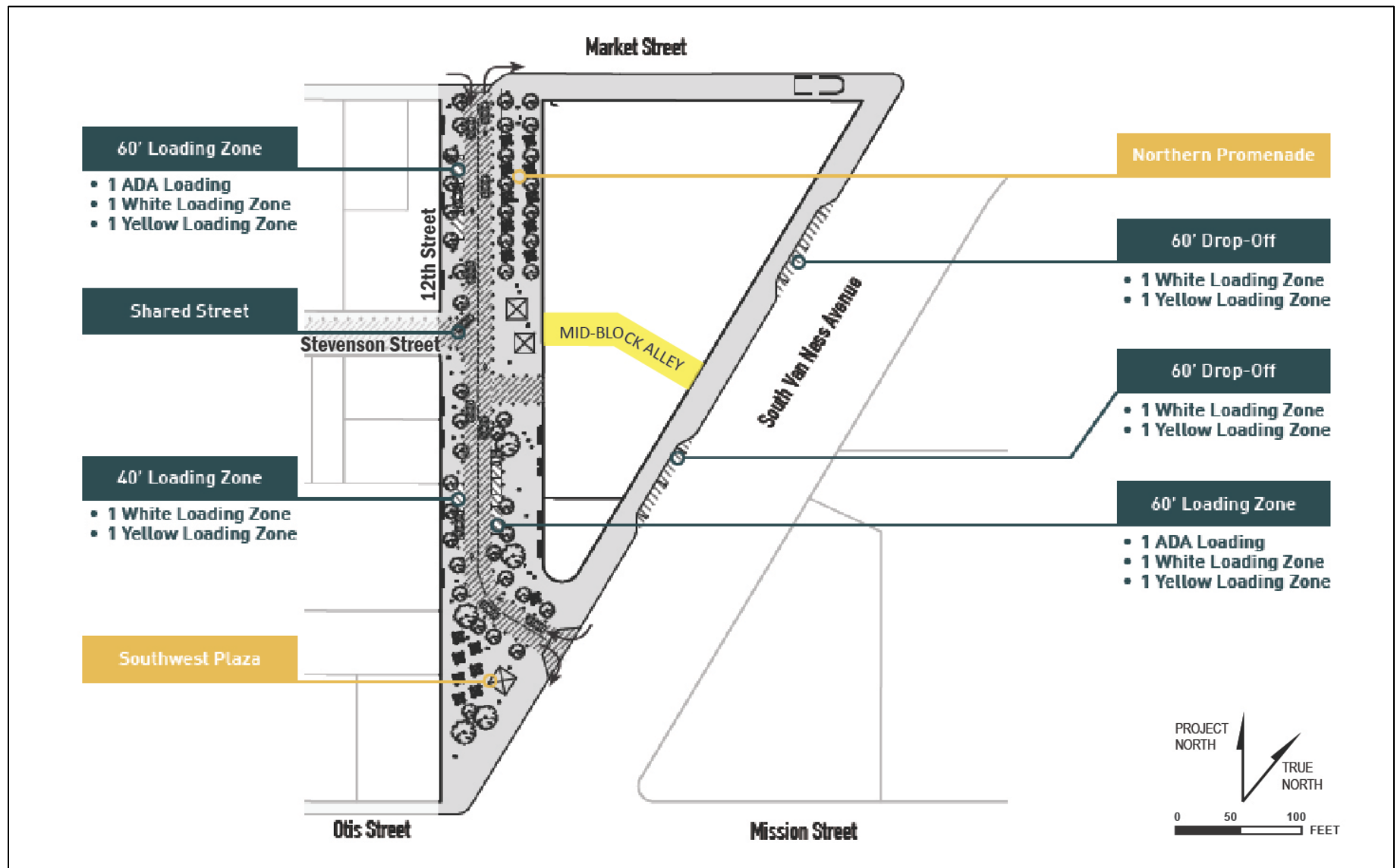
Construction. Construction activities would be the same under the proposed variant as under the proposed project, in terms of phasing, duration and potential for temporary sidewalk and roadway closures. The 55-story proposed single tower project variant would fundamentally have the same foundation type and design methodology as the 41-story double tower construction under the proposed project. Both are anticipated to be constructed with a combination of a mat foundation and deep foundation piers. In both cases, the tower columns and shear walls would be founded on a common pier cap. This pier cap would be supported by drilled piers extending below the BART ZOI, or up to approximately 80 feet bgs, but not to the depth of the underlying bedrock. The proposed variant with one tower would require fewer columns, shear walls, and piers compared to the proposed project with two towers. As under the proposed project, the variant would also not require pile driving.

Straight-Shot Streetscape Option

The straight-shot streetscape plan, shown in Figures 28 and 29 could be included, as an option, with either the proposed project or variant.²⁷ The straight-shot streetscape plan would exceed Market & Octavia Area Plan and Planning Department standards by creating a pedestrian promenade on 12th Street (see Figure 28). On 12th Street, the eastern sidewalk would be expanded to a width of 40 feet (9 feet of pedestrian thoroughway, 25 feet for a pedestrian plaza, and an additional 6 feet of pedestrian thoroughway), while the western sidewalk would be expanded to a width of 18 feet (4 feet of buffer, 10 feet of pedestrian thoroughway, and an additional 4 feet of buffer), as shown in Figure 29. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction.

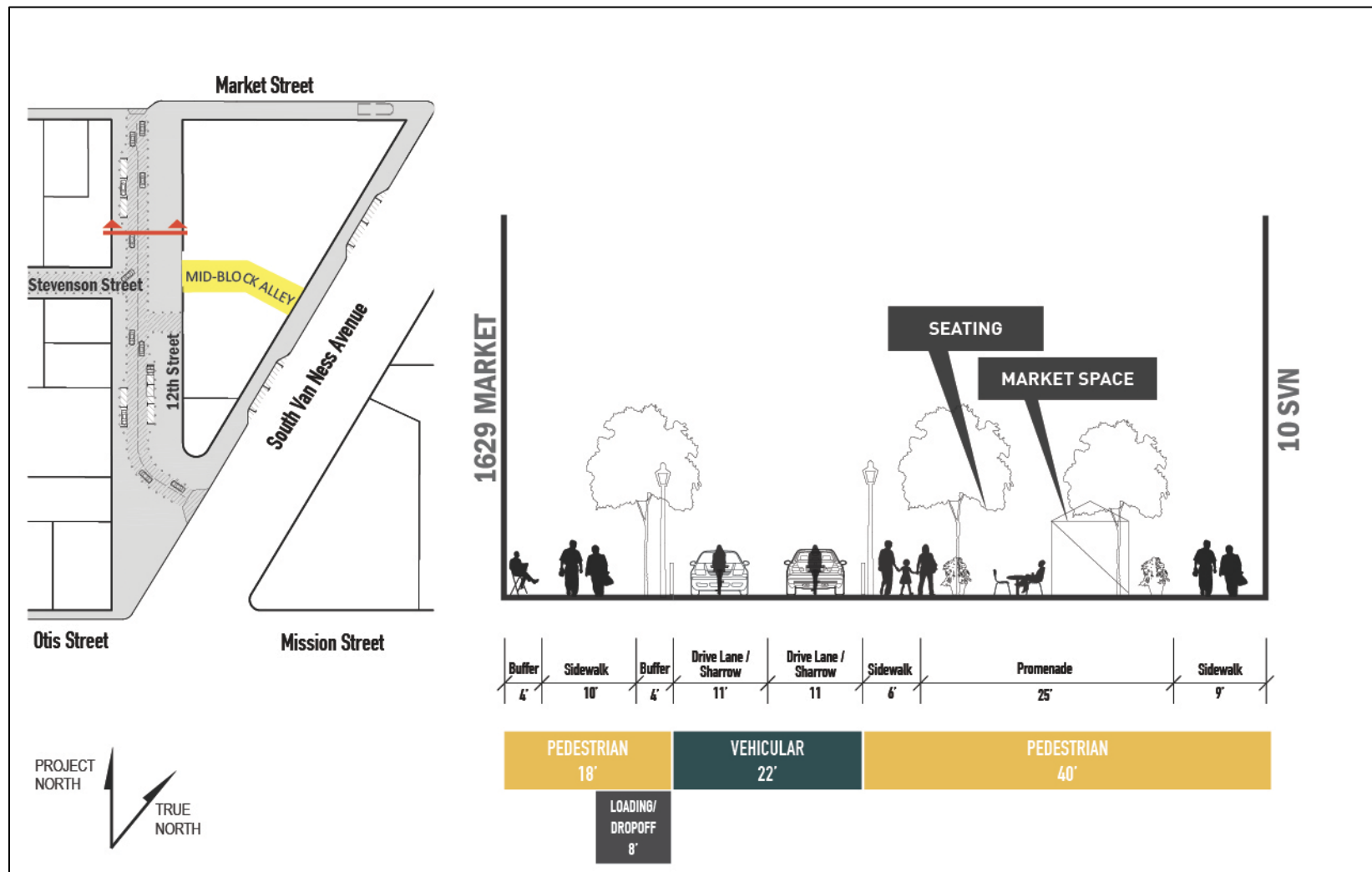
On the west side of 12th Street, the straight-shot streetscape design would include one 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space, and one 40-foot-long loading zone with one commercial loading space and one passenger loading space. One 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space would be included on the east side of 12th Street. The two loading zones on the west side of South Van Ness Avenue, and the pedestrian plaza on the southwest corner of the project site would be included as proposed under the Market Octavia Streetscape Plan.

²⁷ Although Figures 28 and 29 show the straight-shot streetscape option with a mid-block alley connecting South Van Ness Avenue to 12th Street, if the straight-shot streetscape option were combined with the variant, the mid-block alley would be reconfigured to connect Market Street with 12th Street, as shown in Figure 20.



Source: SITELAB Urban Studio, 2017

Figure 28: Straight-Shot Streetscape Option with the Proposed Project (Plan View)



Source: SITELAB Urban Studio, 2017

Figure 29: Straight-Shot Streetscape Option with the Proposed Project (12th Street Right-of-Way Section)

As under the Market Octavia Streetscape Plan, this option would include 61 class II bicycle spaces along the project frontage sidewalks, with 32 spaces on 12th Street, 21 spaces on Market Street, and eight spaces on South Van Ness Avenue. Under both streetscape design options, the three existing curb cuts on South Van Ness Avenue and the three existing curb cuts on the east side of 12th Street would be removed, and a 20-foot-long curb cut would be created on the east side of 12th Street for access to and from the proposed underground parking garage.

Under the proposed streetscape plan and straight-shot streetscape option, new streetscape features would be consistent with the Better Streets Plan within the sidewalk areas along Market Street and South Van Ness Avenue. Approximately seven new street trees would be installed along the south side of Market Street, and approximately 17 new street trees would be installed along the west side of South Van Ness Avenue. Any new trees planted would comply with the Public Works requirements.

The design of the straight-shot streetscape option would be similar to the proposed streetscape design; the primary difference is that the straight-shot streetscape option would remove parking and instead include wider sidewalks, allowing for more room for pedestrian amenities such as a promenade along the east side of 12th Street and additional street furniture for sitting and marketplace kiosk space. In addition, the raised intersection at Stevenson Street and the mid-block alley under the proposed project streetscape would not be included under the straight-shot streetscape option. This option would propose a shared street concept that would be like a living street.²⁸

Required Approvals

This section describes the approvals that would be required for the proposed project and variant.

Approvals Required for the Proposed Project and Variant²⁹

Actions by the Planning Commission

- Approval of a Downtown Project Authorization pursuant to Planning Code Section 309 for new construction or substantial alteration of structures in C-3 Districts, with exceptions to the requirements of Sunlight Access on Certain Streets (section 146[a]); Reduction of Ground-Level Wind Currents in C-3 Districts (section 148); and Reduction of Shadows on Certain Public or Publicly Accessible Open Spaces in C-3 Districts (section 147).
- Approval of a Conditional Use Authorization pursuant to Planning Code section 303[u]) to permit accessory residential parking above that principally permitted in Planning Code sections 151.1 and 249.33.
- Approval of an in-kind improvements agreement under Planning Code section 424.3(c) for community improvements for the neighborhood infrastructure portion of the Van Ness and Market Downtown Residential SUD neighborhood infrastructure fee.

²⁸ Living Streets convert standard streets and alleys “into shared spaces that prioritize the use of the space for pedestrians and open space – often by claiming street space to create enhanced and active places for landscaping and seating. Living Alleys typically include special paving, traffic calming, lighting, seating, greening, and other elements to indicate that vehicles are visitors and pedestrians have primacy across the full width of the right-of-way.” Source: SF Better Streets, <http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/>, accessed April 23, 2018.

²⁹ Additional approvals required for the variant are discussed separately below, p. 50.

Actions by Other City Departments and Agencies

- *Planning Department and Department of Building Inspection (DBI)* – Approval of the site permit and addenda thereto. Approval of demolition, grading, and building permits for the demolition of the existing buildings and construction of the new building. Permit for underpinning of adjacent structures. Night noise permit for nighttime construction.
- *SFMTA Board of Directors* – Approval of the proposed curb modifications, parking space removal, and bicycle corrals on South Van Ness Avenue, Market Street, and 12th Street.
- *SFMTA Department of Parking and Traffic* – Approval of a special traffic permit for use of a public street space during project construction; approval of foundation, shoring, and dewatering systems as they relate to the Muni ZOI.
- *SFMTA Color Curb Program* – Approval of a request for on-street loading spaces on South Van Ness Avenue and 12th Street.
- *Bureau of Streets and Mapping, San Francisco Public Works* – Subdivision and condominium map approval and encroachment permits for sidewalk underground vaults. Permit for removal and planting of street trees; approval of a street space permit for use of a public street space during project construction (including construction of the proposed wind canopies); street and sidewalk permits for any modifications to public streets, sidewalks, or curb cuts.
- *San Francisco Public Works* – Street encroachment permit, to be approved by the director of public works, and by the board of supervisors if required by the director, for wind canopies to be located in the public right-of-way.
- *San Francisco Public Utilities Commission* – Approval of any changes to sewer laterals. Approval of an erosion and sediment control plan before commencing construction, and compliance with post-construction stormwater design guidelines, including a stormwater control plan.
- *San Francisco Department of Public Health* – Approval of a dust control plan because the site is in excess of 0.5 acre (article 22B). Approval of a ventilation plan, in compliance with San Francisco Health Code, article 38, because the proposed project site is located within an area that is identified in the Air Pollutant Exposure Zone Map.³⁰ Approval of a site mitigation plan under the Maher Ordinance (article 22A), because the proposed project is located within the Maher Ordinance Area.³¹
- *Board of Supervisors* – Approval of sidewalk widening.
- *Recreation and Park Commission* – Joint determination with the Planning Commission that the project complies with the requirements of Planning Code section 295.

Actions by Other Agencies

- *Bay Area Air Quality Management District* – Issuance of permits for the installation and operation of an emergency generator.
- *BART* – Plan review and approval of shoring and foundation within the BART ZOI, and issuance of a permit to work within or adjacent to the right-of-way.

³⁰ San Francisco Department of Public Health, 2014, Air Pollutant Exposure Zone Map, April 2014, <https://www.sfdph.org/dph/files/EHSDocs/AirQuality/AirPollutantExposureZoneMap.pdf>, accessed August 9, 2017.

³¹ San Francisco Planning Department, Expanded Maher Area Map, March 2015, <https://www.sfdph.org/dph/eh/HazWaste/hazWasteSiteMitigation.asp>, accessed August 9, 2017.

Additional Approvals Required for the Proposed Variant

Actions by the Planning Commission

- Recommend to the board of supervisors approval of *Planning Code Map and Text Amendments for Height District Reclassification*: from the 120/400-R2 and 400-R-2 Height and Bulk District, as described above, to create a special use district (SUD).³²
- *General Plan Amendment*: Approval of General Plan Amendment to Downtown Area Plan.

Actions by the Board of Supervisors

- *Planning Code Amendments for Height District Reclassification*: The building height of the proposed variant would exceed the height limit of the existing 120/400 R-2 and 400-R-2 Height and Bulk District. The board of supervisors would need to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to Planning Code section 302, to create an SUD.
- *General Plan Amendment*: Approval of General Plan Amendment to Downtown Area Plan.

³² The creation of a special use district is the instrument by which height and bulk controls can be changed in a small geographic area. The SUD would include increases to the height and bulk limits, and may include some changes to the inclusionary housing requirement.

B. PROJECT SETTING

As described above, the project site is located at the southwest corner of Market Street and South Van Ness Avenue, on the entire block bounded by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west. As shown in Figure 2, the project site is roughly triangular in shape and is currently occupied by the 91,088-square-foot San Francisco Honda dealership.³³ A subsurface easement for BART is located underneath the northern third of the project site. Two Muni bus stops and one subsurface Muni rail entrance are located along the project site's frontage with Market Street.

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height districts) range from 40 feet to 400 feet (see Figure 3). Several large, mixed-use commercial, office, and residential buildings are located along Van Ness Avenue and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses.

Cumulative Setting

Cumulative analysis under CEQA may use a list-based or projections-based approach depending on the environmental topic and resources addressed. Table 3 includes cumulative projects within a 0.25-mile radius of the project site that may be considered in determining cumulative environmental effects that are more localized. Table 3 shows the past, present, and reasonably foreseeable relevant projects within 1,500 feet of the project site that, in conjunction with the proposed project or variant, are considered for purposes of the cumulative environmental analysis (see Figure 30). As shown in Table 3, cumulative projects within 1,500 feet of the project site would result in 3,777 residential units, 118,146 gsf of retail, 2,349 gsf of commercial, 542,599 gsf of office, and 142,125 gsf of institutional uses..

³³ The historic resources evaluation prepared for the project (*Part I Historic Resource Evaluation, Final Version: 10 South Van Ness Avenue (2015-004568ENV) City and County of San Francisco, California*) found the existing Honda dealership at 10 South Van Ness Avenue to be eligible for listing in the California Register under Criterion 1 (Events) for its association with the Fillmore West concert venue and Criterion 2 (Persons) for its association with prominent San Francisco music promoter Bill Graham.

Table 3: Cumulative Projects³⁴

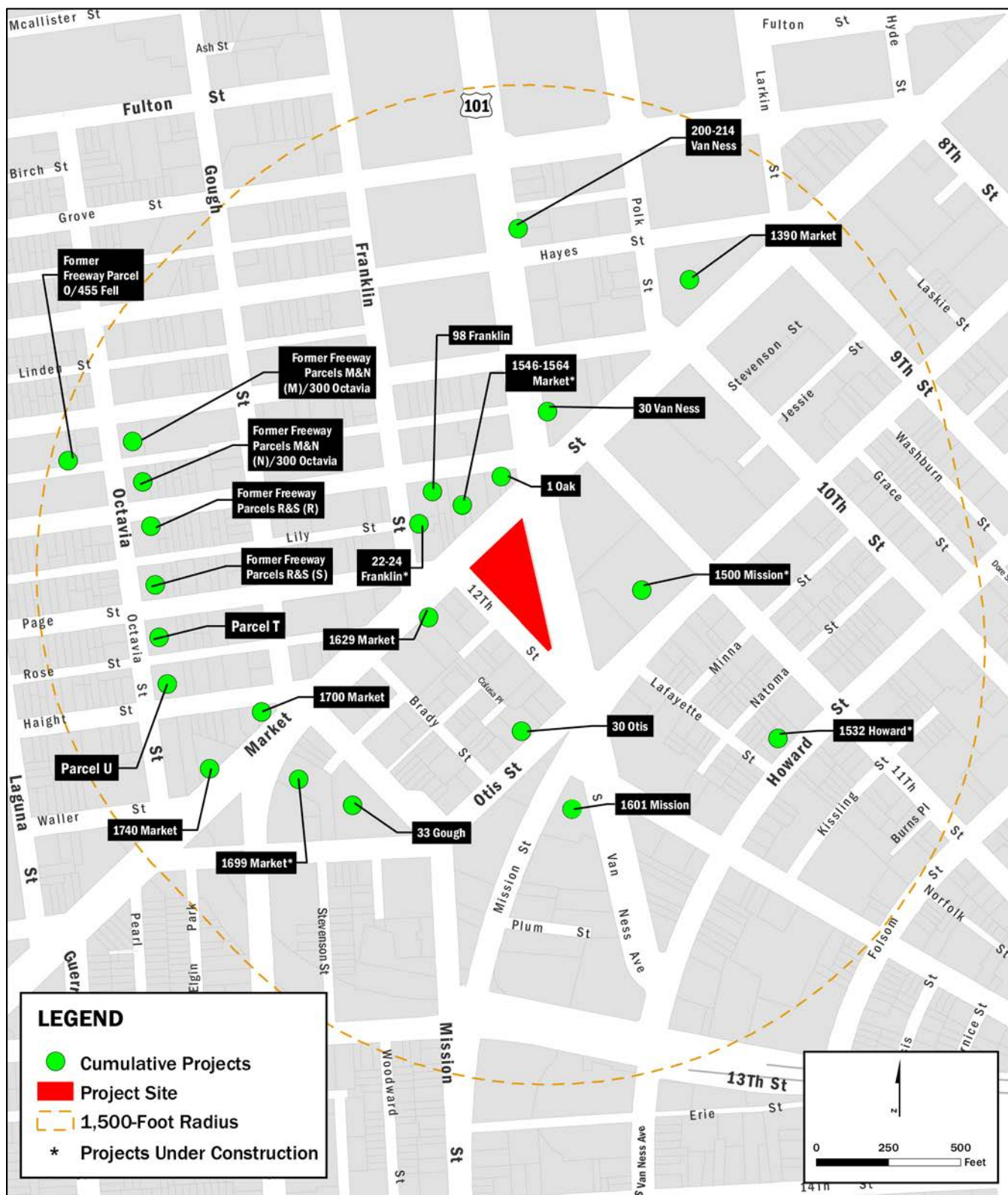
Address	Case File No.	Dwelling Units	Gross Square Feet			
			Retail	Commercial	Office	Institutional
22-24 Franklin Street ¹	2013.1005E	35	2,100			
98 Franklin Street	2016-014802ENV	345	3,100			75,500
33 Gough Street ²	No current case number					
1532 Howard Street ¹	2013.1305E	15				
1390 Market Street (Fox Plaza Expansion) ³	2005.0979E					
1546-1564 Market Street ¹	2012.0877E	109	4,810			
1629 Market Street (1601-1637 Market Street and 53 Colton Street)	2015.005848ENV	584	13,100		27,300	
1699 Market Street ¹	2014.0484E	162	4,500			
1700 Market Street	2013.1179E	48		1,549		
1740 Market Street	2014.0409E	110	7,600			
1500 Mission Street (1500 and 1580 Mission Street) ¹	2014.000362ENV	550	35,000		463,300	
1601 Mission Street	2014.1121ENV	220	7,336			
30 Otis Street	2015.010013ENV	354	4,600			13,125
1 Oak Street	2009.0159E	320	1,300			
30 Van Ness Avenue ⁴	2015.008571ENV	610	21,000		49,999	
200-214 Van Ness Avenue	2015.012994ENV	113	5,000			54,000
Parcels M and N – 300 Octavia Boulevard	2014.002330ENV	12		800		
Parcel O – 455 Fell Street	2015.002837ENV	108	1,200		2,000	
Parcels R and S	2014.1322ENV	56	7,500			
Parcel T	2014.1509ENV	26				
Total		3,777	118,146	2,349	542,599	142,125

Notes:

1. Project(s) currently under construction.
2. No project is currently proposed for this site; the environmental evaluation application was withdrawn on April 5, 2018. Modeled as a Hub pipeline project with a 200-foot-tall tower and 80-foot-tall podium.
3. No proposed project currently exists at this site. Modeled as a 120- to 140-foot-tall building.
4. The project is the sale of a four-story, city-owned office building over ground-floor retail/commercial, with continued use of the office by the City until 2019. After 2020, the building is expected to be replaced with a high-rise residential tower, with a proposed Hub height increase to 520/120 feet.

Source: Compiled by AECOM in 2017, updated April 2018.

³⁴ The cumulative projects list was identified at the time of the publication of the notice of preparation of an environmental impact report (July 12, 2017). This list was updated in April 2018.



Source: AECOM 2017

Figure 30: Cumulative Projects

In addition to the cumulative projects shown in Table 3, the following transportation improvement plans and area plans are considered for purposes of the cumulative environmental analysis:

Van Ness Bus Rapid Transit – Clearinghouse No. 2007092059. The Van Ness Bus Rapid Transit project proposes operational and physical improvements to facilitate improved Muni bus service along Van Ness Avenue between Mission and Lombard streets. The operational improvements include designating bus-only lanes to allow buses to travel with fewer impediments; adjusting traffic signals to give buses more green light time at intersections; and providing real-time bus arrival and departure information to passengers to allow them to manage their time more efficiently. The physical improvements include building high-quality and well-lit bus stations to improve passenger safety and comfort, as well as providing streetscape improvements and amenities to make the street safer and more comfortable for pedestrians and bicyclists who access the transit stations. Improvements to stations in the vicinity of the project site include locating the Bus Rapid Transit station in the northbound direction of South Van Ness Avenue at Market Street and discontinuing the existing curbside bus stop on South Van Ness Avenue north of Mission Street.

Better Market Street Project – Case No. 2014.0012E. The goal of this project is to make improvements to Market Street to reestablish the street as the premier cultural, civic, and economic center of San Francisco. The Better Market Street Project is a coordinated multi-city agency effort led by San Francisco Public Works, the San Francisco Planning Department, and the SFMTA to redesign and implement transportation and streetscape improvements to Market Street. The project would make improvements to the 2.2-mile segment of Market Street between Octavia Boulevard and The Embarcadero and potentially along Mission Street between Valencia Street and The Embarcadero. The project envisions a new Market Street that is more beautiful and green, has enlivened public plazas and sidewalks full of cafés, showcases public art and performances, provides dedicated bicycle facilities, and delivers efficient and reliable transit. The Better Market Street Project would include transportation and streetscape improvements, including changes to the roadway configuration and private vehicle access; traffic signals; surface transit, such as transit-only lanes, stop spacing, service, stop location, stop characteristics and infrastructure; bicycle facilities; pedestrian facilities; streetscapes; commercial and passenger loading; vehicular parking; plazas; and utilities.

Market & Octavia Area Plan – Case No. 2003.0347. As part of the general plan, the Market & Octavia Area Plan serves to respond to the need for housing, repair the fabric of the neighborhood, and to support transit-oriented development. The Market & Octavia Area Plan includes zoning for residential and commercial uses, prescribes streetscape and open space improvements, and locates high-density land uses close to transit. The Market & Octavia Area Plan established the Van Ness and Market Downtown Residential SUD, in which the project site is located, which is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence.

Western SoMa Area Plan – Case No. 2008.0877. The Western SoMa Area Plan is an adopted element of the San Francisco General Plan. The plan area consists of approximately 298 acres in the western portion of the South of Market area, with its northwestern boundary approximately 0.5 mile southeast of the project site. The Western SoMa Area Plan establishes new height and bulk districts, changes to zoning districts, and new density restrictions for the area. The Area Plan also includes streetscape improvements along designated streets and intersections, including installation of signalized pedestrian crossings; sidewalk extensions and corner bulb-outs; gateway treatments such as signage and lighting; physical roadway features such as enhanced hardscape areas, landscaped islands and colored textured pavement; public realm greening amenities (i.e., street trees and planted medians); and other pedestrian enhancements (i.e., street furniture, public restrooms).

The Market Street Hub Project (Hub Project) – Case No. 2015-000940ENV. The Hub Plan would amend the 2008 Market and Octavia Area Plan, for the easternmost portions of the Market and Octavia Area Plan. The overarching objectives of the Hub Plan are to encourage housing, including affordable housing; create safer and more walkable streets as well as welcoming and active public spaces; increase transportation options; and create a neighborhood with a range of uses and services to meet neighborhood needs.³⁵ The Hub Plan would pursue this vision through changes to current zoning controls in the area to meet plan objectives. This would include changes to height and bulk districts for select parcels to allow more housing, including more affordable housing. The Hub Plan seeks to increase the space available for housing through changes to the planning code and zoning map so as to allow development of a taller, larger, and more diverse array of buildings and heights within the Hub Plan area. Modifications to zoning controls would also allow more flexibility for development of nonresidential uses, specifically, office, institutional, art, and public uses. The plan also calls for public-realm improvements to streets and alleys within and adjacent to the Hub Plan area. The Hub Plan would lower off-street parking maximums to decrease off-street parking capacity within the Hub Plan area, a transit-rich location. In addition to analyzing the Hub Plan at a programmatic level, the Hub Plan EIR would evaluate two individual development projects within the Hub Plan area (i.e., 30 Van Ness Avenue Project and 98 Franklin Street Project) at a project-specific level. The Planning Department is anticipated to release a notice of preparation of an environmental impact report (EIR) for the Hub Plan in May 2018 and have a public scoping meeting to receive oral comments concerning the scope of the EIR in June 2018 and a draft EIR in spring 2019.

It is anticipated that if all of the parcels in the Hub Plan area were to be developed to the proposed maximum height and bulk limits, these changes would result in approximately over 2,000 new residential units (over 5,000 new residents) in addition to new commercial space.

³⁵ A draft plan was released in March 2017. Please see: <http://sf-planning.org/market-street-hub-project>. Accessed April 21, 2018.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the San Francisco Planning Code or Zoning Map, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section discusses all applicable (1) variances, special authorizations, and proposed changes to the Planning Code or Zoning Map, (2) conflicts with adopted plans and goals of the City or region, and (3) approvals or permits required from various federal, state, and local agencies necessary for the construction and operation of the proposed project.

Conflicts with adopted plans, policies, or regulations do not, in and of themselves, indicate a significant environmental effect within the meaning of CEQA. To the extent that physical environmental impacts may result from such conflicts, these impacts are analyzed under the relevant environmental topic in the initial study (Section E, Evaluation of Environmental Effects), or in the project EIR. The consistency of the proposed project or variant with plans, policies, and regulations that do not relate to physical environmental issues will be considered by City decision-makers when they determine whether to approve, modify, or disapprove the proposed project or variant.

San Francisco Plans and Policies

San Francisco General Plan

The San Francisco General Plan provides the City’s vision for the future of San Francisco. The general plan is divided into 10 elements that apply citywide: Air Quality, Arts, Commerce and Industry, Community Facilities, Community Safety, Environmental Protection, Housing, Recreation and Open Space, Transportation, and Urban Design. The general plan also includes area plans that identify objectives for specific geographic planning areas, such as the Market & Octavia Area Plan, which includes the project site.

The general plan also includes area plans, each of which focuses on a particular area of the city. The project site is in the area covered by the Market and Octavia Area Plan, which establishes objectives and policies that guide development in the Market and Octavia neighborhoods. The general plan also includes a land use index, which consolidates the different land use policies contained in all of the different elements of the general plan, including area plans.

The proposed project or variant would not obviously or substantially conflict with the objectives and policies of the general plan except as noted below. The proposed project or variant, which would be 400- or 590-feet tall, respectively, would potentially conflict with the following policies of the general plan:

- Recreation and Open Space Element
 - Policy 2.3: Preserve sunlight in public open spaces.
- Urban Design Element

- Policy 3.4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.

The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR. The consistency of the proposed project with general plan objectives and policies that do not relate to physical environmental issues will be considered by City decision makers as part of their deliberations on whether to approve or disapprove the proposed project, and any potential conflicts identified as part of that process would not alter the physical environmental effects of the proposed project.

San Francisco Planning Code

The San Francisco Planning Code, which incorporates by reference the City's zoning maps, governs permitted uses, densities and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless a project complies with the San Francisco Planning Code, or an exception or variance is granted pursuant to the provisions of the San Francisco Planning Code, or legislative amendments to the Planning Code are included and adopted as part of the proposed project.

Land Use Controls

The building site component of the project site is in the C-3-G District. Pursuant to Planning Code section 210.3, the C-3-G District "is composed of a variety of uses: retail, offices, hotels, entertainment, clubs and institutions, and high-density residential. Many of these uses have a citywide or regional function, although the intensity of development is lower here than in the downtown core area. As in the case of other downtown districts, no off-street parking is required for individual commercial buildings. In the vicinity of Market Street, the configuration of this district reflects easy accessibility by rapid transit."

The project site is also within the Van Ness and Market Downtown Residential SUD. As noted in San Francisco Planning Code section 249.33, this district is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence. The SUD is intended to serve as a transitional zone between larger scale commercial areas downtown and lower scale residential and neighborhood commercial areas to the west.

Planning Code sections 215 through 227 regulate the types of land uses that are principally permitted, conditionally permitted, or not permitted in the C-3-G District. Other Planning Code requirements that are applicable to the proposed project include, but are not limited to, the provisions of:

- Section 124: Floor Area Ratio
- Section 132.1: Setbacks and Streetwall Articulation in C-3 Districts
- Section 134: Rear Yards
- Section 135: Usable Open Space
- Section 138: Public Open Space in C-3 Districts
- Section 138.1: Streetscape and Pedestrian Improvements
- Section 140: Dwelling Unit Exposure
- Section 145.1: Street Frontages
- Section 146: Sunlight Access to Public Sidewalks in C-3 Districts
- Section 147: Reduction of Shadows on Certain Public and Publicly Accessible Open Spaces in C-3 Districts

- Section 148: Reduction of Ground-Level Wind Currents in C-3 Districts
- Section 151.1: Permitted Off-Street Parking Spaces in C-3 Districts
- Section 152.1: Required Off-Street Freight Loading Spaces in C-3 Districts
- Section 155.2: Bicycle Parking
- Section 166: Car Sharing
- Section 249.33: Van Ness and Market Downtown Residential Special Use District
- Section 295: Height Restrictions on Structures Shadowing Property Under the Jurisdiction of the Recreation and Park Commission
- Section 309: Permit Review in C-3 Districts
- Section 411: Transit Impact Development Fee
- Section 415: Housing Requirements for Residential and Live/Work Development Projects
- Section 424: Van Ness and Market Affordable Housing and Neighborhood Infrastructure Fee and Program
- Section 429: Public Art Requirements

As described in Section A, Project Description, under “Project Approvals,” pp. 44 to 47, the project would require the following approvals: approval of a Downtown Project Authorization pursuant to Planning Code section 309 for new construction or substantial alteration of structures in C-3 Districts, with exceptions to the requirements of Sunlight Access on Certain Streets (section 146[a]); Reduction of Ground-Level Wind Currents in C-3 Districts (section 148); and Reduction of Shadows on Certain Public or Publicly Accessible Open Spaces in C-3 Districts (section 147); approval of a Conditional Use Authorization pursuant to Planning Code section 303[u]) to permit accessory residential parking above that principally permitted in Planning Code sections 151.1 and 249.33.

Height and Bulk

The northern portion of the site is in the 120-R-2 height and bulk district; and the southern portion of the site is in the 120/400-R-2 height and bulk district. This allows for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower of up to 400 feet in height on the southern portion of the site. The R-2 bulk district does not set bulk restrictions for buildings under 120 feet in height. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in San Francisco Planning Code section 270(e)(2).

Per San Francisco Planning Code section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gsf. Per San Francisco Planning Code section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the R-2 bulk district.

The proposed variant would exceed the existing height and bulk limits and would require the board of supervisors to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to San Francisco Planning Code section 302, through the creation of a special use district.

Floor Area Ratio

Currently, there is no density limit based on lot size within the C-3-G District, as indicated in San Francisco Planning Code section 210.2, Table 210.2. San Francisco Planning Code section 210.2, Table 210.2, limits the FAR

in the C-3-G District to 6:1 for this district, meaning that the building area for a project cannot exceed six times its lot area. The Van Ness and Market Downtown Residential SUD does not permit use or transfer of development rights to increase FAR.³⁶ An increase in FAR is available through payment of the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee.³⁷

The project site is 51,150 sf in area, which would result in permitted building area of 306,900 sf, which would exceed the permitted 6:1 FAR.³⁸ The project sponsor would pay the fees required by the San Francisco Planning Code to achieve the proposed FAR. The proposed project and variant would comply with the San Francisco Planning Code section 415, the Inclusionary Affordable Housing Program, by providing the required percentage of onsite or offsite BMR units or paying the in-lieu fee.

The Accountable Planning Initiative

The Accountable Planning Initiative added section 101.1 to the San Francisco Planning Code and established eight Priority Policies. These policies are as follows (the sections of this initial study addressing the environmental issues associated with the policies, if any, are included in parenthesis):

- (1) Preservation and enhancement of neighborhood-serving retail uses
- (2) Protection of neighborhood character
- (3) Preservation and enhancement of affordable housing
- (4) Discouragement of commuter automobiles
- (5) Protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership
- (6) Maximization of earthquake preparedness
- (7) Landmark and historic building preservation
- (8) Protection of open space

The demolition of the existing building at 10 South Van Ness Avenue potentially conflicts with Priority Policy No. 7, which calls for the preservation of historic buildings. The construction of either the proposed project or variant potentially conflicts with Priority Policy No. 8, which calls for the protection of parks and open space and their access to sunlight. The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR.

Before issuing a permit for any project requiring an initial study under CEQA or for any demolition, conversion, or change of use, and before taking any action that requires a finding of consistency with the San Francisco General Plan, the City is required to find that the proposed project or legislation would be consistent with the Priority Policies. Staff reports and approval motions prepared for the decision-makers would include a comprehensive project analysis and findings regarding the consistency of the proposed project with the Priority Policies.

³⁶ Transferable development rights allow a property to exceed the FAR at a development site by purchasing development rights from historic buildings.

³⁷ In the Van Ness and Market Downtown Residential SUD, increased FAR is allowed with payment of in-lieu fees (the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee).

³⁸ Defined as $6 \times 51,150 \text{ sf} = 306,900 \text{ sf}$.

Other Local Plans and Policies

In addition to the general plan, the planning code and zoning maps, and the Accountable Planning Initiative, other local plans and policies that are relevant to the proposed project are discussed below.

- *San Francisco Sustainability Plan*: is a blueprint for achieving long-term environmental sustainability by addressing specific environmental issues including, but not limited to, air quality, climate change, energy, ozone depletion, and transportation. The goal of the San Francisco Sustainability Plan is to enable the people of San Francisco to meet their present needs without sacrificing the ability of future generations to meet their own needs. The San Francisco Building Code was amended in 2008 to add chapter 13C, Green Building Requirements, which partially implements the energy provisions of the Sustainability Plan.
- *San Francisco Climate Action Strategy*: is a local action plan that examines the causes of global climate change and the human activities that contribute to global warming, provides projections of climate change impacts on California and San Francisco based on recent scientific reports, presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets, and describes recommended actions for reducing the City's greenhouse gas emissions.
- *San Francisco Transit First Policy*: The Transit First Policy is a set of principles that emphasize the City's commitment that the use of public rights of way by pedestrians, bicyclists, and public transit be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the City's Transit First Policy principles in conducting the City's affairs.
- *San Francisco Bicycle Plan*: is intended to provide the safe and attractive environment needed to promote bicycling as a transportation mode. In addition to identifying the existing bicycle route network and proposing short term and long term improvements to this network, the plan identifies goals, objectives, and policies to support these proposed improvements.
- *San Francisco Better Streets Plan*: consists of illustrative typologies, standards, and guidelines for the design of San Francisco's pedestrian environment, with the central focus of enhancing the livability of the city's streets. The requirements of the Better Streets Plan were incorporated into the San Francisco Planning Code as section 138.1.
- *Transportation Sustainability Fee Ordinance*: requires that development projects that filed environmental review applications prior to July 21, 2015, but have not yet received approval, pay 50 percent of the applicable Transportation Sustainability Fee. TSF funds may be used to improve transit serves and improve pedestrian and bicycle facilities.
- *The Better Market Street Project*: is a plan that envisions a new Market Street that is more beautiful and green, has enlivened public plazas and sidewalks full of cafés, showcases public art and performances, provides dedicated bicycle facilities, and delivers efficient and reliable transit. The goal of the Better Market Street Project is to revitalize and reestablish Market Street as the cultural, civic, and economic center of San Francisco.

The proposed project and variant have been reviewed against these local plans and policies and the proposed project and variant would not obviously or substantially conflict with them.

Regional Plans and Policies

In addition to local plans and policies, there are several regional planning agencies whose environmental, land use, and transportation plans and policies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policies are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project and variant are discussed below

- *Plan Bay Area and Regional Housing Needs Plan*: prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), is a long-range land use and transportation plan for the nine-county Bay Area that covers the period from 2010 to 2040. Plan Bay Area calls for concentrating housing and job growth around transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas. In addition, Plan Bay Area specifies strategies and investments for maintaining, managing, and improving the region's multi-modal transportation network and proposes transportation projects and programs to be implemented with reasonably anticipated revenue. Plan Bay Area was adopted in July 2017.³⁹
- ABAG's *Projections 2013* is an advisory policy document that uses population and employment forecasts to assist in the development of local and regional plans and policy documents.
- The Bay Area Air Quality Management District's *Bay Area 2017 Clean Air Plan* requires implementation of "all feasible measures" to reduce ozone and to provide a control strategy to reduce ozone, particulate matter, toxic air contaminants, and GHGs. The 2017 Clean Air Plan describes the status of local air quality and identifies emission control measures to be implemented.
- The Regional Water Quality Control Board's *Water Quality Control Plan for the San Francisco Bay Basin* is a master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.

The proposed project and variant have been reviewed against these regional plans and policies and the proposed project and variant would not obviously or substantially conflict with these plans or policies.

³⁹ Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area 2040*, Final, adopted July 26, 2017.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Population and Housing	<input checked="" type="checkbox"/> Wind and Shadow	<input type="checkbox"/> Hydrology/Water Quality
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Recreation	<input type="checkbox"/> Hazards & Hazardous Materials
<input checked="" type="checkbox"/> Transportation and Circulation	<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Mineral/Energy Resources
<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Public Services	<input type="checkbox"/> Agriculture/Forestry Resources
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Mandatory Findings of Significance

Approach to Environmental Review

This initial study examines the proposed project and variant to identify potential effects on the environment. For each checklist item, the evaluation considered the impacts of the proposed project both individually and cumulatively, with the exception of GHG emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked “Less than Significant with Mitigation Incorporated,” “Less than Significant Impact,” “No Impact” or “Not Applicable” indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked “Less than Significant with Mitigation Incorporated” and “Less than Significant Impact” and for most items checked with “No Impact” or “Not Applicable.”

For all of the items checked “No Impact” or “Not Applicable” without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience, and expertise on similar projects, and standard reference material available within the Planning Department, such as the City’s Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database and maps published by the California Department of Fish and Wildlife.

For the analysis of potential cumulative effects, each environmental topic herein briefly identifies the cumulative context relevant to that topic. For example, for shadow impacts, the cumulative context would be nearby projects that could contribute to cumulative shadow effects on the same open space affected by the project. In other cases, such as air quality, the context would be the San Francisco Bay Area Basin.

Variant

The proposed variant is primarily different from the proposed project in terms of building envelope size, shape, height, bulk, massing and appearance. The overall square footage and breakdown allocated to residential and commercial retail use are nearly identical to the proposed project, including the number of residential units, parking, and open space. Construction would involve the same activities, transportation and circulation issues, duration, depth/amount of excavation, and removal/disposal of building materials as the proposed project. Therefore associated impacts such as air quality and noise impacts from construction would also be identical because the same equipment, vehicles, and material types and quantities would be used for the same period.

As a result, the proposed variant would only be expected to differ in analysis and impacts where the building envelope is a factor (i.e., wind and shadow).

For these reasons, the impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project for nearly all environmental topics, and are not discussed separately.

Straight-shot Streetscape Option

The straight-shot streetscape option could be applied to either the proposed project or the variant. The design of the straight-shot streetscape option would be similar to the proposed streetscape design. The primary difference is that the straight-shot streetscape option would include wider sidewalks expanded to 40 feet on the east side of 12th Street and extended up to 18 feet on the west side of 12th Street. The straight-shot streetscape option would provide more pedestrian streetscape amenities than the proposed streetscape design, applying living streets concepts.⁴⁰ Additionally, there would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction under the straight-shot streetscape option. The straight-shot streetscape option is not discussed further under the topics included in this initial study because there would be no difference in impacts between the straight-shot streetscape option and the proposed streetscape design under either the proposed project or the variant.

As a result, the straight-shot streetscape option will be analyzed and discussed in more detail in only the Transportation and Circulation section of the EIR.

Senate Bill 743 and Public Resources Code Section 21099

Senate Bill 743 was signed into law on September 27, 2013, and became effective on January 1, 2014. Among other provisions, Senate Bill 743 amends CEQA by adding Public Resources Code section 21099 regarding analysis of aesthetics, parking and transportation impacts for urban infill projects.²⁴

Aesthetics and Parking Analysis

Public Resources Code section 21099(d), effective January 1, 2014, provides that “aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.” Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

- (1) The project is in a transit priority area.⁴¹
- (2) The project is on an infill site.⁴²
- (3) The project is residential, mixed-use residential, or an employment center.

⁴⁰ Living Streets convert standard streets and alleys “into shared spaces that prioritize the use of the space for pedestrians and open space – often by claiming street space to create enhanced and active places for landscaping and seating. Living Alleys typically include special paving, traffic calming, lighting, seating, greening, and other elements to indicate that vehicles are visitors and pedestrians have primacy across the full width of the right-of-way.” Source: SF Better Streets, <http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/>, accessed April 23, 2018.

⁴¹ CEQA Guidelines section 21099(a)(7) defines a “transit priority area” is defined as an area within one-half mile of an existing or planned major transit stop. A “major transit stop” is defined in CEQA Guidelines section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

⁴² CEQA Guidelines section 21099(a)(4) defines an “infill site” as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. “Qualified urban uses” are defined in CEQA Guidelines section 21072 as any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses.

The proposed project and variant meet each of the above three criteria because each (1) is located near major transit routes, (2) is located on an infill site that has been previously developed with industrial and commercial uses and is surrounded by areas of either recently completed or planned urban development; and (3) would be a mixed-use residential project. Thus, this initial study and the EIR do not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.⁴³

The Planning Department recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. In addition, CEQA section 21099(d)(2) states that a lead agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers and that aesthetics impacts do not include impacts on historical or cultural resources (e.g., historic architectural resources). As such, the Planning Department does consider aesthetics for design review and to evaluate effects on historic and cultural resources. Renderings of the proposed project and variant will be included in the EIR.

Automobile Delay and Vehicle Miles Traveled Analysis

CEQA section 21099(b)(1) requires that the Governor's Office of Planning and Research develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA section 21099(b)(2) states that upon certification of the revised guidelines for determining transportation impacts pursuant to section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment under CEQA.

In January 2016, the Governor's Office of Planning and Research published a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA for public review and comment. The update recommended that transportation impacts for projects be measured using a vehicle miles traveled (VMT) metric. On March 3, 2016, in anticipation of the future certification of the revised CEQA Guidelines, the San Francisco Planning Commission adopted the recommendation of the Governor's Office of Planning and Research to use the VMT metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: The VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as riding transit, walking, and bicycling.)

Accordingly, this initial study does not contain a discussion of automobile delay impacts. Instead, a VMT and induced automobile travel impact analysis will be provided in the EIR. The topic of automobile delay, nonetheless, may be considered by decision-makers, independent of the environmental review process, as part of their decision to approve, modify, or disapprove the proposed project.

⁴³ San Francisco Planning Department, *Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis*, 2014.0408E, March 30, 2017. This document is on file and available for public review at the Planning Department, 1650 Mission Street, Suite 400, as part of Case File 2014.0408E.

Summary of Potentially Significant Impacts

This initial study evaluates the proposed 10 South Van Ness Avenue project and variant to determine whether they would result in significant environmental impacts. The designation of topics as “Potentially Significant” in this initial study means that these topics will be analyzed in greater depth in the EIR. On the basis of this initial study, the following are the topics for which impacts have been determined to be potentially significant:

- Cultural Resources (historic architectural resources only)
- Transportation and Circulation
- Noise
- Air Quality
- Wind and Shadow

These environmental topics will be evaluated in an EIR prepared for the project.

Summary of Less-than-Significant Impacts

The following potential individual and cumulative environmental effects were determined to be either less than significant or would be reduced to a less-than significant level through recommended mitigation measures included in this initial study:

- Land Use and Land Use Planning (all topics)
- Population and Housing (all topics)
- Cultural Resources (archeological resources, human remains, tribal cultural resources)
- Greenhouse Gas Emissions (all topics)
- Recreation (all topics)
- Utilities and Service Systems (all topics)
- Public Services (all topics)
- Biological Resources (all topics)
- Geology and Soils (all topics)
- Hydrology and Water Quality (all topics)
- Hazards and Hazardous Materials (all topics)
- Mineral and Energy Resources (all topics)
- Agriculture and Forestry Resources (all topics)

These items are discussed and mitigation measures are included, where appropriate, in Section E of this initial study and require no further environmental analysis in an EIR. All mitigation measures identified in this initial study are listed in **Section F, Mitigation Measures and Improvement Measures**. These measures have been agreed to by the project sponsor and will be implemented.

For each checklist item, the evaluation has considered both individual and cumulative impacts of the proposed project, the variant, and both streetscape designs.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
1. LAND USE AND PLANNING					
Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Land Use and Planning

The proposed project and variant share a comparable program of development, with the same types and amounts of land uses. For this reason, the potential land use impacts from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact LU-1: The proposed project or variant would not physically divide an established community. (No Impact)

The project site is in the Market & Octavia Area Plan area as designated by the San Francisco General Plan.⁴⁴ In addition, per the San Francisco Zoning Code, the project site is in the Downtown General Commercial (C-3-G) zoning district, where retail sales and service uses on the ground floor and residential uses above the ground floor are principally permitted. Furthermore, the project site is in the Van Ness and Market Downtown Residential SUD, a transit-oriented, high-density, mixed-use district with a significant residential presence. This SUD is intended to serve as a transitional zone between larger scale commercial areas downtown to the lower scale residential and neighborhood commercial areas to the west.

The physical division of an established community is typically associated with the loss of mobility through a neighborhood or between a community and outlying areas. For example, construction of a barrier to access within an existing neighborhood (such as a new freeway) or the removal of a means of access (such as a roadway) could result in division of an established community. As discussed in Section A, Project Description, the project site is located in the densely developed SoMa neighborhood, adjacent to residential, commercial, and civic uses. With the exception of the proposed streetscape improvements, the improvements under the proposed project or variant would be limited to the project site. The proposed project or variant would not make any changes to major roadways in the area that would inhibit access through the neighborhood, nor would the proposed project impede pedestrian or bicycle travel through the neighborhood. Both proposed streetscape designs would improve access for bicyclists and pedestrians through and in the vicinity of the project site by widening the

⁴⁴ San Francisco Planning Department, *Market & Octavia Area Plan*, adopted May 30, 2008, last amended 2010, http://208.121.200.84/ftp/files/Citywide/Market_Octavia/Market_and_Octavia_Area_Plan_2010.pdf, accessed April 23, 2018.

sidewalks on 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at the intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed. Vehicle access on 12th Street would continue under both of the proposed streetscape designs. Neither the proposed project nor the variant would construct a permanent physical barrier to neighborhood access or remove an existing means of access. Thus, the proposed project or the variant, would not physically divide the established community. No impact would occur.

Impact LU-2: The proposed project or variant would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (*Less than Significant*)

Land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect directly address physical environmental issues and contain targets or standards which must be met to preserve or improve characteristics of San Francisco's physical environment.

As described in Section C, Compatibility with Existing Zoning and Plans, the proposed project and variant would not obviously or substantially conflict with any adopted environmental plan or policy, with the exception of historic preservation policies contained in the general plan and the Accountable Planning Initiative. Physical environmental impacts resulting from these conflicts with historic preservation policies are discussed in topic E.4, Cultural Resources, below, and will be evaluated in the EIR. To the extent that the proposed project or variant conflicts with any general plan objectives and policies that do not relate to physical environmental issues, those conflicts will be considered by decision-makers as part of their decision to approve or disapprove the proposed project or variant independent of the environmental clearance process. Potential conflicts with applicable general plan objectives and policies will continue to be analyzed and considered as part of the review of entitlements applications required for the proposed project and variant independent of environmental review under CEQA.

As designed, the proposed project or variant would require an exception from San Francisco Planning Code section 146(a) related to sunlight access to certain sections of Market Street. Because the proposed project or variant would result in wind comfort criteria exceedances, the proposed project or variant would require an exception from San Francisco Planning Code section 148-Reduction of Ground-level Wind Currents in C-3 Districts, which outlines wind reduction criteria for projects in C-3 Districts. The Planning Code sets criteria for both comfort and hazards and requires buildings to be shaped so as not to cause ground-level wind currents to exceed these criteria.

The proposed variant would exceed the existing height and bulk limits and would require the board of supervisors to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to San Francisco Planning Code section 302, through creation of a special use district. As discussed in Section C, Compatibility with Existing Zoning and Plans, these conflicts would be addressed through the project's entitlement process, including the required variances and exceptions from San Francisco Planning Code requirements.

The proposed project and variant would not conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Impact-C-LU-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a substantial cumulative impacts related to land use and planning. (*Less than Significant*)

The cumulative projects shown in Table 3 are primarily mixed-use buildings of five or more stories that would support residential uses above ground-level retail uses. In some cases, the lower levels would support civic/institutional uses. Cumulative projects also include area plans and transportation improvement plans/projects that prescribe new zoning requirements for residential and commercial uses, and streetscape and other improvements to the transportation network. As shown in Figure 30, the cumulative projects are generally located in the vicinity of Octavia Boulevard in the Hayes Valley neighborhood and in the vicinity of Van Ness Avenue and Market Street, within the Civic Center and SoMa neighborhoods.

Consistent with the planning vision for the area, as adopted in the Market & Octavia Area Plan, the cumulative projects would develop housing on infill sites in proximity to major transit hubs. Cumulative projects located on the former Central Freeway parcels (along Octavia Boulevard) would be smaller in scale to complement the existing streetscape and the residential and retail uses within Hayes Valley. Taller residential towers would be developed along major thoroughfares, such as Van Ness Avenue and Market Street, and within SoMa. Objectives 1.1 and 1.2 of the Market & Octavia Area Plan identify development of high-density housing projects with active ground-floor uses and streetscape improvements in the area as an opportunity to site housing development of appropriate scale and revitalize the pedestrian experience within the project area.

Therefore, because the proposed project or variant, in combination with the cumulative projects considered in this analysis would reflect the City's desired outcome for this area, including adding transportation and streetscape improvements to improve the public realm of the city, cumulative impacts related to land use and land use planning would be considered less than significant.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
2. POPULATION AND HOUSING					
Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Population and Housing

For the purposes of this population and housing analysis, the project area is defined as the census tracts within 0.25 mile of the project site. This includes census tracts 124.02, 176.01, 177, 201, 168.02, and 162.

The proposed project and variant share a comparable program of development, with the same number of residential units and similar amount of commercial retail uses. For this reason, the associated population and housing impacts resulting from operation of the proposed variant are anticipated to be to the same as those resulting from the proposed project.

Impact PH-1: The proposed project or variant would not directly or indirectly induce substantial population growth in San Francisco. (*Less than Significant*)

According to the U.S. Census Bureau's most recent American Community Survey,⁴⁵ the City and County of San Francisco had an estimated population of about 840,763 residents in 2015. Census Tract 201, which includes the project site and immediate vicinity, has a population of 5,548. The total number of housing units within Census Tract 201 is 3,266. In the six census tracts located within the project area (0.25 mile of the project site), the population is 23,863 persons and the total number of housing units is 15,588.⁴⁶ The project site is currently used as an auto dealership, which employs 108 people.⁴⁷

Plan Bay Area, which is the current regional transportation plan and Sustainable Communities Strategy that was adopted by the Metropolitan Transportation Commission and ABAG in July 2013, contains housing and employment projections anticipated to occur in San Francisco through 2040. Plan Bay Area calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and where services necessary to daily living are provided in proximity to housing and jobs. With its abundant transit service

⁴⁵ U.S. Census Bureau, 5-Year Estimates, San Francisco County, Demographic and Housing Estimates, 2011–2015 American Community Survey, https://factfinder.census.gov/faces/nao/jsf/pages/community_facts.xhtml, accessed July 31, 2017.

⁴⁶ Ibid.

⁴⁷ Mejias, Luis, Project Manager, Crescent Heights real estate development company, email to Christine Wolfe of AECOM regarding existing employees on the project site, February 21, 2017.

and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth. In the last few years the supply of housing has not met the demand for housing within San Francisco. As described in ABAG's *Regional Housing Need Plan for the San Francisco Bay Area: 2014-2022*, San Francisco's projected housing need from 2014 to 2022 is 28,869 residential units, consisting of 6,234 within the very-low-income level (0–50 percent); 4,639 within the low-income level (51–80 percent); 5,460 within the moderate-income level (81–120 percent); and 12,536 within the above-moderate-income level (120 percent plus).^{48,49}

As part of the planning process for Plan Bay Area, San Francisco identified priority development areas, which are existing neighborhoods near transit that are appropriate places to concentrate future growth, and the project site is located in the Market-Octavia/Upper Market Priority Development Area of *Plan Bay Area 2040*.⁵⁰

Based on an average household size of 2.19 persons per household for San Francisco, the addition of 984 units under either the proposed project or variant could increase the population at the project site by approximately 2,155 residents.⁵¹ Therefore, the proposed project or variant would result in a residential population increase of approximately 39 percent over the existing population within Census Tract 201, an increase of approximately 9 percent over the existing population of the project area, and approximately 0.26 percent over the existing citywide population. The population increase attributable to the proposed project or variant would represent about 0.77 percent of the projected citywide increase in population of about 280,465 persons anticipated between 2010 and 2040.⁵² The growth associated with the proposed project or single tower project variant is anticipated in the San Francisco General Plan, including the Market & Octavia Area Plan. The increase in the number of dwelling units under the proposed project or variant is consistent with Policy 1.2.2 of the Market & Octavia Area Plan, which states: “maximize housing opportunities and encourage high-quality commercial spaces on the ground floor.”⁵³

The proposed project or variant would introduce a new type of commercial activity and change in employment at the site resulting in a total of approximately 155 employees, approximately 87 associated with the retail uses and approximately 68 associated with the building management operations.^{54,55} This would equate to a net increase of approximately 47 employees at the project site. San Francisco's employment base is projected to increase by approximately 233,500, from about 526,000 total jobs in 2015 to approximately 759,500 in 2040.^{56,57} Even if all of

⁴⁸ Association of Bay Area Governments, *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022*, adopted July 18, 2013, http://www.abag.ca.gov/planning/housingneeds/pdfs/2014-22_RHNA_Plan.pdf, accessed August 9, 2017.

⁴⁹ The Area Median Income (AMI) in San Francisco in 2017 for a 4-person household was \$115,300. Therefore, for a 4-person household, the very-low-income level (0–50 percent of AMI) would be up to \$57,650, the low-income level (51–80 percent of AMI) would be \$57,651–\$92,250, the moderate-income level (81–120 percent of AMI) would be \$92,251–\$138,350, and above-moderate-income level (120 percent of AMI and above) would be greater than \$138,351.

⁵⁰ Association of Bay Area Governments, Priority Development Area Showcase, <http://gis.abag.ca.gov/website/PDAShowcase/>, accessed August 4, 2017.

⁵¹ Based on the U.S. Census Bureau's most recent American Community Survey (2011–2015), the total number of housing units in San Francisco is 383,676 and estimated population is 840,763 (which gives an average of 2.19 persons per household).

⁵² San Francisco Planning Department, 2014 Housing Element, *San Francisco General Plan*, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

⁵³ San Francisco Planning Department, *Market & Octavia Area Plan*, adopted May 30, 2008, last amended 2010, <http://sf-planning.org/market-octavia-area-plan>, accessed April 23, 2018.

⁵⁴ San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002.

⁵⁵ Mejias, Luis, Project Manager, Crescent Heights real estate development company, email to Christine Wolfe of AECOM regarding existing employees on the project site, February 21, 2017.

⁵⁶ California Employment Development Department, Historical Data for Unemployment Rate and Labor Force (Not Seasonally Adjusted) in San Francisco County,

the approximately 47 additional employees associated with the proposed project or variant were conservatively assumed to be new to San Francisco, the project-related employment growth would represent considerably less than 1 percent (0.02 percent) of the city's estimated job growth between the years 2015 and 2040. This estimated increase in employment would be negligible in the context of total jobs in San Francisco.

In general, a project would be considered growth inducing if its implementation would result in substantial population increases and new development either directly or indirectly. The proposed project and the variant would result in the demolition of the existing auto dealership on the site and construction of an infill development including up to 984 residential units over ground-floor commercial uses. However, the proposed project and the variant would be located in an urbanized area and would not be expected to substantially alter existing development patterns in the neighborhood, or in San Francisco as a whole. Furthermore, the proposed project or variant would not indirectly induce substantial population growth in the project area, because it would not involve any extensions of area roads, utilities, or other infrastructure that could enable additional development in currently undeveloped areas.

As such, residential and employment population increases on the project site would be noticeable, compared with existing conditions in Census Tract 201. However, the project-related population and employment increases would not be substantial in relation to the existing number of residents and employees and to the expected increases in the residential and employment populations of San Francisco. Therefore, the proposed project or variant would not directly or indirectly induce substantial population growth or concentration of employment in the project area or citywide that would cause a substantial adverse physical change to the environment. This impact would be less than significant.

Impact PH-2: The proposed project or variant would not displace substantial numbers of existing housing units or people or create demand for additional housing elsewhere. (No Impact)

The project site is currently used as an auto dealership and does not contain any residential uses; therefore, no residential or housing unit displacement would result from the demolition of the existing building and construction of the proposed project or variant. However, the estimated project-related employment increase above existing conditions (approximately 47 new employees) would result in an incremental increase in the demand for housing and would contribute to the city's broader need for additional housing. As described in the City's 2014 *Housing Element*, San Francisco is undertaking rezoning efforts to increase the number of housing units that can be constructed such that the city can meet or exceed its regional housing targets.⁵⁸ According to *ABAG Projections 2013*, in 2015 San Francisco had an estimated 1.27 workers per household.⁵⁹ Based on this assumption about workers per household and the conservative assumption that all new employees would be new San Francisco residents, the estimated 47 new employees attributable to the proposed project or variant would generate a potential demand for about 37 new dwelling units, which would be equivalent to 0.1 percent of the overall housing needs allocation of 28,869 units between 2015 and 2022. This potential increase in employment-

<http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSMOREResult.asp?menuChoice=localAreaPro&criteria=unemployment+rate&categoryType=employment&geogArea=0604000075&area=San++Francisco+County×eries=unemployment+rateTimeSeries>, accessed August 9, 2017.

⁵⁷ San Francisco Planning Department, 2014 *Housing Element*, *San Francisco General Plan*, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

⁵⁸ Ibid.

⁵⁹ Association of Bay Area Governments, *Projections 2013*, December 2013.

related housing demand would not be considered substantial in the context of total housing demand in San Francisco and would be offset by the addition of residential uses provided by the proposed project or variant. In addition, the actual increase in housing demand due to the proposed project or variant may likely be lower, because some of the new employees may not be new to San Francisco.

The proposed project or variant is subject to the provisions of San Francisco Planning Code section 415, Inclusionary Affordable Housing Program, which requires projects of 10 or more residential units to contribute to the creation of below-market-rate housing. The requirements of the Inclusionary Affordable Housing Program differ for development projects based on their date of filing an environmental evaluation application with the San Francisco Planning Department. Based on the application date for the proposed project and variant, the proposed project or variant would be required to provide BMR residential units on the project site (equal to 14.5 percent of the project's overall number of residential units), within a separate building within 1 mile of the project site (equal to 30 percent of the project's overall number of residential units), or through an in-lieu payment to the Mayor's Office of Housing and Community Development (equal to 30 percent of the project's overall number of residential units).

The proposed project or variant would add 984 new residential units and would meet or exceed the requirements of San Francisco Planning Code section 415. Therefore, the proposed project or variant would contribute to the city's housing stock, including affordable housing stock, thereby helping to meet the city's overall housing demands.

In summary, the proposed project or variant would not remove existing housing units and would not displace residents. The proposed retail uses at the proposed project or variant would increase the number of employees at the project site by approximately 47 people, which would not create a significant demand for additional housing. This would be a very small increase compared to the total population of, and the available housing stock in, San Francisco and the Bay Area. Overall, the proposed project or variant would result in no impact related to displacement of housing or residents or creation of housing demand resulting in a need to construct additional housing elsewhere.

Impact-C-PH-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a cumulative impact related to population and housing. (*Less than Significant*)

As mentioned above, *Plan Bay Area 2040* includes housing and employment projections anticipated to occur in San Francisco through 2040, and calls for focused growth and development in priority development areas. The *Plan Bay Area 2040* projections provide the cumulative context for the population and housing analysis.

According to ABAG's *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022* and the California Department of Housing and Community Development, the city's projected housing need from 2014 to 2022 is 28,869 residential units. Consistent with this projection, the Housing Element of the San Francisco General Plan states: "[B]ased on the growing population, and smart growth goals of providing housing in central areas like San Francisco, near jobs, and transit, the City must plan for the capacity for roughly 28,870 new units, 57 percent of which should be suitable for housing for the extremely low, very low, low, and moderate income households to

meet its share of the region's projected housing demand.”⁶⁰ Further, in November 2014, the City voters enacted Proposition K, which established a directive to construct or rehabilitate at least 30,000 homes by 2020.

The jurisdictional allocation for San Francisco translates into an average annual need of approximately 4,124 net new residential units. As described above, *Plan Bay Area 2040* anticipates future growth to be focused in priority development areas, such as the Market-Octavia/Upper Market Priority Development Area, where the proposed project and the majority of the cumulative projects shown in Table 3 are located. The past, present, and reasonably foreseeable projects shown in Table 3 would add approximately 3,777 new dwelling units to the area. Overall, these nearby cumulative development projects (including the proposed project or variant) would add approximately 10,325 new residents in 4,761 dwelling units in the project area, which would represent an estimated 186 percent increase in the area's residential population. All residential projects would be required to pay an affordable housing in-lieu fee or provide the required percentage of onsite or offsite BMR units, in accordance with Planning Code section 415.

In addition, past, present, and reasonably foreseeable future projects (including the proposed project or variant) would add up to approximately 118,146 gsf of retail uses, approximately 2,349 gsf of commercial uses, approximately 542,599 gsf of office uses, and approximately 142,125 gsf of institutional uses. The addition of these new uses could generate approximately 2,897 new employees as follows: 337 from retail uses, 9 from commercial uses, 1,966 from office uses, 517 from institutional uses, and 68 associated with the residential and building services portion of the proposed project or variant.^{61,62} Approximately 1,646 of these new employees are anticipated to be staff of the San Francisco Planning, Building and Public Works Departments, who are being relocated from various buildings in the city, including from 1650 and 1660 Mission Street.⁶³

Based on the conservative assumption that all new employees could be new San Francisco residents and the conversion and demolition of existing buildings for the cumulative projects would not result in employment decreases, an estimated 2,897 new employees (including new employees associated with the proposed project or variant) would be added within a 0.25-mile radius of the project site.⁶⁴ The approximately 2,897 new employees would generate a potential demand for about 2,282 new dwelling units. Based on information in ABAG's *Projections 2013* and the City's *2014 Housing Element*, the employment-related housing demand associated with the cumulative development projects could be accommodated by the city's projected housing growth of 84,910 units between 2015 and 2040. Furthermore, the cumulative development projects would add to the city's housing stock and could potentially accommodate some of the new employment-related housing demand. This estimated cumulative employment growth would account for less than 1 percent of projected citywide household growth between 2015 and 2040.

Lastly, cumulative projects would not result in the displacement of substantial numbers of housing units as the majority of the approved and proposed projects would demolish vacant buildings, construct new buildings on

⁶⁰ San Francisco Planning Department, 2014 Housing Element, *San Francisco General Plan*, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

⁶¹ San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002.

⁶² Due to variability in staffing of residential buildings, employees associated with residential and building service uses at the cumulative projects are not factored into these totals, with the exception of the 68 employees anticipated for employment at the residential portion of the proposed project or variant.

⁶³ Future plans for 1660 Mission Street are not factored into the area totals because future use of the site is not confirmed.

⁶⁴ It is anticipated that the number will be substantial lower than this, given the relocation of existing City of San Francisco staff.

surface parking lots, or otherwise intensify land uses, and the proposed project or variant would not displace any housing units. Although cumulative projects would increase the population and employment in the area, they would not induce substantial population and employment growth beyond what was planned for and anticipated. For these reasons, impacts related to housing displacement and population growth would be less than significant.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
3. CULTURAL RESOURCES					
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cultural Resources

The proposed project and the variant would both involve the demolition of the existing building on the project site and construction would involve the same activities, duration, and depth/amount of excavation. For these reasons, the potential impacts to historic resources, archeological resources, tribal cultural resources, and human remains resulting from construction of the proposed variant would be the same as those resulting from the proposed project.

Impact CR-1: The proposed project or variant would result in the demolition of the existing building at 10 South Van Ness Avenue, a historical resource pursuant to CEQA and the San Francisco Planning Code. (Potentially Significant)

The historic resource evaluation completed for the proposed project and variant found that the structure retains integrity of location, design, setting, and association due to the rareness of the resource and its sociocultural (rather than architectural design) significance as the location of the Fillmore West.⁶⁵ The finding is also based on the presence of extant character-defining features on the exterior and interior, and the reversibility of a number of alterations (including the attached metal screens on the exterior and the auto-lifts in the ballroom space). Therefore, the demolition of the existing structure located at 10 South Van Ness Avenue could cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5, a significant impact. As a result, this topic will be addressed in the EIR.

Impact CR-2: The proposed project or variant's construction could cause a substantial adverse change in the significance of an unknown archeological resource. (Less than Significant with Mitigation)

In addition to assessing impacts to archeological resources that would meet the requirements for listing as a historical resource, impacts to unique archeological resources are also considered under CEQA, as described in

⁶⁵ SWCA Environmental Consultants/Turnstone, *Part I Historic Resources Evaluation 10 South Van Ness Avenue*, September 2016.

section 15064.5 of the CEQA guidelines, as well as under the California Public Resources Code (section 21083.2). If an archeological site does not meet the criteria for inclusion in the California Register of Historical Resources but does meet the definition of a unique archeological resource as outlined in Public Resources Code section 21083.2, it is entitled to special protection or attention under CEQA. A unique archeological resource implies an archeological artifact, object, or site about which it can be clearly demonstrated that – without merely adding to the current body of knowledge – there is a high probability that it meets one of the following criteria:

- The archeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information.
- The archeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- The archeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archeological resource indicates an archeological artifact, object, or site that does not meet the above criteria. Impacts to non-unique archeological resources and resources that do not qualify for listing in the California Register of Historical Resources receive no further consideration under CEQA.

It should also be noted herein that a disturbed or secondarily deposited prehistoric midden is presumed to be significant for its information potential; under CEQA, and it is legally significant unless or until it is demonstrated to the contrary.

A preliminary archeological review was completed by the San Francisco Planning Department for the proposed project.⁶⁶ According to the preliminary archeological review, no prehistoric archeological resources are known to occur on the project site. However, four sites, which include prehistoric components, are located within 0.5 mile of the project site. Due to the presence of these four previously identified prehistoric archeological sites in this portion of San Francisco in similar subsurface settings (i.e., dune sand); the site is considered to have moderate-high sensitivity for the presence of prehistoric archeological resources.

Project construction requires subsurface excavation for the construction of underground parking. As such, due to the moderate-high sensitivity of the project area the project has the potential to disturb unknown archeological resources, and these impacts would be considered significant.

Accordingly, to reduce potential impacts to significant archeological resources, the project sponsor has agreed to comply with **Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring**, which would require the project sponsor to retain the services of an archeologist from the Department Qualified Archeological Consultants List to develop and implement an archeological testing plan. Implementation of **Mitigation Measure M-CR-1** would reduce the impact to a less-than-significant level.

⁶⁶ San Francisco Planning Department, *Environmental Planning Preliminary Archeological Review: Checklist*, Case No. 2015-004568ENV, 10 South Van Ness Avenue, October 12, 2016.

Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring

Based on a reasonable presumption that archeological resources may be present within the project area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list maintained by the Planning Department archeologist. The project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the qualified archeological consultants list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities. On discovery of an archeological site⁶⁷ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative⁶⁸ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

⁶⁷ The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

⁶⁸ An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably before the commencement of any project-related soil-disturbing activities. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring), and site remediation shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to

assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- **Field Methods and Procedures.** Descriptions of proposed field strategies, procedures, and operations.
- **Cataloguing and Laboratory Analysis.** Description of selected cataloguing system and artifact analysis procedures.
- **Discard and Deaccession Policy.** Description of and rationale for field and post-field discard and deaccession policies.
- **Interpretive Program.** Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program.
- **Security Measures.** Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- **Final Report.** Description of proposed report format and distribution of results.
- **Curation.** Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (California Public Resources Code section 5097.98). The archeological consultant, the project sponsor, ERO, and the Most Likely Descendant shall have up to but not beyond six days of discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation

measure compels the project sponsor and the ERO to accept recommendations of a Most Likely Descendant. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such an agreement has been made or, otherwise, as determined by the archeological consultant and the ERO.

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the final archeological resources report shall be distributed as follows: California Archeological Site Inventory, Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the final archeological resources report along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

With implementation of **Mitigation Measure M-CR-1**, project construction would have a less-than- significant impact on prehistoric or historical archeological resources.

Impact CR-3: The proposed project or variant's construction could disturb human remains, including those interred outside of formal cemeteries. (*Less than Significant with Mitigation*)

Section 15064.5 of CEQA assigns special importance to human remains, and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in Public Resources Code section 5097.98.

As discussed above, the project area exhibits elevated archeological sensitivity. Prehistoric archeological sites, including some that contain human remains, have been identified within San Francisco. The likelihood of inadvertently exposing currently unknown archeological resources, including those containing human remains, during construction of the proposed project or project variant cannot be dismissed. The inadvertent exposure of previously unidentified human remains, including those interred outside of formal cemeteries, would be considered a significant impact. To reduce this impact to a less-than-significant level, the project sponsor has agreed to comply with **Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring**, presented above, which includes the procedures required for appropriate treatment of human remains.

With implementation of **Mitigation Measure M-CR-1**, the proposed project or variant would have a less-than-significant impact related to the potential disturbance of human remains.

Impact CR-4: The proposed project or variant's construction could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. (*Less than Significant with Mitigation*)

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing, the national, state, or local register of historical resources. Based on discussions with Native American tribal representatives, in San Francisco, prehistoric archeological resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance.

Pursuant to CEQA section 21080.3.1(d), within 14 days of a determination that an application for a project is complete or a decision by a public agency to undertake a project, the Lead Agency is required to contact the Native American tribes that are culturally or traditionally affiliated with the geographic area in which the project is located. Notified tribes have 30 days to request consultation with the Lead Agency to discuss potential impacts on tribal cultural resources and measures for addressing those impacts. On August 15, 2017, the Planning Department contacted Native American individuals and organizations for the San Francisco area, providing a description of the proposed project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project area. During the 30-day comment period, no Native American tribal representatives contacted the Planning Department to request consultation.

As described under **Impact CR-2**, there is the potential for archeological resources within the project area, and as described in **Impact CR-3**, there is the potential for human remains within the project area. Unknown archeological resources may be encountered during construction that could be identified as tribal cultural resources at the time of discovery or at a later date. Therefore, the potential adverse effects of the proposed project on previously unidentified archeological resources, discussed under Impact CR-2, also represent a significant impact on tribal cultural resources. Implementation of **Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program**, would reduce potential adverse effects on tribal cultural resources to a less-than-significant level. **Mitigation Measure M-CR-2** would require either preservation-in-place of the tribal cultural resources, if determined effective and feasible, or an interpretive program regarding the tribal cultural resources developed in consultation with affiliated Native American Tribal Representatives.

Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for

installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Implementation of **Mitigation Measure M-CR-2** would reduce potential impacts to tribal cultural resources to a less-than-significant level.

Impact C-CR-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in cumulative impacts to historic resources. (Potentially Significant)

There are a number of historic properties in the vicinity of the project site, including several located within the Market Street Masonry Historic District. The vicinity of the project site has undergone various improvements and modernization at different times, and will continue to be developed as part. Therefore, past, present, and reasonably foreseeable projects in the vicinity of the project site could have a cumulative impact related to historic resources, and this topic will be evaluated in further detail in the EIR.

Impact C-CR-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in cumulative impacts to archeological resources, tribal cultural resources, and human remains. (Less than Significant with Mitigation)

Archeological resources, tribal cultural resources, and human remains are nonrenewable, finite resources. All adverse effects to archeological resources have the potential to erode a dwindling cultural/scientific resource base. Federal and state laws protect archeological resources in most cases, either through project redesign or by requiring that the scientific data present within an archeological resource be archeologically recovered.

As identified in the preliminary archeological review, the project site is part of a larger area that was 1850s residential development and cultivated field. Ground-disturbing activities of past, present, and reasonably foreseeable future projects in the project vicinity have the potential to disturb previously unidentified archeological resources, such as historic features associated with the 1850s residential and agricultural development that could yield information pertaining to agricultural processes during the Gold Rush period. Accordingly, the proposed project in combination with past, present, and reasonably foreseeable future projects could result in a significant cumulative impact on archeological resources associated with this 1850s development. As such, the potential disturbance of archeological resources within the project site could make a cumulatively considerable contribution to a cumulative loss of significant archeological information that would contribute to the development of California, Bay Area, and San Francisco history.

As discussed above, implementation of the approved plans for testing, monitoring, and data recovery would preserve and realize the information potential of archeological resources. The recovery, documentation, and interpretation of information about archeological resources that may be encountered within the project site would enhance knowledge of prehistory and history. This information would be available to future archeological studies, contributing to the collective body of scientific and historic knowledge. With implementation of Mitigation Measures M-CR-1 and M-CR-2, the proposed project's contribution to any potential cumulative impacts related to archeological resources, human remains, or tribal cultural resources would not be cumulatively considerable.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
4. TRANSPORTATION AND CIRCULATION					
Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing the measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Transportation and Circulation

Neither the proposed project nor the variant involves changes to air traffic patterns. Therefore, topic 4c is not applicable and is not discussed further.

The proposed project or variant would generate auto, transit, pedestrian and bicycle trips to and from the project site and would increase demands on the local transportation system, including the roadway network, transit service, pedestrian and bicycle facilities, and vehicle parking and freight loading/service vehicle accommodations, which could result in significant transportation impacts. The proposed streetscape design or the straight-shot streetscape option would change circulation of vehicle, bicycle, and pedestrian traffic in the project area. Also, the proposed project, variant or straight-shot streetscape option could conflict with plans, ordinances, or policies addressing the safety or performance of the circulation system or result in other project-level or cumulative transportation and circulation impacts, which will be discussed in the EIR.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
5. NOISE					
Would the project:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise

The project site is not located within an airport land use plan area,⁶⁹ nor is it in the vicinity of a private airstrip. Therefore, topics 6e and 6f are not applicable and are not discussed further.

Construction activities and traffic as well as operation of the proposed project or variant could result in a substantial increase in ambient noise levels, above current levels, in the vicinity of the project site. In addition, construction and operation of the proposed project or variant would generate noise and vibration in a manner that could exceed local standards and expose sensitive receptors (including existing residents across Market Street to the north, and across 12th Street to the west of the project site, and future residents on the project site) to excessive levels potentially resulting in significant noise and vibration impacts. Noise impacts will be discussed in the EIR.

⁶⁹ City/County Association of Governments of San Mateo County, *Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*, November 2012. See also Alameda County Community Development Agency, *Oakland International Airport, Airport Land Use Compatibility Plan*, December 2012.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
6. AIR QUALITY					
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Air Quality

The proposed project or variant would generate emissions and odors and could increase health risk hazards to sensitive receptors (in a manner that could result in significant air quality impacts. Also, the proposed project or variant could also conflict with plans, guidelines, and policies addressing attainment and maintenance of air quality standards within the San Francisco Bay Area Air Basin. Air quality impacts will be discussed in the EIR.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
7. GREENHOUSE GAS EMISSIONS					
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Greenhouse Gas Emissions

Construction of both the proposed project and the variant would involve the same activities, equipment, phasing, and duration. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated energy and water use. Both the proposed project and the variant would be subject to the same regulations related to the reduction of greenhouse gas (GHG) emissions. For these reasons, the GHG emissions resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Greenhouse gas (GHG) emissions and global climate change represent cumulative environmental impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average surface temperature and, thus, cause the resulting climate change effects; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The Bay Area Air Quality Management District has prepared guidelines and methodologies for analyzing GHG emissions. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*, which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA guidelines. These GHG reduction actions have resulted in a 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels, exceeding the year 2020 reduction goals outlined in the Bay Area Air Quality Management District's Bay Area 2010 Clean Air Plan, Executive Order (EO) S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).

Given that the City has met the state's and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under EO S-3-05 and EO B-30-15, the City's GHG reduction goals are consistent with EO S-3-05, EO B-30-15, Assembly Bill 32, and the Bay Area 2010 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans

or result in significant GHG emissions, and would, therefore, not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the impact of the proposed project or variant on climate change focuses on the contribution of the proposed project or variant to cumulatively significant GHG emissions. Because the analysis is in a cumulative context, this section does not include individual project-specific impact statements.

Impact C-GG-1: The proposed project or variant would not result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers, energy required to pump, treat, and convey water, and emissions associated with waste removal, disposal, and landfill operations.

The proposed project or variant would increase activity on the project site through the demolition of the existing two-story commercial building and the construction of a mixed-use residential building(s) with up to 984 dwelling units and approximately 30,000 gross square feet of retail commercial. Therefore, the proposed project or variant would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

The proposed project and variant would be subject to regulations adopted to reduce GHG emissions as identified in the GHG Reduction Strategy. As discussed below, compliance with the applicable regulations would reduce the proposed project's or single tower variant's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

Compliance with the City's Commuter Benefits Program, Emergency Ride Home Program, transportation management programs, Transportation Sustainability Fee, Jobs-Housing Linkage Program, bicycle parking requirements, low-emission car parking requirements, and car sharing requirements would reduce the transportation-related emissions associated with the proposed project or the variant. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of sustainable transportation modes with zero or lower GHG emissions on a per capita basis.

The proposed project or variant would be required to comply with the energy efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, and Water Conservation and Irrigation ordinances, which would promote energy and water efficiency, thereby reducing the energy-related GHG emissions associated with the proposed project or the variant.⁷⁰ Additionally, the proposed project or variant would be required to meet the renewable energy criteria of the Green Building Code, further reducing energy-related GHG emissions.

⁷⁰ Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump, and treat water required for the project.

The waste-related emissions associated with the proposed project or the variant would be reduced through compliance with the City's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy⁷¹ and reducing the energy required to produce new materials.

Compliance with the City's Street Tree Planting requirements would serve to increase natural carbon sequestration. Other regulations, including those limiting refrigerant emissions and the Wood Burning Fireplace Ordinance would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds.⁷² Thus, the proposed project and variant were determined to be consistent with San Francisco's GHG reduction strategy.⁷³

The project sponsor is required to comply with these regulations, which have proven effective as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, Assembly Bill 32, and the climate action plan GHG reduction goals for the year 2020. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce a project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the climate action plan. Therefore, because the proposed project and variant are consistent with the City's GHG reduction strategy, they would also be consistent with the GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the climate action plan, would not conflict with these plans, and would, therefore, not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project and variant would not have a cumulatively considerably contribution to GHGs and would result in a less-than-significant cumulative impact regarding compliance with plans established to reduce GHG emissions.

⁷¹ Embodied energy is the total energy required for the extraction, processing, manufacture, and delivery of building materials to the building site.

⁷² Although they are not GHGs, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing emissions of volatile organic compounds would reduce the anticipated local effects of global warming.

⁷³ San Francisco Planning Department, 2017, *Greenhouse Gas Analysis: Compliance Checklist for 10 South Van Ness Avenue Mixed-Use Project*, January 4, 2017.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
8. WIND AND SHADOW					
Would the project:					
a) Alter wind in a manner that substantially affects public areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wind and Shadow

The proposed project would demolish the existing building on site and construct two podiums with one approximately 400-foot-tall tower above each podium. Under the proposed variant, the existing building would be demolished and a 590-foot-tall building would be constructed. Similar to the proposed project, the variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 420 feet (proposed project) and 610 feet (variant), including roof screens and elevator penthouses.⁷⁴ A podium would be constructed under the proposed variant that would rise up to a height of approximately 164 feet above the ground.

Wind

The proposed project and the variant could result in ground-level wind speeds on the project site and on adjacent sidewalks that exceed pedestrian comfort limits and hazard criteria set forth in the San Francisco Planning Code. Wind impacts will be evaluated further in the EIR.

Shadow

The proposed project and the variant could result in net new shading on several existing and future parks and open spaces in a manner that could affect the use and enjoyment of these facilities. Net new shadow could occur on: Patricia's Green, the Page & Laguna Mini Park, the Howard and Langton Mini Park, Hayes Valley Playground, Koshland Park, Buchanan Street Mall, and the future Natoma and 11th Park, all of which are under the jurisdiction of the San Francisco Recreation and Parks Department (RPD). Net new shading could also occur on the future Brady Park, a privately owned, publicly accessible open space. Shadow impacts will be evaluated further in the EIR.

⁷⁴ Pursuant to Planning Code Section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
9. RECREATION					
Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Recreation

The proposed project would provide 45,175 sf of common usable open space and 2,975 sf of publicly accessible open space, while the proposed variant would provide 25,565 sf of common usable open space, 12,091 sf of publicly accessible open space, and 9,550 sf of private open space. Because development under the proposed variant represents comparable demand for recreational facilities, with the same number of units and similar amount of commercial retail and open space uses and associated park/recreational needs, the potential recreation impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact RE-1: The proposed project or variant would not result in a substantial increase in the use of existing parks and recreation facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated. (*Less than Significant*)

Currently, there are no parks or recreational space on the project site. The following RPD parks, open spaces, and recreational facilities are within 0.5 mile of the project site and are accessible by walking, bicycling, or transit:⁷⁵

- Patricia's Green, located at Octavia Street between Hayes Street and Fell Street, approximately 0.27 mile north of the project site, is an approximately 0.41-acre park that includes a playground, picnic area, and art installations.
- Civic Center Plaza/Joe Alioto Piazza, located at the intersection of Grove Street and Larkin Street, approximately 0.28 mile northeast of the project site, is an approximately 5.4-acre plaza including lawn areas and children's play equipment, located adjacent to City Hall.
- Page and Laguna Mini Park, located mid-block on Rose Street between Laguna Street and Octavia Boulevard, approximately 0.30 mile northwest of the project site, is an approximately 0.16-acre community garden that includes a walkway and seating areas.

⁷⁵ RPD administers more than 220 parks, playgrounds, and open spaces throughout the City. RPD also manages 25 recreation centers, nine swimming pools, five golf courses and numerous tennis courts, ball diamonds, soccer fields and other sports venues (San Francisco Recreation and Park Department, Who We Are, <http://sfrecpark.org/about/who-we-are/>, accessed July 31, 2017).

- Koshland Community Park and Learning Garden, located at the intersection of Page Street and Buchanan Street, approximately 0.36 mile northwest of the project site, is an approximately 0.82-acre park with children's play structures, a plaza, community garden plots, and a half basketball court.
- Hayes Valley Playground, located at the intersection of Hayes Street and Buchanan Street, approximately 0.40 mile northwest of the project site, is an approximately 0.75-acre playground with a stage and plaza to facilitate community gatherings, community garden plots, outdoor fitness equipment, and a 2,500-square-foot clubhouse.
- Page Street Community Garden, located mid-block on Page Street between Buchanan Street and Webster Street, approximately 0.45 mile northwest of the project site, is an approximately 0.08-acre community garden.

RPD is in the process of acquiring a new park property on 11th Street between Minna and Natoma Streets, approximately 0.17 mile southeast of the project site. The timing of construction and programming for the parking is unknown at this time. United Nations Plaza, located on Market Street in the Civic Center area, approximately 0.44 mile east of the project site, is a 2.6-acre pedestrian mall that is not managed by RPD. United Nations Plaza contains hardscaped and landscaped areas and limited seating and is used for weekly farmer's markets and art festivals. In addition, a new privately owned public open space, Brady Park, is proposed approximately 0.07 mile west of the project site. Brady Park is not yet designed and funding has not yet been approved.

The proposed project would add approximately 2,155 permanent residents and approximately 47 net new employees to the project site, increasing the demand for park and recreation facilities in the vicinity of the project site, including those listed above. The proposed project includes open space amenities in the form of commonly accessible terraces, as well as providing publicly accessible open space at the ground level in the form of the proposed mid-block alley, that meet the San Francisco Planning Code requirements for provision of open space. The common usable open space and publicly accessible open space would partially offset the demand for open space generated by project residents.

As such, additional demand for parks, open spaces, and recreational facilities generated by the proposed project or the variant would not be expected to increase use such that it would cause substantial additional physical deterioration of the facilities or require the construction or expansion of recreational facilities. Therefore, the proposed project or the variant would have a less-than-significant impact on parks and recreational facilities.

Impact-C-RE-1: The proposed project or the variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a cumulative impact on recreational facilities or resources. (*Less than Significant*)

Cumulative development in the project vicinity would result in an intensification of land uses and a corresponding increase in the demand for recreational facilities and resources. The City has accounted for such growth as part of the Recreation and Open Space Element of the general plan.⁷⁶ In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund the acquisition, planning, and renovation of the City's network of recreational resources. Moreover, in June 2016, San Francisco voters approved Local Measure

⁷⁶ San Francisco Planning Department, *San Francisco General Plan*, Recreation and Open Space Element, April 2014, pp. 20–36, http://www.sfplanning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf, accessed July 31, 2017.

(Proposition) B, which extends until 2046 a funding set-aside in the City budget for RPD and also provides for annual increases through 2026–2027 in General Fund monies provided to RPD, meaning that, going forward, RPD will have additional funding for programming and park maintenance.⁷⁷ As discussed above, there are seven parks, open spaces, or other recreational facilities within 0.5 mile of the project site, and two additional parks are being proposed. It is expected that these existing recreational facilities would be able to accommodate the increase in demand for recreational resources generated by nearby cumulative development projects. For these reasons, the cumulative projects considered in this analysis would not have a significant cumulative impact on recreational facilities or resources.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
10. UTILITIES AND SERVICE SYSTEMS					
Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Utilities and Service Systems

The proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses; thus, associated water use and wastewater generation would be substantially similar. In addition, both the proposed project and variant would reduce the amount of impervious surfaces on the project site, and would include stormwater detention features. For this reason, the potential utilities impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact UT-1: The proposed project or variant would not exceed wastewater treatment requirements of the applicable regional water quality control board, would not exceed the capacity of the wastewater treatment provider that would service the project, or require or result in the construction of wastewater treatment or stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (*Less than Significant*)

The San Francisco Public Utilities Commission (SFPUC) provides water, wastewater, and storm drainage services in San Francisco. San Francisco's combined stormwater and wastewater treatment system serves the project site and handles both sewage treatment and stormwater runoff. The Southeast Treatment Plant provides wastewater

and stormwater treatment and management for the eastern portion of the City, including the project site.⁷⁸ The Southeast Treatment Plant is permitted to accept 57 million gallons per day (MGD) during dry weather and up to 250 MGD under peak wet-weather conditions.⁷⁹

Stormwater

The San Francisco Stormwater Management Ordinance (as codified in section 147 of the San Francisco Public Works Code) requires that projects that create and replace at least 5,000 sf of impervious surface implement requirements for managing post construction stormwater runoff consistent with the Stormwater Management Requirements and Design Guidelines. Sites with more than 50 percent impervious surfaces (like the project site) must be designed such that stormwater runoff rate and volume do not exceed predevelopment conditions for the one- and two-year, 24-hour design storm.⁸⁰ Compliance with the Stormwater Management Requirements and Design Guidelines would ensure that stormwater generated by the proposed project or the variant is managed onsite such that the project would not contribute additional volumes of polluted runoff to the City's stormwater infrastructure. The Stormwater Management Requirements and Design Guidelines also require that a stormwater control plan be prepared for projects proposing to replace 5,000 sf or more of impervious surface. Stormwater control plans are reviewed by the SFPUC to determine whether a proposed project meets performance requirements.

Implementation of the proposed streetscape improvements would not alter the flow of stormwater onsite because the public-right-of way is already paved, and there would be no increase in the volume of stormwater generated at the project site. The proposed project or the variant would include landscaped open space areas and would result in a net decrease in impervious surfaces overall. The proposed project or variant would replace at least 5,000 sf of impervious surface, thus the proposed project or variant would be required to prepare a stormwater control plan documenting compliance with the requirements of the site mitigation plan. The plan would be prepared as the design of the proposed project or variant is further refined. Furthermore, the proposed project or the variant would include rainwater and stormwater collection features that would detain rainwater and stormwater for reuse onsite. Due to the decrease in net impervious surface area on the project site, inclusion of rainwater and stormwater collection features for reuse onsite, and preparation of a stormwater control plan, the proposed project or the variant would not result in increased stormwater run-off that would require the construction of new wastewater treatment or storm drainage facilities, and impacts would be less than significant.

Wastewater

The proposed project or variant would add residential and retail uses to the project site, which would generate approximately 85,986 gallons per day of wastewater, representing a 0.15 percent increase of the SFPUC's Southeast Treatment Plant's overall capacity.⁸¹ To plan for growth in the SFPUC's service area and the resulting increase in wastewater generation, the SFPUC uses population growth estimates provided by the City. As stated in Impact PH-1, population growth at the project site is planned for in city planning documents. Therefore, the increase in wastewater generated at the project site would not represent an increase beyond the amount projected by the SFPUC and thus would be within the planned capacity of the existing combined system. Therefore, the

⁷⁸San Francisco Public Utilities Commission, San Francisco's Wastewater Treatment Facilities, June 2014, <http://sfwater.org/modules/showdocument.aspx?documentid=5799>, accessed January 24, 2017.

⁷⁹San Francisco Public Utilities Commission, Southeast Treatment Plant, <http://sfwater.org/index.aspx?page=616>, accessed January 24, 2017.

⁸⁰San Francisco Public Utilities Commission, *San Francisco Stormwater Management Requirements and Design Guidelines*, May 2016, <http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=9026>, accessed August 10, 2017.

⁸¹San Francisco Public Utilities Commission, *Water Supply Assessment for the 10 South Van Ness Project*, adopted February 2, 2017.

proposed project or variant would not result in the construction of new wastewater treatment facilities, and impacts would be less than significant.

Additionally, wastewater generated by the proposed project or variant would meet the wastewater pretreatment standards of the SFPUC, as required by the San Francisco Industrial Waste Ordinance. These requirements are aimed at implementing the San Francisco Bay Regional Water Quality Control Board standards. Therefore, the proposed project or variant would not exceed wastewater treatment requirements, and impacts would be less than significant.

Impact UT-2: The proposed project or variant would not require new or expanded water supply resources or entitlements or require or result in the construction of water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (*Less than Significant*)

SFPUC serves approximately 2.6 million customers in the Bay Area, with approximately one-third of water deliveries going to retail customers in San Francisco. As the water provider for San Francisco, SFPUC prepares an urban water management plan every five years to project future demand and evaluate the adequacy of existing and projected supply. Demands that are not met by local runoff are met with water diverted from the Tuolumne River through the Hetch Hetchy System. On average, the Hetch Hetchy System provides approximately 85 percent of the water delivered by the SFPUC. During dry years, the water received from the Hetch Hetchy System can amount to over 90 percent of the total water delivered. SFPUC's 2015 urban water management plan contains water demand predictions based on ABAG's 2013 projections for employment and housing growth. According to the 2015 urban water management plan, water supply will be 77.5 MGD in 2020. Water demand in 2020 is anticipated to be 77.5 MGD. Water demand and supply are projected to be equivalent (i.e., no shortages or surpluses are predicted) through 2040.⁸²

SFPUC plans to supplement water supply sources with increased groundwater extraction and recycled water projects, in addition to expanded recycled water and nonpotable water use requirements. With these projects and requirements, total water supply would increase to 79 MGD in 2025.⁸³ The 2015 urban water management plan indicates that the SFPUC would be able to meet retail water demand through 2040 during normal-year and single dry-year events.⁸⁴ During normal precipitation years, the SFPUC will have adequate supplies to meet its projected retail water demands. If a multiple dry year event occurs, the SFPUC would experience shortages in 2040 during years two and three without development of additional supply concepts.

The proposed project or variant would result in the addition of residential and retail uses to the site, which would increase water demand at the site. The proposed streetscape improvements would include more landscaping than is present at the site under current conditions, which would require water supply for irrigation. Based on the water supply assessment prepared for the proposed project and reviewed and approved by the SFPUC, the proposed project would have an estimated demand of 116,581 gallons per day for both potable and nonpotable water supplies.⁸⁵ Because the proposed variant would include comparable residential uses, retail uses, and landscaping as the proposed project, the water supply and demand for the proposed variant is anticipated to be

⁸²San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016.

⁸³*Ibid.*

⁸⁴*Ibid.*

⁸⁵San Francisco Public Utilities Commission, *Water Supply Assessment for the 10 South Van Ness Project*, adopted February 2, 2017.

approximately the same as the proposed project. The project specific water supply assessment concluded that SFPUC would have adequate water supplies to accommodate the project.

Additionally, the project incorporates several water saving measures. For example, during project construction, the project sponsor and project building contractor must comply with article 21 of the San Francisco Public Works Code, which requires that nonpotable water be used for dust-control activities unless permission is obtained from SFPUC. Article 12C of the San Francisco Health Code, Alternate Water Sources for Non-Potable Applications, allows the collection, treatment, and use of alternate water sources for nonpotable applications. In addition, article 12C requires that all new development projects of 250,000 sf or more of gross floor area install onsite water systems to treat and reuse available alternate water sources for toilet and urinal flushing and irrigation. Developments over 250,000 sf of gross floor area must submit a water budget application and accompanying Water Use Calculator to the SFPUC. Because the proposed project or variant would be over 250,000 gsf, the proposed project or variant would employ a blackwater recycling system, which would recycle wastewater generated by in the building for onsite nonpotable uses, including toilet flushing, irrigation, and HVAC/cooling demand.

The entirety of the proposed project's or variant's toilet/urinal, HVAC, and irrigation water demands would be met by onsite sources, including the proposed blackwater recycling system and proposed stormwater/rainwater collection features. In addition, in compliance with Title 24 of the California Code of Regulations and the City's Green Building Ordinance, the proposed project or variant would include water-efficient fixtures to reduce the amount of potable water used for building functions. The proposed project or variant would comply with chapter 63 of the San Francisco Administrative Code, the San Francisco Water Efficient Irrigation Ordinance, which requires projects to design, install, and maintain efficient irrigation systems, utilize low water-use plantings, and set a maximum applied water allowance (an annual water budget). Overall, the proposed project or variant is anticipated to offset approximately 29 percent of the overall water demand of the proposed project or variant through compliance with this provision.⁸⁶

Because the water demand associated with the proposed project or the variant could be accommodated by SFPUC's existing and planned supplies, and because the proposed project or variant would include water saving measures, the proposed project or variant would not result in a substantial increase in water use on the project site that would result in the need for new water supply entitlements or resources or the construction of new water treatment facilities. Therefore, impacts related to water supply would be less than significant.

Impact UT-3: The proposed project or variant would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and would comply with federal, state, and local statutes and regulations related to solid waste. (*Less than Significant*)

In September 2015, the City approved an agreement with Recology, Inc. for the transport and disposal of the City's municipal solid waste at the Recology Hay Road Landfill in Solano County for approximately nine years or until 3.4 million tons of municipal solid waste have been disposed (whichever occurs first). The City would have an option to renew the agreement thereafter for an additional six years or until an additional 1.6 million tons have

⁸⁶Ibid.

been disposed (whichever occurs first).⁸⁷ The Recology Hay Road Landfill is permitted to accept up to 2,400 tons of waste per day, and, assuming the maximum throughput is transferred to the landfill each day, the landfill has permitted capacity to receive waste approximately through the year 2034.⁸⁸ The current estimated rate of disposal is approximately 1,851 tons, which would result in closure in approximately 2041.⁸⁹ Recology also operates San Francisco's Transfer Station, located at 501 Tunnel Avenue in San Francisco. The San Francisco Transfer Station has a maximum permitted throughput of 3,000 tons per day.

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires municipalities to adopt an Integrated Waste Management Plan to establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling. San Francisco Ordinance No. 27-06 requires a minimum of 75 percent solid waste diversion by 2010, which it exceeded by 5 percent, and has a goal of 100 percent solid waste diversion, or "zero waste," to landfill or incineration by 2020.⁹⁰ Chapter 14 of the San Francisco Environment Code, the Construction and Demolition Debris Recovery Ordinance, requires that construction and demolition debris be transported by a registered transporter and be processed by a registered facility that must recover for reuse or recycling and divert from landfill at least 65 percent of construction and demolition debris. Pursuant to section 4.103.2.3 of the San Francisco Green Building Code, new high-rise residential buildings are required to divert at least 75 percent of construction and demolition waste. Projects that would fully demolish an existing structure must submit a waste diversion plan to the Director of the San Francisco Department of the Environment at the time of application for a demolition permit. The waste diversion plan must provide a list of all material types and volumes anticipated from the demolition; the market or destination for each material; the estimated recovery rate (diversion from landfill) by material or market; and the anticipated transporter for each material type. Chapter 19 of the San Francisco Environment Code, the Mandatory Recycling and Composting Ordinance, requires all employees, visitors, residents, and businesses within the city to separate their recyclables, compostables, and landfill trash.

The rate of waste disposal of the proposed project or variant is anticipated to be consistent with waste disposal rates within the city as a whole. Furthermore, the Hay Road Landfill, as discussed above, has adequate capacity to serve increased demand from the proposed project or the variant. Through compliance with all City ordinances related to waste during both construction and operation, implementation of the proposed project or variant would not impede the City's waste diversion goals. Because the proposed project or variant would involve demolition of a building in full and would construct a high-rise residential building, the project sponsor would be required to prepare and implement a waste diversion plan and divert at least 75 percent of construction and demolition waste, as required by the Construction and Demolition Debris Recovery Ordinance and the San Francisco Green Building Code. Therefore, solid waste impacts would be less than significant.

⁸⁷ City and County of San Francisco, *Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County*, Final Negative Declaration, Planning Department Case No. 2014.0653E, May 21, 2015, and further amended July 20, 2015, http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed January 26, 2017.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ San Francisco Department of the Environment, 2016, Zero Waste – Frequently Asked Questions, <https://sfenvironment.org/zero-waste-faqs>, accessed January 26, 2017, and April 24, 2018.

Impact-C-UT-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to utilities and services systems. (*Less than Significant*)

As discussed above, the SFPUC provides water, wastewater, and stormwater services within the city and Recology provides solid waste service. The SFPUC has incorporated the demand associated with cumulative projects into its future water supply and wastewater service projections identified in the urban water management plan⁹¹ As discussed under Impact C-PH-1, cumulative projects would not result in population growth beyond what has been projected by the City and ABAG as the basis for water supply and wastewater service projections. The City and County of San Francisco currently exceeds statewide goals for reducing solid waste and is expected to reduce solid waste volumes further in the future through several ordinances. For these reasons, cumulative utilities and service systems impacts would be less than significant.

⁹¹San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
11. PUBLIC SERVICES					
Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other services?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Public Services

Impacts to parks and recreational facilities are discussed under topic E.9, Recreation.

The proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated police, fire, and school needs. For this reason, the potential public services impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact PS-1: The proposed project or variant would increase demand for police or fire services but not to the extent that would require new or physically altered of facilities the construction of which could cause significant environmental effects. (*Less than Significant*)

The project site is served by the San Francisco Police Department and the San Francisco Fire Department. The San Francisco Police Department (SFPD), headquartered at 850 Bryant Street, divides the city into two divisions, Metro and Golden Gate, and each division is divided into five districts. The project site is located within the Metro Division and is part of the Southern Police District, which is made up of the South of Market, South Beach, Mission Bay areas. The nearest police stations are: the Tenderloin Task Force Police Station, at 301 Eddy Street, approximately 4,000 feet (0.76 mile) northeast of the project site, the Mission Police Station, at 630 Valencia Street, approximately 4,000 feet (0.76 mile) southwest of the project site and the Northern Police Station, at 1125 Fillmore Street, approximately 4,500 feet (0.85 mile) northwest of the project site.⁹²

The closest fire station is Station No. 36, at 109 Oak Street, approximately 400 feet (0.08 mile) northwest of the project site. Other nearby fire stations include Station 5, at 1301 Turk Street, approximately 4,000 feet (0.80 mile) northwest of the site; Station No. 6, at 135 Sanchez Street at Henry Street, approximately 4,500 feet (0.85 mile) southwest of the project site; Station No. 3, at 1067 Post Street at Polk Street, approximately 4,500 feet (0.85 mile) northeast of the project site, and Station No. 7, at 2300 Folsom Street at 19th Street, approximately 5,000 feet (0.95 mile) south of the project site.⁹³

⁹²San Francisco Police Department, Police District Maps, <http://sanfranciscopolice.org/police-district-maps>, accessed December 20, 2017.

⁹³San Francisco Fire Department, Fire Station Locations, <http://sf-fire.org/FIRE-STATION-LOCATIONS>, accessed April 24, 2018.

The proposed project or variant would be equipped with fire prevention systems, such as fire sprinklers, smoke alarms, and fire alarms. Construction of the proposed project or variant would be required to comply with the California Fire Code, which establishes requirements pertaining to fire protection systems, including the provision of state-mandated fire alarms, fire extinguishers, appropriate building access and egress, and emergency response notification systems.

The proposed project or variant would add 984 residential units and approximately 30,350 or 30,450 gsf of retail uses, respectively, to the project site. Using the average household size of 2.19 persons per household in the city, 984 residential units would result in 2,155 additional permanent residents on the project site.⁹⁴ This increase would result in more calls for police protection, fire protection, and emergency response services relative to the existing use onsite, which does not support any permanent residents. However, given the overall demand for these services in San Francisco, the increase in demand for police and fire services resulting from the proposed project would be incremental and would be accommodated by existing facilities and personnel. The project site is in close proximity to several San Francisco Police Department and Fire Department stations, which would minimize response times to calls received from the proposed project or variant. Implementation of the proposed project or variant would therefore not require the construction of new or alteration of existing police or fire facilities. This impact would be less than significant.

Impact PS-2: The proposed project or variant would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered schools. (*Less than Significant*)

Implementation of the proposed project or variant would result in 984 residential units and an anticipated population of 2,155 residents,⁹⁵ which would result in the need to accommodate approximately 99 K–12 students in local schools.^{96,97} Some of these students would attend schools operated by the San Francisco Unified School District (SFUSD), while others might attend private schools. It is anticipated that existing SFUSD schools in the project vicinity would be able to accommodate this minor increase in demand. Furthermore, the project sponsor would be required to pay a school impact fee based on the construction of net new residential square footage to fund SFUSD facilities and operations (through the DBI) pursuant to section 17620 of the California Education Code. Section 65995(h) of the California Government Code determines that such fees are considered full and complete mitigation of the impacts of development on local school systems. Because developer school fees would be paid, the impact related to provision of school services would be less than significant.

⁹⁴U.S. Census Bureau, 5-Year Estimates, San Francisco County, Demographic and Housing Estimates, 2011–2015 American Community Survey, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml, accessed July 31, 2017.

⁹⁵Based on the U.S. Census Bureau's most recent American Community Survey (2011–2015), the total number of housing units in San Francisco is 383,676 and estimated population is 840,763 (which gives an average of 2.19 persons per household).

⁹⁶San Francisco Planning Department, Transit Center District Plan and Transit Tower Final Environmental Impact Report, Case No. 2007.0558E and 2008.0789E, May 24, 2012, p. 548. Based on student generation rates of 0.25 students for BMR units and 0.05 students for market rate units.

⁹⁷The per unit student generation rate is greater for BMR residential units; therefore, this analysis conservatively assumes the proposed project or the variant would provide 25 percent BMR units onsite.

Impact PS-3: The proposed project or variant would not increase demand for other government services, and would not result in a substantial adverse impact due to the construction or alteration of facilities to provide such services. (*Less than Significant*)

The San Francisco Public Library (SFPL) provides library services in San Francisco, operating the Main Branch at Civic Center as well as 27 neighborhood branches. As of 2016, the public library system had a collection of 3,809,319 items, consisting of books, CDs, DVDs, sheet music, periodicals, government documents, and software. During the 2015–2016 fiscal year, the San Francisco Public Library had a total of 6,362,573 library visits; branch libraries averaged 150,945 library visits.⁹⁸ Neighborhood branches provide reading rooms, book lending, information services, technological resources, and public programs, including youth-oriented programs.⁹⁹ The average collection size across the branches for the 2015–2016 fiscal year was 44,393 items, although any library branch can receive materials from the system’s overall collection. A total of 10,778,428 items across all libraries were circulated in 2015–2016.

As stated above, the proposed project and the variant would construct 984 residential units, which would result in 2,155 additional permanent residents on the project site. This increase in permanent residents would result in increased demand for libraries and other government services. However, given the overall demand for these services in San Francisco, the increase in demand for libraries and other government services resulting from the proposed project would be incremental. Project-related increases to the city’s tax base would support the provision of libraries and other government services in the city. The proposed project and variant would be closest to Main Branch of the San Francisco Public Library; however, the Main Branch and other public and private libraries available in the area and throughout San Francisco are available to serve the additional 2,155 permanent residents. In addition, the San Francisco Public Library regularly evaluates resources to ensure that adequate service is maintained. The Main Branch, other public and private libraries in the project area, and other government services would be able to accommodate the residents of the proposed project and variant. Impacts to library services and other government services would therefore be less than significant.

Impact-C-PS-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to public services. (*Less than Significant*)

Cumulative development in the project area would incrementally increase demand for police, fire, school, and library services, but not beyond levels anticipated and planned for by public service providers. The project sponsor and the sponsors of other development projects would contribute to the SFUSD through development fees, and property taxes generated by the projects would contribute to services from the San Francisco Police and Fire departments. Therefore, cumulative impacts to public services would be less than significant.

⁹⁸San Francisco Public Library, System-wide Statistics FY 2015–2016, September 2016, <http://sfpl.org/pdf/about/administration/statistics-reports/Statisticsbylocation2015-16.pdf>, accessed January 27, 2017.

⁹⁹San Francisco Public Library, Statistics by Location 2015–2016, June 30, 2016, <http://sfpl.org/pdf/about/administration/statistics-reports/Statisticsbylocation2015-16.pdf>, accessed October 17, 2016.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
12. BIOLOGICAL RESOURCES					
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Biological Resources

Construction for both the proposed project and the variant would involve the same location and activities, in an urban area of San Francisco. As under the proposed project, construction and operation of the proposed variant would result in 33 net new street trees. For these reasons, the potential biological resources impacts from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

The project site is located in a developed area almost entirely covered by impervious surfaces with a small number of non-native, ornamental plants and street trees in the project area. The project site does not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service; therefore, topic 12b is not applicable. In addition, the project site does not contain any wetlands as defined by section 404 of the Clean Water Act; therefore, topic 12c is not applicable. Lastly, the project site does not fall within any local, regional, or state habitat conservation plans; therefore, topic 12f is not applicable.

Impact BI-1: The proposed project or variant would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (*Less than Significant*)

The project site is located within a dense urban environment with high levels of human activity. The project site includes an existing building and a small number of non-native, ornamental plants and trees. Eight street trees are along South Van Ness Avenue, six along Market Street, and 14 along 12th Street. The plants and trees on the project site are not considered sensitive habitat for rare or endangered species. Further, the project site and surrounding area are entirely covered with impervious surfaces and do not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Therefore, the project site does not provide habitat for any rare or endangered plant or animal species. Thus, the proposed project or variant would not adversely affect or substantially diminish plant or animal habitats directly or through modifications. Given the existing conditions of the project site, neither the proposed project nor the variant would affect any rare, threatened, or endangered species.

The proposed project's location, height, and materiality, particularly the inclusion of transparent or reflective glass, may present risks for birds as they travel along their migratory paths. As discussed in Item BI-2 below the proposed project and variant would comply with Planning Code section 139, Standards for Bird-Safe Buildings, which establishes building design standards to reduce avian mortality rates associated with bird strikes.¹⁰⁰ Additionally, the proposed project would be subject to, and would comply with, City-adopted regulations for bird-safe buildings, and federal and State migratory bird regulations. Even though incidental bird strikes may occur, and may involve special status avian species the proposed project or variant would not interfere with the movement of native resident or wildlife species or with established native resident or migratory wildlife corridors. This impact would be less than significant.

Impact BI-2: The proposed project or variant would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (*Less than Significant*)

Nesting Birds

As discussed in Item BI-3, below, the project would include tree removal. Nesting birds may be present in the existing street trees and foliage surrounding the project site. As such, if tree removal would occur during the nesting season (January 15 through August 15) or during the breeding season (March through August), nesting birds could be disturbed. This would be considered a potentially significant impact.

The project would comply with California Fish and Game Code section 3500 et al., including sections 3503, 3503.5, 3511, and 3513, which provide that it is unlawful to take or possess any migratory nongame bird, or needlessly destroy nests of birds except as otherwise outlined in the code. Staff at the California Department of Fish and Wildlife (CDFW) enforce the code by requiring that projects incorporate measures to avoid and minimize impacts to nesting birds if any tree removal would occur during the nesting or breeding season. For example, a qualified biologist would conduct a tree survey within 15 days before the start of construction occurring in March through

¹⁰⁰ San Francisco Planning Department, *Standards for Bird-Safe Buildings*, adopted by the San Francisco Planning Commission July 14, 2011, http://default.sfplanning.org/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf, accessed April 24, 2018.

May; or 30 days before the start of construction occurring in June through August. These surveys would help establish the presence of any nesting birds that would need to be protected through avoidance and minimization measures. Additionally, CDFW staff may require notifications if any active nests are identified including consultation with CDFW and establishment of construction-free buffer zones.

Compliance with these existing state regulations would ensure that project impacts relating to nesting birds would be less-than-significant.

Migratory Birds

Migrating birds traveling through San Francisco are subject to risks associated with collision with tall structures, depending on the location, height, and material of the building, particularly those with transparent or reflective glass. Thus, the tall tower(s) proposed under the project and variant could have a potentially significant impact on migrating birds.

San Francisco Planning Code section 139, Standards for Bird-Safe Buildings, sets building design standards to reduce avian mortality rates associated with bird strikes for location-related hazards where the siting of a structure creates a high risk to birds,¹⁰¹ and feature-related hazards that include building design features for structures that create a high risk to birds, due to height, fenestration, etc.¹⁰² The project would be subject to section 139 requirements as it includes a tall tower that may incorporate standing transparent/reflective glass sidings, wind barriers, and balconies, which are considered feature related hazards to migratory birds. As such, the project would use bird safe glazing treatment on the building's glass sliding, as well as any other glass architectural elements. With incorporation of section 139 requirements, project impacts to migratory birds would be less-than-significant.

Compliance with applicable local, state, and federal requirements protecting biological resources would ensure that potential impacts of the proposed project related to the movement of native resident wildlife species, migratory wildlife corridors, or native wildlife nursery sites would be considered less-than-significant.

Impact BI-3: The proposed project or variant would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (*Less than Significant*)

The City's Urban Forestry Ordinance, San Francisco Public Works Code section 801 et seq., requires a permit from San Francisco Public Works for removal of any protected trees. Protected trees include landmark trees, significant trees, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco. The designations are defined as follows.

- **Landmark trees** are designated by the board of supervisors upon the recommendation of the Urban Forestry Council, which determines whether a nominated tree meets the qualification for landmark designation by using established criteria (section 810). Special permits are required to remove a landmark tree on private property or on City-owned property.

¹⁰¹ Projects must be located less than 300 feet from an Urban Bird Refuge to pose location-related hazards under San Francisco Planning Code section 139.

¹⁰² Examples of feature-related hazards under San Francisco Planning Code Section 139 include standing transparent or reflective glass sidings, wind barriers, skywalks, and balconies.

- **Significant trees** are those trees within the jurisdiction of the San Francisco Public Works, or trees on private property within 10 feet of the public right-of-way, that meet certain size criteria. To be considered significant, a tree must have a diameter at breast height of more than 12 inches, a height of more than 20 feet, or a canopy of more than 15 feet (section 810[A][a]). The removal of significant trees on privately owned property is subject to the requirements for the removal of street trees. As part of the determination to authorize removal of a significant tree, the director of San Francisco Public Works is required to consider certain factors related to the tree, including (among others) its size, age, species, and visual, cultural, and ecological characteristics (section 810A[c]).
- **Street trees** are trees within the public right-of-way or on land within the jurisdiction of the San Francisco Public Works. Their removal by abutting property owners requires a permit.

No landmark or significant trees exist on the project site.¹⁰³ The proposed project or variant would remove 28 street trees. As such, the project sponsor would be required to obtain a tree removal permit in accordance with San Francisco Public Works Code section 806. The project sponsor would plant 61 new trees, resulting in 33 net new street trees in compliance with San Francisco Planning Code section 138.1, the Better Streets Plan. San Francisco Planning Code section 138.1 requires new construction, significant alterations, or relocation of building projects within any zoning district to include the planting of one 24-inch box tree for every 20 feet along the project site's street or alley frontage, with any remaining fraction of 10 feet or more requiring an additional tree. The new trees that would be planted under the proposed project or variant would be required to comply with the requirements of the Better Streets Plan, the Better Market Street Project, and the Safer Market Street Project.

Compliance with existing regulations would ensure that the proposed project or variant would not conflict with local policies or ordinances protecting biological resources and would have less-than-significant impacts.

Impact-C-BI-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to biological resources. (*Less than Significant*)

The cumulative development projects noted in Table 3, Cumulative Projects, would result in the intensification of land uses within a dense urban environment that does not include any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Cumulative development would add tall buildings that can injure or kill birds in the event of a collision. In addition, nearby cumulative development projects would result in the removal of existing street trees or other vegetation. However, nearby cumulative development projects would be subject to the California Fish and Game Code regulations, as well as City bird-safe building and urban forestry ordinances applicable to the proposed project and variant. Compliance with existing ordinances would reduce the effects of nearby cumulative development projects to less-than-significant levels.

In summary, implementation of the proposed project or variant in combination with other past, present, and reasonably foreseeable projects would not modify any natural habitat and would have a less-than-significant impact on any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community, and would not conflict with any local policy or ordinance protecting biological resources or an

¹⁰³ San Francisco Department of the Environment, Map of San Francisco's Landmark Trees, <https://sfenvironment.org/article/landmark-tree-program/map-of-san-francisco%E2%80%99s-landmark-trees>, accessed August 3, 2017.

approved conservation plan. For these reasons, the proposed project or variant would not combine with past, present, and reasonably foreseeable future projects in the vicinity to result in a significant cumulative impact related to biological resources, and impacts would be less than significant.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
13. GEOLOGY AND SOILS					
Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, (1994) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Geology and Soils

The proposed project or variant would connect to the existing sewer system, and there would be no use of septic tanks or alternative wastewater disposal systems for the proposed project or variant. Therefore, topic 13e, impacts resulting from use of septic tanks or alternative wastewater disposal systems on unstable soils, is not applicable to the proposed project or variant and will not be addressed further.

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project and variant. The analysis in this section is based on geotechnical reports prepared for the

proposed project and variant by an independent consultant.^{104,105} These reports are the primary sources of information included in this section. The scope of the geotechnical investigation included reviewing test boring logs previously carried out at the site; consultation with BART and SFMTA representatives; evaluation of soil classification, subsurface conditions, seismicity, slide potential; and design recommendations.

Geology of the Site

Based on borings and collected data in the geotechnical investigations,^{106,107} the project site is underlain by 10–30 feet of sandy fill and native Dune Sand, which are loose to dense and exhibit low to moderate strength. The sands are underlain by an approximately 5- to 10-foot-thick marsh deposit consisting of loose to dense silty and clayey sand. Below the marsh deposit, starting at approximately 25 feet below ground surface (bgs) is dense to very dense fine sand, silty sand, and clayey sand, referred to as the Colma formation. The Colma formation extends to at least 194 feet bgs, and includes strong residual soil (weathered rock) consisting of very stiff to hard sandy clay and clay with gravel. The geotechnical investigation states that Colma formation would be capable of supporting the load of the proposed project or variant whether a mat foundation or deep piers are used. The borings revealed that bedrock, comprised of shale of the Franciscan formation, was encountered at approximately 211 feet bgs.

Project Features

The northern third of the project site includes a subsurface easement for the existing BART tunnel, which is located 19.62 feet below grade. The invert of the BART tunnel is approximately 85 feet below ground surface.^{108,109} This northern half of project site is within the BART zone of influence (ZOI)¹¹⁰; therefore, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnel. At this location, the foundation for the podium structures under the proposed project and variant could be supported by a mat foundation approximately 35 feet bgs without putting any additional stress on the BART tunnel. However, the towers under both the proposed project and variant on top of the BART zone of influence would need to be supported by a deep foundation system to a depth of approximately 50–80 feet bgs consisting of piers with double casings that would derive supporting capacity from the soil beneath the BART zone of influence. The deep foundation system would be drilled cast-in-place piers, which would be constructed by digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving would be required. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation.¹¹¹ The final lengths will be determined once the foundation system is designed,

¹⁰⁴ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2015-004568ENV.

¹⁰⁵ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

¹⁰⁶ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹⁰⁷ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

¹⁰⁸ “Invert” refers to the bottom of the tunnel.

¹⁰⁹ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, March 16, 2017.

¹¹⁰ The BART zone of influence is defined by drawing imaginary lines from the critical point of BART’s substructure at a slope of 1-1/2 (horizontal) to 1 (vertical) toward the ground surface.

¹¹¹ *Ibid.*

reviewed by BART and has gone through the rigorous code-mandated design peer review process for all high-rise construction, commonly known as SDRP (Structural Design Review Panel).

BART would review the project's structural plans and final geotechnical and geological hazards evaluation reports for the design to ensure compliance with its guidelines for construction over and adjacent to its subway structures. The reports will include an engineering geology map, a site plan showing the location of subway structures, BART easements, a soil reworking plan, and the geotechnical conclusion and recommendations.

The project site would be excavated up to approximately 40 feet below grade in the northern portion and 50 feet below grade in the southern portion of the site. Excavation in the northern portion of the site would be shallower due to the presence of the subsurface BART tunnel, which at its lowest point is approximately 85 feet bgs. At this location, the foundation for the podium structures under the proposed project could be supported by a mat foundation approximately 35 feet bgs and satisfy the requirement that structural loads associated with the proposed project can be no greater than the existing loads on the BART tunnel. The proposed project or variant would require that approximately 100,000 cubic yards of excavated soil be removed from the project site and disposed of at an appropriate facility.^{112,113} Groundwater was encountered on the project site ranging from 15 to 25 feet bgs at different locations; therefore, dewatering may be required.

The 55-story single tower variant (590 feet tall [up to 610 feet including the elevator penthouse]) would fundamentally have the same foundation type and design methodology as the 41-story double tower (400 feet tall [up to 420 feet including the elevator penthouse]) under the proposed project. In both cases the tower columns and shear walls would be founded on a common pile cap.¹¹⁴ This pile cap would be supported by drilled piers extending below the BART Zone of Influence, to a depth of approximately 50–80 feet bgs, but not to the depth of the underlying bedrock because the Colma formation is strong enough to support the proposed project or variant. The proposed project with two towers would require more columns, shear walls, and piers compared to the single tower variant. However, because the proposed project and variant would have similar foundation designs and are anticipated to be constructed with a combination of a mat foundation and deep foundation piers, the potential geology and soils impacts resulting from construction and operation of either the proposed project or variant are anticipated to be the same.

Regulatory Framework

Under the direction and management of the seven-member Building Inspection Commission, the mission of the San Francisco Department of Building Inspection (the building department) is to oversee the effective, efficient, fair and safe enforcement of the City and County of San Francisco's Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soils, and seismic hazards is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Standards Code (state building code, California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department's

¹¹² Ibid., p. 13.

¹¹³ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017, p. 12.

¹¹⁴ A pile cap is a thick concrete mat that is placed on and fastened to the top of a group of piles that have been driven into soft or unstable ground to transmit loads and provide a suitable stable foundation.

implementing procedures including Administrative Bulletins and Information Sheets, and the State Seismic Hazards Mapping Act of 1990 (seismic hazards act), located in Public Resources Code sections 2690 to 2699.6.

The California Building Standards Code, or state building code, is codified in title 24 of the California Code of Regulations. The state building code provides standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the state. The state building code generally applies to all occupancies in California, with modifications adopted in some instances by state agencies or local governing bodies. The current state building code incorporates, by adoption, the 2016 edition of the International Building Code of the International Code Council with the California amendments. These amendments include significant building design and construction criteria that have been tailored for California earthquake conditions.

Chapter 16 of the state building code addresses structural design requirements governing seismically resistant construction (section 1604), including, but not limited to, factors and coefficients used to establish a seismic site class and seismic occupancy category appropriate for the soil/rock at the building location and the proposed building design (sections 1613.5 through 1613.7). Chapter 18 includes, but is not limited to, the requirements for foundation and soil investigations (section 1803); excavation, grading, and fill (section 1804); allowable load-bearing values of soils (section 1806); foundation and retaining walls, (section 1807); and foundation support systems (sections 1808 through 1810). Chapter 33 includes, but is not limited to, requirements for safeguards at work sites to ensure stable excavations and cut-or-fill slopes (section 3304) and the protection of adjacent properties including requirements for noticing (section 3307). Appendix J of the state building code includes, but is not limited to, grading requirements for the design of excavations and fills (sections J106 and J107) specifying maximum limits on the slope of cut and fill surfaces and other criteria, required setbacks and slope protection for cut and fill slopes (J108), and erosion control in general and regarding the provision of drainage facilities and terracing (sections J109 and J110). San Francisco has adopted Appendix J of the state building code with amendments to J103, J104, J106, and J109 as articulated in the local building code.

The seismic hazards act, enacted in 1990, requires the California State Geologist to create maps identifying seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. The seismic hazard act includes guidelines for the preparation of seismic hazard maps, policies and criteria regarding the responsibilities of city, county, and state agencies; criteria for project approval, and guidelines for evaluating seismic hazards and recommending mitigation measures.¹¹⁵

All projects located within a state-designated seismic hazard zone for liquefaction or landslide hazard are subject to state seismic hazards act requirements, which include the preparation of a geotechnical investigation to delineate the area of hazard and propose mitigation measures to address any identified seismic hazards. The local building official must incorporate the recommended mitigation measures to address such hazards into the conditions of the building permit. The project site is within a seismic hazard zone (liquefaction zone), as discussed below; thus, site design and construction must comply with the requirements of the seismic hazard act.

¹¹⁵ In the context of the seismic hazards act, “mitigation” refers to measures that are consistent with established practice and that will reduce seismic risk to acceptable levels, rather than the mitigation measures identified in the California Environmental Quality Act (CEQA) to reduce or avoid the environmental impacts of a proposed project.

In addition to compliance with the building code and seismic hazards act, the proposed project and variant would follow the building department's local implementing procedures including Administrative Bulletins (AB) (which are part of the local building code) and Information Sheets (IS), which clarify building department requirements and procedures. On December 27, 2017, the building department issued IS S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings (interim guidelines).¹¹⁶ The interim guidelines supplement and clarify the information in AB 082 (Guidelines and Procedures for Structural Design Review)¹¹⁷ as well as AB 083 (Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures).¹¹⁸ Tall buildings are defined as those 240 feet or taller, which includes the subject building. The interim guidelines specify requirements for Geotechnical Engineering peer reviews including the scope of geotechnical and structural review conducted by qualified geotechnical reviewers as part of a Geotechnical Engineering Design Review Team (review team).¹¹⁹

The project sponsor's engineer of record for the project or variant would work with the two-member review team to and resolve all comments related to the foundation design in order to achieve consensus on the adequacy of the building's foundation and structural design. A report of the findings from the review team shall be provided to the director of the building department. The report will provide findings and address following issues: the foundation type (shallow or deep), foundation design, interpretation of geotechnical and geological investigations, soil-foundation-structure interaction under static and seismic loading conditions, effects of dewatering and construction-related activities on the site and in the vicinity, and foundation or building settlement. The interim guidance also requires that prior to the completion of the proposed project or the variant, the project sponsor would contract with qualified monitoring surveyors and instrumentation engineers to monitor the effects of settlement on the building and foundations of the project for a period of ten years after the issuance of the certificate of final completion and occupancy. The findings from the post-occupancy surveys shall be provided to the building department annually within this 10-year period.

Approach to Analysis

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,¹²⁰ the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future seismic hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Thus, the following analysis evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact

¹¹⁶ San Francisco Department of Building Inspection, December 27, 2017, Information Sheet No. S-18, *Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings*, <http://sfdbi.org/sites/default/files/IS%20S-18.pdf>, accessed April 24, 2018.

¹¹⁷ San Francisco Department of Building Inspection, December 19, 2016, Administrative Bulletin 082, *Guidelines and Procedures for Structural Design Review*, <http://sfdbi.org/sites/default/files/AB-082.pdf>, accessed April 24, 2018.

¹¹⁸ San Francisco Department of Building Inspection, March 25, 2008 (updated January 1, 2014 for code references), Administrative Bulletin 083, *Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures*, http://sfdbi.org/sites/default/files/Documents/Administrative_Bulletins/2013_AB/AB_083_updated_010114.pdf, accessed April 24, 2018.

¹¹⁹ A qualified geotechnical reviewer for Engineering Design Review Teams shall be a geotechnical engineer (G.E.) registered in California or a Civil Engineer (C.E.) registered in California with substantially demonstrated geotechnical experience.

¹²⁰ *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369, opinion filed December 17, 2015.

would be significant if the proposed project would exacerbate existing or future seismic hazards or unstable soils by increasing the severity of these hazards that would occur or be present without the project.

Impact GE-1: The proposed project or variant would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or death involving rupture, ground shaking, liquefaction, or landslides. (*Less than Significant*)

As discussed above under “Regulatory Framework,” the building department oversees the effective, efficient, fair and safe enforcement of the City and County of San Francisco’s Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soils, and seismic hazards is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Standards Code (state building code, California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department’s implementing procedures including Administrative Bulletins and Information Sheets, and the state seismic hazards act (Public Resources Code sections 2690 to 2699.6).

The project site is within a seismic hazard zone (liquefaction zone), as discussed below; thus, site design and construction must comply with the requirements of the seismic hazards act.

Fault Rupture

The project site is not within an earthquake fault zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known fault or potentially active fault exists within the project site.¹²¹ In a seismically active area, such as the San Francisco Bay Area, the remote possibility exists for future faulting in areas where no faults previously existed, but the likelihood of such fault rupture is extremely low. Therefore, this impact would be less than significant.

Ground Shaking

The San Andreas, Hayward, and Calaveras faults are the major faults closest to the site. The site is approximately 7 miles east of the San Andreas Fault, 11 miles west of the Hayward Fault, and 22 miles west of the Calaveras Fault. The proposed project or variant would likely experience periodic minor earthquakes and perhaps a major earthquake (moment magnitude greater than 6) on one of the nearby faults during its service life. The intensity of earthquake ground motion at the site would depend upon the characteristics of the generating fault, distance to the earthquake epicenter, magnitude, and duration of the earthquake. The ground shaking at the project site during a major earthquake on one of the nearby faults would be very strong.

ABAG has classified the Modified Mercalli Intensity Shaking Severity Level of ground shaking in vicinity of the proposed project or variant due to an earthquake on the North San Andreas Fault as “VIII-Very Strong.”¹²² “Very strong” is defined as shaking that would result in damage to some masonry buildings, fall of stucco and some masonry walls, fall of chimneys and elevated tanks, and shifting of unbolted wood frame structures off their foundations. In accordance with the state and local building code requirements described above, the geotechnical

¹²¹ California Department of Conservation, Division of Mines and Geology, *Seismic Hazard Zone Report for the City and County of San Francisco, California*, Seismic Hazard Zone Report 043, November 17, 2000.

¹²² Association of Bay Area Governments, Earthquake Hazard Map for San Francisco Scenario: Entire San Andreas Fault System, <http://resilience.abag.ca.gov/earthquakes>, accessed March 21, 2018.

investigation analyzed the potential for very strong seismic shaking and recommended that the proposed project's seismic design be in accordance with the provisions of the building code.¹²³ With implementation of these recommendations, as incorporated into and required by the building code, the impact of strong seismic ground shaking would be less than significant.

The proposed project and variant would comply with the latest requirements of the state and local building codes, the building departments implementing guidance and procedures as well as the seismic hazards act. The final building plans (construction documents) and the structural report would be reviewed by the building department for conformance with recommendations in the site-specific, design-level geotechnical investigation(s) to ensure compliance with state and local building code provisions related to structural safety. Furthermore, the proposed project and variant would follow the requirements of IS S-18, AB-082, and AB-083 related to structural, geotechnical, and seismic hazard design review for tall buildings 240 feet in height or more.¹²⁴ As discussed under "Regulatory Framework" above, this requires peer review of the project's site conditions and design by a two-member engineering design review team, along with monitoring for settlement during a 10-year period after the certificate of final completion and occupancy is issued.

Additional information related to vibration impacts to adjacent structures will be discussed in the EIR cultural resources and noise sections.

The building department permit review process to ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and as a result of the recommendations made by the engineering design review team as required by IS S-18, AB-082, and AB-083¹²⁵ would result in less-than-significant impacts related to strong seismic ground shaking.

Landslides, Liquefaction, Lateral Spreading, and Seismic Settlement

With respect to landslides, based on the general plan, the project site is relatively level and is not located within a mapped landslide zone.¹²⁶ The site is not within a designated earthquake-induced landslide zone as shown on the California Geological Survey seismic hazard zone map for the area. Therefore, the proposed project or variant would have a no impact with respect to potential for landslides, and this topic is not discussed further.

Lateral spreading typically forms on gentle slopes that have rapid fluid-like flow movement and can occur when there is potential for liquefaction in underlying, saturated soils. Liquefaction occurs when saturated soils lose strength and stiffness when there is an applied stress such as an earthquake which causes solid soils to behave like a liquid when there is no cohesion, resulting in ground deformations. Ground deformations can take on many forms, including, but not limited to, flow failure, lateral spreading, lowering of the ground surface, or ground settlement, loss of bearing, ground fissures, and sand boils. Liquefaction of subsurface layers, which could occur during ground-shaking associated with an earthquake, could potentially result in ground settlement.

¹²³ It should be noted that the proposed building must be built to the California Building Standards Code standards in effect at the time of application.

¹²⁴ San Francisco Department of Building Inspection, Information Sheet No. S-18, *Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings*, <http://sfdbi.org/sites/default/files/IS%20S-18.pdf>, accessed April 24, 2018.

¹²⁵ Ibid.

¹²⁶ *San Francisco General Plan*, Community Safety Element, Map 4, http://www.sf-planning.org/ftp/General_Plan/Community_Safety_Element_2012.pdf, accessed September 30, 2016.

As described above, the site is within a state designated liquefaction hazard zone.¹²⁷ This means that there is a potential for permanent ground displacement onsite, such as liquefaction.¹²⁸ The California Geological Survey provided recommendations for the content of site investigation reports within seismic hazard zones in Special Publication 117A, which recommends that at least one exploration point extend to a depth of at least 50 feet to evaluate liquefaction potential. Review of borings from the geotechnical investigations indicates that loose to medium dense sand is likely present both above and below the natural groundwater table in the site area. Loose sand above the groundwater table may densify and loose to medium dense sand below the groundwater table may liquefy during strong ground shaking due to a seismic event on a nearby fault.

Based on the geotechnical investigation borings, the potential for liquefaction was analyzed. The analysis determined that soils in the Dune Sand, marsh deposit and isolated zones within the Colma formation contain potentially liquefiable material and recommended that these be removed and improved during excavation down to 50 feet bgs. The soil encountered at 50–60 feet bgs and beyond proved to have stronger layers within the Colma formation with a low likelihood to liquefy or settle. Some of the on-site sand could generally be re-used and combined to make engineered fill around the foundation including use of crushed rock or other controlled density fill to strengthen the existing soil. Where the marsh deposit and/or loose sands are present and thicker than 2 feet, the soil may have to be improved in situ using a soil-cement mixing method to create columns of soil-cement. These soil improvements would secure the foundation reducing the potential for the proposed project or variant to exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading.

Layers of loose to medium dense sand were identified during testing below the water table that could be susceptible to liquefaction and strength loss during a major earthquake. These layers were encountered within the Dune sand and marsh deposit, and isolated, discontinuous zones within the Colma formation. The geotechnical engineers applied the standard Youd et al. (2001)¹²⁹ and the Tokimatsu and Seed (1987)¹³⁰ methods for evaluating earthquake-induced liquefaction settlement. Using these methods, it was estimated that liquefaction-induced ground settlement, or lowering of the ground surface, could be approximately 2 inches during a major earthquake. For these reasons, the proposed project or variant could result in exposure of people and structures to potential substantial adverse geologic effects.

However, in accordance with the provisions of the 2016 state building code and Special Publication 117A, the preliminary geotechnical reports provide recommendations to address these hazards. The building department permit review process would ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and recommendations made by the engineering design review team as required by IS S-18, AB-082, and AB-083 would ensure that the proposed project would not exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this impact would be *less than significant*.

¹²⁷ California Department of Conservation, Division of Mines and Geology, *Seismic Hazard Zone Report for the City and County of San Francisco, California*, Seismic Hazard Zone Report 043, November 17, 2000.

¹²⁸ Ibid.

¹²⁹ T. L. Youd, I. M. Idriss, R. D. Andrus, I. Arango, G. Castro, J. T. Christian, R. Dobry, W. D. L. Finn, L. F. Harder Jr., M. E. Hynes, K. Ishihara, J. P. Koester, S. S. C. Liao, W. F. Marcuson III, G. R. Martin, J. K. Mitchell, Y. Moriwaki, M. S. Power, P. K. Robertson, R. B. Seed, and K. H. Stokoe II, "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils," *Journal of Geotechnical and Geoenvironmental Engineering* 124(10), 2001.

¹³⁰ H. Tokimatsu and H. B. Seed, "Evaluation of Settlements in Sands Due to Earthquake Shaking," *Journal of Geotechnical Engineering* 113(8), pp. 861–878, 1987.

Impact GE-2: The proposed project or variant would not result in substantial loss of topsoil or erosion. (*Less than Significant*)

The project site is relatively flat, and entirely covered with impervious surfaces. The ground surface elevation of the project site is approximately 40 feet above mean sea level (msl) along Market Street and approximately 32 feet above msl at the southern end of the site. During demolition of the existing structures and foundation and construction of the proposed project or the variant, erosion could occur due to soil exposure during subgrade work. The project site would be excavated up to approximately 40 feet below grade in the northern portion, and 50 feet in the southern portion. Excavated soil would be approximately 100,000 cubic yards and would be improved and reused on site to the extent possible.

Relevant regulations related to erosion prevention include the following:

- National Pollutant Discharge Elimination System
- San Francisco Public Works Code, article 4.2, section 146.7, Erosion and Sediment Control Plan
- San Francisco Environment Code, chapter 14, Construction and Demolition Debris Recovery Ordinance

The project site is presently covered entirely with impervious surfaces; therefore, it does not contain native topsoil. Grading and excavation would expose topsoil onsite and could potentially result in erosion. However, construction-related activities would be required to comply with best management practices and standard erosion-control measures to minimize short-term construction-related erosion pursuant to the National Pollutant Discharge Elimination System Construction General Permit and San Francisco Public Works Code article 4.2. The proposed project or variant would require San Francisco Public Works approval of any grading permit and analysis for efficient stormwater management during construction activities. The construction contractor would be required to implement an erosion and sediment control plan for construction activities in accordance with article 4.2 of the San Francisco Public Works Code (as discussed in more detail in Section E.15, Hydrology and Water Quality). The SFPUC must review and approve the erosion and sediment control plan before the plan's implementation. Contractors and site supervisors are responsible for ensuring that best management practices are implemented and maintained throughout the construction process, and failure to comply would result in citation and civil penalties. Compliance with the plan would ensure that the proposed project or variant would not result in substantial loss of topsoil or in soil erosion. Therefore, impacts related to loss of topsoil or substantial soil erosion would be less than significant.

Impact GE-3: The proposed project or variant would not be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the project or variant, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (*Less than Significant*)

The project site is not located within a state designated landslide hazard zone or area subject to the Slope Protect Act. The site is a flat urban area and does not include hills or cut slopes likely to be subject to landslide. As discussed above, the project site is located within a state designated seismic hazard zone for liquefaction and would be subject to the requirements of the state seismic hazards act.

The project sponsor would be required to provide geotechnical reports prepared by a qualified geotechnical professional that include recommendations for demolition and site preparation, excavation and construction of the proposed project or variant based on site and soil conditions. These recommendations, which would address

the potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, would be implemented by the project sponsor's engineer of record and peer reviewed as required by IS S-18, AB-082, and AB-083.

In addition, as discussed in Section A, Project Description, and at the start of this section, the majority of the project site is either within the BART easement or the BART ZOI. The southernmost portion of the project site is outside of the BART ZOI. The ZOI is an area above an imaginary line drawn upward from the critical point of the BART substructure at an inclination of 1.5:1 (horizontal: vertical). Relevant BART regulations include *General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures*¹³¹ and *Procedures for Permit and Plan Review*.¹³²

The foundation for either the proposed project or the variant would differ within and outside of the BART easement. A mat-supported 12-story podium under the proposed project, or a mat-supported 15-story podium under the variant, above two levels of below-grade parking is planned in the area within the BART easement. Within the BART easement, no loads greater than the existing loads can be imposed on the BART tunnels. According to preliminary calculations, the portion of the proposed project or variant that would be within the BART easement would not impose greater stresses on the soil subgrade than currently exist within the portion of the project site within the BART easement.^{133,134} Soil improvement would be designed to address loads on the BART structure within the BART easement. Therefore potential impacts to the BART tunnel associated with soil improvements would be less than significant.

Outside of the BART easement, but within the BART ZOI, the building would be supported on a deep foundation system to approximately 50–80 feet bgs, consisting of drilled cast-in-place piers. Construction in the BART easement and ZOI and placement of additional loads in the easement and ZOI could cause adverse effects on the BART structure if the proposed project or variant is not properly designed and constructed. The drilled piers would be used to support the deep foundation and the pier sections of the foundation within the ZOI would be double cased to avoid surcharging (i.e., creating additional loads on) the BART tunnels. BART would review the project or variant's structural plans, and the building department would not issue permits without receiving confirmation of BART's review. Coordination, design approval and construction monitoring would meet BART's construction requirements to ensure that impacts related to the project's lateral surcharge pressures on the BART structure would be less than significant.

Outside the BART easement and ZOI, the tower structure would be supported on a deep foundation system (drilled cast-in-place piers). The podium structure outside of the BART ZOI could be supported by a mat foundation, provided the subgrade soil is dense and not subject to loss of support during an earthquake. If weak or potentially liquefiable soil is present beneath the mat, a potentially significant impact would occur.

¹³¹ Bay Area Rapid Transit District, *General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures*, 2003, http://www.bart.gov/sites/default/files/docs/Gen_Guide_Subway_062012.pdf, accessed June 2, 2016.

¹³² Bay Area Rapid Transit District, *Procedures for Permit and Plan Review*, 2012, http://www.bart.gov/sites/default/files/docs/Permits_and_Plan_Review_062012.pdf, accessed June 2, 2016.

¹³³ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹³⁴ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

During excavation, the shoring system could yield and deform laterally if not properly designed, which would cause the surrounding improvements, including the Muni stairway adjacent to the northern property boundary, to settle and move laterally. This would result in a potentially significant impact associated with soil instability. To avoid settlement and lateral deformation, as discussed in the geotechnical studies, the project would require the installation of shoring systems during basement excavation on all sides of the property.^{135,136}

Furthermore, the building department permit review process to ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and recommendations made by the engineering design review team along with BART permit review requirements would ensure that the proposed project or variant would not result in unstable soil conditions that could result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

In addition, the proposed project and variant would follow the requirements of IS S-18, and require monitoring for the effects of settlement on the building and foundations of the project or variant for a period of ten years after the issuance of the certificate of final completion and occupancy. Therefore, through compliance with these regulations, the proposed project or variant would not exacerbate the potential for soil to become unstable or to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse as a result of the project or variant, and this impact would be *less than significant*.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. (*Less than Significant*)

Expansive soils expand and contract in response to changes in soil moisture, particularly when near-surface soils fluctuate from saturated to low-moisture-content conditions and back again. As outlined in the preliminary geotechnical investigation, the site is underlain by 5–10 feet of fill, 5–20 feet of Dune Sand beneath the fill, and 5–10 feet of marsh deposit beneath the Dune Sand. The bottom of the Colma formation was reached at 194 feet bgs, which is underlain by residual soil and bedrock, which was encountered at 211 feet bgs. The fill contains loose to medium dense sand and gravels intermixed with layers of medium stiff clays. Due to the low clay content within the dune sands, there would be a low likelihood for expansion, although the Colma sand below could result in some expansion-related affects. Areas not excavated, including sidewalks and other adjacent improvements, may also be affected by expansive soils, if present. Loose sand above the groundwater level may be subject to differential compaction and settlement during strong ground shaking. The available subsurface information indicates loose unsaturated sand is present beneath the site. Because the sand would be removed during basement excavation, differential compaction should not be an issue at the project site. Additionally, the San Francisco Building Code requires that the project applicant include analysis of the potential for soil expansion impacts for DBI review and approval as part of the design-level geotechnical investigation and address these effects in the design documents prepared for the proposed project. As such, potential impacts related to expansive soils would be less-than-significant.

¹³⁵ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹³⁶ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

Impact GE-5: Construction activities for the proposed project or variant would directly or indirectly result in damage to, or destruction of, as-yet unknown paleontological resources or sites, should such resources, sites, or features exist on or beneath the project site. (*Less than Significant with Mitigation*)

Paleontological resources include the fossilized remains or traces of animals, plants, and invertebrates from a previous geological period. Paleontological resources are deposited and preserved within particular lithologic (rock) units. Lithologic units that may contain fossils include sedimentary and volcanic formations. Collecting localities and the geologic formations containing those localities are also considered paleontological resources, as they represent a limited, nonrenewable resource that, once destroyed, cannot be replaced. Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources.¹³⁷

Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. Particularly important are fossils found in situ (undisturbed) in primary context (e.g., fossils that have not been subjected to disturbance subsequent to their burial and fossilization). As such, they aid in stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphological evolution, paleoclimatology, the relationships between aquatic and terrestrial species, and evolution in general.

Note that significance may also be stated for a particular rock unit, predicated on the research potential of fossils suspected to occur in that unit. Such significance is often stated as "sensitivity" or "potential." In most cases decisions about how to manage paleontological resources must be based on this potential because the actual situation cannot be known until construction excavation for the project is underway.

The results of the geotechnical investigation indicate that the project site is underlain by 10 to 30 feet of sandy fill and native Dune Sand. The sands are underlain by an approximately 5- to 10-foot-thick marsh deposit consisting of loose to dense silty and clayey sand. Below the marsh deposit is dense to very dense fine sand, silty sand, and clayey sand, referred to as the Colma formation which extends approximately 194 feet bgs.^{138,139}

Previous occurrences of large late Pleistocene vertebrate remains from three individuals of Colombian Mammoth (*Mammuthus columbi*) and remains from a single Giant Bison (*Bison latifrons*) have been recovered from gravelly, sandy clay of the Colma formation exposed in an excavation at the intersection of Pacific Avenue and Kearny Street, San Francisco, California.¹⁴⁰ The proposed project or the variant would have similar foundations and would both entail the same excavation techniques during construction through the depth of the Colma formation, and as a result the project site has a moderate potential to destroy as-yet unknown paleontological resources.

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of

¹³⁷ Society of Vertebrate Paleontology, *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*, 2010, http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx, accessed February 2, 2017.

¹³⁸ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹³⁹ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

¹⁴⁰ P. U. Rodda and N. Baghai, "Late Pleistocene Vertebrates from Downtown San Francisco, California," *Journal of Paleontology* 67(6), pp. 1058–1063 (1993), <http://www.jstor.org/discover/10.2307/1306122?uid=3739560&uid=2129&uid=2&uid=70&uid=4&uid=3739256&sid=2110167512486>, accessed February 2, 2017.

Paleontological Resources would be implemented to reduce potentially significant adverse effects on paleontological resources, including fossils and associated contextual data.

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources

Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find and a qualified paleontologist notified, who shall evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and San Francisco Planning Department. There shall be no construction work in the area to allow for the recovery of the resource in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan compliant with the standards of the Society for Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City and County of San Francisco shall determine which of the recommendations in the recovery plan are necessary and feasible, and these recommendations shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

With implementation of Mitigation Measure M-GE-4, impacts on paleontological resources would be less than significant.

Impact GE-6: Construction activities for the proposed project or variant would not directly or indirectly result in damage to, or destruction of, unique geologic features. (No Impact)

The project site is located in an urbanized area and is entirely developed with impervious surfaces. There are no undisturbed soils or rock outcroppings located on or near the project site that would constitute unique geologic features. As mentioned above, the proposed project would not substantially change the general topography of the site, and therefore, would have no impact on unique geologic features.

Impact C-GE-1: The proposed project or variant in combination with other past, present, or reasonably foreseeable future projects would not result in substantial cumulative impacts on geology and soils, and paleontological resources. (Less than Significant)

Geology, soils, and paleontological impacts are generally site-specific and localized. Past, present, and reasonably foreseeable projects could require various levels of excavation or cut-and-fill, which would affect local geologic conditions and may affect paleontological resources. However, the cumulative projects are also subject to the building department requirements for geotechnical review and would be required to comply with the state and local building codes.

In addition, site-specific geotechnical review and monitoring for paleontological resources would reduce each project's impacts associated with geology, seismic safety, and paleontological resources, and that site-specific mitigation would be developed, when necessary, based on site conditions. Similar to the proposed project or variant, all projects listed in Table 3 would be subject to these mandatory seismic safety standards and design review procedures. Compliance with these standards and procedures would ensure that the effects from nearby cumulative projects would be reduced to less-than-significant levels. Therefore, in combination with cumulative projects, the proposed project or variant would result in a less-than-significant cumulative impact.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
14. HYDROLOGY AND WATER QUALITY					
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Hydrology and Water Quality

Construction for the proposed project and the variant would involve the same activities, duration, and depth/amount of excavation. Like the proposed project, dewatering would be necessary for construction of the proposed variant. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses, and a comparable amount of impermeable surfaces. For these reasons, the potential hydrology and water quality impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

The City and County of San Francisco is a participant in the National Flood Insurance Program. As a condition of participating in the program, San Francisco has adopted and enforces a floodplain management ordinance intended to reduce the risk of damage from flooding in the city. The Floodplain Management Ordinance governs construction in flood-prone areas and designates the City Administrator's Office as the City's Floodplain Administrator. For the purposes of assessing flood hazards, the City and County of San Francisco has developed an interim floodplain map to identify special flood hazard areas within the city limits, based on data from the Federal Emergency Management Agency.¹⁴¹

The project site is not located either: (1) within a special flood hazard area identified on San Francisco's Interim Floodplain Map;¹⁴² (2) within the "blocks of interest" identified by SFPUC as prone to flooding;¹⁴³ or (3) adjacent to a shoreline that could be affected by sea-level rise. Furthermore, given its flat elevation and siting away from water storage facilities, coastlines, and hillsides, the project site is also not located within an area that would be: (1) flooded as the result of levee, dam, or reservoir failure;^{144,145} (2) inundated in the event of a tsunami along the San Francisco coast, based on a 20-foot water level rise at the Golden Gate Bridge;¹⁴⁶ or (3) subject to landslides and mudflow.¹⁴⁷ Therefore, topics 14g, 14h, 14i, and 14j are not applicable.

Impact HY-1: The proposed project or variant would not impact water quality standards or waste discharge requirements. (*Less than Significant*)

During construction and operations stormwater and wastewater from the project site would continue to flow into the City's combined stormwater/sewer system and would be treated to the standards contained in the City's National Pollutant Discharge Elimination System permit for the Southeast Water Pollution Control Plant, before

¹⁴¹ City and County of San Francisco, San Francisco Interim Floodplain Map (Preliminary), November 12, 2015, http://sfgsa.org/sites/default/files/Document/SF_Citywide.pdf, accessed August 10, 2017.

¹⁴² Ibid.

¹⁴³ San Francisco Planning Department, Review of Projects in Identified Areas Prone to Flooding, April 1, 2007, <http://ec2-50-17-237-182.compute-1.amazonaws.com/docs/PlanningProvisions/info%20sheet%20v1.3.pdf>, accessed February 7, 2017.

¹⁴⁴ San Francisco Planning Department, *San Francisco General Plan* Community Safety Element, October 2012, http://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf, accessed August 9, 2017.

¹⁴⁵ California Emergency Management Agency, California Geological Survey, and University of Southern California, Tsunami Inundation Map for Emergency Planning San Francisco North Quadrangle/San Francisco South Quadrangle (SF Bay), June 15, 2009, http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanFrancisco/Documents/Tsunami_Inundation_SouthSFNorthSF_SFBay_SanFrancisco.pdf, accessed August 10, 2017.

¹⁴⁶ San Francisco Planning Department, *San Francisco General Plan* Community Safety Element, October 2012, http://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf, accessed August 9, 2017.

¹⁴⁷ California Division of Mines and Geology, Seismic Hazard Zone Report for the City and County of San Francisco, California, http://gmw.consrv.ca.gov/shmp/download/quad/SAN_FRANCISCO_NORTH/maps/ozn_sf.pdf, accessed April 18, 2016.

discharge into San Francisco Bay. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System permit for the plant.

To reduce the discharge of construction-related pollution to the local storm drain system, the Construction Site Runoff Control Ordinance was adopted in 2013 and the respective program is managed by SFPUC to ensure that all construction sites implement best management practices to control construction site runoff. Because the project would disturb 1.17 acres during construction, the project sponsor would be required to develop a storm water pollution prevention plan (SWPPP) describing the BMPs the contractor would implement to prevent erosion and discharge of sediment and other pollutants in stormwater runoff. To prevent any duplicative efforts, the project sponsor may submit the SWPPP in lieu of an erosion and sediment control plan to comply with the Construction Site Runoff Control Program.

Additionally, the proposed project or variant would be required to meet the standards for stormwater management identified in the San Francisco Stormwater Management Ordinance and meet the SFPUC stormwater management requirements per the 2016 Stormwater Management Requirements and Design Guidelines. The project sponsor would be required to submit, and have approved by the SFPUC, a stormwater control plan for managing operational stormwater runoff that complies with the City's 2016 Stormwater Management Requirements and Design Guidelines using a variety of BMPs. The stormwater management approach must reduce the existing runoff flow rate and volume through employment of a hierarchy of BMPs set forth in the Stormwater Management Requirements. The required BMP Hierarchy prioritizes infiltration-based BMPs, rainwater harvesting, vegetated roofs, and lined bioretention features (commonly known as a flow-through planter). The proposed project or the variant would include rainwater collection features to capture stormwater that would be treated and reused onsite.

Article 12C of the San Francisco Health Code also requires that all new development projects of 250,000 gross square feet or more of gross floor area install onsite water systems to treat and reuse alternate sources of water for toilet and urinal flushing and irrigation. The proposed project and variant, which are both more than 250,000 gsf, would use an onsite blackwater recycling system to treat wastewater.

Groundwater was encountered approximately 20 feet below ground surface (bgs) during the geotechnical investigation.^{148,149} The proposed project or variant would necessitate excavation up to approximately 40 feet bgs in the northern portion of the project site and up to 50 feet bgs in the southern portion of the project site. Excavation in the northern portion would be to a shallower depth due to the presence of the subsurface BART tunnel and associated easement. The deep foundation cast-in-place piers would be constructed up to 250 feet bgs. Because groundwater would be encountered on site, temporary dewatering activities would be necessary. The Bureau of Systems Planning, Environment, and Compliance of the SFPUC must be notified of projects necessitating dewatering. The SFPUC may require water analysis before discharge. The proposed project or variant would be required to obtain a batch wastewater discharge permit from the SFPUC Wastewater Enterprise Collection System Division before any dewatering activities. Groundwater encountered during construction of the proposed project or variant would be subject to the requirements of Public Works Code article 4.1, Industrial Waste, which requires that groundwater meet specified water quality standards before it may be discharged into the sewer system. These measures would ensure protection of water quality during construction.

¹⁴⁸ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [proposed project], 10 Van Ness Avenue, March 16, 2017.

¹⁴⁹ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 Van Ness Avenue, June 6, 2017.

Therefore, the proposed project or variant would not substantially degrade water quality, and water quality standards or waste discharge requirements would not be violated. As such, the proposed project or variant would have a less-than-significant impact on water quality.

Impact HY-2: The proposed project or variant would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (*Less than Significant*)

San Francisco overlies seven groundwater basins: Westside, Lobos, Marina, Downtown, Islais Valley, South San Francisco, and Visitacion Valley. The project site is located above the Downtown Groundwater Basin, which is generally inadequate to supply a significant amount of groundwater for municipal supply due to low yield.¹⁵⁰ Based on semi-annual monitoring, the groundwater currently used for irrigation and other nonpotable uses in San Francisco meets or exceeds the water quality needs for these end uses.¹⁵¹

Currently, there is negligible recharge of groundwater at the project site, because the site is almost completely covered with impervious surfaces. Therefore, the proposed project or variant would not substantially increase the amount of impervious surface and would not result in any substantial change in infiltration or runoff on the project site.

While the proposed project or variant would encounter groundwater no substantial ongoing groundwater extraction activities would occur beyond incidental dewatering for construction. Therefore, groundwater resources would not be substantially depleted, and the proposed project or variant would not substantially interfere with groundwater recharge. Thus, there would be a less-than-significant impact on groundwater supplies.

Impact HY-3: The proposed project or variant would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation (or flooding) onsite or offsite. (*Less than Significant*)

No surface bodies of water traverse the project site. The project site is almost entirely covered by impervious surfaces, and runoff from these impervious surfaces flow to the curb and are discharged into the combined stormwater and wastewater system. Impervious surfaces at the project site would decrease under the proposed project or variant, but drainage patterns would remain generally the same. In addition, as discussed under Impact HY-1, the proposed project and single tower variant would include a rainwater capture and recycling system, and therefore less water would discharge from the project site to the combined sewer system in compliance with the Stormwater Management Ordinance. This would in turn reduce potential erosion and flooding in down-gradient areas. Therefore, the proposed project and variant would not be expected to result in substantial erosion or flooding associated with changes in drainage patterns, and impacts would be less than significant.

¹⁵⁰ San Francisco Public Utilities Commission, 2015 *Urban Water Management Plan for the City and County of San Francisco*, June 2016.

¹⁵¹ Ibid.

Impact HY-4: The proposed project or variant would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (*Less than Significant*)

Stormwater generated and collected at the project site flows into SFPUC's combined stormwater/sewer system. During construction and operation of the proposed project or variant, all wastewater and stormwater runoff from the project site would be treated at the Southeast Water Pollution Control Plant. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System permit for the plant. During construction and operation, the proposed project or variant would be required to comply with all local wastewater discharge, stormwater runoff, and water quality requirements, including the 2016 San Francisco Stormwater Management Requirements and Design Guidelines. The Stormwater Management Requirements and Design Guidelines would ensure that stormwater runoff generated by the proposed project or variant would be managed on site to reduce the existing runoff flow rate and volume such that the project would not contribute additional peak volumes of polluted runoff to the city's stormwater infrastructure. The Stormwater Management Ordinance would ensure that the proposed project or variant implements and installs appropriate stormwater management systems that retain runoff on site, promote stormwater reuse, and limit site discharges from entering the city's combined stormwater/sewer system. Specifically, the proposed project and variant would include a rainwater capture and recycling system to reduce the amount of stormwater discharged from the project site to the combined stormwater/sewer system. This would reduce the potential for the site to generate substantial amounts of polluted runoff. Therefore, the proposed project or variant would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and this impact would be less than significant.

Impact HY-5: The proposed project or the variant would not otherwise substantially degrade water quality. (*Less than Significant*)

A phase I environmental site assessment was prepared for the property at 10 South Van Ness Avenue in 2014.¹⁵² No evidence of any significant staining, spillage, and ponded liquids or uncontained solids was discovered on the project site during site reconnaissance. No recognized environmental conditions associated with the storage of hazardous materials at the project site were observed. No potential underground storage tanks, ponds, stressed vegetation or stained soil; or mining, oil and gas exploration, production and distribution were noted at the site, and no apparent signs of chemical releases or leaks were noted at any nearby facilities.

Impact HY-1 discusses potential effects to surface water and groundwater quality. There are no sources of existing contamination identified at the site and the proposed project or variant would not include uses that would be anticipated to substantially degrade water quality. In addition, measures would be implemented during construction to mitigate impacts on water quality. Therefore, impacts would be less than significant.

¹⁵² Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California*, May 24, 2014.

Impact C-HY-6: The proposed project or variant in combination with other past, present, or reasonably foreseeable future projects would not result in substantial cumulative impacts on hydrology and water quality. (*Less than Significant*)

Cumulative development in the project area would result in intensified uses and thus a cumulative increase in wastewater generation. The SFPUC has accounted for such growth in its service projections.¹⁵³ Cumulative development could also result in an increase in polluted runoff and stormwater discharges. However, other development projects would be subject to the same water conservation, stormwater management, and wastewater discharge ordinances applicable to the proposed project or variant. The proposed project or variant would also be required to adhere to existing drainage control requirements that address water quality and quantity similar to that of other nearby current and future projects. Because other development projects would be required to follow drainage, dewatering, and water quality regulations, similar to the proposed project or variant, peak stormwater drainage rates and volumes for the design storm would gradually decrease over time with new development, meaning that no substantial cumulative effects would occur. Compliance with these ordinances would reduce the effects of nearby cumulative projects to less-than-significant levels. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects to create a significant cumulative impact related to hydrology and water quality, and the impact would be less than significant.

¹⁵³ San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
15. HAZARDS AND HAZARDOUS MATERIALS					
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hazards and Hazardous Materials

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, checklist topics 15e and 15f are not applicable.

Construction for both the proposed project and the variant would involve the same activities, duration, depth/amount of excavation, and removal/disposal of building materials. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail, which would typically use the same common cleaning products. For these reasons, the

potential hazards and hazardous materials impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact HZ-1: The proposed project or variant would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Construction of the proposed project or variant would involve the demolition of an existing structure, excavation of the site, construction of a mixed-use residential building with retail spaces, dwelling units, and an underground parking structure, and streetscape improvements. Construction activities would require the use of and transport of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials. These materials could be released during transport or disposal of building materials and cause a hazard to the public. San Francisco requires the project sponsor and its contractor to implement BMPs as part of their grading permit requirements that would include hazardous materials management measures, which would reduce short-term construction-related impacts related to transport, use, and disposal of hazardous materials to less-than-significant levels.

Operation of the proposed project or the variant would, likely, result in the use of common types of hazardous materials typically associated with retail/commercial and residential uses, such as cleaning products and disinfectants. These products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. However, most of these materials are consumed through use, resulting in relatively little waste. Businesses are required, by law, to ensure employee safety by identifying hazardous materials in the workplace, providing safety information to workers who handle hazardous materials, and adequately training workers. For these reasons, hazardous materials used during project operation would not pose substantial public health or safety hazards resulting from routine use, transport, or disposal of hazardous materials. Therefore, the proposed project or variant would result in less-than-significant impacts related to the use of hazardous materials.

Impact HZ-2: The proposed project or variant would not result in a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment. (*Less than Significant*)

In 2005, a phase I/II environmental site assessment was prepared for the project site.¹⁵⁴ The site assessment confirmed that the project site includes an auto sales and services repair facility that regularly uses hazardous materials, including oil and hydraulic fluids, used oil, filters, rags, and 55-gallon drums, which are stored on site in bulk storage and aboveground tanks, with secondary containment where necessary. The roof top parking area contains a small area where car washing/detailing is performed.¹⁵⁵ The project site overlies soils that contain remnants of the 1906 earthquake and fire.¹⁵⁶ Approximately 100,000 cubic yards of existing soil would be excavated during construction of the proposed project or variant to accommodate deep foundation cast in-place piers and an underground parking structure.

There are certain areas of San Francisco that are located on fill and fall under the jurisdiction of the Maher Ordinance. These areas, were once highly industrialized and contaminated and are underlain by imported fill

¹⁵⁴ Green Environment, Inc., *Phase I/II Environmental Site Assessments*, 10 South Van Ness Avenue, San Francisco, California, August 2, 2005.

¹⁵⁵ Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment*, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

¹⁵⁶ AEI Consultants, *Phase I Environmental Site Assessment: 10 South Van Ness Avenue, San Francisco, California 94103*, September 2, 2009.

consisting of soil and debris from the 1906 earthquake. As such, these sites often contain lead and other pollutants. To protect public and worker health and safety projects that involve disturbance of more than 50 cubic yards of such soils require investigation, site management, and reporting subject to article 22A of the San Francisco Health Code (also known as the “Maher Ordinance”), which is administered and overseen by the Department of Public Health. The proposed project or variant would disturb more than 50 cubic yards of soil and is located within a Maher area, and, therefore, the proposed project or variant is subject to the Maher Ordinance.

The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare an environmental site assessment that meets the requirements of Health Code section 22.A.6. A site assessment determines the potential for site contamination and level of exposure risk as a result of a project. Based on that information, a project sponsor may be required to conduct soil and groundwater sampling and analysis, and where such analysis reveals the presence of hazardous substances in excess of state or federal standards, a project sponsor is required to submit a site mitigation plan to the Department of Public Health or other appropriate state or federal agencies, and to remediate any site contamination in accordance with an approved site mitigation plan before the issuance of any building permit. The project sponsor submitted a Maher application on March 18, 2016.

The 2005 environmental site assessment identified issues and provided the results of remedial actions for potential hazards identified in the report.¹⁵⁷ Also, in compliance with the Maher Ordinance, an updated environmental site assessment was prepared to assess the current potential for site contamination based upon the conclusions and evidence presented in the 2005 environmental site assessment combined with current conditions.¹⁵⁸ The updated environmental site assessment included: (1) a reconnaissance field survey of the site and vicinity; (2) review of previous site investigations and reports; (3) review of public local, state, and federal records pertinent to an environmental site assessment; (4) review of relevant documents and maps regarding local geologic and hydrogeologic conditions; and (5) review of historical documents including aerial photographs and topographic maps.

The updated environmental site assessment determined that there was:

- No observed evidence during site reconnaissance of any significant staining, spillage, and ponded liquids or uncontained solids on the project site
- No observed evidence of any recognized environmental conditions associated with the storage of hazardous materials at the project site
- No potential underground storage tanks, ponds, stressed vegetation or stained soil, or mining, oil, and gas exploration, production, or distribution
- No apparent signs of chemical releases or leaks at any nearby facilities.¹⁵⁹

Based on the information and conclusions from the updated environmental site assessment, the proposed project or variant would not result in a significant hazard to the public or the environment from the release of hazardous materials associated with contaminated soil, groundwater, and storage areas.

¹⁵⁷ Green Environment, Inc., *Phase I/II Environmental Site Assessments*, 10 South Van Ness Avenue, San Francisco, California, August 2, 2005.

¹⁵⁸ Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment*, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

¹⁵⁹ Ibid.

Although the project site does not contain any underground storage areas identified as containing hazardous materials, according to the environmental assessment¹⁶⁰ and updated environmental site assessment,¹⁶¹ demolition of the existing structure would involve removal of building materials that could contain asbestos and lead based paint. Therefore, these hazardous materials could be released into the environment during construction activities and could cause a hazard to the public. However, any hazardous materials currently on the site, such as asbestos or lead-based paint, would be removed during or prior to demolition of the existing building and prior to project construction, and would be handled in compliance with applicable laws and regulations.

The California Department of Toxic Substance Control considers asbestos hazardous and removal is required. Asbestos-containing materials must be removed in accordance with local and state regulations, BAAQMD, the California Occupational Safety and Health Administration (CAL OSHA), and California Department of Health Services requirements. This includes materials that could be disturbed by the proposed demolition and construction activities. Specifically, Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

The California legislature vests the BAAQMD with the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and the BAAQMD is to be notified ten days in advance of any proposed demolition or abatement work. Any asbestos-containing material disturbance at the project site would be subject to the requirements of BAAQMD Regulation 11, Rule 2: Hazardous Materials—Asbestos Demolition, Renovation, and Manufacturing. The local office of CAL OSHA must also be notified of asbestos abatement to be carried out. Asbestos abatement contractors must follow state regulations contained in Title 8 of California Code of Regulations Section 1529 and Sections 341.6 through 341.14, where there is asbestos related work involving 100 gsf or more of asbestos-containing material. Pursuant to California law, DBI would not issue the required permit until the applicant has complied with the requirements described above.

For buildings constructed prior to 1978, such as the existing building, it is highly likely that lead-based paint was used in their construction. Work that could result in disturbance of lead-based paint must comply with Section 3423 of the Building Code, Work Practices for Exterior Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Section 3423 identifies prohibited practices that may not be used in disturbance or removal of lead paint, and notification requirements. Where there is any work that may disturb or remove lead paint on the exterior of any building, or the interior of occupied buildings built prior to or on December 31, 1978, Section 3407 requires specific notification and work standards and identifies prohibited work methods and penalties.

These regulations and procedures already established as part of the building permit review process would ensure that any potential impacts due to the presence of asbestos or lead based paint on the project site are reduced to a less-than significant level.

Other hazardous building materials that could be present include fluorescent light ballasts that could contain polychlorinated biphenyl (PCBs) or diethylhexyl phthalate, and switches, thermostats, and fluorescent light tubes that could contain mercury vapors. Disruption of these materials could pose health threats for construction

¹⁶⁰ Green Environment, Inc., *Phase I/II Environmental Site Assessments*, 10 South Van Ness Avenue, San Francisco, California, August 2, 2005.

¹⁶¹ Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment*, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

workers if not properly disposed of, a potentially significant impact. Each of these materials is subject to federal and state regulation to ensure that they are properly handled during removal and disposal, before the start of building demolition or renovation. PCBs have been prohibited in most uses since 1978, although some electrical transformers still in use today use oils that contain PCBs.

However, disposal of PCBs is regulated at both the federal level (the Toxic Substances Control Act, U.S. Code, title 15, chapter 53; and implementing regulations in title 40, part 761 of the Code of Federal Regulations) and at the state level (22 CCR section 66261.24), and diethylhexyl phthalate is covered under federal regulations (Code of Federal Regulations title 40, section 261.33). Disposal of these materials as hazardous waste must be in compliance with applicable laws and regulations and may involve incineration or other treatment or disposal in an approved chemical waste landfill. Mercury is regulated as a hazardous waste under 22 CCR sections 66262.11 and 66273.4, and its disposal as hazardous waste under 22 CCR section 66261.50. Because they are considered a hazardous waste, all fluorescent lamps and mercury-containing switches and thermostats must be recycled or taken to a handler of universal waste. Compliance with the existing legal and regulatory framework noted here would ensure that potential impacts of exposure to such other hazardous building materials would be less than significant. Therefore, with mandatory compliance with existing laws and regulatory requirements the potential hazard to the public and the environment from reasonably foreseeable conditions involving the release of hazardous materials into the environment would be less than significant with mitigation.

Impact HZ-3: The proposed project or variant would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (*Less than Significant*)

One school is located within 0.25 mile of the project site: the French American International School, approximately 0.14 mile north of the project site across Market Street at 150 Oak Street. The proposed project or variant would not store, handle, or dispose of significant quantities of hazardous materials and would not otherwise include any uses that would include emissions of hazardous substances. Any hazardous materials currently on the project site, such as asbestos-containing materials and lead-based paint would be removed before or during demolition of the existing building, and before construction, and would be handled in compliance with applicable laws and regulations, as described above. With adherence to these regulations, there would be no potential for such materials to affect this nearest school. Thus, the proposed project or variant would have a less-than-significant impact related to hazardous emissions or materials within 0.25 mile of a school.

Impact HZ-4: The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. (*Less than Significant*)

According to the updated environmental site assessment, the project site is not listed on the Hazardous Waste and Substances Sites List (commonly referred to as the “Cortese List”) compiled by the California Department of Toxic Substances Control pursuant to Government Code section 65962.5.¹⁶² In addition, the State Water Resources Control Board’s GeoTracker database indicates that the project site does not contain any active

¹⁶² California Department of Toxic Substances Control. EnviroStor Hazardous Waste and Substances Site List, http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBLKG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST, accessed February 1, 2017.

underground storage tanks, cleanup sites, or other remediation efforts.¹⁶³ While a regulatory agency database report (EDR) for the project site did not identify any recognized environmental conditions for the site, due diligence detailed in the 2005 environmental site assessment, as cited in the updated environmental site assessment, identified some potential sources of contamination, including a buried fuel oil storage tank on the property, evidence of a historic fuel service station onsite, two abandoned monitoring wells in adjacent public sidewalk off of 12th Street, and three below-grade remnant hydraulic lift components. However, the current site owner responded to the environmental site assessment results in 2005 by permanently closing the monitoring wells, removing the hydraulic lift components, and testing the soil below, and investigating and sampling soil to address the historic fueling station and possible buried fuel tank; and the updated environmental site assessment concluded that all issues were determined to be resolved as a result of such actions.¹⁶⁴

As a result, the project site is not included on the Cortese List, and impacts would be less than significant.

Impact HZ-5: The proposed project or variant would not interfere with the implementation of an emergency response plan nor expose people or structures to a significant risk of loss, injury, or death involving fires. (*Less than Significant*)

San Francisco ensures fire safety primarily through provisions of the Building and Fire Codes. Final building plans are reviewed by the San Francisco Fire Department to ensure conformance with these provisions. As such, potential fire hazards, including those associated with hydrant water pressures and emergency access, would be addressed during the permit review process.

Implementation of the proposed project or variant could contribute incrementally to congested traffic conditions in the immediate area in the event of an emergency evacuation. However, because the proposed project or variant would be located within a dense urban setting, it is expected that traffic would be dispersed within the existing street grid such that there would be no significant adverse effects on nearby traffic conditions.

Therefore, the proposed project or variant would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan, and this impact would be less than significant.

Impact-C-HZ-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in significant cumulative impacts related to hazards and hazardous materials. (*Less than Significant*)

Impacts from hazards and hazardous materials are generally site-specific, and typically do not result in cumulative impacts. Any hazards that are present at surrounding sites would be subject to the same safety requirements discussed above for the proposed project and variant, which would reduce any hazards impacts to less than significant. Therefore, the proposed project or variant in combination with past, present, and reasonably foreseeable future projects would not result in cumulative impacts related to hazards and hazardous materials, and the impact would be less than significant.

¹⁶³ State Water Resources Control Board, GeoTracker database and webmap, <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=10+van+ness+ave%2C+san+francisco%2C+ca>, accessed February 1, 2017.

¹⁶⁴ Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California*, May 24, 2014.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16. MINERAL AND ENERGY RESOURCES					
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mineral and Energy Resources

All land in San Francisco, including the project site, is designated by the California Division of Mines and Geology as Mineral Resource Zone 4 under the Surface Mining and Reclamation Act of 1975.¹⁶⁵ This designation indicates that adequate information does not exist to assign the area to any other mineral resource zone; thus, the area is not one designated to have significant mineral deposits.¹⁶⁶ The project site has previously been developed, and future evaluations of the presence of minerals at this site would therefore not be affected by the proposed project. Because of this, the development and operation of the proposed project or variant would not affect operational mineral resource recovery sites. Therefore, topics 16a and 16b are not applicable to the proposed project or variant.

Construction for both the proposed project and the variant would involve the same activities, duration, and depth/amount of excavation. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated energy use. For these reasons, the potential mineral and energy resources impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact ME-1: The proposed project or variant would not encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (*Less than Significant*)

The proposed project or variant would introduce new residential, commercial and assembly uses, and an increased intensity of uses to the project site, although not to an extent that would exceed anticipated growth in the area.

As new buildings in San Francisco, the proposed project or the variant would be subject to the energy conservation standards included in the San Francisco Green Building Code that require the project to meet a number of conservation standards, including installation of water efficient fixtures and energy efficient

¹⁶⁵ California Department of Conservation, Division of Mines and Geology, Open File Report 96-03 and Special Report 146, Parts I and II.

¹⁶⁶ California Department of Conservation, Division of Mines and Geology, Special Report 146, Parts I and II (1986) and DMG Open File Report 96 03 (1996), <http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/index.aspx>, accessed August 18, 2016.

appliances, and the proposed project or variant would provide features that encourage alternative modes of transportation, such as bicycle racks and car-share parking spaces. Documentation showing compliance with the San Francisco Green Building Code would be submitted with the application of the building permits, and would be enforced by the DBI. In addition, the proposed project or variant would be required to comply with California Code of Regulations title 24, which regulates energy consumption for the heating, cooling, ventilation, and lighting of residential and nonresidential buildings and is enforced by the DBI. Compliance with title 24 and the San Francisco Green Building Code would ensure reduction in the use of fuel, water, and energy by the proposed project or variant.

In addition, San Francisco has a lower vehicle miles traveled ratio than the San Francisco Bay Area region as a whole. The transportation analysis zone in which the project site is located (transportation analysis zone 578) has between 40 and 78 percent fewer daily VMT than the San Francisco Bay Area regional average. Furthermore, the following transportation-related aspects of the proposed project or variant would discourage single-occupancy vehicle trips: proximity to transit, bicycle storage, and a TDM Plan with strategies to discourage the use of automobiles and to encourage transit and other modes of transportation. Because the proposed project or variant is an infill mixed-use development in a transit-rich area, the vehicle trips and associated fuel use for the proposed project or the variant would not constitute wasteful use of energy and therefore would be consistent with the Plan Bay Area 2040 167 land use strategy, which seeks to reduce per capita VMT. Operation of the proposed project or variant would provide opportunities to minimize VMT, use public transit, and use nonmotorized modes of transportation (e.g., walking, biking, transit) to reach residential and employment destinations and amenities.

Therefore, the proposed project or variant would not result in the use of large amounts of fuel, water, or energy, or result in the use of these resources in a wasteful manner, and effects related to the use of these resources would be less than significant.

Impact-C-ME-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in substantial cumulative impacts related to energy and minerals. (*Less than Significant*)

The cumulative development projects shown in Table 3 would be required by the DBI to conform to the requirements of Title 24 and the San Francisco Green Building Code regarding minimizing the use of large amounts of fuel, water, or energy by, for instance, installing energy efficient appliances and water efficient fixtures. Conformance with Title 24 and the San Francisco Green Building Code would preclude significant cumulative impacts related to the use of fuel, water, or energy. In addition, the City plans to reduce GHG emissions to 40 percent below 1990 levels by 2025 and 80 percent below 1990 levels by 2050, which would be achieved through a number of different strategies, including energy efficiency. As such, the proposed project and variant, in combination with other past, present or reasonably foreseeable projects, would result in a less-than-significant cumulative impact related to the use of fuel, water, and energy resources.

¹⁶⁷ The *Plan Bay Area 2040* is collaboration among the Association of Bay Area Governments, Bay Area Air Quality Management District, Metropolitan Transportation Commission, and the San Francisco Bay Conservation and Development Commission. *Plan Bay Area 2040* is a long-range transportation, land-use and housing plan that will support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area. The *Plan Bay Area 2040* was approved on July 26, 2017.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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17. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as a model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding State inventory of forest land, including the Forest and Range Assessment and Forest Legacy Assessment projects; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Agriculture and Forestry Resources

The project site is located within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to nonagricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts.¹⁶⁸ No land in San Francisco is designated as forest land or timberland by the California Public Resources Code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, topics 17a, 17b, 17c, 17d, and 17e are not applicable to the proposed project or variant.

¹⁶⁸ San Francisco is identified as "Urban and Built-Up Land" on the California Department of Conservation Important Farmland in California Map, 2012, <http://www.consrv.ca.gov>, accessed January 12, 2017.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
18. MANDATORY FINDINGS OF SIGNIFICANCE					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: Authority cited: Sections 21083 and 21083.05, 21083.09 Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21073, 21074 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21080.3.1, 21080.3.2, 21082.3, 21084.2, 21084.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Mandatory Findings of Significance

The foregoing analysis identifies potentially significant impacts to cultural resources (historic architectural resources only), transportation and circulation, noise, air quality, wind, and shadow, all of which will be analyzed further in the EIR.

- A. As discussed in the various topics in this initial study, the proposed project and variant are anticipated to have less-than-significant impacts on most of the environmental topics discussed in this initial study. Where necessary, mitigation measures have been identified to reduce impacts to less than significant levels. Mitigation measures are included in the following topics: cultural resources, geology and soils and hazards and hazardous materials. However, the proposed project or variant could have potentially significant impacts related to cultural resources (historic architectural resources only), transportation and circulation, noise, air quality, wind, and shadow. These impacts will be discussed and analyzed further in the EIR.
- B. The proposed project or variant, in combination with past, present, and reasonably foreseeable projects described in the Cumulative Setting would not result in cumulative impacts to land use, population and housing, cultural resources (archeological resources, human remains, and tribal cultural resources), greenhouse gas emissions, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral and energy resources, and agricultural and forest resources with implementation of identified mitigation. However,

the proposed project or variant, in combination with the past, present and foreseeable projects could result in cumulative impacts related to historic architectural resources, transportation and circulation, noise, air quality, wind, and shadow. These cumulative impacts will be discussed and analyzed further in the EIR.

- C. As discussed above, the proposed project or variant have the potential to result in significant impacts with respect to historic architectural resources, transportation and circulation, noise, air quality, wind, and shadow, which could adversely affect human beings. The EIR will assess these topics and identify mitigation measures where applicable.

F. MITIGATION MEASURES

The following mitigation measures are also included under each relevant topic area above.

Cultural Resources

Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring

Based on a reasonable presumption that archeological resources may be present within the project area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list maintained by the Planning Department archeologist. The project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the qualified archeological consultants list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities. On discovery of an archeological site¹⁶⁹ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative¹⁷⁰ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project,

¹⁶⁹ The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

¹⁷⁰ An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably before the commencement of any project-related soil-disturbing activities. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring), and site remediation shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is

evaluated. If in the case of pile driving activity (foundation, shoring), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- **Field Methods and Procedures.** Descriptions of proposed field strategies, procedures, and operations.
- **Cataloguing and Laboratory Analysis.** Description of selected cataloguing system and artifact analysis procedures.
- **Discard and Deaccession Policy.** Description of and rationale for field and post-field discard and deaccession policies.
- **Interpretive Program.** Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program.
- **Security Measures.** Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- **Final Report.** Description of proposed report format and distribution of results.
- **Curation.** Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (California Public Resources Code section 5097.98). The archeological consultant, the project sponsor, ERO, and the Most Likely Descendant shall have up to but

not beyond six days of discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept recommendations of a Most Likely Descendant. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such an agreement has been made or, otherwise, as determined by the archeological consultant and the ERO.

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the final archeological resources report shall be distributed as follows: California Archeological Site Inventory, Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the final archeological resources report along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Geology and Soils

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources

Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find and a qualified paleontologist notified, who shall evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and San Francisco Planning Department. There shall be no construction work in the area to allow for the recovery of the resource in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan compliant with the standards of the Society for Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City and County of San Francisco shall determine which of the recommendations in the recovery plan are necessary and feasible, and these recommendations shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

G. PUBLIC NOTICE AND COMMENT

On July 12, 2017, the Planning Department mailed a notice of preparation of an EIR and notice of public scoping meeting to property owners within 300 feet of the project site, tenants, and other potentially interested parties. Subsequently, the Planning Department held a public scoping meeting on Wednesday, August 2, 2017, to receive input on the scope of the environmental review for the proposed project and variant. Five speakers provided oral comments at the public scoping meeting. No comment letters were received during the public scoping meeting. During the public review and comment period on the notice of preparation, a total of 13 comment letters, comment cards, and emails were submitted to the Planning Department. The written and oral comments raised the following issues:

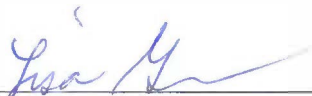
- Potential impacts related to the proposed provision of parking at a dwelling unit to parking space ratio that would require conditional approval by the Planning Commission
- Potential transportation impacts associated with tech shuttle services, transportation network companies, and e-commerce delivery services
- The appropriateness of using an average vehicle miles traveled metric to determine significance of transportation impacts
- Desire for community benefits, such as public open space and art displays
- Potential wind impacts to bicyclists and pedestrians traveling in the vicinity of the project site
- Provision of two- and three-bedroom units in new residential projects in the project vicinity
- Provision of affordable housing
- The need to mitigate demolition of historic resources
- Cumulative impacts

The issues raised in the written and oral comments have either been addressed in this initial study or will be addressed in the EIR, as appropriate.

H. DETERMINATION

On the basis of this initial study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☒ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.



Lisa Gibson
Environmental Review Officer
for
John Rahaim
Director of Planning

DATE: May 2, 2018

I. INITIAL STUDY PREPARERS

Planning Department, City and County of San Francisco (Lead Agency)

Environmental Planning Division

1650 Mission Street, Suite 400

San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson

Principal Environmental Planner: Rick Cooper

Senior Environmental Planner: Rachel Schuett

AECOM (Environmental Planning Consultant)

300 California Street, Suite 600

San Francisco, CA 94104

Project Director: David Reel

Project Manager: Florentina Craciun

Deputy Project Manager: Elliott Schwimmer

Land Use/Planning: Christine Wolfe

Population/Housing: George Smyth

Cultural Resources: Mark Hale

Transportation/Circulation: Anthony Mangonon

Noise: Mark Storm

Air Quality and GHG Emissions: Jason Paukovits

Mary Kaplan

Paola Peña

Kelsey Bennett

Wind and Shadow: Elliott Schwimmer

Recreation: George Smyth

Utilities/Service Systems: Christine Wolfe

Public Services: Christine Wolfe

Biological Resources: Lidia D'Amico

Geology/Soils: Christine Wolfe

Hydrology/Water Quality: Elizabeth Nielsen

Hazards/Hazardous Materials: Galen Peracca

Mineral/Energy Resources: Kelsey Bennett

Jason Paukovits

Agriculture/Forestry Resources: Lidia D'Amico

J. Abrams Law, P.C.

One Maritime Plaza Suite 1900

San Francisco, California 94111

Jim Abrams

Dana Lovisolo

BMT Fluid Mechanics (Wind Consultant)

81 Prospect Street

Brooklyn, NY 11201

Project Manager: Max Lee

FASTCAST (Shadow Consultant)

34 Corte Madera Avenue

Mill Valley, CA 94941

Managing Partner: Adam Noble

CHS Consulting (Transportation Consultant)

220 Montgomery Street, Suite 346

San Francisco, CA 94104

Senior Transportation Planner: Andrew Kluter

Transportation Planner: Charles Felder

SWCA (Historic Preservation Consultant)

330 Townsend Street, Suite 216

San Francisco, CA 94107

Senior Architectural Historian: Debi Howell-Ardila

Architectural Historian: Natalie Loukianoff

Steven Treffers

Page & Turnbull (Historic Preservation Consultant)

417 Montgomery Street, 8th Floor

San Francisco, CA 94104

Christina Dikas

Carolyn Kiernat

Maggie Smith

SITELAB urban studio

156 2nd Street

San Francisco, CA 94102

Laura Crescimano

Eri Suzuki

Mu-Ping Cheng

Michel St Pierre

10SVN, LLC (Project Sponsor)

530 Bush Street, Suite 800

San Francisco, CA 94108

Vice President: Adam Tartakovsky

Project Manager: Luis Mejias

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PLACE
POSTAGE
HERE

Rachel Schuett
San Francisco Planning Department
Environmental Planning Division
1650 Mission Street, Suite 400
San Francisco, CA 94103

PLEASE CUT ALONG DOTTED LINES

PLEASE RETURN THIS POSTCARD TO REQUEST A COPY OF
THE FINAL ENVIRONMENTAL IMPACT REPORT

(NOTE THAT THE DRAFT EIR PLUS THE RESPONSES TO COMMENTS
DOCUMENT CONSTITUTE THE FINAL EIR)

REQUEST FOR FINAL ENVIRONMENTAL IMPACT REPORT

Planning Department Case No. 2015-004568ENV

10 South Van Ness Mixed-Use Project

Check one box: ☐ Please send me a copy of the Final EIR on CD-ROM.
 ☐ Please send me a paper copy of the Final EIR.

Signed: _____

Name: _____

Street: _____

City: _____ State: _____ Zip: _____

From: [Board of Supervisors, \(BOS\)](#)
To: [BOS-Supervisors](#)
Subject: FW: The Department of Elections Is Recruiting Poll Workers for the November 6 Election
Date: Wednesday, October 17, 2018 5:48:00 PM

From: SFVote, (REG)
Sent: Monday, October 15, 2018 9:27 AM
Subject: The Department of Elections Is Recruiting Poll Workers for the November 6 Election

Department of Elections
 City and County of San Francisco
 John Arntz, Director

For Immediate Release
 SAN FRANCISCO, Monday, October 15, 2018--With the countdown to the November 6 election underway, the Department of Elections seeks poll workers to help administer voting at neighborhood polling places on Election Day.

To sign up to be poll workers, people can call (415) 554-4395 or apply in person at the Department of Elections in City Hall, Room 48.

Poll workers attend a training session prior to serving as Clerks or Inspectors on Election Day. Inspectors are responsible for bringing ballots and other voting materials to their assigned polling places on election morning and overseeing operations at the sites. Clerks assist with a variety of tasks including checking in voters, issuing ballots, and providing general voter assistance. For one day of service, poll workers receive a stipend ranging from \$142 to \$195, depending on the assignment.

San Francisco voters depend on reliable and dedicated volunteers to make every Election Day run smoothly. With many community members having already joined the City's poll worker team, the Department of Elections looks forward to welcoming other civic-minded individuals to the team.

For more information about volunteering as a poll worker, visit sfelections.org/pollworker or call (415) 554-4395.

###

San Francisco Department of Elections
 1 Dr. Carlton B. Goodlett Place
 City Hall, Room 48
 San Francisco, CA 94102
 (415) 554-4375
sfelections.org



Continue the conversation with the Department of Elections on [Facebook](#) and [Twitter](#)!

Your feedback is important to us! Please take our [customer service survey](#).

Help your community by [serving as a poll worker!](#) Call (415) 554-4395 or apply at the Department's office.



SAN FRANCISCO PLANNING DEPARTMENT

BOS-11 in CD
form

Notice of Availability of and Intent to Adopt a Mitigated Negative Declaration

Date: October 17, 2018
Case No.: 2015-016326ENV
Project Title: Seawall Lots 323 and 324 – Hotel and Theater Project
Zoning: C-2 (Community Business) Use District
Waterfront 3, Special Use District
40-X Height and Bulk District
Block/Lot: 0138/001
0139/002
Project Sponsor: Jay Wallace, TZK Broadway, LLC., (415) 955-1100 ext. 4007
Staff Contact: Laura Lynch– (415) 575-9045
Laura.Lynch@sfgov.org

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

This notice is to inform you of the availability of the environmental review document concerning the proposed project as described below. The document is a preliminary mitigated negative declaration (PMND), containing information about the possible environmental effects of the proposed project. The PMND documents the determination of the Planning Department that the proposed project could not have a significant adverse effect on the environment. Preparation of a mitigated negative declaration does not indicate a decision by the City to carry out or not to carry out the proposed project.

Project Description:

The project site includes two Port of San Francisco assessor's parcels, Assessor's Block 0138, Lot 001 and Assessor's Block 0139, Lot 002, and two Port right-of-way parcels. These parcels compose approximately 59,750 square feet of Port property, with primary frontages along The Embarcadero, Broadway, and Davis Street. The Port currently leases the project site to a parking operator.

The project sponsor, TZK Broadway LLC, proposes to demolish the existing 250 space parking lot and construct a mixed-use development consisting of three components: an approximately 29,570-gross-square-foot (gsf) entertainment venue that would house Teatro ZinZanni's historic spiegel tent and 285-seat dinner-theater-entertainment venue and program; an approximately 118,000-square-foot, four-story hotel with 192 rooms; and an approximately 14,000 gsf, privately financed and maintained public park, all built to conform with the 40-X height and bulk district.

The proposed project would remove 35 on-street parking spaces, and three on-street motorcycle parking spaces. No new on-or off-street parking is proposed. Parking for the proposed project would occur through offsite parking and valet services. Approximately 20 class I bicycle parking spaces and 28 class II bicycle parking spaces are proposed. A 142 ½-foot-long commercial loading zone would be constructed on Davis Street, with two spaces and a service area. The proposed project would widen the existing

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中文詢問請電: 415.575.9010 | Para Información en Español Llamar al: 415.575.9010 | Para sa Impormasyon sa Tagalog Tumawag sa: 415.575.9121

sidewalks around the site and add four new bulb-outs on these improved sidewalks. Construction on the 1.37-acre site is estimated to take up to approximately 22 months.

The proposed project would require a Conditional Use Authorization for the hotel use pursuant to Planning Code section 240.3(e). This approval, within the C-2 zoning district, constitutes the approval action for the proposed project, pursuant to section 31.04(h)(3) of the San Francisco Administrative Code. A General Plan referral for partial street vacation of a public right-of-way and approval of sidewalk widening and modifications to related infrastructure within the public right-of-way would also be required. In addition, issuance of a State Lands Commission consistency letter and approval of the long-term lease by the Port would be required.

The PMND is available to view or download from the Planning Department's Negative Declarations and EIRs web page

(<http://www.sf-planning.org/sfceqadocs>).

Paper copies are also available at the Planning Information Center (PIC) counter on the ground floor of 1660 Mission Street, San Francisco.

If you have questions concerning environmental review of the proposed project, contact the Planning Department staff contact listed above.

Within 30 calendar days following publication of the PMND (i.e., by 5:00 p.m. on **November 19, 2018** any person may:

- 1) Review the PMND as an informational item and take no action;
- 2) Make recommendations for amending the text of the document. The text of the PMND may be amended to clarify or correct statements and may be expanded to include additional relevant issues or to cover issues in greater depth. This may be done **without** the appeal described below; **OR**
- 3) Appeal the determination of no significant effect on the environment to the Planning Commission in a letter which specifies the grounds for such appeal, accompanied by a \$617 check payable to the San Francisco Planning Department.¹ An appeal requires the Planning Commission to determine whether or not an Environmental Impact Report must be prepared based upon whether or not the proposed project could cause a substantial adverse change in the environment. Send the appeal letter to the Planning Department, Attention: Lisa Gibson, 1650 Mission Street, Suite 400, San Francisco, CA 94103 or emailed to lisa.gibson@sfgov.org. **The letter must be accompanied by a check in the amount of \$617.00 payable to the San Francisco Planning Department, and must be received by November 19.** The appeal letter and check may also be presented in person at the PIC counter on the first floor of 1660 Mission Street, San Francisco.

In the absence of an appeal, the mitigated negative declaration shall be made final, subject to necessary modifications, after 30 days from the date of publication of the PMND. If the PMND is appealed, the Final Mitigated Negative Declaration (FMND) may be appealed to the Board of Supervisors. The first approval action, as identified in the Initial Study, would establish the start of the 30-day appeal period for the FMND pursuant to San Francisco Administrative Code Section 31.16(h).

¹ Upon review by the Planning Department, the appeal fee may be reimbursed for neighborhood organizations that have been in existence for a minimum of 24 months.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.



SAN FRANCISCO PLANNING DEPARTMENT

Initial Study

Preliminary Mitigated Negative Declaration

Date: October 17, 2018
Case No.: **2015-016326ENV**
Project Title: **Seawall Lots 323 and 324 – Hotel and Theater Project**
Zoning: C-2 (Community Business) Use District
Waterfront 3, Special Use District
40-x Height and Bulk District
Block/Lot: 0138/001
0139/002
Lot Size: 59,750 square feet
Project Sponsor Jay Wallace
TZK Broadway, LLC
(415) 955-1100 ext. 4007
Lead Agency: San Francisco Planning Department
Staff Contact: Laura Lynch (415) 575-9045
Laura.Lynch@sfgov.org

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

PROJECT DESCRIPTION:

The project site includes two Port of San Francisco (Port) assessor's parcels, Assessor's Block 0138, Lot 001 and Assessor's Block 0139, Lot 002, and two Port right-of-way parcels. These parcels compose approximately 59,750 square feet (1.37-acre) of Port property, with primary frontages along The Embarcadero, Broadway, and Davis Street. The Port currently leases the project site to a parking operator.

The project sponsor, TZK Broadway LLC, proposes to demolish the existing 250 space parking lot and construct a mixed-use development consisting of three components: an approximately 29,570-gross-square-foot (gsf) entertainment venue that would house Teatro ZinZanni's historic *spiegel tent*¹ and 285-seat dinner-theater-entertainment venue and program; an approximately 118,000-square-foot, four-story hotel with 192 rooms; and an approximately 14,000 gsf, privately financed and maintained public park, all built to conform with the 40-X height and bulk district.

¹ The Zinzanni spiegel tent, the Palais Nostalgique, is a 100+ year old European cabaret tent constructed of wood, stained glass, red velvet and gold fabric. The spiegel tent was constructed by renowned craftsman Willem Klessens. The tent is 29 feet tall with a circumference of 211 feet. It has historically been used to host a variety of entertainment uses such as dances, wine tastings, cabarets, and celebrations.

No off-street parking is proposed at the project site. Parking would occur through valet services and offsite parking at existing nearby facilities. Approximately 20 class I bicycle parking spaces and 28 class II bicycle parking spaces are proposed. Construction on the project site is estimated to take up to approximately 22 months.

FINDING:

This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

Mitigation measures are included in this project to avoid potentially significant effects. See section F, Mitigation Measures and Improvement Measures on page 169.

Initial Study

Seawall Lots 323 and 324 – Hotel and Theater Project

(Planning Department Case No. 2015.016326ENV)

October 2018

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List of Acronyms

2015 UWMP	2015 Urban Water Management Plan
2017 Clean Air Plan	<i>Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area, Final 2017 Clean Air Plan</i>
µg/m ³	micrograms per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ARB	California Air Resources Board
ADRP	archeological data recovery plan
ARDTP	archeological research design and treatment plan
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
bgs	below ground surface
bhp	boiler horsepower
“Blue Book”	<i>Regulations for Working in San Francisco Streets</i>
BMP	best management practice
C-2	Community Business zoning district
CALGreen Code	California Green Building Standards Code
<i>CBIA v. BAAQMD</i>	<i>California Building Industry Association v. Bay Area Air Quality Management District</i>
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CO	carbon monoxide
CRHR	California Register of Historical Resources
dB	decibel(s)
dBA	A-weighted decibel(s)
DBI	San Francisco Department of Building Inspection
DNL	day-night noise level
ERO	environmental review officer
ESA	environmental site assessment
FTA	Federal Transit Administration
GHG	greenhouse gas
gsf	gross square feet
hp	horsepower
HVAC	heating, ventilation, and air conditioning
lb/day	pounds per day
L _{dn}	day-night sound level
L _{eq}	equivalent noise level
LEED	Leadership in Energy and Environmental Design
MLD	Most Likely Descendant
MRZ	Mineral Resource Zone
MTCO _{2e}	metric tons of carbon dioxide equivalents
Muni	San Francisco Municipal Railway
Northeast Embarcadero Study	<i>Northeast Embarcadero Study: An Urban Design Analysis for the Northeast Embarcadero Area</i>
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OPR	Governor’s Office of Planning and Research
PM	particulate matter
PM _{2.5}	particulate matter equal to or less than 2.5 microns in diameter
PM ₁₀	particulate matter equal to or less than 10 microns in diameter
Port	Port of San Francisco
PRC	California Public Resources Code
Rec Park	Recreation and Park Commission
ROG	reactive organic gas
ROW	right-of-way
RWQCB	Regional Water Quality Control Board

SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SFFD	San Francisco Fire Department
<i>SF Guidelines</i>	<i>Transportation Impact Analysis Guidelines for Environmental Review</i>
SFMTA	San Francisco Municipal Transportation Agency
SFPUC	San Francisco Public Utilities Commission
SFPW	San Francisco Public Works
SFRPD	San Francisco Recreation and Park Department
SO ₂	sulfur dioxide
TAC	toxic air contaminant
TAZ	transportation analysis zone
TDM	transportation demand management
U.S. EPA	U.S. Environmental Protection Agency
VdB	vibration decibel(s)
VMT	vehicle miles traveled
VOC	volatile organic compound
ZinZanni	Teatro ZinZanni

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A. PROJECT DESCRIPTION

A.1. PROJECT SUMMARY

The project site includes two Port of San Francisco (Port) assessor's parcels, Assessor's Block 0138, Lot 001 and Assessor's Block 0139, Lot 002, and two Port right-of-way (ROW) parcels. These parcels compose approximately 59,750 square feet of Port property, with primary frontages along The Embarcadero, Broadway, and Davis Street. The Port currently leases the project site to a parking operator. The project sponsor, TZK Broadway LLC, proposes to demolish the existing parking lot and construct a mixed-use development consisting of three components: an approximately 29,570-gross-square-foot (gsf) entertainment venue that would house Teatro ZinZanni's (ZinZanni's) historic *spiegel tent*² and dinner-theater-entertainment venue and program; an approximately 118,000-square-foot hotel with 192 rooms; and an approximately 14,000-gsf, privately financed and maintained public park.

A.2. EXISTING CONDITIONS

Project Location and Site Characteristics

The approximately 59,750-square-foot, triangle-shaped project site is on the western side of The Embarcadero, the northern side of Broadway, the eastern side of Davis Street, and the southern side of Green Street in the North Beach neighborhood (Figure 1). The project site is generally flat, with elevations ranging between approximately 6 and 10 feet above mean sea level. At its northeastern corner, the site slopes toward San Francisco Bay. The site's elevation is highest along Davis Street, at approximately 10 feet above mean sea level, and lowest along The Embarcadero, at approximately 6 feet above mean sea level.

The project site consists of the two Port parcels, Assessor's Block 0138, Lot 001, and Assessor's Block 0139, Lot 002. These parcels (referred to collectively in this document as the "Port parcels") are commonly referred to as Seawall Lots 323 and 324. The project site abuts two unused ROW parcels between The Embarcadero and Davis Street at the Vallejo Street junction. The proposed project would include an adjustment to the Davis Street property line at the corner of Davis and Vallejo streets (referred to in this document as the "Davis Street lot/street adjustment"). The Port parcels, ROW parcels, and Davis Street lot/street adjustment contribute to a total project site area of approximately 59,750 square feet (1.37 acres). The Port is the trustee of the site under the terms of the *Burton Act*.³

The project site is currently used as a surface parking lot, with approximately 250 striped self-parking stalls and two temporary wooden pay booths. The Port leases the site to a parking operator under a short-term lease. Some of the existing parking spaces are used by Port employees, and by the adjacent KGO-TV and KRON 4 news station for parking for their news vans.

² The Zinzanni spiegel tent, the Palais Nostalgique, is a 100+ year old European cabaret tent constructed of wood, stained glass, red velvet and gold fabric. The spiegel tent was constructed by renowned craftsman Willem Klessens. The tent is 29 feet tall with a circumference of 211 feet. It has historically been used to host a variety of entertainment uses such as dances, wine tastings, cabarets, and celebrations.

³ In 1968, the State of California transferred its responsibilities for the San Francisco waterfront to the City and County of San Francisco (City) through the Burton Act. As a condition of the transfer, the State required the City to create a Port Commission that has the authority to manage the San Francisco waterfront for the citizens of California. Although the Port is a department of the City and County of San Francisco, the Port receives no financial support from the City, and relies almost solely on the leasing of Port property for its revenues. For more information about Port history, see https://web.archive.org/web/20070903162440/http://www.sfgov.org/site/port_page.asp?id=31784 (accessed May 1, 2018).

Three existing curb cuts along the project frontage provide access to the existing surface parking lot: one curb cut on Broadway (28 feet long) and two curb cuts on Davis Street (28 feet and 20 feet long). The existing sidewalk is 15 feet wide along The Embarcadero and 10 feet wide along Broadway and 11 feet wide along Vallejo Street. Davis Street only has a short 10-foot-wide sidewalk along the southwest a portion of the proposed project site. The proposed project would remove six existing parallel on-street parking spaces and three existing on-street motorcycle parking spaces along the project frontage on the north side of Broadway, three existing parallel on-street parking spaces along the project frontage on the east side of Davis Street, 20 existing perpendicular on-street Port parking spaces along the project frontage on the east side of Davis Street, and six existing perpendicular on-street Port parking spaces along the project frontage on the north side of Vallejo Street. There are 28 street trees along the perimeter of the site; 22 trees are along The Embarcadero, four on Broadway, and two on Davis Street. Figure 2 shows an aerial view of the project location.

Land Use and Zoning

The project site is within the C-2 (Community Business) *zoning district* and the 40-X *height and bulk district* (40-foot maximum height, no bulk limit). The San Francisco General Plan (General Plan) land use designation for the project site is General Commercial. As shown on the Generalized Land Use Map for this subarea, the types of General Plan land use designations in the project area include a mixture of General Commercial, Light Industrial/Public Trust, and High Density Residential. The site is also within the Northeastern Waterfront Special Sign District,⁴ Northeast Waterfront Historic District,⁵ Waterfront Special Use District No. 3,⁶ and Northeast Waterfront Area Plan,⁷ and is governed by the Port's Waterfront Land Use Plan.⁸

A.3. PROJECT CHARACTERISTICS

Proposed Project

The proposed project would involve the demolition of the existing surface parking lot and construction of a new mixed-use development with three components:

- an entertainment venue, featuring the historic 40-foot-tall spiegel tent hosting its maximum 285-seat theater and entertainment venue and a kitchen, bar, bathrooms, and back-of-house area;
- a four-story hotel, consisting of a maximum of 192 guest rooms plus a lobby, guest services, restaurant, and bar areas at ground level and a rooftop bar for hotel guests and patrons⁹ only; and
- an approximately 14,000-gsf, privately owned, publicly accessible park.

⁴ San Francisco Planning Code section 608.15.

⁵ San Francisco Planning Code article 10, appendix D.

⁶ San Francisco Planning Code section 240.3.

⁷ San Francisco Planning Department, *Northeastern Waterfront Area Plan*, 1998 and Amendments by Resolution 16626 on July 31, 2003, http://www.sf-planning.org/ftp/General_Plan/NE_Waterfront.htm. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2015.016326ENV.

⁸ Port of San Francisco, *Waterfront Land Use Plan*, June 2004; Revised October 2009, <http://sfport.com/waterfront-land-use-plan-0>, accessed online August 2016.

⁹ Patrons are defined as visitors of the theater, restaurant or other amenities of the hotel that are not guests of the hotel



FIGURE 1 PROJECT LOCATION

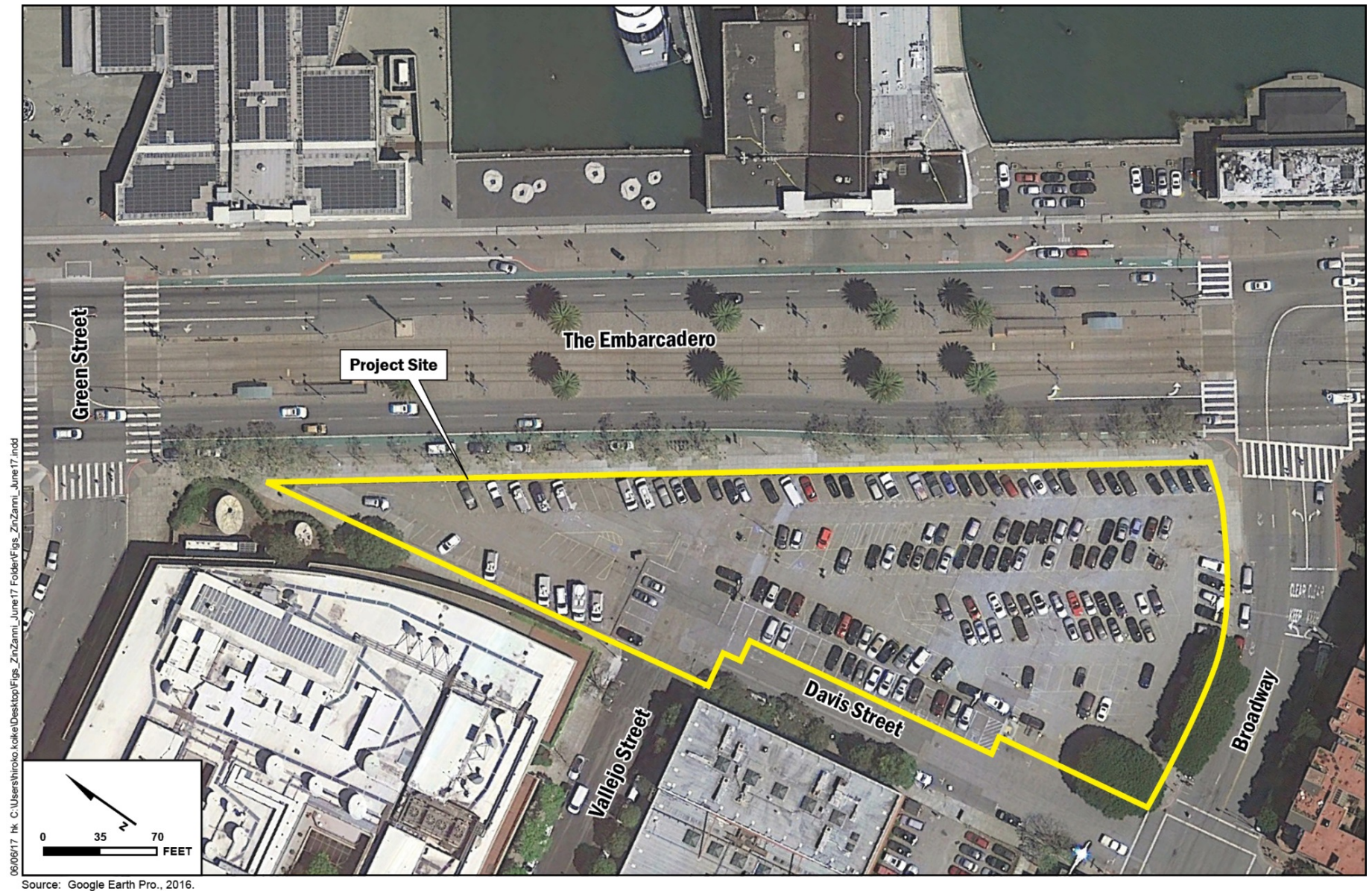


FIGURE 2 AERIAL VIEW OF PROJECT LOCATION

The proposed project would include a total of approximately 147,880 gsf, and would be 40 feet tall (up to 55 feet with mechanical equipment and elevator penthouses, as permitted by San Francisco Planning Code section 260[b][1]). Table 1 provides an overview of project characteristics. Figure 3 provides the proposed site plan, and Figures 4 through 7 shows the floor plans. Figure 8 portrays the proposed roof plan and Figure 9 provides details of the proposed public park plan. Figures 10 and 11 depicts renderings of the proposed project looking to the north and south, respectively.

TABLE 1 PROJECT CHARACTERISTICS

Lot		Dimensions
Size		59,750 square feet
Length		600 feet (Embarcadero)/210 feet (Broadway)/ 290 feet (Davis Street)
Proposed Building		Area (gsf)
Height		40 feet (4 stories) (55 feet with elevator penthouse)
Ground Floor (Hotel and Theater)	Hotel Lobby and Elevator Lobby Area	1,470
	ZinZanni Pre-function: ZinZanni Lobby and Lounge	3,040
	Restaurant Food and Beverage and Bar	4,420
	ZinZanni Retail and Retail Storage	1,950
	Spiegeltent	4,630
	Hotel Meeting Space ¹⁰	2,360
	Mechanical/Circulation/Back of House	26,270
<i>Total</i>		<i>44,140</i>
Level 2 ¹		31,490
Level 3 ¹		32,030
Level 4 ¹		32,030
Roof	Open Roof Terrace	3,970
	Elevator/Mechanical Penthouses	4,220
Total		147,880
Uses		Area (gsf)
Entertainment Venue, Including Venue Back of House and Circulation		21,570
Hotel, Including Hotel Back of House and Circulation		121,890
Restaurant Food and Beverage		4,420
Open Space		Publicly Accessible ² 14,000
		Common ³ 3,970
		Private ⁴ 0
Vehicle Parking Spaces		Number
		0
Bicycle Parking Spaces		Class I 20 (on ground floor)
		Class II 28 (in three locations along project frontage); 15 existing (along The Embarcadero)
Loading Spaces		2

Notes:

¹ Proposed room numbers: Level 2, 59 rooms; level 3, 67 rooms; and level 4, 66 rooms.

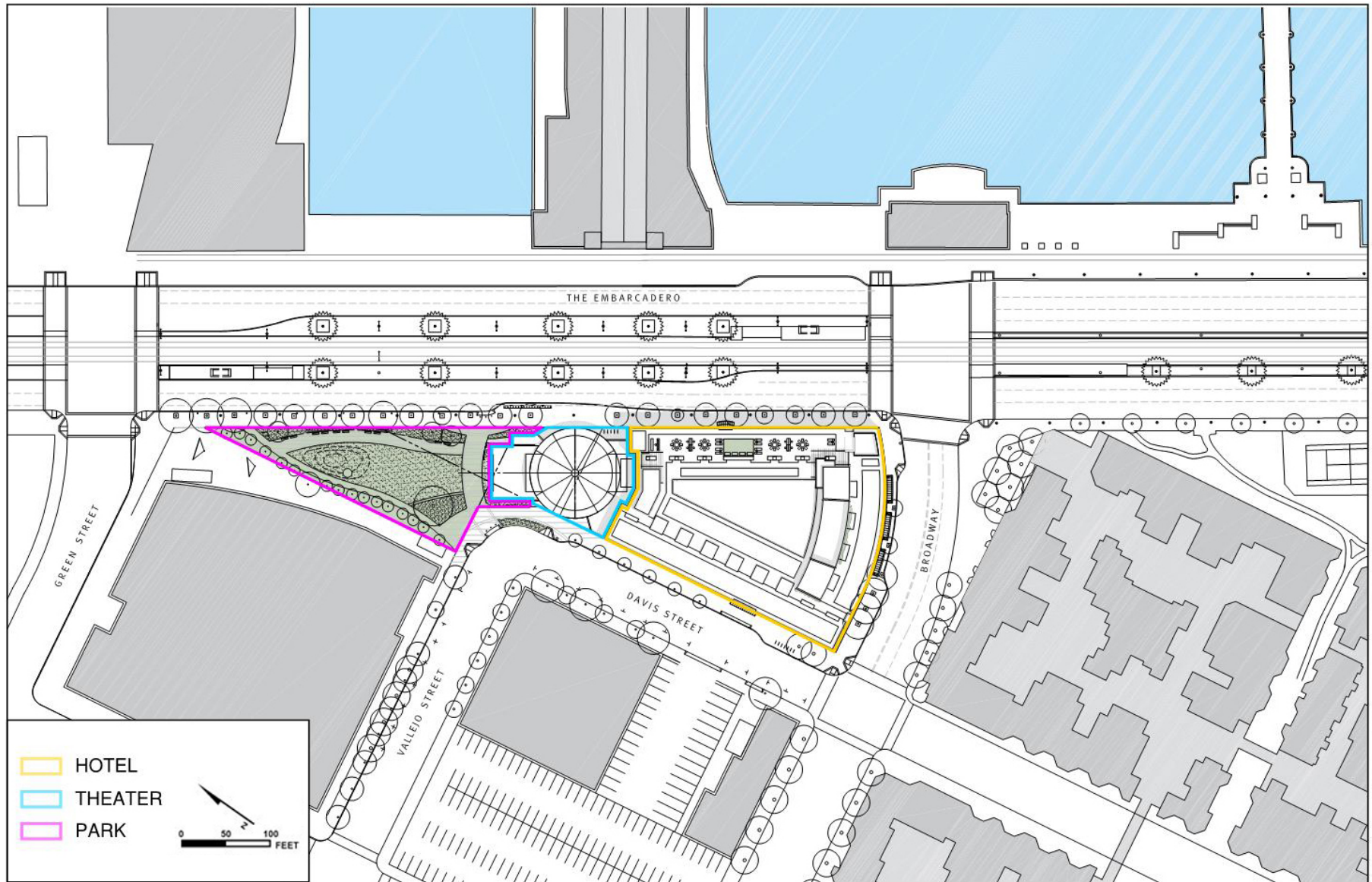
² Publicly accessible open space provided as a park in the northern corner of the site.

³ Common open space provided as an open roof terrace that would be accessible to hotel guests and patrons only.

⁴ No private open space (including patios/decks off of hotel rooms) would be provided.

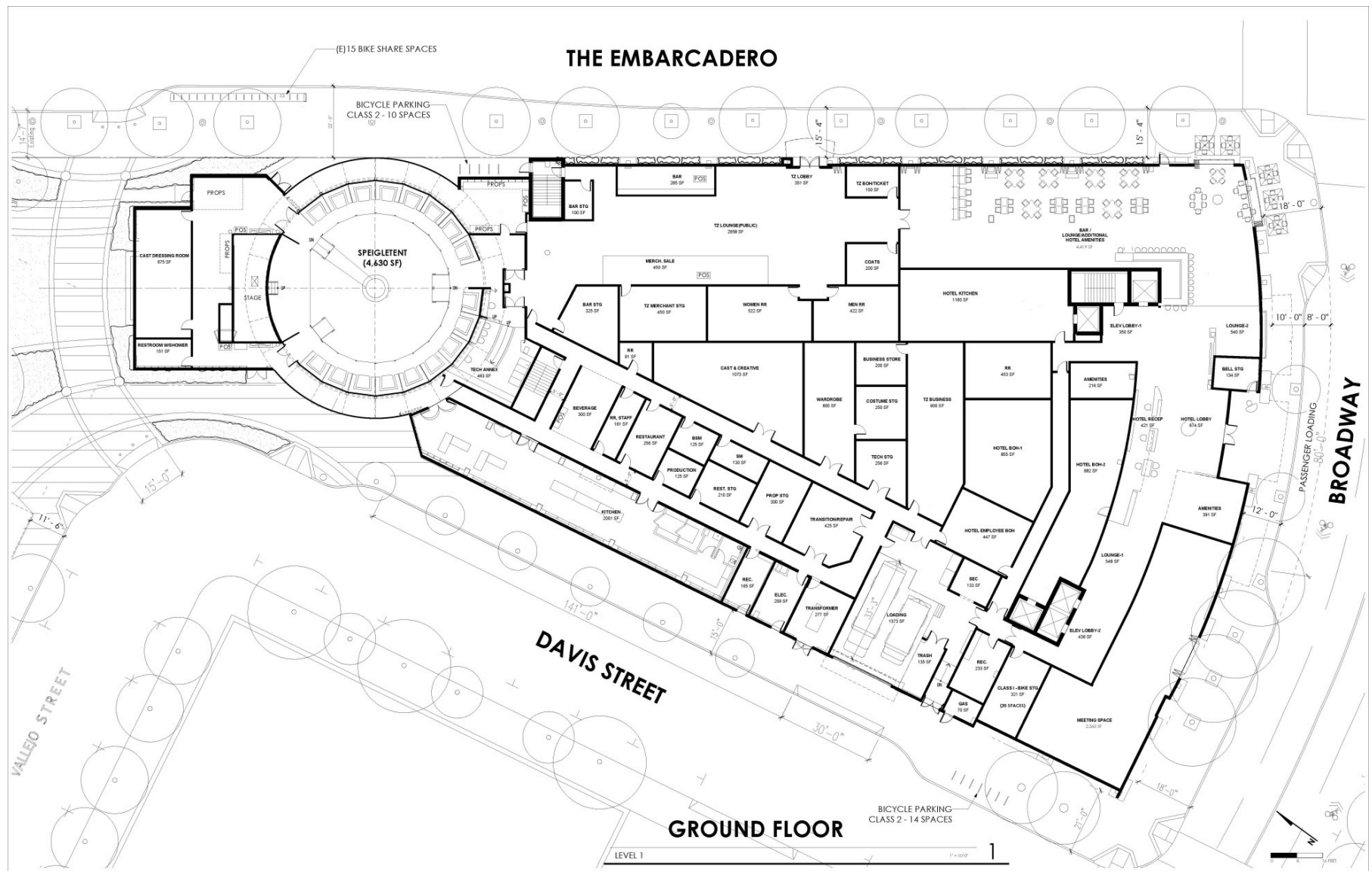
Source: Hornberger + Worstell Architects and HRGA Architects, 2018

¹⁰ Meeting space may be rented by hotel guests or patrons of the hotel that are not staying at the hotel.



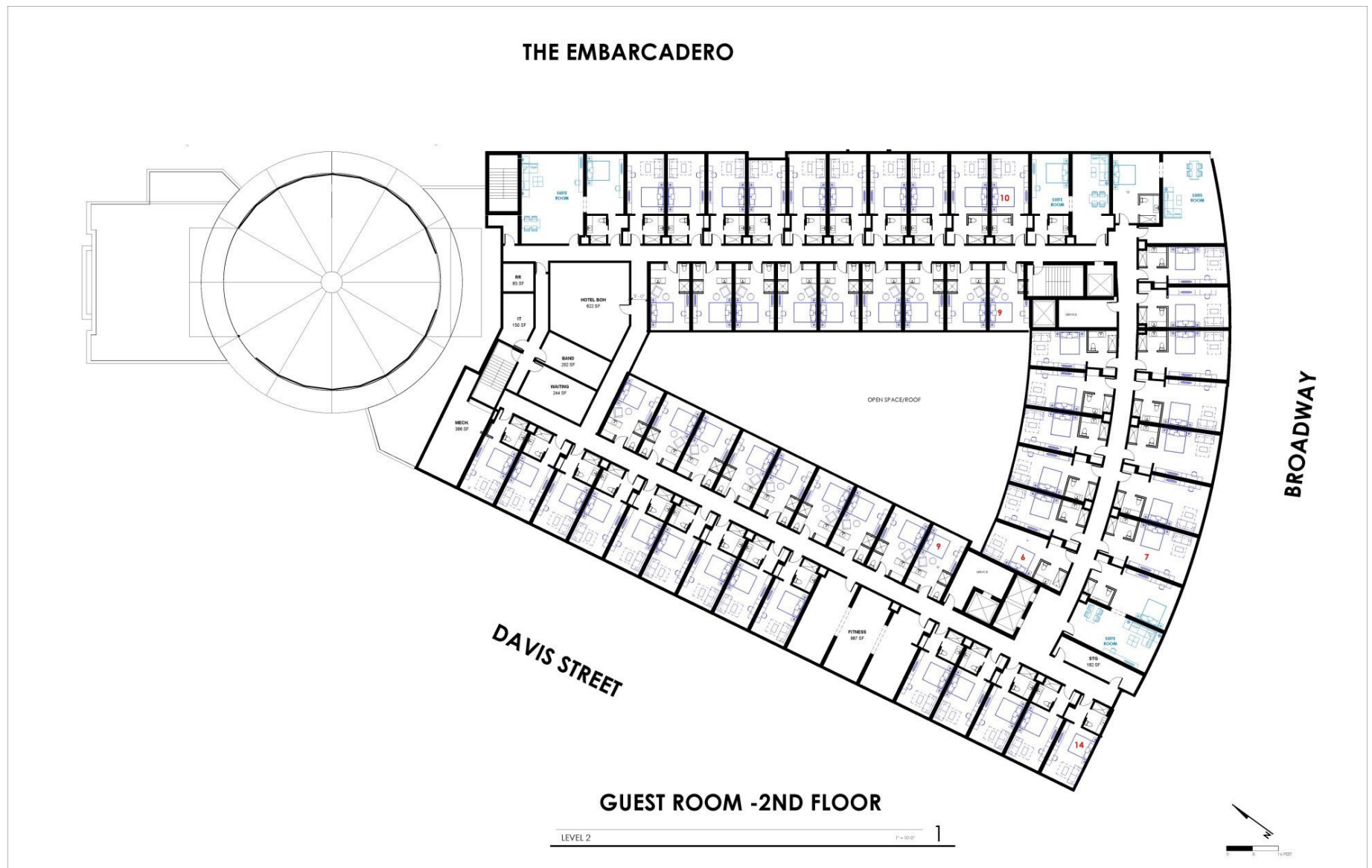
Source: Hornberger + Worstell Architects 2018

FIGURE 3 **PROPOSED SITE PLAN**



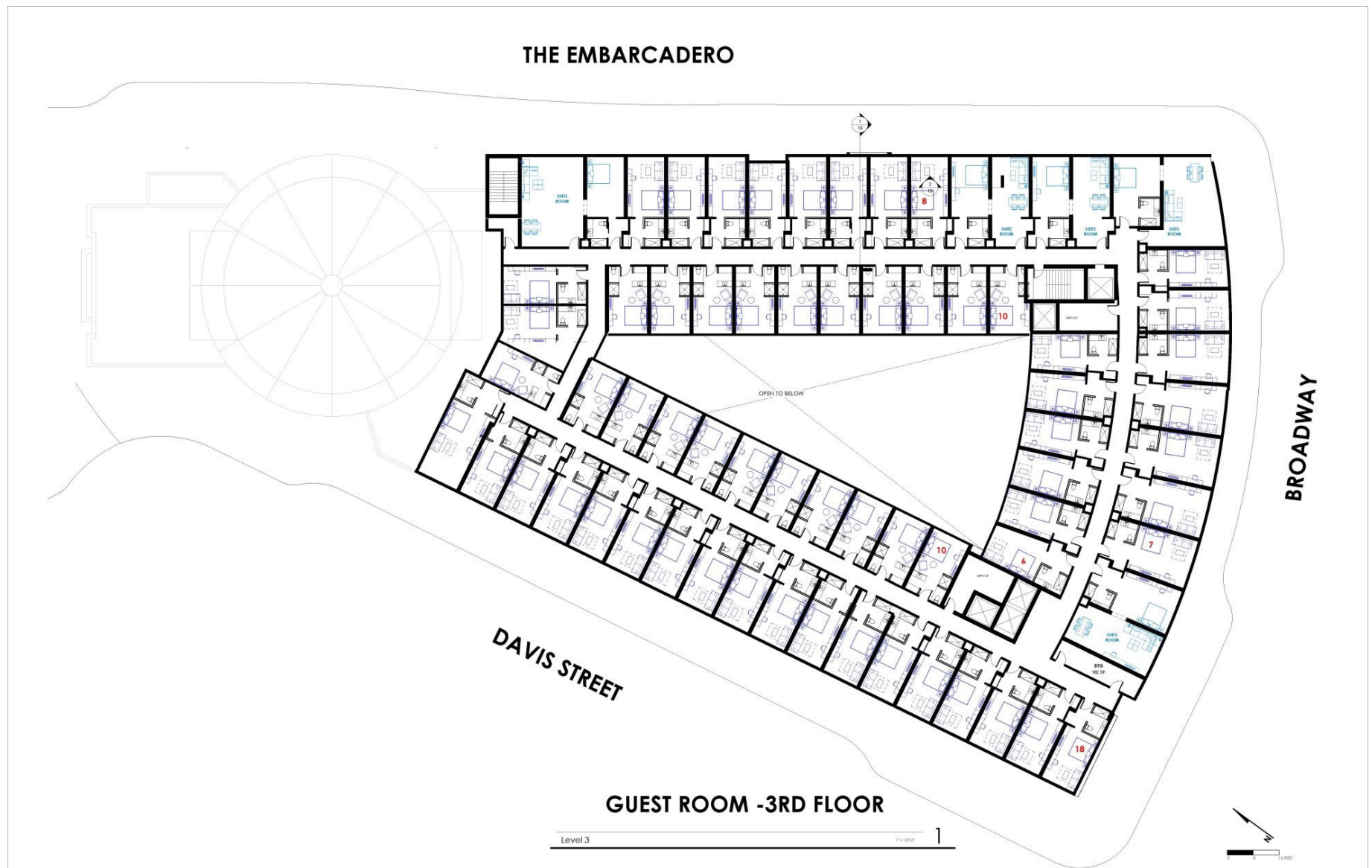
Source: Hornberger + Worstell Architects and HRGA Architecture, 2018

FIGURE 4 PROPOSED GROUND-FLOOR PLAN



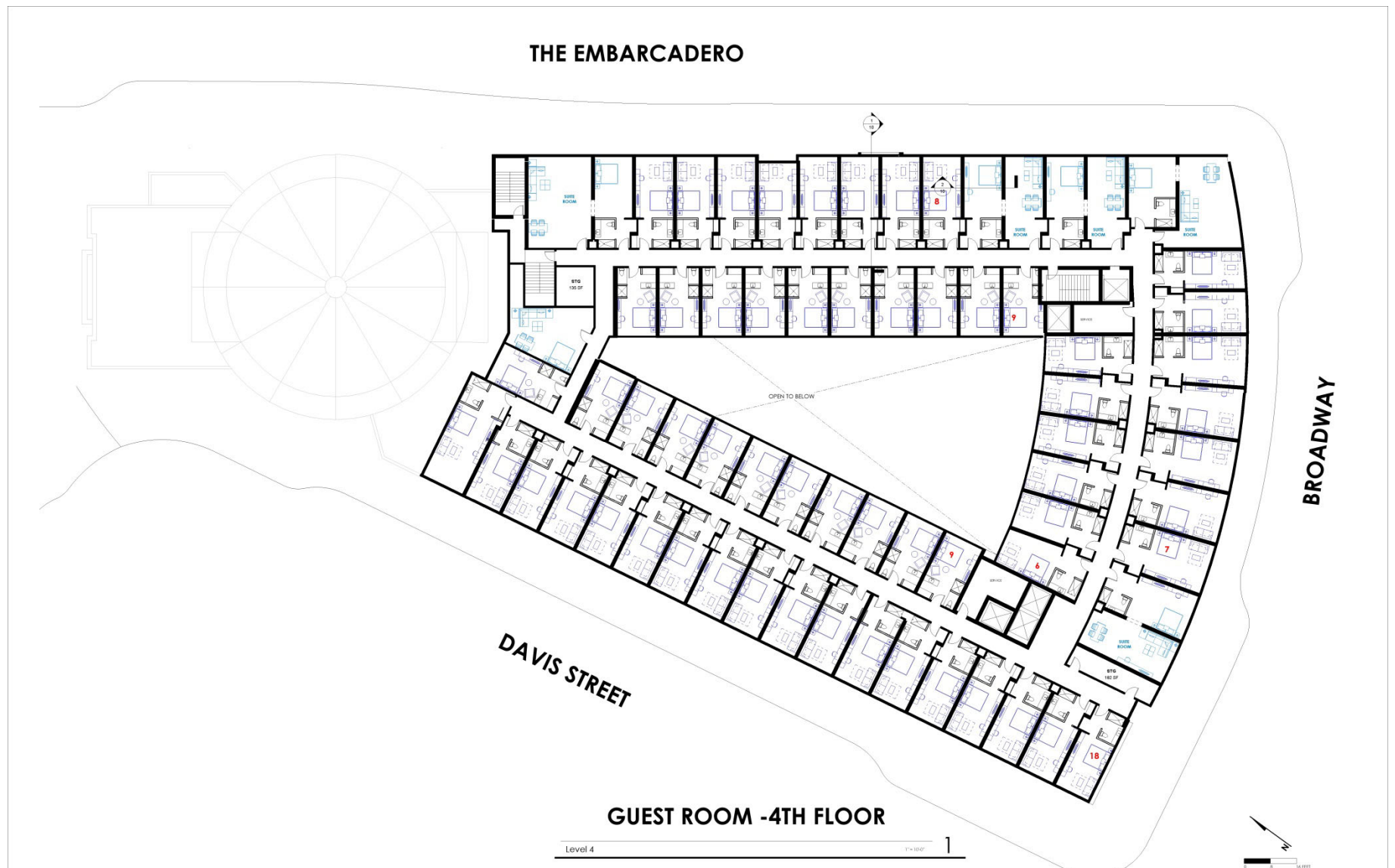
Source: Hornberger + Worstell Architects and HRGA Architecture, 2018

FIGURE 5 **PROPOSED SECOND-FLOOR PLAN**



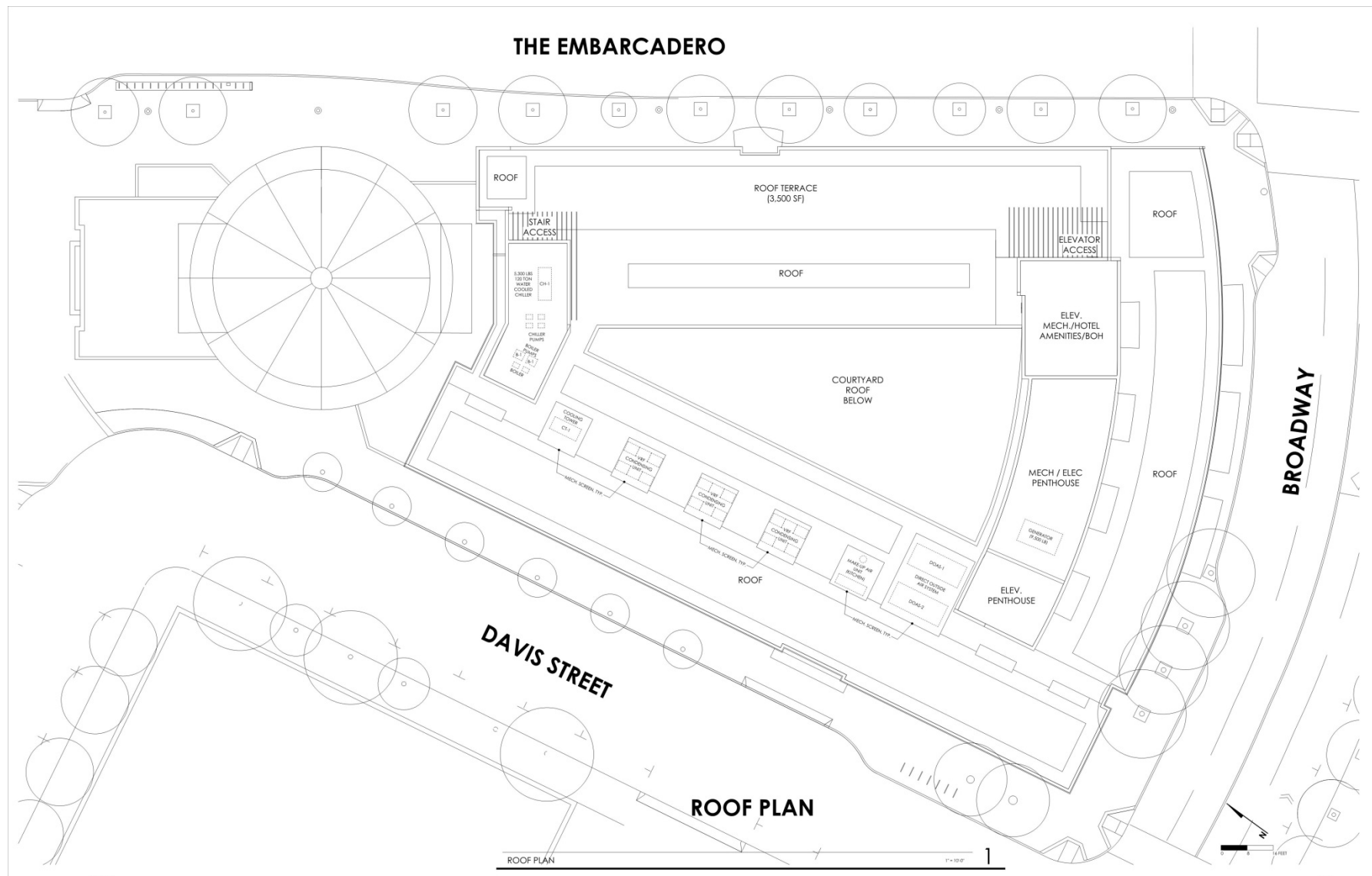
Source: Hornberger + Worstell Architects and HRGA Architecture, 2018

FIGURE 6 **PROPOSED THIRD-FLOOR PLAN**



Source: Hornberger + Worstell Architects and HRGA Architecture, 2018

FIGURE 7 **PROPOSED FOURTH-FLOOR PLAN**



Source: Hornberger+Worstell Architects, 2018

FIGURE 8 PROPOSED ROOF PLAN



Source: Hornberger+Worstell Architects, 2018

FIGURE 9 PROPOSED PUBLIC PARK PLAN



Source: Hornberger+Worstell Architects and HRGA Architecture, 2018

FIGURE 10 NORTHWEST VIEW OF PROPOSED PROJECT



Source: Hornberger+Worstell Architects and HRGA Architecture, 2018

FIGURE 11 **SOUTH VIEW OF PROPOSED PROJECT**

Project Building Characteristics

Entertainment Venue

The entertainment venue would include approximately 26,100 gsf to house the historic spiegel tent and seating for the entertainment venue, kitchen, bar, bathrooms, welcoming areas, ticket booth, merchandise area, lobby and circulation space, and back-of-house activities. The entertainment venue would be located inside a clear gazebo-like structure, constructed of glass and metal with steel or metal supports, at the northern end of the site adjacent to the public park. The glass gazebo-like structure would be clear to allow pedestrians walking past the structure to view the historic spiegel tent and see through the backstage area during daylight hours. The structure's roofline would be glass with metal.

The entertainment venue is expected to accommodate up to a maximum of 285 patrons and would operate from 8 a.m. to 2 a.m. Monday through Sunday. Entertainment venue patrons would be encouraged to arrive at the venue approximately 30 minutes to 1 hour before shows begin. Event times would follow the following approximate schedule:

- Monday–Saturday, 6:30 p.m. to midnight
- Sunday midday, 11:30 a.m. to 3 p.m., and/or Sunday evening, 5:30 to 10 p.m.

The proposed project's entertainment venue would include a small outdoor raised stage area located at the south end of the public park, attached to the back-of-house portion of the entertainment venue. Operable doors on the northern side of the entertainment venue structure would open up onto the outdoor stage area. The operable doors would remain closed during regularly scheduled performances at the entertainment venue. The outdoor raised stage that would be located in the public park could be used for small-scale community and neighborhood events; small-scale theater performances by local schools and community groups; and other neighborhood events, such as weekly exercise classes or a children's dance or singing performance. The public park would be approximately 14,000 square feet and would have limited capacity because of its size, which would restrict the size of events that could take place. Activities that would occur in the public park would allow for passage of pedestrian traffic through the site.

Hotel

The hotel component would include a total of approximately 118,00 gsf, of which 14,560 gsf would be at ground level for entry and drop-off areas for guests, the front desk, a concierge, gathering space, retail, restaurant and café uses, back-of-house uses, and elevator and stairwell access. The hotel would also include a restaurant and bar. Operating hours for the restaurant would be approximately 6 a.m. to midnight, 7 days a week. The bar portion of the hotel would be permitted to remain open until 2 a.m., although it is anticipated to close earlier on weekdays. The restaurant and bar would include an outdoor patio along the eastern side of the building, along The Embarcadero. Above the ground-level floor, the proposed project would include approximately three floors of hotel uses totaling 95,560 gsf and 192 hotel guest rooms. The hotel would also include an approximately 3,970-gsf rooftop deck, serving food and beverages from the hotel's bar and restaurant services, for use by hotel guests and patrons only.

The roof would include wind-protected outdoor spaces for hotel guests and patrons. Vertical metal screening walls would be integrated with the other exterior building materials designed to allow for plants to grow vertically and create a green screen effect that would shield the rooftop mechanical devices from view. The roof would likely be designed with a small array of solar panels as well as low-impact-design stormwater facility. Figure 8 shows the proposed roof plan.

Mechanical Equipment

The mechanical and elevator penthouses would take up 4,220 square feet on the roof of the proposed building. The elevator penthouses are combined with staircases in two locations. The mechanical room would have equipment to serve theater and hotel operations to maintain the temperature. The theater's main mechanical system would be a chilled water system consisting of one 120-ton, 5,300-pound water-cooled chiller and two 100-pound primary and secondary chiller pumps that

would be located inside the mechanical room. For heating, a hot water system would consist of two condensing-type heating hot water boilers in the roof mechanical room, each rated at 1,000 thousand British thermal units per hour. Some mechanical equipment on the roof would also be located outside of the mechanical room on the roof, where outside air is required to operate. This equipment would include the heat pumps, a 4,500-cubic-foot-per-minute air scrubber/pollution unit for the main kitchen exhaust, and the make-up air unit consisting of an evaporative cooling module and hot water heating. This mechanical equipment would be screened by green vegetation on the roof. The building's air handler would be located in the second-floor mechanical room and supply ducting would be routed to below grade to serve the theater. The air handler would provide approximately 8,500 cubic feet per minute. In addition, an 800-kilowatt, diesel-powered emergency generator would be located in the mechanical penthouse.

Public Park

The proposed project would construct an approximately 14,000-gsf public park in the northern portion of the site parallel to The Embarcadero, as depicted in Figure 9. The park would consist of both landscaping and hardscape, with benches and lighting in and around the park. The park would include pathways for pedestrian access from The Embarcadero through to Vallejo and Davis streets.

The public park would provide space for a variety of informal activities, such as family and community picnics, and gatherings, neighborhood yoga and tai chi classes, programming for toddlers and young children, educational events for elementary school students, and pedestrian strolling, and sitting. The park would also include view mounds to allow visitors to "get up to see the bay," as well as moveable and permanent seating and tables, wayfaring, lighting, historic signage, and public art features. Additionally, the park would include iconic statuary art at the intersection of Davis and Vallejo streets, marking the park as an important destination across from the waterfront.

The public park would be used for informal passive activities on weekdays and weekends during normal business hours, subject to Port requirements. The park may also include temporary events, approximately one time per week, under the management of the project sponsor, in accordance with the terms and lease with the Port¹¹ and the City's event policies. Activities could involve hosting a food truck gathering, lunchtime music or lecture session, or activities related to local festivals or events in the vicinity or other parts of San Francisco, such as Sunday Streets. A portion of the public park may also be used for a pre-show activities related to the theater or hotel. For example, if a wedding were held at the hotel, guests could enjoy drinks outside before going inside for the celebration. Sound may be amplified up to approximately one time per week and the appropriate approvals would be obtained from the Port in advance.

The project sponsor would maintain the public park. Maintenance activities would include but would not be limited to providing sufficient trash containers and other recycling systems, and providing security to keep the park clean and safe. The public park would be open 24 hours a day and would be supervised by private security hired by the project sponsor, unless actual usage or public safety concerns require less frequent late-night use.

The public park area would include an easement for the San Francisco Fire Department (SFFD) to access the site from The Embarcadero or Davis Street through Vallejo Street right-of-way. Currently, SFFD has an easement on the site that runs north and south along the terminus of Davis Street to Green Street. An additional easement is recorded against the site for use by AT&T for its telephone conduit that runs through the ROW portion of the proposed park. The two existing easements would need to be terminated and replaced with new easements, with SFFD's easement serving as an emergency-vehicle access point between The Embarcadero and Vallejo Street. This access point would be protected by new movable bollards where none exist today.

¹¹ The Guidelines & Application for Special Events, <https://sfport.com/special-events-port>, set forth the applicable regulations governing special events at Port property.

Parking and Loading

Valet Services

The proposed project would not include off-street vehicle parking on the project site. Instead, parking for the proposed project would occur through offsite parking and valet services. The proposed valet service would park hotel guests' and patrons' vehicles at nearby off-street parking facilities to manage storage of vehicles brought to the site. Numerous existing parking lots and parking structures are located in the immediate vicinity of the site. The project sponsor proposes to use up to 50 parking spaces for the hotel use by a covenant agreement with Impark at one of its nearby locations.¹² The agreement states that the Four Embarcadero Center parking garage, which contains more than 2,000 parking stalls within a 10-minute walk from the project site, would be available. The proposed project valet service would primarily use the Impark lot at 847 Front Street for vehicle storage, and would therefore only travel one block to drop-off and retrieve hotel patron vehicles. The agreement also includes parking garages at Three Embarcadero Center (200 spaces) and 847 Front Street (60 spaces) that would also be available.

Parking for the entertainment venue would also occur at an off-site, self-parking location or locations close to the project site. An e-mail or text message sent to patrons would encourage taking public transit, cabs, or ridesharing services to the project site and would inform them of the many off-site, self-parking locations close to the theater, such as parking at 847 Front Street, Pier 19, 1000 Front Street, and One Maritime Plaza. Entertainment venue patrons would be directed to off-site, self-parking locations by the hotel's valet parking attendant, or would be allowed to access the hotel's valet services for a separate fee.

Loading

The proposed project would install a new 80-foot-long curbside passenger loading space ("white curb") along the northern side of Broadway to provide ingress and egress into the site for hotel guests, theater guests, and other patrons.¹³ The passenger loading space would be located adjacent to the hotel lobby entrance into the building and would be used in a curbside valet operation for hotel guests, theater patrons, and other patrons.

A proposed 142½-foot-long commercial loading zone would be established along the project frontage on the eastern side of Davis Street. The loading dock includes two spaces and a service area that would be used exclusively for deliveries, service providers including waste collection, and recycling. The proposed project would add a new loading dock along Davis Street, measuring 23 feet, 8 inches wide by 33 feet, 3 inches deep by 12 feet high. This loading dock would be designed to incorporate a roll-up door into the façade and an audible and visual signal would be included to alert pedestrians to truck movement at the dock.

Daily and quarterly deliveries for the entertainment venue would be accommodated at the proposed Davis Street loading dock. Daily deliveries for the entertainment venue would include food, supplies, and other products for the theater; quarterly deliveries for the entertainment venue may include equipment or materials needed to modify the theater when the theme of the show changes.

¹² The project sponsor has executed a letter of intent with Impark and a letter report from Impark dated January 19, 2017, describing its valet options in the immediate vicinity of the project site and Impark's conclusion, based on its valet services provided at other hotels in San Francisco that substantially less than a maximum of 50 spaces are needed. The letter of intent and the letter report are included in the transportation impact study as Appendix K. (CHS Consulting Group, *Seawall Lot 323 and 324 [Teatro Zinzanni] Project Final Transportation Impact Study*, May 2018.)

¹³ The proposed project is within the jurisdiction of the Port of San Francisco, which is outside the jurisdiction of the San Francisco Municipal Transportation Agency's Color Curb Program.

Trash and delivery services would occur on Davis Street in a 1,660-gsf enclosed loading dock area, which would have a roll-up door. The loading dock would provide two truck parking zones within the building to allow for both an *SU-30*¹⁴ vehicle and a delivery van. A dedicated recycling area and a separate trash room would also be directly adjacent to the loading zone. A security office, located within the loading dock area, would provide visual oversight for both the loading dock and the employee entrance.

Bicycle and Pedestrian Access

Bicycle Parking

The proposed project would include a total of 59 bicycle parking spaces, which would consist of 20 *class I* bicycle parking spaces and 43 *class II*¹⁵ bicycle parking spaces (28 new). Access to the class I bicycle parking spaces would be via a secured door into the building along Davis Street. The class I bicycle parking spaces would be provided for use by hotel and other employees only. The 43 class II bicycle parking spaces would be located on the sidewalk in front of the project site (14 new spaces along Davis Street and 10 new spaces along The Embarcadero, in addition to 15 existing spaces along The Embarcadero). The location of bicycle parking spaces within the public ROW would be subject to review and approval by the San Francisco Municipal Transportation Agency (SFMTA), the San Francisco Port Commission, and San Francisco Public Works (SFPW).

Pedestrian Access

The proposed project would provide several pedestrian entrances for hotel, entertainment venue, and restaurant and bar uses. The building's primary entrance would be through the hotel lobby area, located along the northern side of Broadway at the new white curb. The entertainment venue's primary access would be along The Embarcadero, although guests would be permitted to access the entertainment venue from the hotel's main Broadway entrance. The hotel's restaurant and bar would be accessible from street-level openings at the intersection of The Embarcadero and Broadway and along The Embarcadero, and from inside the hotel itself.

The proposed public park would include pathways for pedestrian access from The Embarcadero to Vallejo and Davis streets and around the perimeter of the proposed project. The pedestrian connection to The Embarcadero would also be wide enough to allow an emergency-vehicle to gain access when necessary for use by the San Francisco Fire or Police departments or for a maintenance truck, protected by movable bollards.

Transportation Demand Management Plan

As required by the City's Transportation Demand Management Program Ordinance (Ordinance 34-17, approved February 2017), the project sponsor would develop a transportation demand management (TDM) plan that would be subject to review and approval by the San Francisco Planning Commission as part of its deliberations on the proposed project. Ordinance 34-17 added section 169, Transportation Demand Management Program, to the San Francisco Planning Code. Under section 169.3, projects with 10 or more dwelling units, 10 or more group housing units, or 10,000 square feet or more of nonresidential space, or certain changes of use involving 25,000 square feet or more must develop a TDM plan. Compliance with the approved TDM plan would be adopted as a condition of approval for the proposed project (section 169.4[c]).

¹⁴ SU-30 is a single-unit truck design vehicle consisting of a two-axle truck with an overall length of 30 feet and a turning radius of 42 feet.

¹⁵ Section 155.1(a) of the Planning Code defines class I bicycle spaces as "spaces in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, nonresidential occupants, and employees" and defines class II bicycle spaces as "spaces located in a publicly-accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use."

The TDM Program Ordinance states that before a certificate of occupancy can be issued, a property owner must facilitate a site inspection by the San Francisco Planning Department and document implementation of applicable aspects of the TDM plan. The property owner must also maintain a TDM coordinator, allow for planning department inspections, and submit periodic compliance reports throughout the life of the project.

For the proposed project, the project sponsor has agreed to implement the following TDM measures:

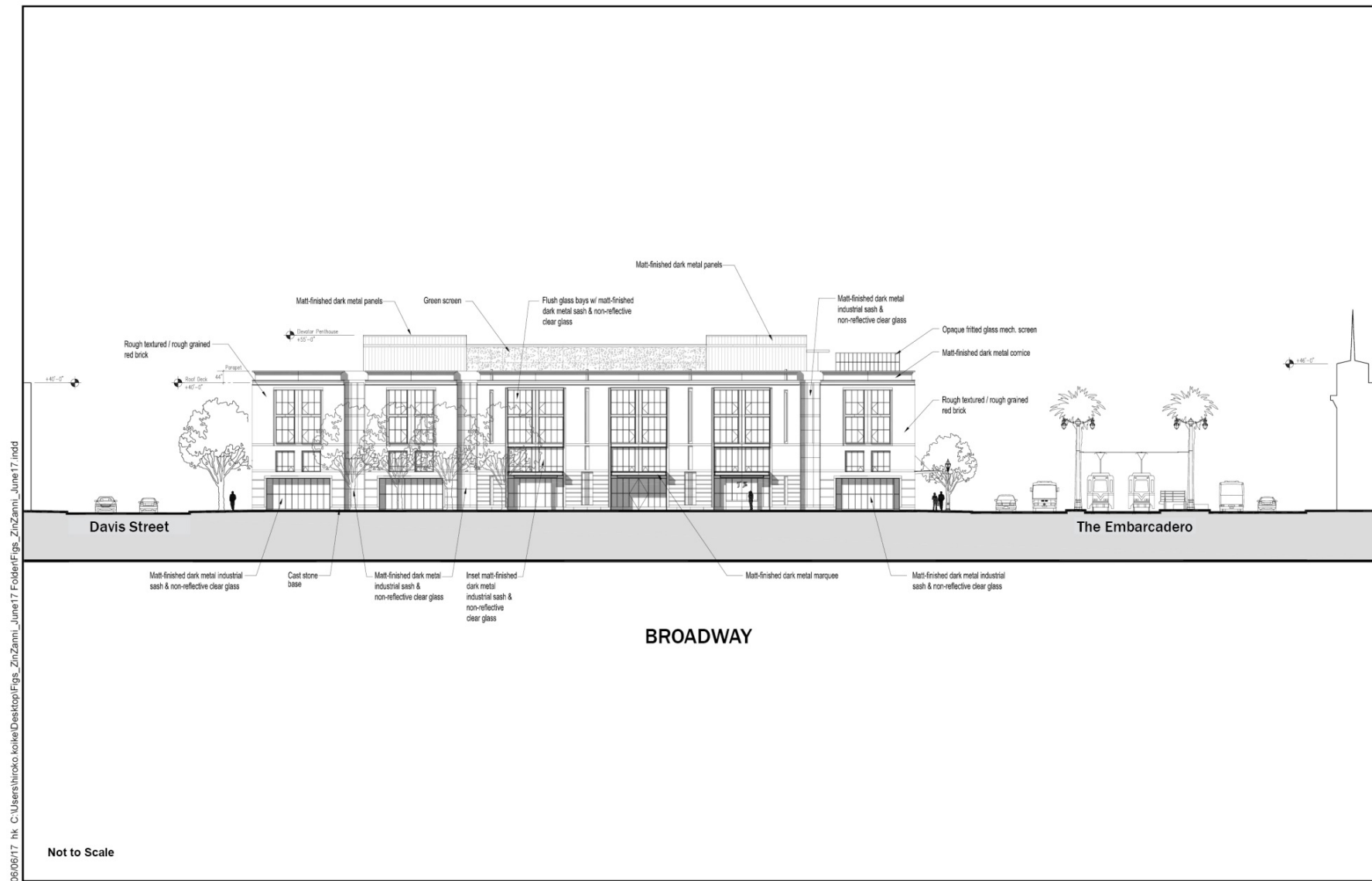
- **PKG-4: Parking Supply Options (Option E).** Provide less than or equal to 60 percent and greater than 50 percent of the neighborhood nonresidential parking rate.
- **ACTIVE-1: Improve Walking Conditions (Option A).** Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by providing bulb-outs along the Davis Street and Broadway sidewalks to shorten crosswalk distances and reduce vehicle speed.
- **ACTIVE-2: Bicycle Parking (Option A).** Provide class I and class II bicycle parking spaces for hotel, retail, and theater uses as required by the planning code.
- **ACTIVE-5A: Bicycle Repair Station.** Provide onsite tools and space for bicycle repair.
- **DELIVERY-1: Delivery Supportive Amenities.** Facilitate delivery services by providing a staffed reception area for receipt of deliveries, and offering one of the following: clothes lockers for delivery services, or temporary storage for package deliveries, laundry deliveries, and other deliveries.
- **INFO-2: Real-Time Transportation Information Displays.** Provide real-time transportation information on displays in prominent locations on the project site to highlight sustainable transportation options and support informed trip-making.

Architecture and Design

The project's architectural elements have been selected to comply with the character of the Northeast Waterfront Historic District. The building's exterior would be covered with a red brick veneer and the window fenestration would include multi-paned industrial sash patterns similar to buildings in the area. The mostly glass gazebo enclosing the historic spiegel tent would be circular in form, composed of nonreflective material, and would comply with the 40-foot height limit. Figures 12 through 15 show elevations for the proposed project and Figure 16 shows proposed building sections.

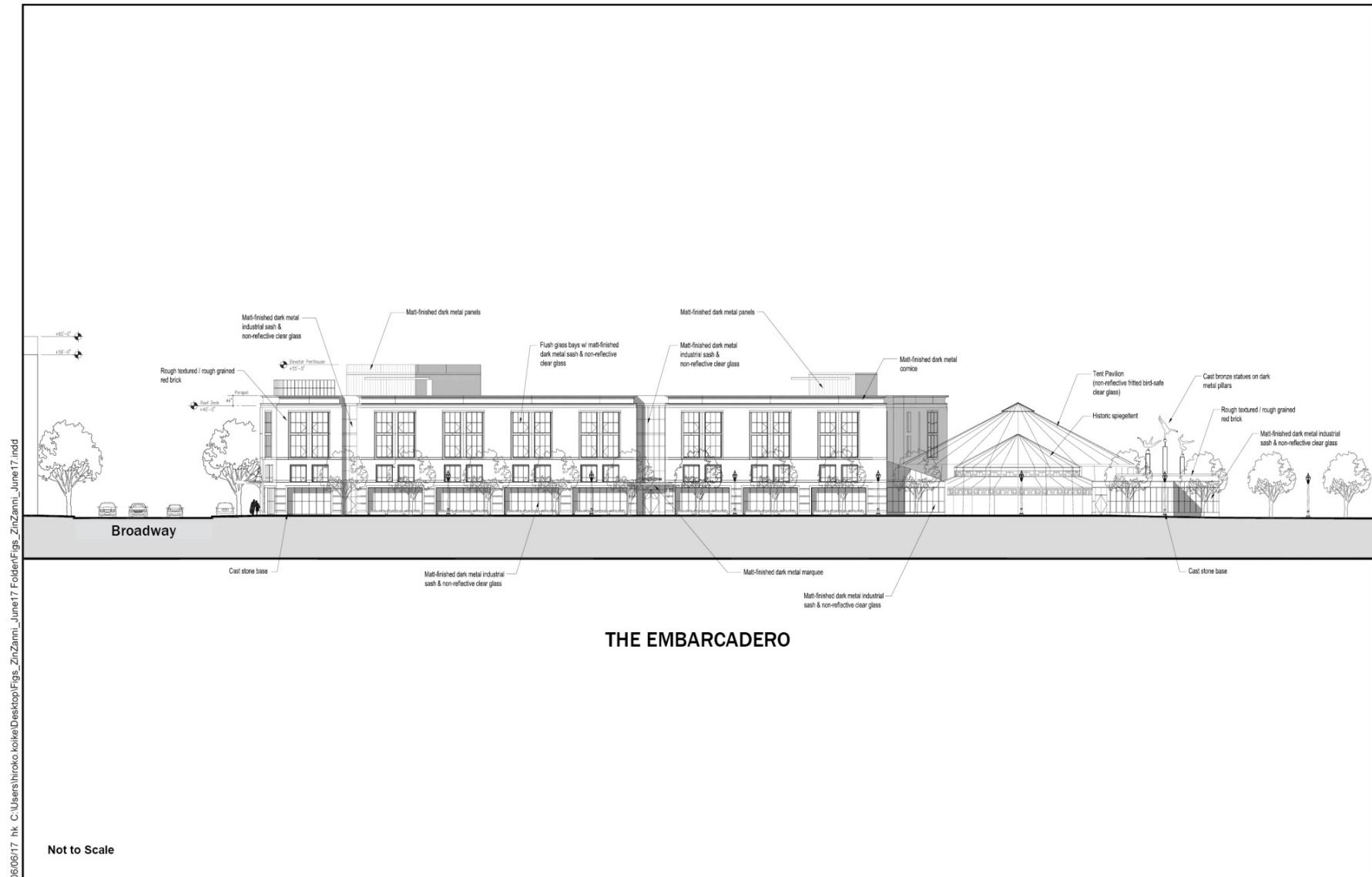
The proposed project would be developed to achieve *Leadership in Energy and Environmental Design (LEED)*¹⁶ Gold certification.

¹⁶ LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which provides third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, reduction of carbon dioxide emissions, improved indoor environmental quality, stewardship of resources, and sensitivity to impacts on resources.



Source: Hornberger+Worstell Architects, 2017.

FIGURE 12 PROPOSED ELEVATION – NORTH, BROADWAY



Source: Hornberger+Worstell Architects, 2017.

FIGURE 13 PROPOSED ELEVATION – WEST, THE EMBARCADERO

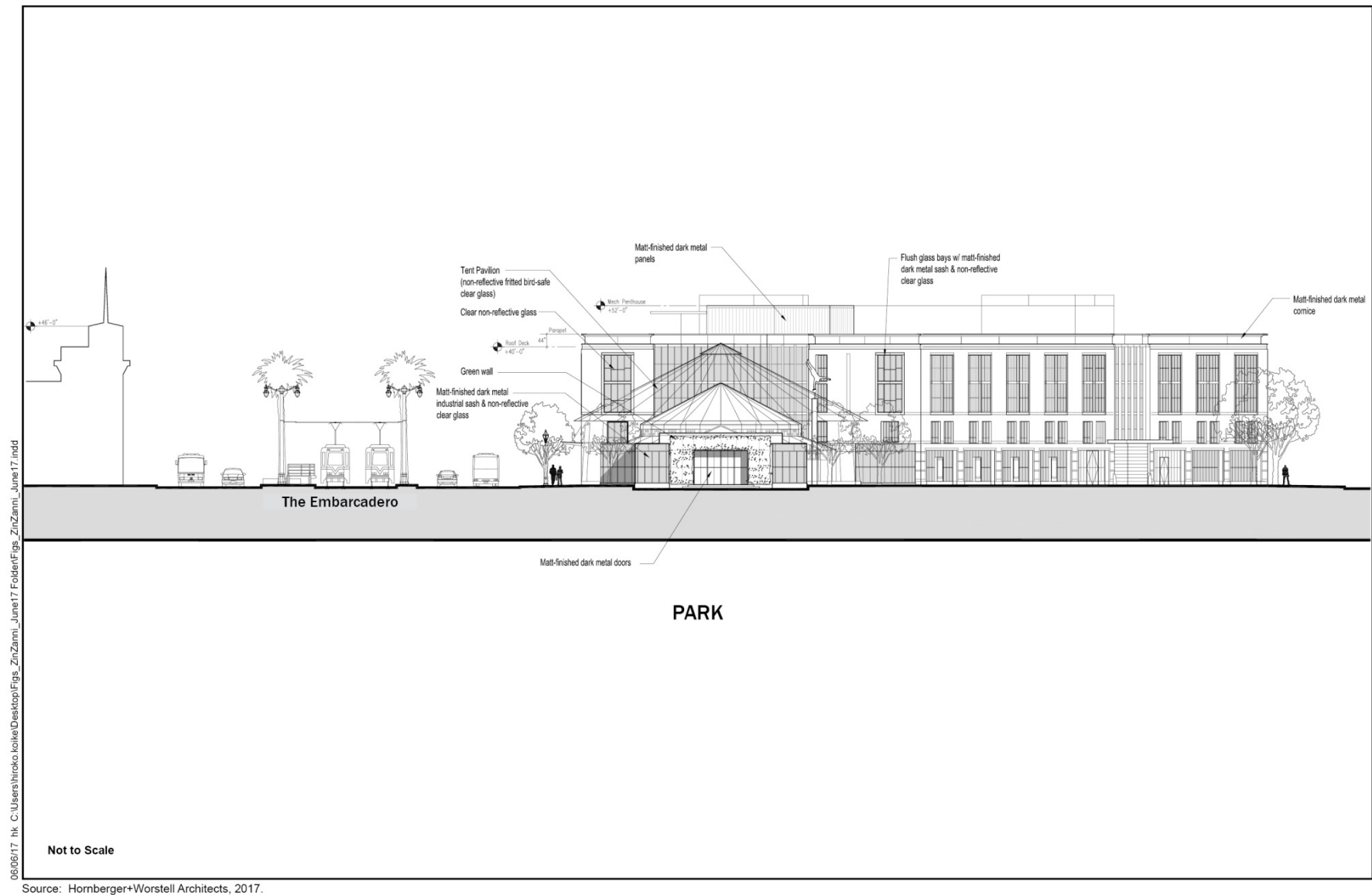


FIGURE 14 PROPOSED ELEVATION – SOUTH, PROPOSED PUBLIC PARK

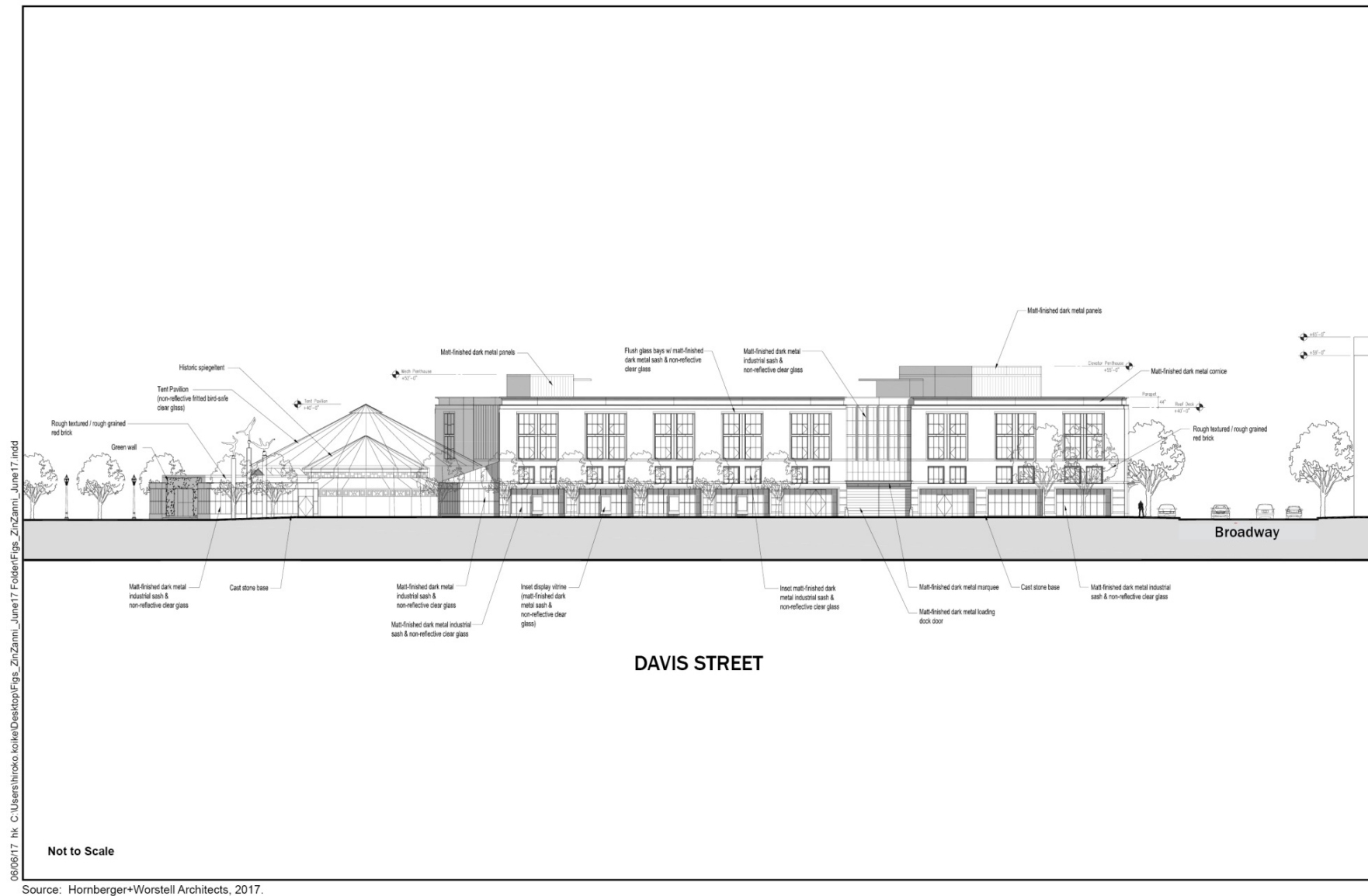
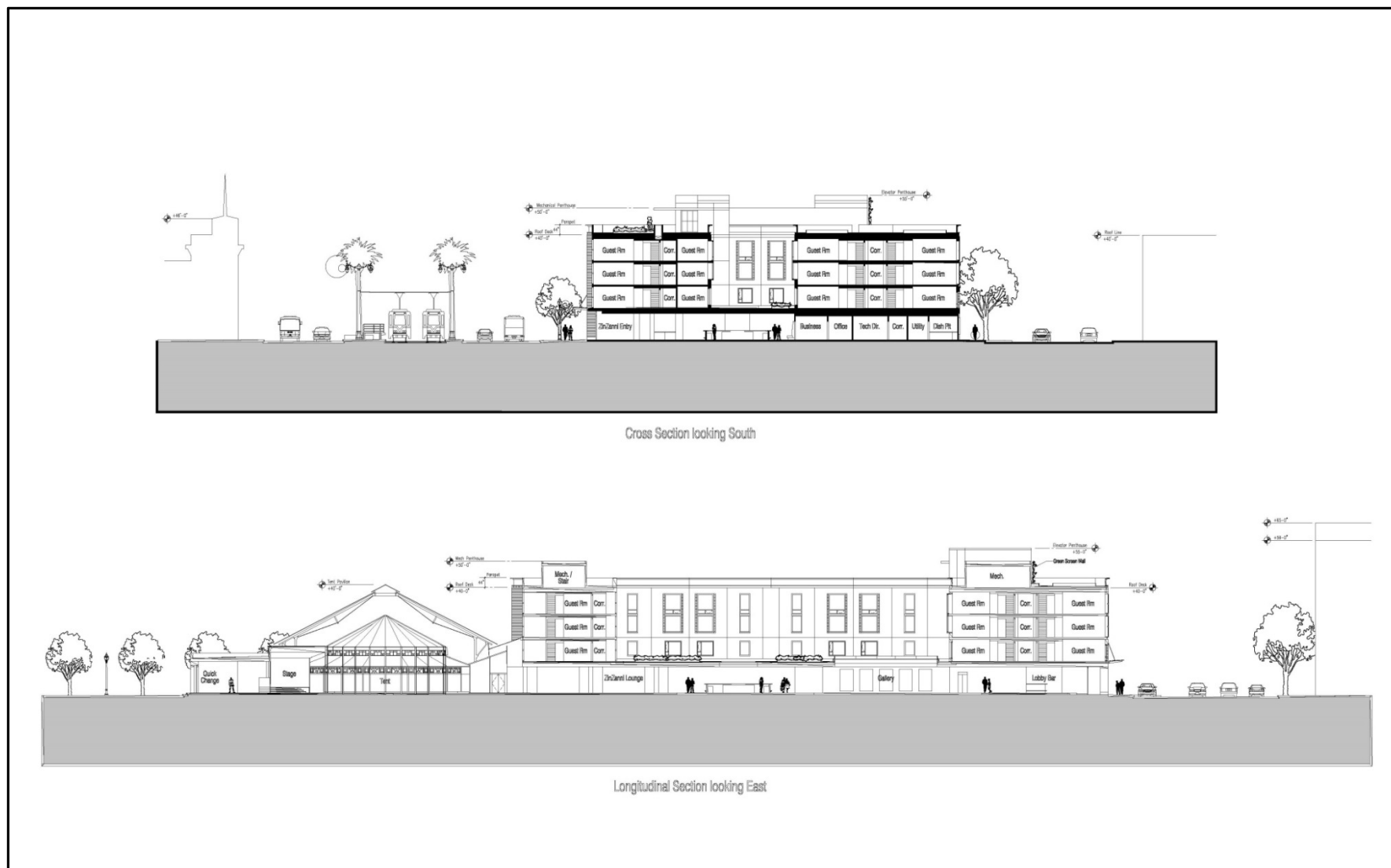


FIGURE 15 PROPOSED ELEVATION – EAST, DAVIS STREET



Source: Hornberger+Worstell Architects, 2018

FIGURE 16 PROPOSED BUILDING SECTIONS

Landscaping

There are 28 street trees along The Embarcadero, Broadway, and Davis Street; however, none are *protected trees* as defined by the City's Urban Forestry Ordinance, Public Works Code section 801 et seq. The proposed project would retain all 28 existing trees and would comply with Planning Code section 138.1(c)(1) by retaining or replacing any trees that would be disturbed during construction. A total of 28 new trees would be planted on the sidewalks along all street frontages of the proposed project in accordance with Public Works Code section 806(d)(2), which requires planting one street tree for every 20 linear feet of project site frontage. All new street trees would be placed in continuous soil-filled trenches. For pedestrian safety, no new trees would be within 25 feet of an intersection. With implementation of the proposed project, there would be a total of 56 street trees.

Landscaping would also be provided on the roof of the building for hotel guests and patrons, in the form of raised planters and a green wall to screen mechanical features. In addition, the proposed public park would include an open grass lawn, shrubs, and trees.

Streetscape and Infrastructure Improvements

Broadway

The proposed project would widen the existing sidewalk from 10 feet to 18 feet along the entire project length of Broadway. This would eliminate an existing 30-foot-wide curb cut on Broadway near The Embarcadero. The proposed project would also remove six existing parallel on-street parking spaces and three existing on-street motorcycle parking spaces along the project frontage on the north side of Broadway. The project would add two new *bulb-outs*¹⁷ along Broadway: one new 18-foot-long by 15-foot-wide bulb-out at the corner of Broadway and The Embarcadero, and one new 18-foot-long by 21-foot-wide bulb-out at the corner of Broadway and Davis Street. The bulb-out at Broadway and The Embarcadero would project 18 feet from the property line. This bulb-out would improve pedestrian access while allowing sidewalk activation with outdoor bar and café seating, and would create an approximately 80-foot-long drop-off area in front of the project site for hotel entry. Additionally, a new 8-foot-deep by 80-foot-long passenger loading zone would be constructed on Broadway.

Davis and Vallejo Streets

Currently, there is only a short 10-foot-wide sidewalk along a portion of the proposed project site along Davis Street. The proposed project would add several new elements on Davis Street: a new 15-foot-wide sidewalk; a new 142½-foot-long loading zone; a new 21-foot-long by 18-foot-wide bulb-out at the corner of Davis Street and Broadway; a new 21-foot-long by 18-foot-wide bulb-out at the corner of Davis and Vallejo streets; and a new 30-foot-wide loading dock curb cut within the new loading zone. Trash and recycling pickup would occur at the Davis Street loading dock. At the intersection of Davis and Vallejo streets, the proposed project would adjust the Davis Street ROW to align parallel to The Embarcadero property line at Vallejo Street. In addition, the proposed project would also remove three existing parallel on-street parking space along the project frontage on the east side of Davis Street, 20 existing perpendicular on-street Port parking spaces along the project frontage on the east side of Davis Street, and six existing perpendicular on-street Port parking spaces along the project frontage on the north side of Vallejo Street. As shown on Figure 8 Public Park Plan, a 15-foot-wide curb cut is provided on The Embarcadero and Davis Street with moveable bollards that would allow emergency and maintenance vehicle access through the site on the paved pedestrian path.

¹⁷ A bulb-out is a *traffic calming* measure that reduces the crossing distance for pedestrians by extending the sidewalk.

The Embarcadero

The proposed project would not include sidewalk improvements along the project length of The Embarcadero, except for a new 15-foot-wide curb cut for fire truck and maintenance access at the east site of the proposed public park, to maintain access through to Davis Street along the paved pedestrian path.

Right-of-Way

This adjustment would add a triangular area of approximately 610 square feet to the project site to allow for a fully integrated site. A portion of Vallejo Street within the proposed project footprint would be vacated and/or abandoned. The ROW is not a functioning street and is not currently used by vehicles. A 10-inch auxiliary water supply system line, an 8-inch water main owned by the San Francisco Public Utilities Commission (SFPUC), and an AT&T fiber optic conduit are present in the ROW. The 10-inch auxiliary water supply system is not needed to supply emergency fire suppression and has been abandoned in place by the San Francisco Fire Department as confirmed by the SFPUC, CDD division. The 8-inch water main owned by the SFPUC is not needed to supply current distribution. The AT&T fiber optic conduit currently located in the ROW would be relocated approximately 15 feet to the north of its current location re-routing the fiber optic cable a distance of approximately 218 lineal feet, and these changes have been discussed and approved by AT&T.

Infrastructure Improvements

The project sponsor has preliminarily coordinated with SFPUC's City Distribution Division and determined that the existing SFPUC auxiliary water supply system line would be abandoned in place during building construction. A high-pressure water line that is in place at the intersection of Davis and Vallejo streets would continue to provide necessary services as required by SFPUC. This existing high-pressure water line would not be modified, interfered with, or otherwise negatively affected. Therefore, abandoning the auxiliary water supply system line in the ROW would not affect the balance of SFPUC's water facility system. This approach has also been preliminarily reviewed by the Port's fire marshal. The project sponsor would pay the costs and apply for associated permits necessary for the abandonment of SFPUC water facilities.¹⁸

The project sponsor has proposed to relocate the AT&T fiber optic conduit from its current location in the ROW approximately 20 feet north into the proposed public park. The project sponsor has met with AT&T to discuss the conduit relocation plan, and AT&T has initially reviewed the project sponsor's approach to the relocation. AT&T is drafting the contractual documents for the project sponsor's proposed relocation of the fiber optic conduit. The project sponsor would pay the costs of relocating the AT&T fiber optic conduit.

A.4. CONSTRUCTION ACTIVITIES AND SCHEDULE

The proposed project would be supported on shallow foundation systems bearing upon ground-improved soil involving lightweight cellular concrete and ground-improved soil, as described by ENGEO Incorporated.¹⁹ The shallow foundation would consist of stiff reinforced structural mat, shallow continuous footings, with interconnecting grade beams, or a combination of both systems. The shallow foundation system selected would depend on the actual structural loads of the building, which would be determined through the detailed design process.

Directly below the shallow foundation, ground improvement measures would be required to improve the strength of the underlying existing artificial fill that extends to 45 feet beneath the project site. These measures would provide uniform support and would reduce liquefaction, seismic settlement, and lateral spreading risks for the site and the new building's

¹⁸ Peter Bekey, KCA Engineers, email correspondence with SFPUC, including drawing, April 20, 2016.

¹⁹ ENGEO Incorporated, *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies*, April 6, 2018.

foundations. The ground improvement measures are anticipated to consist of dry soil mixing, a technique that improves weak soils by mechanically mixing them with dry cementitious binder to create rows of overlapping soilcrete columns. The column grid array would cover the building footprint and stabilize the underlying soil mass. Dry soil mixing is a low-vibration construction method and is used in high-groundwater conditions because it creates minimal spoils for disposal.

Considering the maximum allowable average building load, the uppermost 6 feet of the building pad area would be excavated, and the foundation subgrade level would be restored using lightweight cellular concrete to reduce loads and potential settlement of the underlying Young Bay Mud.

Table 2 provides the estimated quantities of excavation material, import material, and ground improvement.

TABLE 2 ESTIMATED QUANTITIES OF FILL MATERIALS

Description	Estimated Quantity	Considerations
Export for lightweight cellular concrete excavation	11,100 cubic yards	<ul style="list-style-type: none"> Building footprint of approximately 43,400 square feet 6-foot excavation to accommodate foundation and lightweight cellular concrete Average mat load of 500 pounds per square foot or less
Import of lightweight cellular concrete	9,300 cubic yards	<ul style="list-style-type: none"> Building footprint of approximately 43,400 square feet 6-foot excavation to accommodate foundation and lightweight cellular concrete Average mat load of 500 pounds per square foot or less
Ground improvement through dry soil mixing	20,000 square feet	<ul style="list-style-type: none"> 40 percent of the overall building footprint replacement ratio

Source: ENGEO Incorporated, 2018

Note: Includes 15% contingency

Demolition of the existing surface parking lot and construction of the proposed project is anticipated to take approximately 16–22 months, beginning in 2019, with completion in 2020. The proposed project would be constructed in multiple phases. Construction phases would include preparation/demolition (1 month), excavation/foundation work (2.5 months), structure (4–7 months), exterior buildout (3–4 months), and interior buildout (7–8 months).

A.5. REQUIRED APPROVALS

The proposed project would require the approvals from the City and County of San Francisco that are listed below.

Board of Supervisors

- Approval of lease disposition and development agreement
- General Plan referral for partial *street vacation* of a public right-of way
- Approval of the streetscape improvements application
- Approval of applications for the lot merger and re-subdivision

Planning Department

- General Plan referral for partial *street vacation* of a public right-of way
- *Conditional use* authorization for the hotel use pursuant to San Francisco Planning Code section 240.3(e)
- Approval of applications for the lot merger and re-subdivision

- Approval of the streetscape improvements application
- Approval of a building permit

Historic Preservation Commission

- Approval of a Certificate of Appropriateness from the Historic Preservation Commission for new construction within the Northeast Waterfront Landmark District (a historic district under San Francisco Planning Code article 10)

San Francisco Port Commission

- Approval of applications for demolition, excavation and grading, shoring, and building permits
- Approval of a request for curb cut, color curb, and on-street parking changes, and approval of location of bicycle parking spaces within the public ROW
- Approval of lease disposition and development agreement
- Approval of application for partial street vacation of a public ROW
- Approval of the streetscape improvements application
- Urban design recommendations following the waterfront design review process (San Francisco Port Commission Design Advisory Committee)

Actions by Other City Departments (Approving Bodies Noted in Parentheses)

- Approval of a *site mitigation plan*, soil mitigation plan, and dust control plan before the start of excavation work pursuant to San Francisco Health Code article 22A; receipt of notification of compliance letter pursuant to the City's *Maier Ordinance*, Administrative Code section 22A (San Francisco Department of Public Health)
- Approval of applications for the lot merger and re-subdivision (San Francisco Public Works)
- Approval of application for partial *street vacation* of a public right-of way (San Francisco Public Works)
- Approval of the streetscape improvements application (San Francisco Public Works)
- Approval of sidewalk widening and modifications related to infrastructure within the public ROW (San Francisco Public Works)
- Approval of and use of *dewatering wells* (should such wells be used) per article 12B of the San Francisco Health Code (San Francisco Public Works)
- Approval of sidewalk widening and modifications related to infrastructure within the public ROW (San Francisco Fire Department)
- Approval of a building permit (San Francisco Department of Building Inspection)
- Approval of project compliance with the stormwater management requirements and design guidelines, a stormwater control plan, a landscape plan per the Water Efficient Irrigation Ordinance, a water budget application, and nonpotable implementation plan per the Non-potable Water Ordinance (San Francisco Public Utility Commission)

- Approval of and use of *dewatering wells* (should such wells be used during construction) per article 12B of the San Francisco Health Code (San Francisco Public Utility Commission and San Francisco Department of Public Health)
- Approval of sidewalk widening and modifications to related infrastructure within the public ROW (San Francisco Municipal Transportation Agency)
- Approval of travel lane, sidewalk, and parking closures during construction (San Francisco Municipal Transportation Agency) - Transportation Advisory Staff Committee)

Actions by Other Government Agencies

- Approval of permit for installation, operation, and testing of diesel backup generators (Bay Area Air Quality Management District)
- Issuance of State Lands Commission consistency letter by the Port (State Lands Commission)

Approval Action

The conditional use authorization is the approval action for purposes of CEQA that would establish the start of the 30-day appeal period for appeal of the final mitigated negative declaration to the Board of Supervisors pursuant to section 31.04(h) of the San Francisco Administrative Code.

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B. PROJECT SETTING

B.1. PROJECT SITE AND SURROUNDING LAND USES

The project site is located in the North Beach neighborhood with frontages at The Embarcadero, Broadway, Davis Street, and Green Street within the Northeast Waterfront Historic District, in the northeast quadrant of San Francisco. The site is approximately 0.3 mile north of San Francisco's Financial District, 0.35 mile southwest of the Port's James R. Herman Cruise Terminal, and 0.8 mile southwest of Pier 39. The site is along the western side of The Embarcadero, opposite San Francisco Bay. The site is occupied by a surface parking lot consisting of 250 surface parking spaces and two temporary wooden pay booths. Some of the existing parking spaces are used by the Port for employee parking and by the adjacent KGO-TV and KRON 4 news station for parking for its news vans.

Access to the site is available only from Davis Street and Broadway (not The Embarcadero or Green Street). The 59,750-gsf site consists of two Port assessor's parcels, Assessor's Block 0138, Lot 001, and Assessor's Block 0139, Lot 002, also commonly referred to as Seawall Lots 323 and 324. These two abutting, unused right-of-way parcels are located between The Embarcadero and Davis Street at the Vallejo Street junction.

Land uses in the surrounding area are mixed-use including retail, restaurants, commercial offices, and residential. The average height of buildings in the immediate area ranges from one to five stories and from 25 to 55 feet (except the Gateway Apartments, which are up to 65 feet tall). Surrounding occupants include the KGO-TV news station, the Gateway Apartments, the Waterfront Restaurant, and the Exploratorium. The northern portion of the site abuts a three-story office building occupied by the KGO-TV news station under lease from the Port. The Gateway Apartments, an approximately 58- to 65-foot-tall, five-story apartment building, is across Broadway south of the site. Two- to three-story office buildings are across Davis Street to the west, and a new 178-unit senior and affordable housing project is proposed on Davis Street across from the site, consisting of senior and family affordable units.²⁰

The site is a noncontributing property within the Northeast Waterfront Landmark District, which is designated as a historic district under article 10 of the San Francisco Planning Code. The site has a 40-X height and bulk district designation. The hotel use is a conditionally permitted use in the C-2 zoning district and would require approval by the San Francisco Planning Commission of a conditional use authorization pursuant to planning code section 240.3(e). The entertainment venue and public park are principally permitted uses in the C-2 zoning district.²¹ The proposed uses at the project site are principally permitted uses under the Port's Waterfront Land Use Plan.

The nearest parks or public open spaces are the Levi's Plaza and Seawall Lot approximately 0.3 mile north of the project site, Sydney G. Walton Square 0.1 mile to the south on Jackson Street, Sue Bierman Park 0.3 mile to the south along The Embarcadero, and the Filbert Steps 0.5 mile west of the project site. The public space along The Embarcadero to the east is used for recreation and entertainment uses and connects to the Ferry Building, 0.3 mile away.

B.2. SITE ACCESS AND TRANSIT

The roadway network surrounding the project site is generally an east-west and north-south grid. The project site is generally bounded by four surrounding two-way streets: The Embarcadero to the east and Davis Street to the west, Broadway to the south, and Green Street at the northern tip. Both Davis and Vallejo streets terminate at the project site. Local access is

²⁰ San Francisco Planning Department, *88 Broadway and 735 Davis Street Project Final Mitigated Negative Declaration*, Case No. 2016-007850ENV, October 25, 2017, amended February 27, 2018. http://sfmea.sfplanning.org/2016-007850ENV_FMND.pdf.

²¹ Planning Code Table 210.1.

provided by arterial and local roadways near the project site. Access to the project site by transit, foot, or bicycle is available through existing transit service (bus and light rail), sidewalks, streets, and crosswalks near the project site.

The closest Muni Metro station to the site is The Embarcadero Station approximately 0.5 mile south, which is shared with the regional rail service operated by Bay Area Rapid Transit (BART). The closest BART station entrance to the project site is the Market Street entrance at The Embarcadero Station. The project site is located within 0.25 mile of four local Muni bus lines (1 California, 10 Townsend, 12 Folsom/Pacific, and 39 Coit); two express Muni bus lines (30X Marina Express and 82X Levi Plaza Express); three Muni cable car/trolley lines (E Embarcadero, F Market & Wharves, and C California Cable Car); and two regional bus lines (Golden Gate Transit and San Mateo County Transit District). The San Francisco Ferry Terminal is located approximately 0.3 mile south of the site and a Caltrain station is located approximately 2 miles to the south.

B.3. CUMULATIVE PROJECTS

Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines section 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (Code of Federal Regulations Title 40, Section 1508.7). If the analysis determines that the potential exists for the proposed project, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project's incremental contribution to any significant cumulative impact is itself significant (i.e., cumulatively considerable). The cumulative impact analysis for each individual resource topic is discussed in each resource section.

The proposed project is located in the vicinity of a number of past, present, and reasonably foreseeable cumulative development projects. The projects listed in Table 3 and mapped in Figure 17 (p. 32) are either under construction or the subject of an environmental evaluation application currently on file with the San Francisco Planning Department and are within approximately one-quarter mile of the project site. The variety of uses proposed includes residential, commercial, retail, office, museum, and hotel, including open space accessible to the public.

TABLE 3 CUMULATIVE PROJECTS

#	Address	Planning Department Case File No.	Dwelling Units	Open Space	Retail	Office	Museum	Hotel	Childcare
(gross square feet)									
1	300 Clay Street	2015- 006980ENV				16,230			
2	940 Battery Street	2015- 001033ENV			625	11,470	28,670		
3	439 Washington Street	2015- 015553ENV			4,500			101,000 (189 rooms)	
4	447 Battery Street	447 Battery Street	9		2,470			85,510 (188 rooms)	
5	220 Battery Street	2015-009783ENV	2						
6	100 California Street	2013.1857E				9,400			
7	Downtown SF Ferry Terminal Expansion ²²	N/A							
8	88 Broadway and 735 Davis Street	2016-007850ENV	178	8,850	6,400				4,300
Totals			189	8,850	13,995	37,100	28,670	186,510	4,300

²² Water Emergency Transportation Authority (WETA) is the agency responsible for the project which includes additional improvements to the ferry terminal facilities including the gates and piers to accommodate expanded service in the future. Pier construction in the Bay is currently underway.

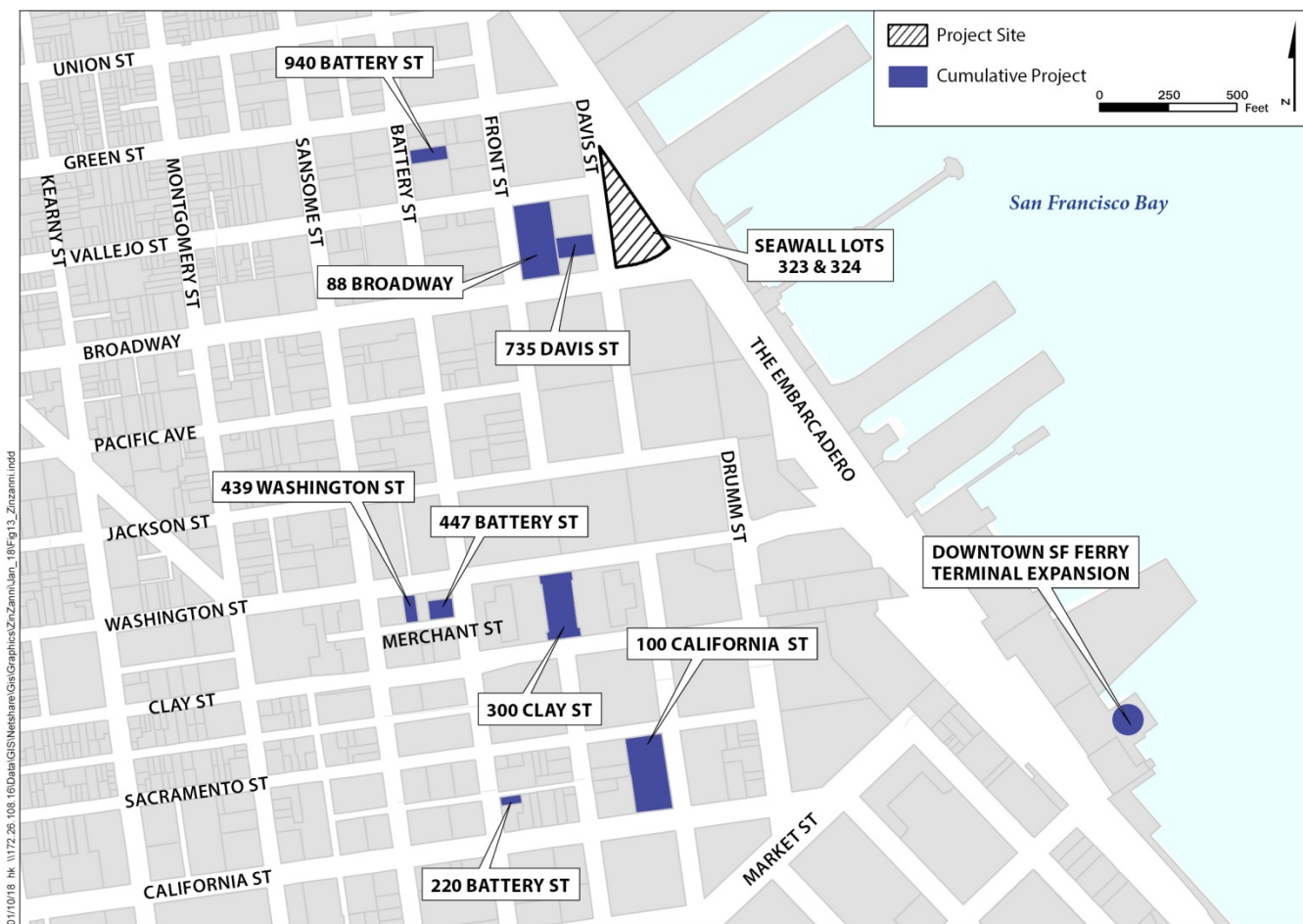


FIGURE 17 CUMULATIVE PROJECTS NEARBY

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C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Guidelines section 15125(d) requires discussion of inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans, focusing on those inconsistencies that may result in physical environmental impacts. Decision-makers will consider the consistency of the project with plans that do not directly relate to physical environmental issues when they determine whether to approve or disapprove the project.

Therefore, the analysis in this section is intended to provide decision-makers with a discussion of planning considerations that are pertinent to the proposed project. This section also provides a preliminary conclusion as to whether the proposed project would result in any inconsistencies with relevant plans and policies that relate to physical environmental impacts.

Conflicts and inconsistencies with a policy do not constitute, on their own, significant environmental impacts, unless such conflicts or inconsistencies result in direct physical environmental impacts. The physical impacts of the proposed project are discussed in Section E, below.

Plans and policies addressed in this section include:

- San Francisco Planning Code
- San Francisco General Plan
- Waterfront Land Use Plan
- Accountable Planning Initiative
- The Public Trust
- San Francisco Bicycle Plan
- San Francisco Better Streets Plan
- San Francisco Sustainability Plan
- *Climate Action Strategy for San Francisco*
- *Plan Bay Area*
- San Francisco Bay Area Basin Plan
- Clean Air Plan
- San Francisco Transit First Policy

C.1. SAN FRANCISCO PLANNING CODE AND ZONING MAPS

The San Francisco Planning Code incorporates by reference the City's zoning maps, governs permitted uses, densities, and the configuration of buildings in San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless the proposed project complies with the planning code, an exception or variance is granted pursuant to the planning code's provisions, or legislative amendments to the planning code are included and adopted as part of the

proposed project. Overall, the proposed project would be generally consistent with the planning code as listed below, and the physical environmental impacts of the proposed project are analyzed in this initial study:

- **Zoning District.** The project site is zoned Community Business (C-2). Under section 210.1 of the San Francisco Planning Code, C-2 zones are intended to provide convenience goods and services to residential areas. In addition, some C-2 districts provide comparison shopping goods and services on a general or specialized basis to a citywide or regional market area. The character and intensity of the commercial development in C-2 zones are intended to be consistent with the character of other uses in the adjacent areas. Per Planning Code section 210.1, the proposed project would require a conditional use permit for the hotel use, but the entertainment venue and public park are principally permitted uses in the C-2 zoning district.
- **Height and Bulk Districts.** The project site is located in a 40-X height and bulk district, which has a 40-foot maximum height and no bulk limit. Mechanical equipment and appurtenances and elevator and stair penthouses are permitted to extend an additional 15 feet beyond the height limit, pursuant to Planning Code section 260(b). The proposed four-story building would be 40 feet tall, and with rooftop appurtenances, would extend to a maximum of 55 feet tall. Accordingly, the proposed project would meet the City's height restrictions for the project site.
- **Open Space.** According to Planning Code section 210.1, no construction of open space is required for the proposed project. The proposed project, however, would construct an approximately 14,000-gsf public park in the northern portion of the site. The public park would consist of both landscaping and hardscape and would include pathways for pedestrian access from The Embarcadero through to Vallejo and Davis streets.
- **Streetscape Improvements.** Public Works Code section 806(d)(2) requires that one 24-inch box tree be planted for every 20 feet of property frontage along each street, with any remaining fraction of 10 feet or more of frontage requiring an additional tree. Additionally, the proposed project must make pedestrian and streetscape improvements to the public ROW as set forth in the Better Streets Plan (Planning Code section 138.1) for projects involving more than 250 feet of linear street frontage and an entire block face. There are 28 existing street trees adjacent to the project site. The proposed project would add 28 trees along the frontages on The Embarcadero, Davis Street, and Broadway. Accordingly, the proposed project would meet the City's streetscape improvement requirements.

Additionally, the City's Urban Forestry Ordinance (Public Works Code section 801 et seq.) requires the project sponsor to obtain a permit from SFPW to remove any *protected trees*, which include *landmark trees*, *significant trees*, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco. The proposed project would not remove existing street trees. Additionally, the project site does not include any landmark or significant onsite or street trees under existing conditions, and therefore, would not violate the City's Urban Forestry Ordinance (section 801 et seq. of the Public Works Code).

- **Vehicle Parking and Loading.** Pursuant to Planning Code sections 151 and 161, vehicle parking is not required for the commercial or hotel uses onsite. The proposed project does not include vehicle parking. Therefore, the proposed project would comply with the parking requirements. As shown in Figure 4, a 142½-foot commercial loading zone would be provided on Davis Street for freight and deliveries and an 80-foot passenger loading zone would be provided on Broadway for the hotel facility. Per Planning Code section 152, the proposed project is required to provide at least one off-street freight loading space. The proposed project would provide two off-street freight loading spaces in a loading dock along Davis Street, and would be in compliance with the requirements of Planning Code section 152.
- **Bicycle Parking.** Planning Code sections 155.1 and 155.2 require that the project provide class I and class II bicycle parking for commercial (hotel, theater, and retail) uses. The project proposes bicycle parking on the ground floor

and in three locations along the project frontage (see Figure 4). The proposed building would include 20 class I and 43 class II bicycle parking spaces (28 new class II spaces are proposed). The class I bicycle parking spaces would be provided for use by hotel employees and commercial tenant employees only, and would be located on the ground floor along Davis Street and accessed via a locked door at that location. The 43 class II bicycle parking spaces would be located on sidewalks in front of the project site (14 new spaces along Davis Street, 10 new spaces along The Embarcadero, and four new spaces in the park, in addition to 15 existing spaces located on The Embarcadero). The location of bicycle parking spaces within the public ROW would be subject to review and approval by the Port.

- **Article 10 Historic District/Special Use District.** The project site is a noncontributing property within the Northeast Waterfront Landmark District, a designated historic district per Planning Code article 10. As described in Appendix D of article 10, this historic district is maintained as an architecturally historic and aesthetically historic significant area. Appendix D establishes the location and boundaries of the historic district, outlines the character-defining features of the district and criteria for reviewing alterations and new construction within the district. Because of the location of the project site, the proposed project is subject to the review and approval of a Certificate of Appropriateness application by the Historic Preservation Commission for compatibility with the Northeast Waterfront Landmark District, pursuant to article 10 and Appendix D.

The project is also within Waterfront Special Use District No. 3, and is subject to the requirements outlined in Planning Code section 240.3. Section 240 sets forth regulations to preserve the unique characteristics of waterfront *special use districts*, requiring developments to undergo a waterfront design review process. Section 240.3 discusses the specific design, land use, scale, and other factors for development within Waterfront Special Use District No. 3.

The proposed project would generally be consistent with provisions of the San Francisco Planning Code. As stated above, potential inconsistencies of the proposed project with applicable plans, policies, and regulations do not, by themselves, indicate a significant environmental effect. To the extent that physical environmental impacts may result from such conflicts, these impacts are discussed in Section E, Evaluation of Environmental Effects. Any inconsistencies between the proposed project plans, policies, and planning code land use controls that do not relate to physical environmental issues or result in physical environmental effects will be considered by City decision-makers as part of their determination on whether to approve, modify, or disapprove the proposed project.

C.2. LOCAL PLANS AND POLICIES

San Francisco General Plan

In addition to the San Francisco Planning Code, the proposed project is subject to the San Francisco General Plan. The general plan provides general policies and objectives to guide land use decisions. The general plan provides the City's vision for the future of San Francisco. The general plan is divided into 10 elements that apply citywide policies and objectives into the following topical areas: Air Quality, Arts, Commerce and Industry, Community Facilities, Community Safety, Environmental Protection, Housing, Recreation and Open Space, Transportation, and Urban Design. In addition, the proposed project is governed by the Northeastern Waterfront Area Plan, a specific area plan of the City's General Plan, which is discussed more below. Development in San Francisco is subject to the general plan, which provides objectives and policies to guide land use decisions, and contains some policies that relate to physical environmental issues, some of which may conflict with each other. Achieving complete consistency with the general plan is not always possible for a proposed project. CEQA does not require an analysis of a proposed project in relation to all general plan policies; it asks whether a proposed project would conflict with any plans or policies adopted to protect the environment. The General Plan's Northeastern Waterfront Area Plan recognizes that the proposed project is also subject to the Port of San Francisco's Waterfront Land Use Plan and its Design and Access Element, as well as the requirements of the Burton Act governing Port properties.

Achieving complete consistency with the general plan is not always possible for a proposed project. CEQA does not require an analysis of a proposed project in relation to all general plan policies; it asks whether a proposed project would conflict with any plans or policies adopted to protect the environment. Elements of the San Francisco General Plan that are particularly applicable to planning considerations associated with the proposed project are the Urban Design, Arts, Recreation and Open Space, and Transportation elements, in addition to the Northeastern Waterfront Area Plan.

The Urban Design Element is concerned both with development and with preservation, recognizing that enhancement and conservation of the positive attributes of the city are necessary to meet human needs. Of these positive attributes, the city's characteristic city pattern is integral to maintaining "an image, a sense of purpose, and a means of orientation." Views, topography, streets, building form and major landscaping are of particular importance to the city's pattern. The Urban Design Element indicates that preservation of landmark buildings and districts contributes to the sense of permanence and continuity in the urban fabric of the city. The proposed project is within a designated landmark district under article 10 of the San Francisco Planning Code. As such, the proposed project is subject to the approval of a Certificate of Appropriateness from the Historic Preservation Commission for new construction in the Northeast Waterfront Landmark District, which would review the project for compatibility with the surrounding development.

In addition, the following Urban Design Element policies under Objective 2, Conservation of Resources, include policies that provide for a sense of nature, continuity with the past, and freedom from overcrowding. Specifically, policies 2.8, 2.9 and 2.10 are relevant to the project as they relate to use of street areas. Policy 2.9 states that there is a rebuttable presumption that street space should be retained as valuable public open space in the tight-knit fabric of the city.

The proposed project meets Policy 2.8: Maintain a strong presumption against the giving up of street areas for private ownership or use, or for construction of public buildings. No active or planned street areas are being given up for private ownership or use, or for the construction of public buildings. The proposed project includes the vacation of a ROW parcel that is between Seawall Lots 323 and 324 and which currently crosses through the existing parking plot from Davis Street to The Embarcadero. The ROW parcel is an unmapped, undeveloped, paper street, under the Port's jurisdiction which is not currently used as a street. The Port would remain the owner of the ROW with implementation of the proposed project. The proposed project would build on top of the existing ROW, but the development would be offset by the construction of a new public park that would allow public access through the site and would also provide a dedicated easement for San Francisco Fire Department access through the site. The public park would include passive recreational areas, pathways and benches which would enhance the pedestrian experience, while maintaining a new easement for access by emergency vehicles. A curb cut on Davis Street would allow circulation through to The Embarcadero on a paved pathway, secured by movable bollards. The proposed project meets Policy 2.9: Review proposals for the giving up of street areas in terms of all the public values those streets afford. The proposed project would repurpose the ROW parcel that is currently occupied by a surface parking lot and is not used as a street area. The proposed project would develop the site to include a new hotel, entertainment venue, restaurant and a public park, uses which are consistent with the General Plan, Waterfront Land Use Plan and the Burton Act. Currently the ROW parcel is an unmapped, undeveloped, paper street, not used or planned for use as a street. The proposed project would not cause any detriment to vehicular or pedestrian circulation but would allow for designated pedestrian circulation through the site along with emergency vehicular access with two curb cuts connecting from Davis Street to The Embarcadero and the new public park that would allow emergency vehicles to pass through the site. The proposed project would not interfere with utility lines or services. The proposed project does not contain any natural features nor does it cause any detriment to the scale and character of the surrounding area because it is being designed to conform to the existing character, height and bulk limits for the area and in accordance with the City's Planning Code Article 10, the Northeastern Waterfront Area Plan and the Waterfront Land Use Plan and Access and Design Element. The proposed project would not

obstruct, diminish or eliminate a significant view.²³ The public walkways and open space around and through the project site would provide new view corridors that would link Vallejo Street to the Embarcadero and would provide new public open space amenities in the neighborhood. Policy 2.9 outlines 12 conditions that would discourage approval of a proposed street vacation and none of these conditions are present under the proposed project. The proposed project would facilitate a public serving, Public Trust consistent project (hotel and entertainment venue) and would create a public space that would allow public access use of the site including a new privately owned public open space (POPO) in the form of a new public park.

The proposed project meets Policy 2.10: Permit release of street areas, where such release is warranted, only in the least extensive and least permanent manner appropriate to each case. The proposed project would be constructed pursuant to a Port ground lease, and the Port would always retain the interest in the site which permits the Port to recapture the proposed project site's occupied ROW parcel should that be warranted following lease termination, thereby ensuring that the release is not permanent. The proposed project would release the unused ROW parcel in a manner that the public values and purpose of streets as expressed in the Urban Design Element and elsewhere in the General Plan would be consistent with the preferred uses for the project site as set forth in the Port's Waterfront Land Use Plan. The effects of the proposed street vacation or use of the ROW parcel is minimized because the public access through the site by people and emergency vehicles is still maintained. The vacation of the ROW would enhance the pedestrian experience and public life and would create a new POPO and would involve Trust consistent uses (hotel and entertainment venue).

The Arts Element is intended to "validate and increase the role of the arts as a major economic force in the region." The importance of the arts to the cultural identity and economic prosperity of San Francisco is underscored in a number of policies seeking to support local artists and artwork. Objective I-2 seeks to increase the contribution of the arts to the economy of San Francisco, including the continued support and increased promotion of arts and arts activities throughout the city for the benefit of visitors, tourists, and residents (policy I-2.2). Policy VI-1.9 supports the creation of opportunities for private developers to include arts spaces in private developments citywide. The proposed project would comply with the Arts Element by providing permanent arts and entertainment space at the proposed entertainment venue, which would host the 100-year-old spiegel tent. The proposed building would provide support space for performers and producers. The design of the proposed building would allow passersby along The Embarcadero to see "behind the scenes" during performances. The proposed project would also include a public park and outdoor stage that could potentially host community performances and public gatherings such as neighborhood exercise classes, a children's dance or singing performance, or lunchtime music or lecture session.

The Recreation and Open Space Element is intended to improve the quality of life in San Francisco communities by providing places for "recreation, activity and engagement, for peace and enjoyment, and for freedom and relief from the built world." Among its objectives is increasing recreation and open space to meet the long-term needs of the city and bay region. Objective 2, policy 2.12 of the Recreation and Open Space Element encourages the expansion of the *privately owned public open spaces* requirement to new mixed-use development areas, ensuring that spaces are truly accessible, functional, and activated. Objective 3 promotes improved access and connectivity to open space within the city. The proposed project would comply with the Recreation and Open Space Element by providing the POPO as an additional public recreational area in the vicinity of other popular recreational facilities, such as The Embarcadero Promenade.

²³ The Design and Access Element provides that Vallejo is not designated as: (1) a street that has "planned public access and open space" (Public Access and Open Space Map, Exhibit B); (2) a street with Major Views of the Bay and Across Water or a street that involves "hilltop views of the waterfront" (Page 44); (3) a street that is designated for "new views of the Bay and across water" (Page 45) or an existing or proposed street that connects to the Bay, historic structures or architecture" (Page 46); (4) a street that has a view to the Bay or a view to a historic building (Page 80) or a street where it is deemed necessary to preserve or create views of historic buildings or architecture (Page 83); or (5) a street that needs to maintain Bay views (Page 87) or a street with a "street corridor with an unobstructed view of the Bay", a street with a "proposed view to the Bay", a street with a "view to historic structures", "a street with views of historic structures" or "a street with a proposed view to architecture with a waterfront identity" (Pages 126-127, Appendix A).

The Transportation Element includes discussions about pedestrian issues and provides direction and policies to encourage safe, convenient and pleasant pedestrian movement as part of the transportation system. Objective 24 is focused on the design of every street for safe and convenient walking with corresponding policies. Objective 25, Improve the ambience of the pedestrian environment, contains a relevant policy to the proposed project, Policy 25.5: Where consistent with transportation needs, transform streets and alleys into neighborhood-serving open spaces or “living streets” by adding pocket parks in sidewalks or medians, especially in neighborhoods deficient in open space. This policy encourages excess paved areas to be converted to pocket parks on widened sidewalks, curb extensions or new medians in appropriate circumstances. This policy defines pocket parks as small, active public spaces created in the existing public right-of-way. In addition to landscaping, pocket parks may include features such as seating areas, play areas, community garden space, or other elements to encourage active use of the public open space. The proposed public park for the proposed project replaces the parking lot currently located on the ROW parcel with similar park features as suggested in Policy 25.5. The compatibility of the proposed project with General Plan goals, policies, and objectives that do not relate to physical environmental issues would be considered by decision-makers as part of their decision whether to approve or disapprove the proposed project.

The General Plan also requires compliance with the Port of San Francisco’s Waterfront Land Use Plan and its Waterfront Design and Access Plan, and the State of California’s Public Trust doctrine. The proposed project also satisfies all of the key provisions of those governing documents. The Waterfront Land Use Plan provides that Seawall Lots 323 and 324 are principally permitted for hotel, entertainment and open space uses. The proposed project proposes to construct a new hotel, entertainment venue and POPO, consistent with the Waterfront Land Use Plan.

The Design and Access Plan provides that Seawall Lots 323 and 324 are prime sites for infill development and that new uses should take advantage of the major public access amenities of Pier 7 and provide a focal point for the area where Broadway meets The Embarcadero. The proposed project would use the Seawall Lots in a manner that meets those primary policies for the project site. The Design and Access Plan also provides that development on Seawall Lots should:

- Respect City form by stepping new buildings down toward The Embarcadero
- Use strong and bold building forms and detailing on new buildings to reinforce the large scale of The Embarcadero
- New buildings should respect the scale and architectural character of adjacent neighborhoods
- Maintain City street corridor views shown on the City Street View map in chapter 3.

The proposed project meets all of the aforementioned policies in that it: (1) would be constructed to comply with the areas 40-foot height limit, (2) the building has continuous massing along The Embarcadero that reinforces the street wall and large scale of The Embarcadero, (3) uses strong and bold building forms and detailing to reinforce the large scale of The Embarcadero by construction to the property line, (4) uses materials that are consistent with the area, and incorporates many other design details that are consistent with the district (5) respects the scale and architectural character of the adjacent Northeast Waterfront Historic District insofar as it has been designed to comply with Article 10, Appendix D Guidelines for building form, massing fenestration and materiality in the historic district and conforming with Secretary of the Interior Standards-Standard 9, Additions to Historic Districts (6) maintains the designated street corridor views as described in the Design and Access Plan (Chapter 3, Map B, Open Spaces and Access), insofar as the project does not have any impact on Broadway or Davis Street, and Vallejo Street is not mentioned as an existing open space and public access area, or a planned open space and public access area or a view corridor

The General Plan also requires compliance with the Burton Act and the California Public Trust doctrine. The proposed project fully complies with the Burton Act Public Trust doctrine insofar as it involves three trust consistent, public assembly and Port commercial uses—hotel, entertainment venue and public park—and supports the other requirements of the Burton Act such as promoting access to and along the waterfront and will pay fair market rent and contribute to the general fund for public trust uses.

*Northeastern Waterfront Area Plan*²⁴

The Northeast Waterfront Area Plan, part of the San Francisco General Plan, includes goals, policies, and objectives to maintain, expand, and allow new shipping, commercial, and recreational maritime operations that provide improved and expanded commercial and recreational maritime facilities, open spaces, and public access along the waterfront. This *area plan*, last amended by the San Francisco Planning Commission in 2003, includes the area along San Francisco Bay from Fisherman's Wharf to China Basin. The area plan includes land under Port jurisdiction and the areas of the city adjacent to the Port area. Although the area's role in San Francisco's maritime shipping industry has declined over time, the Port remains responsible for ensuring the continuation of maritime commerce, navigation, and fisheries within the Northeastern Waterfront. The Northeastern Waterfront Area Plan envisions the addition of hotel, restaurant, and retail uses in this area to promote increased access and enjoyment of the waterfront.

The project site is within the area plan's Base of Telegraph Hill Subarea, which contains a mix of maritime, residential, and commercial uses. A variety of land uses are designated appropriate on inland sites, including hotel, residential, office, and other commercial activities. The open space policy for this subarea also encourages the provision of landscaping and publicly accessible open space in the development. The area plan indicates that new development on these parcels shall be designed to "preserve and enhance the rich historic character of the subarea, and, as appropriate, highlight access points to the nearby North Beach, Chinatown and Fisherman's Wharf districts."

The following areawide objectives and policies of the Northeastern Waterfront Area Plan relate to the proposed project:

- **Objective 1:** To develop and maintain activities that will contribute significantly to the City's economic vitality and provide additional activities which strengthen the predominant uses in each subarea of the northeastern waterfront, while limiting their concentration to preserve the environmental quality of the area.
- **Objective 2:** To diversify uses in the northeastern waterfront, to expand the period of use of each subarea and to promote maximum public use of the waterfront while enhancing its environmental quality.
- **Objective 7:** To strengthen and expand the recreation character of the northeastern waterfront and to develop a system of public open spaces and recreation facilities that recognizes its recreational potential, provides unity and identity to the urban area, and establishes an overall waterfront character of openness of views, water and sky and public accessibility to the water's edge.
- **Policy 8.2:** Limit additional parking facilities in the Northeastern Waterfront and minimize the impact of this parking. Discourage long-term parking for work trips which could be accommodated by transit. Restrict additional parking to: (a) Short-term (less than four hour) parking facilities to meet needs of additional business, retail, restaurant, marina, and entertainment activities; (b) Long-term parking facilities for maritime activities, hotel and residential uses. To the extent possible, locate parking away from areas of intense pedestrian activity. Encourage shared parking at adjacent or nearby facilities.
- **Policy 8.5:** Base the determination of the amount of parking allowed for permitted uses on the desirability of reducing automobiles along the waterfront and, to the maximum extent feasible, consider the use of existing public transit and inland parking, as well as public transit and inland parking which could reasonably be provided in the future.

²⁴ San Francisco Planning Department, *Northeastern Waterfront Area Plan*, 1998 and Amendments by Resolution 16626 on July 31, 2003, http://www.sf-planning.org/ftp/General_Plan/NE_Waterfront.htm.

- **Policy 8.6:** Remove or relocate inland those existing parking facilities on or near the water's edge or within areas of intense pedestrian activity.
- **Policy 10.5:** Permit nonmaritime development bayward of the sea wall only if the following qualifications are met:
 - a. Maximum feasible public access is provided to the water's edge.
 - b. Important Bay and waterfront views along The Embarcadero and level inland streets are preserved and improved. Minor encroachment into the view corridors from level inland streets may be permitted: (1) Where the encroaching element has a distinct maritime character and adds variety to the views along the waterfront; (2) Where minor structures (such as kiosks) are desirable to provide public amenities contributing to a continuity of interest and activity along the waterfront; (3) Where essential maritime facilities cannot reasonably be located and designed to avoid view blockage; and (4) Where the public enjoyment of the Bay will be enhanced by providing a place of public assembly and recreation which allows unique vistas and overviews that include portions that are publicly accessible during daytime and evenings consistent with ensuring public safety,
- **Policy 10.6:** Retain older buildings of architectural merit or historical significance to preserve the architectural and historical character of the waterfront and ensure the compatibility of new development.

The following policies and objective of the Northeastern Waterfront Area Plan specific to the Base of Telegraph Hill Subarea relate to the proposed project:

- **Policy 18.3:** Encourage moderate development of uses such as shops, restaurants, entertainment and hotels which activate the waterfront during evenings and weekends, but to a lesser overall intensity and concentration than present in the adjacent downtown and Fisherman's Wharf areas.
- **Policy 18.4:** Design new development on Seawall Lots 323 and 324 as an orientation point for the waterfront which also highlights the intersection of Broadway and The Embarcadero.
- **Policy 19.3:** Design transportation access to new developments on seawall lots to minimize congestion on Bay Street, Broadway, and The Embarcadero.
- **Objective 20:** To develop the area in such a way as to preserve and enhance the physical form of the waterfront and Telegraph Hill, and to preserve views from the hill.

The proposed project would convert an existing surface parking lot along The Embarcadero to a hotel, entertainment venue, and public park. The addition of the proposed project to the site would better define the intersection of The Embarcadero and Broadway for all roadway users, marking the importance of the intersection as a gateway point. Rather than creating new parking facilities in an area well served by existing transit, the proposed project would enhance the pedestrian experience on and around the site, promoting recreation along The Embarcadero. Although the proposed project would add new entertainment uses to the site, the intensity of use would be consistent with immediately surrounding uses along the waterfront, which generally are less intense in use than destinations located downtown or in Fisherman's Wharf. The Historic Preservation Commission and Architectural Review Committee must review the project design to ensure consistency with the historic district in which the project is located. The proposed project would not conflict with any goals, objectives, or policies of the Northeastern Waterfront Area Plan. The proposed project is compatible with the heights of the surrounding buildings and would provide appropriate streetscape for pedestrians, accommodate pedestrians and bicyclists, create open space connections, and make sure that the new development would fit into the context of historic properties in the area.

The project site is within the boundary of the *Northeast Embarcadero Study: An Urban Design Analysis for the Northeast Embarcadero Area* (Northeast Embarcadero Study), prepared by the San Francisco Planning Department. This study was conducted to assess empty surface parking lots, including the project site, along the western side of The Embarcadero for

future infill development. The study was adopted on July 8, 2010, and its guidelines were incorporated into the Northeast Waterfront Area Plan. The objectives of the Northeast Embarcadero Study are to create site guidelines that are beneficial to the pedestrian realm, establish east-west connections between the city and the Bay, establish an appropriate streetscape for pedestrians, create open space connections, and make sure that new development fits into context of historic properties. The proposed project is compatible with the heights of the surrounding buildings and provides accessible open space in the form of a new public park that would allow for passage of pedestrians from Davis Street through to The Embarcadero.

Waterfront Land Use Plan

Land use and development on properties within Port jurisdiction, including the project site, are guided by the Waterfront Land Use Plan.²⁵ The lands within the Port's jurisdiction are held in public trust and managed by the Port. The Port, as trustee of these public lands, is required to promote maritime commerce, navigation, and fisheries, and to protect natural resources and develop recreational facilities for public use. The Waterfront Land Use Plan is intended to designate lands to meet these objectives and to serve the intensified demand for residential and commercial development on appropriate inland parcels. Providing improved access to the waterfront is among the plan's primary objectives.

The Waterfront Land Use Plan designates the project site as a Mixed Use Opportunity Area anticipated to include a new open space component. The plan notes that the project site (encompassing Seawall Lots 323 and 324) is currently underused and recommends that it be developed with uses that activate the waterfront and are integrated with adjacent uses. Suggested uses include support space and ancillary parking for pier activities or mixed-use hotel, office, or residential developments with ground-floor retail uses. The plan indicates that these lots should provide a smooth transition from inland neighborhood uses to shoreline improvements, making the area inviting to local residents. The plan also notes that the project site is within the Northeast Waterfront Historic District and that the design of new development must respect and enhance the historic and architectural character of adjacent development.

In 2015, the Port completed the *Waterfront Land Use Plan 1997–2014 Review*.²⁶ The review documents land use changes at the Port over an 18-year period and identifies recommendations for a targeted update of the Waterfront Land Use Plan, which is currently underway. The review identified goals for the project area similar to those identified in the 2009 Waterfront Land Use Plan, including the development of a boutique hotel at the intersection of Broadway and Embarcadero (on Seawall Lot 324). The current review of the Waterfront Land Use Plan continues to make the same finding. Such a development would need to be designed to be compatible with existing land uses and to define the intersection's role as an area gateway. Seawall Lot 323 is identified as an opportunity to reconnect adjacent neighborhoods with the waterfront and improve the public realm.

The Accountable Planning Initiative

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added section 101.1 to the planning code and established the following priority policies, set forth in section 101.1(b):

- (1) That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in, and ownership of, such businesses be enhanced
- (2) That existing housing and neighborhood character be conserved and protected to preserve the cultural and economic diversity of our neighborhoods

²⁵ Port of San Francisco, *Waterfront Land Use Plan*, June 2004; Revised October 2009, <http://sfport.com/waterfront-land-use-plan-0->, accessed May 22, 2016.

²⁶ Port of San Francisco, *Waterfront Land Use Plan 1997–2014 Review*, 2015, http://sfport.com/sites/default/files/FileCenter/Documents/10303-WLUP_Review_Chapter1_July2015_reduced%20size.pdf, accessed May 22, 2016.

- (3) That the City's supply of affordable housing be preserved and enhanced
- (4) That commuter traffic not impede Muni transit service or overburden our streets or neighborhood parking
- (5) That a diverse economic base be maintained by protecting the City's industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced
- (6) That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake
- (7) That landmarks and historic buildings be preserved
- (8) That our parks and open space and their access to sunlight and vistas be protected from development

Policies 1, 2, and 5 are addressed in the initial study checklist in Section E.1, Land Use and Planning. Policy 3 is addressed in Section E.2, Population and Housing. Policy 4 is addressed in Section E.4, Transportation and Circulation. Policy 6 is addressed in Section E.13, Geology and Soils. Policy 7 is addressed in Section E.3, Cultural Resources. Policy 8 is addressed in Section E.8, Wind and Shadow.

The proposed project would not conflict with any of the eight priority policies of section 101.1(b). Because the project site is located within a designated landmark district under article 10 of the San Francisco Planning Code, the Historic Preservation Commission will review and issue a decision on a certificate of appropriateness provided for the project. The San Francisco Planning Commission and Board of Supervisors will review the proposed project for consistency with the priority policies during the public hearing on the proposed project before acting on the conditional approval for the hotel use. The case report and approval motions for the proposed project that are presented to the planning commission will contain the planning department's comprehensive project analysis and findings regarding the proposed project's consistency with the priority policies, plans, policies, and planning code provisions that do not relate to physical environmental issues. The planning commission and board of supervisors will also consider the information in this initial study when they determine whether to approve, modify, or disapprove the proposed project.

Other Local Plans and Policies

In addition to the San Francisco General Plan, the Northeast Waterfront Area Plan, the Waterfront Land Use Plan, the Northeast Embarcadero Study, the planning code and zoning maps, and the Accountable Planning Initiative, other local plans and policies that are relevant to the proposed project are discussed below.

- **San Francisco Transit First Policy** is a set of principles that emphasize the City's commitment that the use of public ROWs by pedestrians, bicyclists, and public transit be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the City's Transit First Policy principles in conducting the City's affairs.
- **San Francisco Bicycle Plan** is a citywide bicycle transportation plan that identifies short-term, long-term, and other minor improvements to San Francisco's bicycle route network. The overall goal of the San Francisco Bicycle Plan is to make bicycling an integral part of daily life in San Francisco.
- **San Francisco Better Streets Plan** classifies the City's public streets and ROW, and creates a unified set of standards, guidelines, and implementation strategies that guide how the City designs, builds, and maintains its public streets and ROW to enhance the livability of the City's streets.

- **San Francisco Sustainability Plan** is a plan for San Francisco’s long-term environmental sustainability. The goal of the San Francisco Sustainability Plan is to enable the City and its people to meet their current needs without sacrificing the ability of future generations to meet their own needs. Among the specific environmental issues included in this plan are air quality, climate change, energy, ozone depletion, and transportation.
- **Climate Action Strategy for San Francisco** is a local action plan that: examines the causes of global climate change and the human activities that contribute to global warming; provides projections of climate change impacts on California and San Francisco based on recent scientific reports; presents estimates of San Francisco’s baseline greenhouse gas (GHG) emissions inventory and reduction targets; and describes recommended actions for reducing the city’s GHG emissions.

C.3. REGIONAL PLANS AND POLICIES

In addition to local plans and policies, the environmental, land use, and transportation plans and policies prepared by several regional planning agencies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policies are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project are discussed below.

Plan Bay Area

This plan is the principal regional planning document that guides planning in the nine-county Bay Area. It includes the region’s first sustainable communities strategy, developed in accordance with Senate Bill (SB) 375 and jointly adopted by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission, first on July 18, 2013, then with the update, *Plan Bay Area 2040*, adopted on July 26, 2017. *Plan Bay Area 2040* is a long-range land use and transportation plan that covers the period from 2010 to 2040. The plan is scheduled to be updated every 4 years.

Plan Bay Area 2040 calls for concentrating housing and job growth around transit corridors, particularly in areas identified by local jurisdictions as priority development areas. In addition, the plan specifies strategies and investments for maintaining, managing, and improving the region’s multimodal transportation network and proposes transportation projects and programs to be implemented with reasonably anticipated revenue. The project site is located in the Port of San Francisco Priority Development Area.²⁷

Plan Bay Area 2040 is a limited and focused update to the 2013 *Plan Bay Area*, with updated planning assumptions that incorporate key economic, demographic, and financial trends from the last several years. *Plan Bay Area 2040* is an advisory policy document used to assist in the development of local and regional plans and policy documents, and the Metropolitan Transportation Commission’s 2040 *Regional Transportation Plan*, which is a policy document that outlines transportation projects for highway, transit, rail, and related uses through 2040 for the nine Bay Area counties.

San Francisco Bay Area Basin Plan

Water quality control plans (also known as basin plans) provide the basis for protecting water quality in California. Basin plans are mandated by both the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act. The goal of the *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin* is to provide a definitive program of actions designed to preserve and enhance water quality and to protect beneficial uses of water in San Francisco Bay. The stormwater discharge, wastewater management, drainage plan, and water quality control systems for the proposed project would comply

²⁷ Association of Bay Area Governments, *Plan Bay Area*, Priority Development Area Showcase, <http://gis.abag.ca.gov/website/PDAShowcase/>, accessed March 1, 2017.

with, and generally be consistent with, the basin plan's water quality regulations. The physical impacts of implementing these systems, and the permitting requirements of the San Francisco Bay Regional Water Quality Control Board (RWQCB), are discussed in Section E.14, Hydrology and Water Quality, of this initial study.

Bay Area 2017 Clean Air Plan

The Bay Area Air Quality Management District's (BAAQMD's) *Bay Area 2017 Clean Air Plan* requires implementation of "all feasible measures" to reduce ozone and to provide a control strategy to reduce emissions of ozone, particulate matter, toxic air contaminants, and GHGs. The clean air plan describes the status of local air quality and identifies emission control measures to be implemented. The proposed project would generally be consistent with the clean air plan. Physical impacts of the proposed project related to air quality and compliance with these plans are addressed in Section E.6, Air Quality, and Section E.7, Greenhouse Gas Emissions.

The Public Trust

Some of the properties under Port jurisdiction are subject to use limitations under the public trust and the Burton Act. The public trust imposes certain use restrictions on historical tidal and submerged lands along the waterfront, to protect the interests of the state in commerce, navigation, and fisheries, as well as other public benefits recognized to further the public trust purposes, such as recreation and environmental preservation.²⁸ The Port has been delegated authority by the State Lands Commission to negotiate terms of use for lands under public trust. The Port would provide a public trust consistency assurance letter to the State Lands Commission to confirm that the proposed project is consistent with public trust objectives.

Consistency with these plans are discussed in detail in sections E.2, Population and Housing, E.6, Air Quality, E.7, Greenhouse Gas Emissions, and E.14, Hydrology and Water Quality.

²⁸ Public Trust Policy, adopted by the State Lands Commission on August 29, 2001.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below, for which mitigation measure would be required to reduce potentially significant impacts to less-than-significant levels. The following pages present a more detailed checklist and discussion of each environmental factor.

<input type="checkbox"/> Land Use/ Planning	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Population and Housing	<input type="checkbox"/> Wind and Shadow	<input type="checkbox"/> Hydrology/Water Quality
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Recreation	<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Transportation and Circulation	<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Mineral/Energy Resources
<input type="checkbox"/> Noise	<input type="checkbox"/> Public Services	<input type="checkbox"/> Agriculture and Forestry Resources
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Mandatory Findings of Significance

D.1. APPROACH TO ENVIRONMENTAL REVIEW

This initial study examines the proposed project to identify potential effects on the environment. For each checklist item, the evaluation has considered the impacts of the proposed project both individually and cumulatively, with the exception of GHG emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked “Less than Significant with Mitigation Incorporated,” “Less than Significant Impact,” “No Impact” or “Not Applicable” indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked “Less than Significant with Mitigation Incorporated” and “Less than Significant Impact” and for most items checked with “No Impact” or “Not Applicable.” For all of the items checked “No Impact” or “Not Applicable” without discussion, the conclusions regarding potential significant adverse environmental effects are based on field observation, staff experience, and expertise on similar projects, and/or standard reference material available at the San Francisco Planning Department, such as the City’s *Transportation Impact Analysis Guidelines for Environmental Review*, or the California Natural Diversity Database and maps published by the California Department of Fish and Wildlife.

Public Resources Code Section 21099

On September 27, 2013, Governor Brown signed SB 743, which became effective on January 1, 2014.²⁹ Among other provisions, SB 743 amended CEQA by adding California Public Resources Code section 21099 regarding the analysis of aesthetics and parking impacts for certain urban infill projects in *transit priority areas*.³⁰

Aesthetics and Parking Analysis

CEQA Guidelines section 21099(d), effective January 1, 2014, provides that “aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.” Accordingly, aesthetics and parking are no longer to be considered in determining whether a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

²⁹ SB 743 is available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743, accessed May 23, 2016.

³⁰ A “transit priority area” is defined as an area within one-half mile of an existing or planned major transit stop. As defined in CCR title 14, section 15191 and in PRC section 21064.3, a major transit stop is a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

1. The project is in a transit priority area.
2. The project is on an *infill site*.³¹
3. The project is residential, mixed-use residential, or an *employment center*.³²

The proposed project meets each of the above three criteria because it is (1) located within 0.5 mile of several rail and bus transit routes; (2) located on an infill site that is used as a surface parking lot; and (3) an employment center based on the C-2 zoning with a *floor area ratio*³³ of no less than 0.75 and located within a transit priority area.³⁴ Thus, this initial study does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

CEQA Guidelines section 21099(d)(2)(A) states that a lead agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers. Furthermore, section 21099(d)(2)(B) states that aesthetics impacts do not include impacts on historical or cultural resources. As such, there will be no change in the San Francisco Planning Department's methodology related to design and historic review.

The planning department recognizes that the public and decision-makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. Therefore, some information that otherwise would have been provided in the aesthetics section of an initial study (such as project renderings) are included in the project description. However, this information is provided solely for informational purposes and is not used to determine the significance of the environmental impacts of the project, pursuant to the CEQA Guidelines.

Similarly, the planning department acknowledges that parking conditions may be of interest to the public and the decision-makers. Therefore, the initial study presents a parking demand analysis for informational purposes and considers any secondary physical impacts associated with constrained supply (e.g., queuing by drivers dropping off or picking up passengers at the project site in such a way that could affect the public ROW) as applicable in the transportation analysis.

Automobile Delay and Vehicle Miles Traveled Analysis

CEQA section 21099(b)(1) requires that the Governor's Office of Planning and Research (OPR) develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." Section 21099(b)(2) states that upon certification of the revised guidelines for determining transportation impacts pursuant to section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, OPR published the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* for public review and comment. The update recommended that transportation impacts for projects be measured using a metric of *vehicle miles traveled* (VMT). On March 3, 2016, in anticipation of the future certification of the revised CEQA Guidelines, the San Francisco Planning Commission adopted OPR's recommendation to use the VMT metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: The VMT metric does not apply to the analysis of impacts on nonautomobile modes of travel such as riding transit, walking, and bicycling.)

³¹ As defined in PRC section 21099(a), an infill site is a lot located in an urban area that has been previously developed.

³² As defined in PRC section 21099(a), an employment center project is a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 that is located in a transit priority area.

³³ The floor area ratio is the gross floor area of a building or buildings on a zoning plot divided by the area of such zoning plot. The floor area ratio is calculated to determine whether the mass and scale of a structure is compatible with zoning district requirements.

³⁴ San Francisco Planning Department, *Transit-Oriented Infill Project Eligibility Checklist*, Case No. 2015-016326ENV, May 4, 2018.

Accordingly, this initial study does not contain a discussion of automobile delay impacts. Instead, an analysis of VMT and induced automobile travel impacts is provided in Section E.4, Transportation and Circulation. Nonetheless, the topic of automobile delay may be considered by decision-makers, independent of the environmental review process, as part of their decision to approve, modify, or disapprove the proposed project.

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E. EVALUATION OF ENVIRONMENTAL EFFECTS

E.1. LAND USE AND PLANNING

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
1. LAND USE AND PLANNING.— Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact LU-1: The proposed project would not physically divide an established community. (*Less than Significant*)

The division of an established community would typically involve the construction of a physical barrier to neighborhood access (such as a new freeway segment) or the removal of a means of access (such as a bridge or roadway). The proposed project would involve removal of an existing surface parking lot and adjustments to existing public ROWs for the construction of a new mixed-use development that includes hotel, entertainment uses, and a public park. The proposed project would not disrupt or divide the physical arrangement or impede the passage of persons or vehicles.

A portion of the Vallejo Street ROW that is entirely within the project site would be vacated and/or abandoned to allow for construction of the proposed project. The ROW is not a functioning street and is not in use by vehicles because Vallejo Street dead-ends at the project site when it reaches Davis Street (it does not extend to The Embarcadero). The removal of this ROW would not interrupt or affect vehicular or pedestrian access.

Currently, a 10-inch auxiliary water supply system line and an 8-inch water main owned by SFPUC and an AT&T fiber optic conduit are in place within the ROW. The AT&T fiber optic conduit would be left in place or relocated. SFPUC water facilities would be abandoned in place when the building is constructed, a result that has been reviewed by SFPUC's City Distribution Division.³⁵ Construction activities would be staged primarily at the northern portion of the project site, and would also require temporary sidewalk closures, primarily along the project frontage on Vallejo Street, Davis Street, occasionally Broadway, and possibly The Embarcadero. It is anticipated that no vehicle travel lanes would be closed during construction. Closures of travel and parking lanes and sidewalks are subject to review and approval by the Transportation Advisory Staff Committee, an interdepartmental committee that includes the San Francisco Police Department, SFPW, the San Francisco Planning Department, SFFD, and SFMTA. The construction management plan reviewed by the committee would address the temporary impacts from construction activities such as issues of circulation (for traffic, pedestrians, and bicycles), safety, parking, and other project construction in the area.

The established community surrounding the project site includes piers, bulkheads, and other Port development to the north and east, mixed-use commercial and residential development to the south, and commercial development to the west. The project site is used as a surface parking lot and is located across The Embarcadero from the Bay. The existing surface parking lot does not have an existing pathway between the surrounding neighborhood and The Embarcadero and the shoreline. The proposed project would improve neighborhood connectivity by providing a pedestrian pathway through the project site, from

³⁵ Peter Bekey, KCA Engineers, email correspondence with SFPUC, including drawing, April 20, 2016.

The Embarcadero to Davis Street, which would facilitate public access. Therefore, the impact of the construction of proposed project would be *less than significant* with respect to physically dividing an established community.

Impact LU-2: The proposed project would not conflict with applicable land use plans, policies, or regulations (including, but not limited to, the general plan, a specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (*Less than Significant*)

Land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect are those that directly address physical environmental issues and/or contain targets or standards that must be met to preserve or improve characteristics of San Francisco's physical environment. The proposed project would not obviously or substantially conflict with any such adopted environmental plan or policy. The proposed project would not result in conflicts with existing land use designations or plans, as described in detail in Section C, Compatibility with Existing Zoning and Plans.

Additionally, the proposed project is within the Northeast Waterfront Landmark District, a historic designated neighborhood per planning code article 10. Based on the historic resource evaluation³⁶ prepared for the proposed project, the proposed project would be compatible with the Northeast Waterfront Landmark District with respect to the height, scale, and proportion; the lack of ornamentation, fenestration, materials, colors, and visual complexity; and construction to the front lot lines on all four streets that characterize the district. Additionally, the proposed project would be reviewed by the Historic Preservation Commission for approval of a Certificate of Appropriateness indicating compliance with the Northeast Waterfront Landmark District's development requirements. Further discussion of the historic resource evaluation and the proposed project's potential impacts on the Northeast Waterfront Landmark District's historical significance is provided in Section E.3, Cultural Resources.

For the reasons discussed in Section C, Compatibility with Existing Zoning and Plans, the proposed project would not conflict with any other plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be *less than significant*.

Impact-C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to land use and planning. (*Less than Significant*)

The cumulative projects listed in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, consist of infill development, transportation improvements, and recreation projects. Where infill development is proposed, the projects would renovate or demolish existing buildings in the Financial District, North Beach, and Northeast Waterfront neighborhoods and construct mixed-use, primarily commercial buildings, including new office, institutional, and hotel space. Residential uses are also proposed, including a new affordable housing development next to the project site. All of the cumulative development projects would result in the intensification of land uses in the project vicinity, similar to the proposed project. However, they are infill projects that would not physically divide an established community by constructing a physical barrier to neighborhood access, such as a new freeway, or remove a means of access, such as a bridge or roadway. The cumulative projects would be confined to individual parcels and would not collectively result in the construction of barriers or other physical modifications that would divide existing communities. Therefore, there would be no cumulative impact from the construction of physical barriers.

³⁶ San Francisco Planning Department, Historic Resource Evaluation Report – Preservation Team Review Form, Hotel and Theatre at Broadway for Kenwood Investments, LLC and Teatro Zinzanni, Seawall Lots 323 & 324, San Francisco, California, March 23, 2018. Eiliesh Tuffy, Senior Planner, San Francisco Planning Department.

The cumulative projects would also not result in conflicts with land use plans or policies adopted for the purpose of avoiding or mitigating environmental impacts, because they would generally support the City's objectives for siting new development in the vicinity of major transit stops, provision of housing, increased access to multiple transit modes, and increased access to the Bay shoreline. For example, these cumulative development projects would be required to comply with the same plans, policies, and regulations as the proposed project as discussed throughout this initial study, such as the 2017 Clean Air Plan; *Strategies to Address Greenhouse Gas Emissions*; the Noise Ordinance, section 2909 of the Police Code (article 29); CCR title 24, part 11 (the 2016 CALGreen Code), the San Francisco Green Building Ordinance; and San Francisco Ordinance 27-06 for recycling construction and demolition debris. Compliance with these plans and other mandatory regulations would help to make sure that development of cumulative development projects would not conflict with any applicable plans, policies, or regulations adopted to avoid or mitigate an environmental effect. Cumulative projects located in the Financial District and North Beach would be consistent with the existing high-density commercial uses in the area. Port projects would be consistent with the Port's objective to increase recreational opportunities and access along the waterfront. The proposed project, in combination with past, present, and reasonably foreseeable projects, would not combine with cumulative development projects to create or contribute to a cumulative land use impact. Therefore, the cumulative land use impact would be *less than significant*.

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E.2. POPULATION AND HOUSING

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
2. POPULATION AND HOUSING.— Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project would not displace substantial numbers of existing housing units, necessitating the construction of replacement housing because there is no development on the site. The project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere because the site is currently a surface parking lot. Therefore, there would be **no impact** related to these topics, which is addressed in questions 2b and 2c.

Impact PH-1: The proposed project would not directly or indirectly induce substantial population growth in San Francisco. (*Less than Significant*)

In general, a project would be considered growth-inducing if its implementation would result in substantial population increases or would result in new development that might not occur if the project were not implemented. ABAG prepares population growth projections for the Bay Area, including San Francisco, and, based on this growth, adopts housing needs for each city and county in the Bay Area, known as the regional housing needs allocation.

The proposed project would not create new residential units, and as such, would not directly contribute to increases in San Francisco's population. Once completed, the hotel is anticipated to accommodate approximately 365 guests. The hotel use (including food and beverage uses) and the other entertainment uses of the proposed project would create employment opportunities. The entertainment use is anticipated to employ approximately 62 people³⁷ while the hotel use, including the food and beverage uses, would employ approximately 67 people, totaling 129 new jobs.³⁸ These jobs are expected to be filled by existing Bay Area residents. Even if new employees needed to relocate to San Francisco, the number of new employees would not be substantial relative to San Francisco's overall population and would not result in the need to construct new housing. Employment in San Francisco is projected to increase by 34 percent (191,740 jobs) between 2010 and 2040.³⁹ The proposed project's increase of 129 employees would be accommodated within the projected employment growth in San Francisco.

Overall, the increase in the number of employees on the project site would be noticeable near the project site. However, project-related employment increases would not be substantial relative to the existing number of employees in the city, nor

³⁷ Economic and Planning Systems, *Economic Impacts of the Proposed Teatro ZinZanni/Kenwood Hotel and Dinner Theatre*, May 2016.

³⁸ Employment multiplier based on San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002.

³⁹ Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy*, revised May 16, 2012, p. 49, http://www.planbayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf, accessed August 8, 2016.

would the increase in employees exceed regional projections for growth and employment. Therefore, the impact of the proposed project related to direct and indirect population growth would be *less than significant*.

Impact-C-PH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to population and housing. (*Less than Significant*)

The cumulative projects listed in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, consist of infill development, transportation improvements, and recreation projects. Although the Ferry Building projects and Pier 29 improvements could result in new employment opportunities, the jobs associated with these projects would likely be filled by existing San Francisco Bay Area residents. Employment generation would be relatively small in comparison to the existing number of jobs in the city.

Where infill development is proposed in the vicinity of the proposed project, those projects would either renovate existing buildings to add additional commercial, institutional, or residential uses or demolish existing buildings and construct new, mixed-use developments that would include residential, retail, and hotel uses. None of the projects would result in the loss of existing housing. Residential uses would add to the city's housing stock and assist in meeting the City's regional housing needs allocation goals for housing production, including the provision of housing affordable to low- and moderate-income families. Although the majority of the jobs associated with the cumulative projects are anticipated to employ existing Bay Area residents, it is possible that new jobs could result in indirect population growth. However, the cumulative projects would be generally consistent with adopted land use designations and would generate population growth already anticipated by the City's and ABAG's planning documents. The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in a *less-than-significant* cumulative increase in population or demand for housing beyond what has been planned for at the regional and local level. The project would not contribute to a cumulative impact on population and housing, because it would not result in any population or housing displacement.

E.3. CULTURAL RESOURCES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
3. CULTURAL RESOURCES.—Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact CR-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code. (*Less than Significant*)

Under CEQA, a historical resource (these include historic built-environment and prehistoric and historic archeological resources) is considered significant if it meets the criteria for listing in the California Register of Historical Resources (CRHR). Resources that are listed in or formally determined to be eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the CRHR, and are thus considered historical resources for the purposes of CEQA compliance.

A property may be considered an historic resource if it meets any of the California Register criteria related to (1) events, (2) persons, (3) architecture, or (4) information potential that make it eligible for listing in the California Register, or if it is considered a contributor to an existing or potential historic district. The significance of a historic resource is materially impaired when a project “demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance.”

The project site is currently occupied by a surface parking lot. No historic architectural resources occur within the project site.⁴⁰ The project site is, however, located within the boundaries of the Northeast Waterfront Historic District. Designated in 1983 under article 10 of the San Francisco Planning Code, the district was found to be significant for its collection of commercial masonry warehouse structures, which date from the late 19th to early 20th centuries. These structures were found to reflect San Francisco’s history of waterfront storage and maritime activities. The warehouse facilities composing the Northeast Waterfront Historic District were in continuous industrial use from the Gold Rush to the mid-1960s. In addition to the structures, the district contains cobblestone paving and the standard and narrow-gauge belt railroad track that served the warehouses and other commercial ventures of the district and surrounding neighborhood. As stated in the historic resource evaluation report for the project⁴¹ and confirmed by the San Francisco Planning Department on March 23, 2018,⁴² the

⁴⁰ Carey & Company, *Historic Resource Evaluation, Part 2: Compatibility Analysis. Hotel and Theatre at Broadway for Kenwood Investments, LLC and Teatro Zinzanni, Seawall Lots 323 & 324, San Francisco, California*, February 26, 2018.

⁴¹ Carey & Company, *Historic Resource Evaluation, Revised, Hotel and Theatre at Broadway for Kenwood Investments, LLC and Teatro Zinzanni, Seawall Lots 323 & 324, San Francisco, California*, 2016, p. 7.

proposed entertainment venue and hotel project would not result in the destruction of historic materials, features, or spatial relationships that characterize the historic district. Therefore, the demolition of the existing surface parking and the proposed new construction on the site would not result in a significant impact as defined under CEQA.

The proposed four-story hotel would be compatible with the character-defining features of the district because of the buildings design:

- rectilinear massing that is large in bulk
- repetitive bays rhythmically spaced to be in concert with nearby warehouse buildings in the district.
- modulation of the façade achieved through repetitive glass and metal window elements to break down the mass of the building
- regularity of the overall form multi-paned industrial window sash with dark metal framing
- ground-floor fenestration set in large rectilinear openings
- rough-textured, rough-grained, full-dimensioned brick veneer in a red color scheme
- simple, abstract, dark-colored metal cornice
- contemporary design of compatible height and massing for the atypical round theater structure, to differentiate it as new construction while protecting the integrity of the surrounding environment

The design does not incorporate any false-historic features and the proposed building would be compatible with the surrounding historic structures. As the proposed project conforms to the Secretary Standards and is compatible with the specific characteristics of the District, the new construction would not materially impair the Northeast Waterfront Landmark District. Thus, the Northeast Waterfront Landmark District would remain eligible for listing in Article 10 of the San Francisco Planning Code. As a result, impacts on historic architectural resources would be *less than significant*.

Impact CR-2: The proposed project could cause a substantial adverse change in the significance of an archeological resource pursuant to section 15064.5. (*Less than Significant with Mitigation*)

This section discusses archeological resources, both as historical resources according to section 15064.5 as well as unique archeological resources as defined in section 21083.2(g). Baseline conditions for potential archeological resources in the project area are documented in the *Addendum to the Archeological Research Design and Treatment Plan for the Broadway Hotel Project, City and County of San Francisco, California*.⁴³

No archeological resources have been previously identified within the project site. The lack of previously identified resources should be expected because, according to the *archeological research design and treatment plan* (ARDTP), “no known previous archeological investigations involving fieldwork have occurred in the project area.” Although no archeological

⁴² San Francisco Planning Department, *Historic Resource Evaluation Report – Preservation Team Review Form, Hotel and Theatre at Broadway for Kenwood Investments, LLC and Teatro Zinzanni, Seawall Lots 323 & 324, San Francisco, California*, March 23, 2018. Eiliesh Tuffy, Senior Planner, San Francisco Planning Department

⁴³ Environmental Science Associates, *Seawall Lots 323 & 324 Project, City and County of San Francisco, Addendum to the Archeological Research Design and Treatment Plan for the Broadway Hotel Project, City and County of San Francisco, California*, 2017.

fieldwork has been conducted to date within the project area, statements of the general archeological sensitivity of the project site can be developed based on land form, geology, site history, and current conditions, all of which are presented in the ARDTP. The archeological sensitivity for both prehistoric and historic-era archeological resources as determined in the ARDTP is presented below.

Prehistoric Archeological Sensitivity

As revealed in archival sources and geotechnical data cited in the ARDTP,⁴⁴ before major reclamation efforts of the 19th century, the entire project site was submerged beneath the waters of San Francisco Bay. The fill introduced during reclamation efforts overlies a deep deposit of Bay Mud. These soils do not represent land surfaces that were available for prehistoric human inhabitation. As such, there is “no potential for surficial or near-surface prehistoric archeological deposits” on the project site.⁴⁵

Although surface and near-surface prehistoric resources are not anticipated, the ARDTP determined that the project site is considered to be of “moderate sensitivity for prehistoric archeological resources,”⁴⁶ largely due to the discovery of two prehistoric artifacts that were uncovered approximately 500 feet west of the project area during archeological monitoring of the 88 Broadway and 753 Davis Street Project. The two artifacts, a vitreous basalt core and an obsidian core, were found at 10–12 feet below ground surface (bgs) and 8–10 feet bgs, respectively, which is within the maximum depth of disturbance proposed for the project (i.e., 6 feet bgs of mass excavation with soil improvements to 39 feet below the project site). The origin of the specimens is evidently a subject of debate, as various hypotheses have been proposed for their presence/association, including “indigenous Californian occupation; historic-period indigenous Hawaiian Islander (kanaka) occupation; indigenous Californian or Aleutian Islander associated with Fort Ross; and imported fill material.”⁴⁷ Whatever their ultimate origin, their presence close to the current project area elevates the sensitivity for prehistoric archeological resources from low to moderate.⁴⁸

Historic Archeological Sensitivity

Before the reclamation efforts of the 19th century mentioned above, the project area was under water, but near the shoreline of San Francisco Bay. It is documented in the ARDTP⁴⁹ that the project area went through the following primary land transformation processes:

- *1850s–1860s:* Wharf construction the along the present-day alignments of Vallejo Street and Davis Street
- *1880s:* Land reclamation of the entire project area
- *1880s to early 20th century:* Grading for and general construction of industrial facilities (railyards and wood and coal storage facilities) throughout the project area
- *Late 1960s:* Construction of elevated freeway on-ramp in the southern half of the project area
- *Early 1990s:* Demolition and removal of the elevated freeway on-ramp in the southern half of the project area

⁴⁴ Environmental Science Associates, Seawall Lots 323 & 324 Project, City and County of San Francisco, Addendum to the Archeological Research Design and Treatment Plan for the Broadway Hotel Project, City and County of San Francisco, California, 2017.

⁴⁵ Ibid., p. 74.

⁴⁶ Ibid., p. 76.

⁴⁷ Ibid., p. 25.

⁴⁸ Ibid.

⁴⁹ Ibid.

The historic development, followed by these significant modern construction activities that likely affected intact historic-era archeological remains, has resulted in an assessment for the project site that ranges from low to moderate to high sensitivity for containing buried historical archeological remains.

Construction activities including vehicles and equipment could expose and have impacts on unknown archeological resources. It is possible that previously unrecorded and buried (or otherwise obscured) archeological deposits could be discovered during ground-disturbing activities associated with project implementation. Such ground-disturbing activities would include demolition of the existing surface parking lots, overall grading of the project site, and trenching for installation of utilities. Thus, the proposed project could have a potentially significant impact on previously unidentified unique archeological resources as defined in section 15064.5 and described above. With implementation of **Mitigation Measure M-CR-2, Archeological Testing**, impacts would be reduced to *less than significant with mitigation*. This mitigation measure requires that archeological resources be avoided and, if discovered, that they be treated appropriately. Based on a reasonable presumption that archeological resources may be present in the project area, the following measures would be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources.

Mitigation Measure M-CR-2: Archeological Testing

The project sponsor shall retain the services of an archeological consultant from the rotational Department Qualified Archaeological Consultants List maintained by the San Francisco Planning Department's archeologist. The project sponsor shall contact the department's archeologist to obtain the names and contact information for the next three archeological consultants on the list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the environmental review officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities: On discovery of an *archeological site*⁵⁰ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative⁵¹ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan. The archeological testing program shall be conducted in accordance with the

⁵⁰ The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

⁵¹ An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the Department archeologist.

approved testing plan. The archeological testing plan shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and evaluate whether any archeological resource encountered on the site constitutes a historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine whether additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the San Francisco Planning Department's archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program a reasonably prior to any project-related soil-disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soil-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (e.g., foundation, shoring), and site remediation, shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), how to identify the evidence of the expected resource(s) and the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project's archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in

the case of pile driving or deep foundation activities (e.g., foundation, shoring), the archeological monitor has cause to believe that the pile driving or deep foundation activities may affect an archeological resource, the pile driving or deep foundation activities shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accordance with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the plan's scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of the selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program.* Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and unintentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains, Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws, including immediate notification of the Office of the Chief Medical Examiner of the City and County of San Francisco and, in the event of the medical examiner's determination that the human remains are Native American, notification of the Native American Heritage Commission, which shall appoint a Most Likely

Descendant (MLD) (PRC section 5097.98). The ERO shall also be immediately notified upon discovery of human remains. The archeological consultant, project sponsor, ERO, and MLD shall have up to but not beyond 6 days after the discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines, section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept the recommendations of an MLD. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement, if such as agreement has been made, or otherwise, as determined by the archeological consultant and the ERO. If no agreement is reached, state regulations shall be followed, including the reburial of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC section 5097.98).

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the draft final archeological resources report shall be distributed as follows: The California Archaeological Site Survey Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning Division of the San Francisco Planning Department shall receive one bound, one unbound, and one unlocked, searchable PDF copy on CD of the report, along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Impact CR-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries. (*Less than Significant with Mitigation*)

Section 15064.5 of CEQA assigns special importance to human remains, and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC section 5097.98.

No known human burial locations were identified in the study area during the completion of the archeological investigation.⁵² However, the possibility cannot be discounted that human remains could be inadvertently exposed during ground-disturbing activities in the project site, given the elevated sensitivity for the area to harbor buried prehistoric resources. Therefore, project implementation could result in impacts on previously undiscovered human remains, including those interred outside of formal cemeteries, during ground-disturbing activities.

To reduce this potential impact to a less-than-significant level, the proposed project would comply with **Mitigation Measure M-CR-2, Archeological Testing**, which includes the procedures required for appropriate treatment of human remains. With

⁵² Environmental Science Associates, *Seawall Lots 323 & 324 Project, City and County of San Francisco, Addendum to the Archeological Research Design and Treatment Plan for the Broadway Hotel Project*, City and County of San Francisco, California, 2017.

implementation of **Mitigation Measure M-CR-2**, the proposed project impact related to the potential disturbance of human remains would be *less than significant with mitigation*.

Impact CR-4: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. (*Less than Significant with Mitigation*)

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing, the national, state, or local register of historical resources. Based on discussions with Native American tribal representatives, in San Francisco, prehistoric archeological resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance.

Pursuant to CEQA section 21080.3.1(d), within 14 days of a determination that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency is required to contact the Native American tribes that are culturally or traditionally affiliated with the geographic area in which the project is located. Notified tribes have 30 days to request consultation with the lead agency to discuss potential impacts on tribal cultural resources and measures for addressing those impacts. On December 8, 2016, the San Francisco Planning Department contacted Native American individuals and organizations for the San Francisco area, providing a description of the project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project vicinity. During the 30-day comment period, no Native American tribal representatives contacted the planning department to request consultation.

Research to establish baseline conditions and Native American outreach efforts completed by the City and the planning department have not revealed the presence of tribal cultural resources as defined in PRC section 21074 in the project site. Baseline research did reveal, however, that the project site exhibits elevated sensitivity for harboring buried (i.e., currently unknown) prehistoric archeological resources associated with the indigenous (Native American) inhabitation of the area. Such prehistoric resources may also be considered tribal cultural resources; under Assembly Bill (AB) 52, this class of cultural resource includes sites, features, and objects with cultural value to a California Native American tribe that are either listed in the CRHR, eligible for listing, or listed in a local register of historical resources as defined in PRC section 5020.1(k).

As described under Impacts CR-1 and CR-2, the potential exists for archeological resources to be present in the project area, and as described in Impact CR-3, the potential exists for human remains to be present. Unknown archeological resources may be encountered during construction that could be identified as tribal cultural resources at the time of discovery or at a later date. Therefore, the potential adverse effects of the proposed project on previously unidentified archeological resources, discussed under Impact CR-1 and CR-2, also represent a potentially significant impact on tribal cultural resources.

Implementation of **Mitigation Measure M-CR-4, Tribal Cultural Resources Interpretive Program**, would reduce potential adverse effects on tribal cultural resources to *less than significant with mitigation*. **Mitigation Measure M-CR-4** would require either preservation in place of the tribal cultural resources, if determined effective and feasible, or an interpretive program regarding the tribal cultural resources developed in consultation with affiliated Native American tribal representatives.

Mitigation Measure M-CR-4: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation in place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Impact-C-CR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in potentially significant cumulative impacts related to cultural resources. (*Less than Significant with Mitigation*)

Archeological resources, tribal cultural resources, and human remains are nonrenewable, finite resources. All adverse effects on archeological resources have the potential to erode a dwindling cultural/scientific resource base. Past, present, and reasonably foreseeable future development projects in San Francisco and the Bay Area region would include construction activities that could disturb archeological resources and tribal cultural resources and could contribute to cumulative impacts related to the loss of significant historical, scientific, and cultural information about the history and prehistory of California, the Bay Area, and San Francisco, including the history and prehistory of Native American peoples.

The cumulative impact for cultural resources includes potential future development within a 0.25-mile radius of the proposed project combined with effects of development on lands within the City of San Francisco. As shown in Table 3 and mapped in Figure 17 in Section B.3, cumulative projects have the potential to cumulatively affect cultural resources including historic resources, archeological and paleontological deposits, human remains, and tribal cultural resources. Because impacts resulting from cumulative projects are unknown, for a conservative assumption, cumulative impacts on archeological resources, human remains, and tribal cultural resources are considered to be significant. The proposed project could contribute to cumulative impacts on cultural resources if the proposed project and other projects listed in Table 3 would adversely affect cultural resources in the project vicinity.

Implementation of **Mitigation Measure M-CR-2 and Mitigation Measure M-CR-4** would ensure that adverse project-specific impacts on unknown archeological resources and tribal cultural resources on the project site would not occur.

As shown in Table 3, the cumulative projects would involve modifications to existing buildings or the renovation/reuse of existing buildings for other uses, with the exception of the 88 Broadway and 735 Davis Street project. The cumulative projects would involve changes to existing buildings that could result in impacts on historic buildings; however, the 88 Broadway and 735 Davis Street project and the 940 Battery project are the only two cumulative projects in the Northeast Waterfront Landmark District. Therefore, the proposed changes to the other cumulative projects would not combine with the proposed project to result in a cumulative impact to the Northeast Waterfront Landmark District. The proposed 88 Broadway and 735 Davis Street project is a surface parking lot. Therefore, development on this lot would not result in the direct loss or change to a historic structure and a determination was made that 88 Broadway and 733 Davis Street would be compatible with the Northeast Waterfront Landmark District.⁵³ As noted in Table 2, the 940 Battery Street project would result in interior and exterior alterations to create a new fourth floor and fifth floor at the roof level, and also proposes a change of use

⁵³ San Francisco Planning Department, *88 Broadway & 735 Davis Street Final Mitigated Negative Declaration Certificate of Appropriateness Case Report*, Case No. 2016-007850COA, April 4, 2018. Approval motion included HPC determination that that the proposed project would not destroy or damage any contributing elements or impact character-defining features within the Landmark District.

from warehouse to museum and retail. The impacts on the potentially historic building at 940 Battery Street⁵⁴ and its relationship to the Northeast Waterfront Landmark District were determined to be less than significant in the approved Final Mitigated Negative Declaration. All cumulative projects within the Northeast Waterfront Landmark District are subject to article 10 of the Planning Code, which requires that all new construction receive a Certificate of Appropriateness from the Historic Preservation Commission. As discussed under Impact CR-1, the proposed project's design was found to be compatible with the Northeast Waterfront Landmark District. Therefore, the proposed project would not combine with other cumulative projects to result in significant cumulative impacts on the Northeast Waterfront Landmark District.

Accordingly, with implementation of the mitigation measures listed above, the proposed project would not combine with cumulative development projects to create or considerably contribute to a cumulative impact on archaeological resources, human remains, or tribal cultural resources. Thus, the proposed project would not combine with cumulative projects to result in a cumulative effect on unknown archaeological resources, or tribal cultural resources, and impacts would be reduced to *less than significant with mitigation*.

⁵⁴ San Francisco Planning Department, *940 Battery Street Final Mitigated Negative Declaration*, Case No. 2015-001033ENV, June 20, 2018, amended July 13, 2018. Approval motion included HPC determination that that would not impact the project.

E.4. TRANSPORTATION AND CIRCULATION

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
4. TRANSPORTATION AND CIRCULATION— Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, question 4c above, regarding the potential for changes in air traffic patterns resulting in substantial safety risks, is not applicable to the project. The following discussion is based on the information provided in the transportation impact study prepared for the proposed project in accordance with the San Francisco Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review*.⁵⁵

Project Setting

The 59,750-square-foot project site is currently occupied by a surface parking lot with approximately 250 surface parking spaces and two temporary wooden pay booths. Some of the existing parking spaces are used by the Port for employee parking and by the adjacent KGO-TV and KRON 4 news station for parking for its news vans.

The proposed project would remove six existing parallel on-street parking spaces and three existing on-street motorcycle parking spaces along the project frontage on the north side of Broadway, three existing parallel on-street parking space along the project frontage on the east side of Davis Street, 20 existing perpendicular on-street Port parking spaces along the project frontage on the east side of Davis Street, and six existing perpendicular on-street Port parking spaces along the project frontage on the north side of Vallejo Street.

The project site fronts on two major arterials that pass through the Northeastern Waterfront area: The Embarcadero (running north to south) and Broadway (running east to west). Davis Street abuts the western edge of the project site, but vehicular through-access is restricted between Vallejo Street and The Embarcadero and between Davis and Green streets. The ROW in these areas is occupied primarily by a surface parking lot, which is not designed to allow vehicles to enter or exit at the

⁵⁵ CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018.

Embarcadero or Green Street. Similarly, Vallejo Street cuts east to west through the site, but the ROW east of Davis Street is occupied by surface parking and does not provide a connection to The Embarcadero.

The site is well-served by public transit. Primary direct access is provided by Muni's historic streetcar service along The Embarcadero (E Embarcadero and F Market & Wharves), directly in front of the project site. Supplementary local transit service is provided in the area by Muni bus routes including the 10 Townsend, 12 Folsom–Pacific, 30X, and 82X Levi Plaza Express which travel along the Broadway/Pacific Avenue and Battery Street/Sansome Street couplets. Regional transit service is provided primarily by BART, at The Embarcadero Station along Market Street about 0.5 mile south of the project site. Additional local and regional transit services are within extended biking or walking distance of the project site, and can be accessed by transfers to and from the Muni routes listed above. The closest transit stops to the project site are the Broadway & The Embarcadero and Exploratorium/Green & The Embarcadero stations on the E Embarcadero and F Market & Wharves lines, located in the transit-only ROW in the median of The Embarcadero.

Major on-street bikeways in the project vicinity include class II facilities (bicycle lanes)⁵⁶ along The Embarcadero and class III facilities (shared lanes)⁵⁷ with *sharrows* (pavement markings) and signage along Broadway. Class II facilities are also provided for a short stretch of Front Street west of the project site. In addition, a popular shared-use promenade for bicyclists and pedestrians, designated as part of the San Francisco Bay Trail, is provided along the waterfront (east) side of The Embarcadero.

Sidewalks in the project vicinity are generally 10–15 feet wide, but are not continuous along the western edge of the project site along Davis Street, where the sidewalk terminates at mid-block north of Broadway. Some intersections in the vicinity lack marked crosswalks and *Americans with Disabilities Act compliant* curb ramps. Three curb cuts are provided for the site's existing surface parking lot, two along Broadway and Davis Street, and a third vehicular access point near the Davis Street/Vallejo Street intersection.

Vehicle Miles Traveled in San Francisco and the Bay Area

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development located far from other land uses, in areas with poor access to nonprivate vehicular travel modes, generates more automobile travel than development in urban areas, which feature higher density, a greater mix of land uses, and travel options other than private vehicles.

Given these travel behavior factors, San Francisco has a lower VMT ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the city have lower VMT ratios than others. For transportation analysis and other planning purposes, San Francisco and the entire Bay Area are disaggregated into smaller geographic study areas, referred to as transportation analysis zones (TAZs). These zones vary in size from single city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

The San Francisco County Transportation Authority uses the San Francisco Chained Activity Model Process to estimate VMT by private automobiles and taxis for different land use types. This process calibrates travel behavior based on observed behavior from the California Household Travel Survey 2010–2012, U.S. Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings.

⁵⁶ Class III facility (bicycle route): Shared use with pedestrian or motor vehicle traffic.

⁵⁷ Class II facility (bicycle lane): Striped lane for one-way bike travel on a street or highway.

The San Francisco Chained Activity Model Process uses a *synthetic population*, which is a set of individual actors representing the Bay Area’s actual population who make simulated travel decisions for a complete day. The San Francisco County Transportation Authority uses a tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from a project site. For retail uses, the transportation authority uses a trip-based analysis, which counts VMT from individual trips to and from the project site (as opposed to the entire chain of trips). A trip-based approach, as opposed to a tour-based approach, is necessary for retail projects because a tour is likely to consist of trips stopping in multiple locations, and summarizing tour VMT for each location would overestimate VMT.^{58,59}

Methodology for the Vehicle Miles Traveled Impact Analysis

Land use projects may cause substantial additional VMT. The following identifies thresholds of significance and screening criteria used to determine whether a land use project would result in significant impacts under the VMT metric.

Residential and Retail (and Similar) Projects

For residential projects, a project would generate substantial additional VMT if it exceeds the regional household VMT per capita minus 15 percent.⁶⁰ As documented in the *OPR Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* (referred to here as the “proposed transportation impact guidelines”), a 15 percent threshold below existing development is “both reasonably ambitious and generally achievable.”⁶¹ For retail projects, the San Francisco Planning Department uses a VMT efficiency metric approach for retail projects: a project would generate substantial additional VMT if it exceeds the regional VMT per retail employee minus 15 percent. This approach is consistent with CEQA section 21099 and the thresholds of significance for other land uses recommended in OPR’s proposed transportation impact guidelines. For mixed-use projects, each proposed land use is evaluated independently relative to the significance criteria described previously.

OPR’s proposed transportation impact guidelines provide screening criteria to identify types, characteristics, or locations of land use projects that would not exceed these VMT thresholds of significance. OPR recommends that if a project or land use proposed as part of a project meets any of the following screening criteria, VMT impacts are presumed to be less than significant for that land use and a detailed VMT analysis is not required.

The screening criteria applicable to the proposed project and their application in San Francisco are described below.

- ***Map-Based Screening for Residential and Retail Projects.*** OPR recommends mapping areas that exhibit VMT less than the applicable threshold for that land use. Accordingly, the San Francisco County Transportation Authority has developed maps depicting existing VMT levels in San Francisco for residential and retail land uses based on the San Francisco Chained Activity Model Process’s 2012 base-year model run. The San Francisco Planning

⁵⁸ Stated another way: A tour-based assessment of VMT at a retail site would consider the VMT for all trips in the tour, for any tour with a stop at the retail site. If a single tour stops at two retail locations, such as a coffee shop on the way to work and a restaurant on the way back home, both retail locations would be allotted the total tour VMT. With a trip-based approach, all retail-related VMT can be apportioned to retail sites without double-counting.

⁵⁹ San Francisco Planning Department, *Executive Summary: Resolution Modifying Transportation Impact Analysis*, Appendix F, Attachment A, March 3, 2016.

⁶⁰ OPR’s proposed transportation impact guidelines state that a project would cause substantial additional VMT if it exceeds both the existing City household VMT per capita minus 15 percent and existing regional household VMT per capita minus 15 percent. In San Francisco, the average VMT per capita is lower (8.4) than the regional average (17.2). Therefore, the City average is irrelevant for the purposes of the analysis.

⁶¹ Governor’s Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, January 20, 2016, p. III:20, http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf.

Department uses these maps and associated data to determine whether a proposed project is located in an area of the city that is below the VMT threshold.

- *Proximity to Transit Stations.* OPR states that residential and retail projects, and projects that are a mix of these uses, that are proposed within one-half mile of an existing *major transit stop* (as defined by CEQA section 21064.3) or an existing stop along a *high-quality transit corridor* (as defined by CEQA section 21155) would not result in a substantial increase in VMT. However, this presumption would not apply if the project would have a floor area ratio of less than 0.75; would include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or is inconsistent with the applicable sustainable communities strategy.⁶²

OPR's proposed transportation impact guidelines do not provide screening criteria or thresholds of significance for other types of land uses, other than for those projects that meet the definition of a *small project* (the proposed project does not meet the small project criterion). Therefore, the San Francisco Planning Department provides additional screening criteria and thresholds of significance to determine whether land uses similar in function to residential and retail would generate a substantial increase in VMT. These screening criteria and thresholds of significance are consistent with CEQA section 21099 and the screening criteria recommended in OPR's proposed transportation impact guidelines.

The planning department applies the Map-Based Screening and Proximity to Transit Station screening criteria to the following land use types:

- *Tourist Hotels, Student Housing, Single-Room Occupancy Hotels, and Group Housing.* Trips associated with these land uses typically function similarly to residential. Therefore, these land uses are treated as residential for screening and analysis.
- *Childcare; K-12 Schools; Medical; Postsecondary Institutional (nonstudent housing); and Production, Distribution, and Repair.* Trips associated with these land uses typically function similarly to office. Although some visitor/customer trips may be associated with some of these uses (e.g., childcare and school drop-off, patient visits), those trips are often side trips within larger tours. For example, the visitor/customer trips are influenced by the origin (e.g., home) and/or ultimate destination (e.g., work) of those tours. Therefore, these land uses are treated as office for screening and analysis.
- *Grocery Stores, Local-Serving Entertainment Venues, Religious Institutions, Parks, and Athletic Clubs.* Trips associated with these land uses typically function similar to retail. Therefore, these types of land uses are treated as retail for screening and analysis.
- *Theater (Entertainment).* For this use, the regional average daily VMT per capita threshold is assumed to be 17.1, representing an average of the VMT regional daily thresholds for retail, office, and household uses that are used by San Francisco. To determine the VMT associated with the proposed project's theater component in TAZ 830, the regional average daily visitor-related VMT was calculated using assumptions about origin-destination trip distribution percentages from the 1111 California Street Masonic Center Renovation Project Draft Environmental Impact Report. The Masonic Center represents a reasonably comparable project in terms of entertainment draw for both patrons and employees.

⁶²

A project is considered to be inconsistent with the sustainable communities strategy if development is located outside of areas contemplated for development in the sustainable communities strategy.

2040 Cumulative Conditions

San Francisco 2040 cumulative conditions were projected using a modeling run of the San Francisco Chained Activity Model Process, using the same methodology as outlined for existing conditions, but including residential and job growth estimates and reasonably foreseeable transportation investments through 2040.

Average Daily Vehicle Miles Traveled Summary

Table 4 summarizes average daily VMT per capita or employee for residential, retail, and entertainment uses for the region (Bay Area) and the TAZ containing the project site (TAZ 830). Under existing conditions, regional average daily VMT is 17.2 (per capita) for residential uses, 14.9 (per employee) for retail uses, and 17.1 (per employee) for theater uses. Under 2040 cumulative conditions, regional average daily VMT is 16.1 for residential uses, 14.6 for retail uses, and 15.4 for theater uses.

TABLE 4 DAILY VEHICLE MILES TRAVELED

Proxy Land Use	Project Land Use	Existing Conditions			2040 Cumulative Conditions		
		Bay Area Regional Average	Bay Area Regional Average minus 15%	TAZ 830	Bay Area Regional Average	Bay Area Regional Average minus 15%	TAZ 830
Residential (households)	Hotel	17.2	14.6	2.6	16.1	13.7	2.2
Retail (employment)	Retail/restaurant	14.9	12.6	11.2	14.6	12.4	10.1
Theater	Theater	17.1	14.5	5.6	15.4	13.1	5.6

Sources: San Francisco Transportation Information Map, accessed online July 2016; CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018, Table 13 and Table 16.

Notes:

For the hotel use, the household (residential) land use was used as a proxy land use, per the San Francisco Planning Department's Resolution Modifying Transportation Impact Analysis (March 3, 2016 staff report).

For the theater use, the Transportation Analysis Zone (TAZ) 830 vehicle miles traveled (VMT) were calculated using origin/destination trip generation data from the 1111 California Street Masonic Center Renovation Project Draft Environmental Impact Report (Case No. 2011.0471E, April 17, 2013). The hotel use regional average was calculated as a composite of the residential, office, and retail VMT per capita for TAZ 830.

Employment (retail) is the land use associated with the proposed project's retail and restaurant components.

Travel Demand

Travel demand for the proposed project was estimated according to the methodology and guidance provided in the San Francisco Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review* (the *SF Guidelines*).⁶³ Additional information from other sources, including *Trip Generation* (published by the Institute of Transportation Engineers) and the American Community Survey (published by the U.S. Census Bureau), was incorporated into the travel demand analysis, in accordance with guidance from the *SF Guidelines* and standard practice for estimating travel demand for land use developments in San Francisco.

Trip generation for the proposed project was calculated based on the proposed number of hotel rooms, the proposed number of theater seats, and the gross square footage of proposed restaurant and retail uses. Existing vehicle trips entering and exiting the project site were not collected for purposes of the study. As stated, the project site is currently actively occupied by a 250-space off-street parking lot.

Table 5 presents the person-trip generation for the proposed project. Person-trips for the retail, eating/drinking, and hotel components were estimated based on the trip generation rates obtained from the *SF Guidelines*. The daily person-trip

⁶³ San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, 2002.

generation rate for the “quality sit-down” eating/drinking use is 200 trips per 1,000 gsf, with 13.5 percent of daily trips assumed to occur during the p.m. peak hour. The daily person-trip generation rate for the retail use is 150 trips per 1,000 gsf, with 9 percent of daily trips assumed to occur during the p.m. peak hour. The daily person-trip generation rate for the hotel use is typically seven person-trips per room, with 10 percent of the daily trips assumed to occur during the p.m. peak hour.

The person-trips for the theater component were estimated on information provided by the project sponsor in terms of the theater’s proposed seating capacity (285 seats), the hours of operation (Monday through Sunday from 8 a.m. to midnight, with shows scheduled Wednesday through Saturday from 6:30 p.m. to midnight, Sunday midday from 11:30 a.m. to 3 p.m., and Sunday evening from 5:30 p.m. to 10 p.m.), and the anticipated number of daily employees specifically working at the theater (62 employees). Each show at the theater was assumed to operate at full seating capacity, with all 62 theater staff working onsite during the show. One daily inbound trip and one daily outbound person-trip were assumed for each theater patron and employee for a weekday show, resulting in 694 daily person-trips (124 trips for the 62 employees, and 570 trips for the 285 show attendees). The resulting daily person-trip generation rate for the theater component was 2.44 trips per seat, assuming 694 daily person-trips for the 285 seats. The project sponsor anticipates 40 percent of theater employees (24 employees) and 50 percent of show patrons (143 attendees) to arrive during the p.m. peak hour (assumed as 5–6 p.m.), with none departing that same hour given the 7 p.m. show start time. The remainder of inbound theater employees (60 percent) and show patrons (50 percent) are assumed to arrive between 6 and 7 p.m., also with no outbound trips given the 7 p.m. start time. The resulting 167 person-trips during the p.m. peak hour represent 24 percent of the 694 daily person-trips. All outbound trips for the daily show would occur after the show concludes at midnight. As a result, the proposed project is expected to generate approximately 3,213 total daily person-trips and 447 p.m. peak-hour person-trips (264 inbound and 183 outbound).

TABLE 5 PROJECT PERSON-TRIPS

Land Use ¹	Size	Daily Trip Rate ²	Daily Person-Trips	P.M. Peak-Hour Percentage	P.M. Peak-Hour Person-Trips		
					Total	In	Out
Restaurant	4,420 gsf	200/1,000 gsf	884	13.5%	119	57	62
Theater	285 seats	2.44/seat ³	694	24.0%	167	167	0
Retail	1,950 gsf	150/1,000 gsf	292	9.0%	26	13	13
Hotel	192 rooms	7/room	1,344	10.0%	135	27	108
Total Person-Trips			3,214	–	447	264	183

Source: *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002, Appendix C – Tables C-1 and C-2; CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro ZinZanni) Project Final Transportation Impact Study*, May 2018. Table 8. Notes:

gsf = gross square feet

¹ Restaurant use corresponds with the *Transportation Impact Analysis Guidelines for Environmental Review (SF Guidelines)* “eating/drinking—quality sit-down” use. The theater use is based on sponsor staffing and visitor estimates. The retail use corresponds with the *SF Guidelines* “general retail” use. The hotel use corresponds with the *SF Guidelines* “hotel/motel” use.

² Daily and p.m. peak-hour person-trips in the table may differ slightly from calculations in Appendix F because of rounding.

³ Daily person-trip rate for the theater use was determined by dividing the number of daily person-trips (694) for the theater use by the number of seats (285) in the entertainment venue.

The person-trips generated by the proposed project were assigned to different transportation modes to determine the number of auto, transit, walk, and other trips to and from the project site. The modal split rate for the retail, theater, hotel, and restaurant uses was based on the information contained in the *SF Guidelines* for Superdistrict 1. Table 6 summarizes the mode split results. The proposed project would generate approximately 1,160 auto person-trips, 885 transit trips, 955 walk trips, and 213 other trips (e.g., bike) on a typical day. During the p.m. peak hour, the proposed project would generate 163 auto person-trips, 140 transit trips, 116 walk trips, and 26 other trips.

TABLE 6 PROJECT PERSON-TRIPS GENERATION BY MODE

Land Use	Daily					P.M. Peak Hour				
	Auto	Transit	Walk	Other	Total	Auto	Transit	Walk	Other	Total
Retail	105	50	102	36	292	9	4	9	3	26
Theater	252	211	191	40	694	60	49	47	10	167
Hotel	486	388	389	81	1,344	51	56	23	5	135
Restaurant	317	237	274	56	884	43	31	37	8	119
Total	1,160	885	955	213	3,213	163	140	116	26	447

Sources: *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002, Appendix E – Tables E3, E10, and E11; CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018. Table 9.

Note: Daily and p.m. peak-hour person-trips in table may differ slightly from calculations in Appendix F because of rounding.

Table 7 presents the estimated daily and p.m. peak-hour vehicle trips for the proposed project. Vehicle trips were estimated by dividing the number of auto person-trips by the vehicle occupancy rates. The vehicle occupancy rates for the retail, theater, hotel, and eating/drinking components were based on the information contained in the *SF Guidelines* for Superdistrict 1. As shown in Table 7, the proposed project would generate approximately 634 daily vehicle trips and 157 p.m. peak-hour vehicle trips (93 inbound to the site and 64 outbound from the site).

TABLE 7 PROJECT VEHICLE TRIP GENERATION

Land Use	Size	Vehicle Occupancy Rate ¹	Daily Vehicle Trips	P.M. Peak Hour		
				Total	In	Out
Retail	1,950 gsf	2.07	51	4	2	2
Theater	285 seats	2.15	117	60	60	0
Hotel	192 rooms	2.21	220	50	10	40
Restaurant	4,420 gsf	1.29	246	43	21	22
Total			634	157	93	64

Sources: *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002, Appendix E – Tables E3, E10, and E11; CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018. Table 10.

Notes:

gsf = gross square feet

¹ This rate is calculated by dividing daily person-trips for each land use by the daily vehicle trips for each land use.

² Daily and p.m. peak-hour vehicle trips presented in table may slightly differ from calculations in Appendix F because of rounding.

Trip Distribution

Table 8 shows the daily and p.m. peak-hour trip distribution patterns for the proposed project. Trip distribution patterns for theater, retail, hotel, and restaurant uses were based on the 2002 *SF Guidelines* for the Superdistrict 1. These trip distribution patterns were used as the basis for assigning the proposed project trips to the local streets in the study area.

TABLE 8 PROJECT TRIP DISTRIBUTION PATTERNS

Area	Retail		Theater		Hotel		Restaurant	
	Work	Non-work	Work	Non-work	Work	Non-work	Work	Non-work
Superdistrict 1	12.8%	19.0%	12.8%	22.0%	12.8%	22.0%	12.8%	22.0%
Superdistrict 2	14.4%	7.0%	14.4%	14.0%	14.4%	14.0%	14.4%	14.0%
Superdistrict 3	17.0%	8.0%	17.0%	13.0%	17.0%	13.0%	17.0%	13.0%
Superdistrict 4	11.2%	3.0%	11.2%	7.0%	11.2%	7.0%	11.2%	7.0%
East Bay	22.4%	11.0%	22.4%	11.0%	22.4%	11.0%	22.4%	11.0%
North Bay	6.1%	5.0%	6.1%	5.0%	6.1%	5.0%	6.1%	5.0%
South Bay	14.3%	8.0%	14.3%	7.0%	14.3%	7.0%	14.3%	7.0%
Other	1.8%	39.0%	1.8%	21.0%	1.8%	21.0%	1.8%	21.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002, Appendix E – Tables E3, E10, and E11; CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018, Table 11.

Impact TR-1: The proposed project would not cause substantial additional VMT or substantially induce automobile travel. (*Less than Significant*)

Vehicle Miles Traveled Analysis – Tourist Hotel

As discussed above in Table 4, Daily Vehicle Miles Traveled, existing average daily VMT per capita for residential uses in TAZ 830 is 2.6, which is 85 percent below the existing regional average daily VMT per capita of 17.2. Because the project site is located in an area where existing VMT is less than the regional average minus 15 percent, the proposed project's hotel use would not result in substantial additional VMT. This impact would be ***less than significant***. In addition, the project site meets the Proximity to Transit Stations screening criterion, which indicates that the proposed project's hotel uses would not cause substantial additional VMT.⁶⁴

Vehicle Miles Traveled Analysis – Retail

As discussed above in Table 4, Daily Vehicle Miles Traveled, existing average daily VMT per employee for retail uses in TAZ 830 is 11.2, which is 25 percent below the existing regional average daily VMT per capita of 14.9. Because the project site is located in an area where existing VMT is less than the regional average minus 15 percent, the proposed project's retail/restaurant uses would not result in substantial additional VMT. This impact would be ***less than significant***. In addition, the project site meets the Proximity to Transit Stations screening criterion, which indicates that the proposed project's retail/restaurant uses would not cause substantial additional VMT.⁶⁵

Vehicle Miles Traveled Analysis – Theater

As discussed above in Table 4, Daily Vehicle Miles Traveled, existing average daily VMT per employee for theater uses in TAZ 830 is 5.6, which is 67 percent below the existing regional average daily VMT per capita of 17.1. Because the project site is located in an area where existing VMT is less than the regional average minus 15 percent, the proposed project's theater use would not result in substantial additional VMT. This impact would be ***less than significant***. In addition, the

⁶⁴ San Francisco Planning Department, *Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis*; *Seawall Lot 323 & 324*, May 4, 2018.

⁶⁵ *Ibid.*

project site meets the Proximity to Transit Stations screening criterion, which indicates that the proposed project's theater use would not cause substantial additional VMT.⁶⁶

Induced Automobile Travel Analysis

The proposed project is not a transportation project, but would include features that would alter the transportation network, including provision of bicycle parking, establishment of commercial and passenger loading zones, removal of on-street parking and demolition and construction of curb cuts. These features fit within the general types of projects that would not substantially induce automobile travel. As such, an analysis of induced automobile travel is not required. In addition, the proposed project would also remove a surface lot with approximately 250 parking spaces for automobiles and would not include any new or replacement spaces. Although up to 50 parking spaces would be leased at an offsite facility, primarily the Impark lot at 847 Front Street, to accommodate valet parking for the hotel guests and patrons, the project would still result in a net reduction in off-street parking. Parking for the entertainment venue would also occur at off-site, self-parking locations in close proximity to the project site including 847 Front Street, Pier 19, 1000 Front Street and One Maritime Plaza. Entertainment Venue patrons would also be allowed to access the hotel's valet services for a separately charged fee. Therefore, this impact would be *less than significant*.

Although the project would not result in substantial additional VMT or substantially induce automobile travel, transportation demand management measures could be implemented to further decrease less-than-significant impacts with regard to automobile traffic in the vicinity of the project site. The project sponsor should implement a TDM program that seeks to minimize the number of single-occupancy vehicle trips generated by the proposed project. The TDM program targets a reduction in single-occupancy vehicle trips by encouraging use of other modes of transportation, including walking, bicycling, transit, car-share, carpooling, and/or other modes, and would be in effect for the lifetime of the project.

The project sponsor has agreed to implement the following TDM measures:

- **PKG-4: Parking Supply Options (Option E).** Provide less than or equal to 60 percent and greater than 50 percent of the neighborhood nonresidential parking rate.
- **ACTIVE-1: Improve Walking Conditions (Option A).** Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by providing bulb-outs along the Davis Street and Broadway sidewalks to shorten crosswalk distances and reduce vehicle speed.
- **ACTIVE-2: Bicycle Parking (Option A).** Provide class I and class II bicycle parking spaces for hotel, retail, and theater uses as required by the planning code.
- **ACTIVE-5A: Bicycle Repair Station.** Provide onsite tools and space for bicycle repair.
- **DELIVERY-1: Delivery Supportive Amenities.** Facilitate delivery services by providing a staffed reception area for receipt of deliveries, and offering one of the following: clothes lockers for delivery services, or temporary storage for package deliveries, laundry deliveries, and other deliveries.

⁶⁶ San Francisco Planning Department, *Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis; Seawall Lot 323 & 324*, May 4, 2018.

- **INFO-2: Real-Time Transportation Information Displays.** Provide real-time transportation information on displays in prominent locations on the project site to highlight sustainable transportation options and support informed trip-making.

Impact TR-2: The proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, nor would it conflict with an applicable congestion management program. (*Less than Significant*)

Vehicle Circulation

The proposed project would generate new vehicle-trips on the surrounding roadway network, but would also remove existing automobile-oriented uses (surface parking) that already generate substantial amounts of vehicle traffic and replace them with hotel, theater, retail and restaurant uses with no accessory off-street parking. Parking would be by valet only. The surface parking lot at the project site accommodates approximately 250 parking spaces, most of which are used by commuters traveling to and from workplaces in the area during the weekday a.m. and p.m. peak periods (7–9 a.m. and 4–6 p.m.). Some of the existing parking spaces are used by the Port for employee parking and used by the adjacent KGO-TV and KRON 4 news station for parking for its news vans. Three curb cuts along the project frontage provide ingress to and egress from to the property: one curb cut on Broadway (28 feet long) and two curb cuts on Davis Street (28 feet and 20 feet long, respectively).

The Embarcadero is a major north-south roadway that connects San Francisco’s Fisherman’s Wharf area with the South Beach neighborhood. The Embarcadero roadway operates two-way, with generally two travel lanes in each direction. The Embarcadero receives a large volume of traffic, but the proposed project does not propose any sidewalk or loading changes on the project site segment and would not change circulation. Broadway is a major east-west street that connects The Embarcadero area with the Pacific Heights neighborhood. Broadway operates two-way, with generally two travel lanes in each direction between The Embarcadero and Fillmore Street. Hotel patron vehicles would access the passenger-loading bay from the westbound direction on Broadway. The passenger loading bay would be 80 feet long and would be able to store up to four vehicles entering and exiting the loading bay at any given time. Because there are two traffic lanes in the westbound direction along Broadway, there is adequate capacity to allow for vehicles to bypass hotel-related vehicles turning into the loading bay. As a result, minor vehicle queues would not occur along Broadway and would not exacerbate traffic circulation conditions during peak commute periods.

The other street segments fronting the project site, including Vallejo Street, Davis Street, and Green Street, function primarily as low-volume collector roadways providing local access to adjacent or nearby properties. Given these considerations, the proposed project’s impact on local vehicle circulation would be *less than significant*.

Passenger Loading Impacts

Passenger loading for the hotel would take place in an 80-foot passenger loading zone proposed along Broadway, capable of accommodating up to four vehicles at any given time as mentioned above. The hotel use would generate 50 vehicle trips (nine inbound vehicle-trips and 36 outbound vehicle-trips) at the passenger loading zone during the p.m. peak hour, resulting in a peak passenger loading demand of up to two vehicles per minute. The proposed zone would have capacity to accommodate the anticipated peak passenger loading demand. The valet operation would primarily drop-off and retrieve vehicles to and from the Impark lot at 847 Front Street, approximately one block west of the project site, and would employ the necessary staffing level needed to maintain vehicular access to the zone at all times. No designated passenger loading activities would occur along The Embarcadero or Davis Street. In addition, there would be a secondary pedestrian entrance for the theater along The Embarcadero.

Although the project's impacts on traffic and bicycle circulation as a result of passenger loading activities would be *less than significant*, the following improvement measures could be implemented to further decrease these less-than-significant impacts.

Improvement Measure I-TR-2a: Monitoring and Abatement of Queues

As an improvement measure to reduce the potential for queuing of vehicles accessing the project site, it will be the responsibility of the project sponsor or subsequent property owner to ensure that recurring vehicle queues do not occur adjacent to the site (i.e., along Davis Street and Broadway loading areas or other surrounding streets).

It will be the responsibility of the owner/operator of the building to ensure that recurring vehicle queues do not occur on the public ROW. A vehicle queue is defined as one or more vehicles (destined to the loading zones on Davis Street or Broadway) blocking any portion of any public street, alley, or sidewalk for a consecutive period of 3 minutes or longer on a daily or weekly basis.

If a recurring queue occurs, the owner/operator of the building will employ abatement methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, as well as the characteristics of the loading zone, the street(s) adjacent to the zone, and the associated land uses (if applicable).

Suggested abatement methods include but are not limited to the following: redesign of loading zones to improve vehicle circulation; use of additional offsite parking facilities or shared parking with nearby uses; and travel demand management strategies such as additional bicycle parking, customer shuttles, and delivery services.

If the planning director, or his or her designee, suspects that a recurring queue is present, the San Francisco Planning Department will notify the property owner in writing. Upon request, the owner/operator will hire a qualified transportation consultant to evaluate the conditions at the site for no less than 7 days. The consultant will prepare a monitoring report to be submitted to the planning department for review. If the planning department determines that a recurring queue does exist, the owner/operator will have 90 days from the date of the written determination to abate the queue.

Improvement Measure I-TR-2b: Active Valet Parking Management

Queues for arriving hotel patrons at the curbside valet passenger loading zone on Broadway will be managed by professionally trained valet staff to ensure that valet vehicle queues are confined within the valet loading zone and there is no vehicle spillover into the travel lanes on westbound Broadway back to The Embarcadero. The proposed project will provide adequate valet staffing to ensure the most efficient processing of arriving and departing hotel patron vehicles, which will be parked in an offsite garage facility under a covenant agreement with the project sponsor. Guests returning to the project curbside for their vehicles will be retrieved by valet staff and returned to the proposed 80-foot-long passenger loading zone along the project frontage on Broadway. Although no spillover queues are anticipated, if any recurring queues occur, the owner/operator of the project building will employ abatement methods as needed to abate such queues. Appropriate abatement methods will vary depending on the characteristics and causes of recurring queues, as well as the characteristics of the loading zone, the street(s) adjacent to the zone, and the associated land uses (if applicable), and are detailed in **Improvement Measure I-TR-2a, Monitoring and Abatement of Queues**.

Freight Loading Impacts

The proposed project would provide two off-street freight loading spaces in a loading dock along Davis Street in compliance with the requirements of San Francisco Planning Code section 152. The project would also establish a commercial loading zone (approximately 142½ feet long) along the Davis Street frontage of the project site. The proposed project would generate a demand for less than one freight/delivery loading space during both the average hour and peak hour of loading activities. Therefore, the proposed project's freight loading accommodations would satisfy the estimated loading demand.

Based on a turning template analysis that included fire truck turning movements⁶⁷, SU-30 trucks would be able to negotiate movements into and out of the dock along Davis Street. Freight loading activities, including deliveries and trash collection, would not result in adverse effects on traffic, transit, bicycle, or pedestrian circulation.

Although the project's impacts related to freight loading activities would be ***less than significant***, the following improvement measures could be implemented to further decrease these less-than-significant impacts.

Improvement Measure I-TR-2c: Active Loading Dock Driveway Controls

As an improvement measure to reduce and/or eliminate any potential conflicts between freight delivery vehicles entering and exiting the project driveway to and from the off-street freight loading spaces and conflicts between moving vehicles and other users of the roadway (e.g., cyclists, pedestrians in sidewalk areas), it will be the responsibility of the project sponsor and/or property owner to install active management controls at the off-street freight loading space driveway and within the off-street freight loading area.

It is recommended that sensors be installed at the gated loading dock ramp and at the driveway entrance/exit lane at Davis Street to detect any outbound vehicles and pedestrians within the driveway and ramp area. Upon exiting the loading dock, vehicles traveling along the garage ramp and approaching the gate would then trigger a sensor that would activate an electronic sign, signal, or audible devices at the driveway entrance to notify any vehicles, pedestrians, or bicyclists of the exiting vehicle.

Additional traffic calming and safety treatments will be installed within the loading dock area. Specific signage will be installed to notify drivers exiting the parking driveway to slow, stop, and yield to any pedestrians walking along the sidewalk on Davis Street (e.g., "Caution: Pedestrian Crossings," "Watch for Pedestrians," "Exit Slowly," "STOP"). Diagonal mirrors will also be installed so that motorists exiting the loading dock area and pedestrians on the sidewalk can see each other. The project sponsor will also install rumble strips or similar devices to maintain slow speeds for vehicles exiting the loading dock.

Improvement Measure I-TR-2d: Coordination of Large Deliveries and Garbage Pickup

Trucks exceeding 40 feet in length will be scheduled and coordinated through hotel management and restaurant tenants, and directed to use the proposed curbside 142½-foot-long commercial loading zone along the Davis Street frontage of the project site.

To reduce the potential for double-parking (or other illegal parking activity) by delivery or trash vehicles in the travel lanes along the Davis Street or Broadway frontages of the project site (in the event that the existing or proposed on-street loading spaces are occupied), appropriate delivery and trash pickup procedures will be enforced

⁶⁷ KCA Engineers, Fire Truck Turning Movements Drawings, September 2017.

to avoid any blockages of Davis Street or Broadway over an extended period of time and reduce any potential conflicts between deliveries and pedestrians walking along Davis Street or Broadway.

The building manager will notify the hotel, restaurant, entertainment venue, and retail tenants of garbage pickup times and locations so that they are efficiently coordinated and result in minimum conflict with other loading activity and traffic circulation in the immediate vicinity of the project.

Construction Impacts

Project construction would take up to approximately 22 months. Construction hours would typically be from 7 a.m. to 5 p.m. on weekdays, with occasional work on Saturdays. Normal off-peak activities including equipment deliveries and other unique tasks would occasionally take place outside of standard work hours.

Construction activities would be staged primarily at the northern portion of the project site and would also require some temporary sidewalk closures, primarily along the project frontage along Vallejo Street and Davis Street, but also occasionally along Broadway (and possibly The Embarcadero) for various durations during the entire construction period. The proposed project would develop and implement a construction management plan to anticipate and minimize transportation-related impacts of various construction activities associated with the proposed project. The plan would ensure that overall circulation around the project site is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle access and connectivity.

The plan would supplement and expand, rather than modifying or superseding, any manual, regulations, or provisions set forth by SFMTA, SFPW, or other City departments and agencies, and the California Department of Transportation. The construction contractor would be required to meet SFMTA's *Regulations for Working in San Francisco Streets* (the "Blue Book"), and would be required to meet with SFMTA and other responsible City agencies to determine feasible traffic management measures to reduce traffic congestion during construction of this project and other nearby projects, as appropriate.

Construction worker parking would be at an offsite location yet to be determined. Some construction equipment and related machinery may also need to occupy sidewalk space and parking lanes on a temporary and periodic basis, depending on the construction phase. Temporary, periodic sidewalk closures may be necessary, requiring pedestrian diversion into parking lanes. It is anticipated that no travel lanes would need to be closed during construction.

In general, lane and sidewalk closures are subject to review and approval by the Transportation Advisory Staff Committee, an interdepartmental committee that includes the San Francisco Police Department, SFPW, the San Francisco Planning Department, SFFD, and SFMTA. The construction management plan reviewed by the committee would address issues of circulation (for traffic, bicycles, and pedestrians), safety, parking, and other project construction in the area. The project would be required to consult with SFMTA before construction to review potential effects on nearby transit operations.

Throughout the construction period, construction-related trucks would flow into and out of the site. Construction truck traffic would temporarily lessen the capacities of local streets because of the slower movement and larger turning radii of trucks, which may affect traffic operations. It is anticipated that a majority of the construction-related truck traffic would use Interstate 80, U.S. Highway 101, and Interstate 280 to access the project site. In general, trucks and construction workers would use The Embarcadero, Howard Street, Battery Street, First Street, Fremont Street, Front Street, Clay Street, Davis Street, Broadway, and Drumm Street to travel between the project site and these freeways.

On average, 125 construction workers per day are anticipated to be present at the project site, depending on the construction phase. Construction workers who drive to the site would be able to park in nearby public parking facilities in the vicinity of the project site or in available on-street parking spaces. To reduce worker-vehicle demand, construction workers would be

encouraged to carpool or take public transportation. It is anticipated that adding worker-related vehicle- or transit-trips would not substantially affect transportation conditions, because any impacts on local intersections or the transit network would be similar to, or less than, those associated with the proposed project.

Overall, construction-related impacts would be temporary and limited in duration, and would be *less than significant*. However, the following improvement measures could be implemented to further decrease these less-than-significant impacts.

Improvement Measure I-TR-2e: Construction Truck Deliveries during Off-Peak Periods

Any construction traffic occurring between 7 a.m. and 9 a.m. or between 3:30 p.m. and 6 p.m. on weekdays would coincide with weekday commute-period traffic and could temporarily disrupt traffic and transit flow, although it would not be considered a significant impact. Limiting truck movements to the hours between 9 a.m. and 3:30 p.m. on weekdays (or other times, if approved by SFMTA) would further minimize disruptions to circulation along adjacent streets during the weekday a.m. and p.m. peak periods.

As required, the project sponsor and construction contractor(s) will meet with SFMTA, SFFD, and the San Francisco Planning Department to determine feasible measures to reduce traffic congestion, including potential transit disruption and pedestrian circulation impacts, during construction of the project. To minimize cumulative traffic impacts due to project construction, the project sponsor will coordinate with construction contractors for any concurrent nearby projects that are planned for construction or which later become known, including the proposed mixed-use development at 88 Broadway and 753 Davis Street.

Improvement Measure I-TR-2f: Construction Management Plan

In addition to items required in the construction management plan, the project sponsor will include the following:

- *Carpool and Transit, and Other Access for Construction Workers.* As an improvement measure to minimize parking demand and vehicle-trips associated with construction workers, the construction contractor(s) will include methods to encourage carpooling, transit and bicycle use, or on-foot travel to and from the project site by construction workers in the construction management plan contracts.
- *Project Construction Updates.* As an improvement measure to minimize construction impacts on nearby businesses, the project sponsor will provide regularly updated information (typically in the form of a website, news articles, and onsite postings) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns.

Impact TR-3: The proposed project would not result in substantially increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. (*Less than Significant*)

The proposed project would not include any design features that would substantially increase traffic hazards (e.g., a new sharp curve or dangerous intersections), and would not include any incompatible uses, as discussed in Section E.1, Land Use and Planning. Therefore, the proposed project would not cause adverse impacts associated with traffic hazards. In addition, the proposed project does not provide onsite parking facilities and would eliminate all existing curb cuts.

As discussed above under Impact TR-2, peak passenger loading demand of up to two vehicles per minute could occur with the proposed project. The proposed loading zone would have capacity to accommodate the anticipated peak passenger loading demand, and the valet operation would implement valet service rate measures as needed to maintain vehicular access to the zone at all times. This would ensure that the loading zones during peak traffic hours would not interfere with bicycle, pedestrian, or vehicular movements around the site.

Although the proposed project is not expected to result in substantial loading and impacts would be less than significant, **Improvement Measure I-TR-2a, Monitoring and Abatement of Queues**, and **Improvement Measure I-TR-2b, Active Valet Parking Management**, has been included to further decrease the severity of these less-than-significant impacts with regard to queuing and parking management. Based on the above, the proposed project would have a *less-than-significant* impact related to transportation hazards due to a design feature or resulting from incompatible uses.

Impact TR-4: The proposed project would not result in inadequate emergency access. (*Less than Significant*)

Although the proposed project would generate additional traffic in the surrounding area, such an increase in vehicles would not impede or hinder the movement of emergency vehicles, including routes from nearby fire stations. The street network—including Davis Street, Vallejo Street, and Broadway, all located immediately adjacent to the site—currently provides emergency-vehicle access to the project site, and would continue to do so with the project.

The existing SFFD easement along the northwesterly edge of the project site would be abandoned and replaced with an enhanced easement from Vallejo Street through the public park to The Embarcadero, a modification that has been reviewed by SFFD and the Port’s fire marshal⁶⁸. Emergency vehicle access would be provided along a proposed vehicle and pedestrian pathway through the project’s public plaza area on the northern side of the project site. The emergency access lane would be accessed from new 15-foot-long curb cuts at the east end (along The Embarcadero) and west end (at the northeastern corner of the Davis Street/Vallejo Street intersection), and general vehicle access would be restricted through use of removable/retractable bollards. A turning template analysis that included fire truck turning movements⁶⁹ shows that a fire truck would be able to turn into the emergency access lane from Vallejo Street.

Therefore, the proposed project’s impacts on emergency-vehicle access would be *less than significant*.

Impact TR-5: The proposed project would not conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such features. (*Less than Significant*)

Transit Impacts

Transit Screenlines

The proposed project would generate about 885 new daily transit person trips to and from the project site, with approximately 140 new transit person trips during the p.m. peak hour. Based on the distribution of transit trips associated with the proposed project during the p.m. peak hour, about 50 outbound transit trips would cross local and regional screenlines, with the remaining project-generated transit trips not crossing any screenlines. These 50 transit trips include 25 trips across local (Muni) screenlines and 25 trips across regional screenlines.

The project’s impacts on transit capacity can be quantified across “screenlines” surrounding downtown San Francisco, representing groupings of local and regional transit services that serve a common origin or destination. For the weekday p.m. peak hour, the screenlines are typically oriented in the outbound direction leaving downtown, as this is the dominant direction of travel during the afternoon and evening. Screenlines may be further subdivided into corridors (for local transit) or operators/modes (for regional transit). Local transit (Muni) has a capacity utilization standard of 85 percent, while regional transit operators have a capacity utilization standard of 100 percent.

⁶⁸ SFFD Captain Ken Cofflin, email correspondence with the sponsor, the Port, and KCA Engineers, August 31, 2016.

⁶⁹ KCA Engineers, Fire Truck Turning Movements Drawings, September 2017.

For local transit, the proposed project would increase ridership on the downtown screenlines and corridors, but would not directly cause any of them to exceed the 85 percent capacity utilization threshold. However, several corridors currently exceed the 85 percent capacity utilization threshold under existing conditions and would continue to do so with the project. A contribution analysis indicates that the proposed project would not represent a considerable contribution to ridership on any of these corridors:

- On the Fulton/Hayes corridor (5 Fulton and 21 Hayes) in the Northwest screenline, the project would contribute 0.1 percent to the total ridership during the weekday p.m. peak hour.
- On the Third Street corridor (T Third Street) in the Southeast screenline, the project would contribute 0.01 percent to the total ridership during the weekday p.m. peak hour.

Therefore, the proposed project would result in *less-than-significant* impacts on capacity utilization on the downtown screenlines for local transit.

For regional transit, the proposed project would increase ridership on the downtown screenlines and corridors, but would not directly cause any of them to exceed the 100 percent capacity utilization threshold. However, BART service to the East Bay currently exceeds the 100 percent capacity utilization threshold under existing conditions and would continue to do so with the project. A contribution analysis indicates that the proposed project would not represent a considerable contribution to ridership on BART service to the East Bay:

- On BART service in the East Bay screenline, the project would contribute less than 0.01 percent to the total ridership during the weekday p.m. peak hour.

Therefore, the proposed project would result in *less-than-significant* impacts on capacity utilization on the downtown screenlines for regional transit.

Transit Operations

The proposed project would not modify or relocate any existing Muni bus or streetcar stops, and would not introduce any design features that would preclude or alter access to nearby transit facilities. The proposed project would generate automobile traffic along nearby local roadways that currently accommodate bus transit routes (i.e., Battery Street), but would not result in substantial conflicts between project-generated vehicles destined to the project site and transit vehicles, as these local streets include adequate travel lanes (and roadway capacity) to allow transit vehicles to bypass any vehicles slowing to pull into the curbside loading zones adjacent to the project site. Therefore, the project's impacts on transit operations would be *less than significant*.

Bicycle Impacts

The proposed project would provide class I and class II bicycle parking in compliance with the requirements of planning code sections 155.1 and 155.2, including 20 class I spaces in a secure bicycle room within the ground-floor level of the hotel along the Davis Street frontage and 43 class II spaces within sidewalks adjacent to the project site.

The proposed project would generate approximately 26 person-trips on "other" modes during the weekday p.m. peak hour, of which a substantial portion are anticipated to be bicycle trips. The project site is within convenient bicycling distance of nearby mixed-use neighborhoods (including North Beach, the Financial District, South of Market, and South Beach), and is located adjacent to major bikeways along The Embarcadero (Route 5 and the San Francisco Bay Trail) and Broadway (Route 10).

The proposed project would not increase automobile or bicycle traffic to a level that adversely affects existing bicycle conditions in the area. Furthermore, the project would not include design features or generate activities (such as freight

loading) that would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas. Therefore, the proposed project's impact on bicycle facilities and circulation would be *less than significant*.

Although the project's impacts on bicycle conditions would be less than significant, several improvement measures could be implemented to further decrease these less-than-significant impacts. **Improvement Measure I-TR-2b, Active Valet Parking Management**, discussed in more detail in the preceding "Passenger Loading Impacts" section, would address potential project effects as a result of activities at the proposed passenger and commercial loading zones. **Improvement Measure I-TR-2c, Active Loading Dock Driveway Controls** and **Improvement Measure I-TR-2d, Coordination of Large Deliveries and Trash Pickup**, discussed in more detail in the preceding "Freight Loading Impacts" section, would address potential project effects as a result of freight loading activities.

Pedestrian Impacts

The proposed project would generate approximately 256 pedestrian trips during the weekday p.m. peak hour, including approximately 140 transit trips and 116 walk-only trips. The proposed project would include multiple pedestrian entrances along Broadway and The Embarcadero to accommodate employees, hotel guests, patrons, and other visitors, and the new pedestrian activity generated by the project would be spread across several adjacent sidewalks and crosswalks. The proposed project's primary entrance for the hotel would be provided on the northern side of Broadway adjacent to the curbside loading zone, where the main lobby area and elevators are located to allow hotel patrons to access the hotel rooms. An additional pedestrian entrance would be provided from the western side of The Embarcadero, and would serve as the primary entrance for the entertainment venue and an alternative to the Broadway entrance for all other project uses.

The project includes Better Streets Plan streetscape improvements in compliance with Planning Code section 138.1, including two new 8½-foot-wide bulb-outs along Broadway (at intersection corners with The Embarcadero and Davis Street), two new 6-foot-wide bulb-outs along Davis Street (at intersection corners with Vallejo Street and Broadway), two new marked crosswalks at the Davis Street/Vallejo Street intersection, and sidewalk landscaping. The project would also remove (i.e., fill in) the two existing curb cuts, and install continuous new sidewalk along the eastern side of Davis Street north of Broadway, and construct one new curb cut to serve a ground-floor loading dock. Overall, these improvements would enhance walkability and the pedestrian realm.

The proposed project would not increase automobile or pedestrian traffic to a level that adversely affects existing pedestrian conditions in the area. Furthermore, the project would not include design features or generate activities (such as freight loading) that would create potentially hazardous conditions for pedestrians or otherwise substantially interfere with pedestrian accessibility to the site and adjoining areas. Therefore, the proposed project's impact on pedestrian facilities and circulation would be *less than significant*.

Although the project's impacts on pedestrian conditions would be less than significant, several improvement measures could be implemented to further decrease these less-than-significant impacts. **Improvement Measure I-TR-2a, Monitoring and Abatement of Queues**, and **Improvement Measure I-TR-2b, Active Valet Parking Management**, discussed in more detail in the preceding "Passenger Loading Impacts" section, would address potential project effects as a result of activities at the proposed passenger and commercial loading zones. **Improvement Measure I-TR-2c, Active Loading Dock Driveway Controls**, and **Improvement Measure I-TR-2d, Coordination of Large Deliveries and Trash Pickup**, discussed in more detail in the preceding "Freight Loading Impacts" section, would address potential project effects as a result of freight loading activities.

Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not substantially contribute to cumulative transportation and circulation impacts related to VMT, transit, bicycles, pedestrians, loading, emergency access, or construction. (*Less than Significant*)

VMT, by its very nature, is largely a cumulative impact. The VMT associated with past, present, and future projects contribute to physical secondary environmental impacts. It is likely that no single project by itself would be sufficient in size to prevent the region or state from meeting its VMT reduction goals. Instead, a project's individual VMT contributes to cumulative VMT impacts. The project-level thresholds for VMT and induced automobile travel are based on levels at which new projects are not anticipated to conflict with state and regional long-term GHG emission reduction targets and statewide VMT per capita reduction targets set in 2020. Therefore, because the proposed project would not exceed the project-level thresholds for VMT and induced automobile travel (Impact TR-1), the proposed project would not be considered to result in a cumulatively considerable contribution to VMT impacts.

Furthermore, as shown in Table 4, Daily Vehicle Miles Traveled, projected 2040 average daily VMT for land uses in TAZ 830 is 2.2 (per capita) for residential uses, 10.1 (per employee) for retail uses, and 5.6 (per employee) for theater uses. This is below the corresponding regional averages of 16.1 for residential uses (86 percent lower), 14.6 for retail uses (31 percent lower), and 15.4 for theater uses (43 percent lower).

Because the project site is located in an area where VMT is less than the projected 2040 regional average minus 15 percent, the proposed project's hotel, retail/restaurant, and entertainment uses would not result in substantial additional VMT. Therefore, the proposed project would not contribute considerably to any substantial cumulative increase in VMT. This impact would be *less than significant*.

Transit Impacts

The analysis of transit capacity utilization under cumulative (year 2040) conditions considers future ridership growth (including new ridership from future land use development) and foreseeable changes in local and regional transit service in the future (such as Muni Forward improvements). Although some local transit screenlines and corridors and regional transit screenlines and operators would operate above their established capacity utilization threshold (85 percent for local transit, 100 percent for regional transit) by 2040, the proposed project would contribute less than 1 percent of the total ridership on these services.

The project would generate automobile traffic on the surrounding street network, but would not make a considerable contribution to the increase in traffic levels between now and year 2040 such that substantial conflicts to transit operations could occur. Therefore, the project's contribution to cumulative transit impacts would be *less than significant*.

Bicycle and Pedestrian Impacts

Bicycle and pedestrian activity may increase between now and year 2040 with the addition and enhancement of pedestrian and bicycle facilities, future land use development, and other transportation changes such as the Muni Forward improvements and The Embarcadero Enhancement Project. However, the proposed project would not create potentially hazardous conditions for bicyclists or pedestrians or otherwise interfere with pedestrian or bicycle accessibility to the project site and adjoining areas. The project would not substantially affect nearby bicycle routes or contribute to substantial overcrowding on public sidewalks under cumulative conditions, and would not conflict with any proposed streetscape plans in the vicinity of the project under cumulative conditions. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable developments in San Francisco, would result in *less-than-significant* cumulative bicycle and pedestrian impacts.

Passenger and Freight Loading Impacts

The proposed project would not contribute to any modification and/or elimination of existing or proposed passenger and freight loading spaces, or to any substantial passenger and freight loading demand in excess of the available capacity of corresponding facilities, such that adverse effects on traffic, transit, bicycle, or pedestrian circulation could occur under cumulative conditions. The 88 Broadway and 753 Davis Street^{70, 71} project has potential to have a cumulative impact on traffic and loading because of the proximity to the proposed project site. The 88 Broadway and 753 Davis Street project would add two 35-foot long passenger loading spaces (one located along the project frontage on the west side of Davis Street, and one located along the south side of Vallejo Street) in addition to a new 35-foot long on-street commercial loading space along the project frontage on Front Street. While both projects would include passenger loading zones along Davis Street, given existing and projected vehicle traffic, and the expected increase in traffic activity generated by the two sites, as well as the physical separation between the various passenger and commercial loading zones, potential conflicts between the two sites or with existing plus planned traffic circulation would not constitute a substantial traffic safety hazard. There would be enough space for vehicle traffic and passenger loading zones for the two projects to coexist (along the west side of Davis Street and south side of Vallejo Street) or the proposed commercial loading areas along the east side of Davis Street. Additional caution may be needed for larger trucks using the loading areas which may require more time and space to move through Davis Street, however, this would be a short term, temporary impact. The proposed project would not contribute to any potential elimination and/or modification to existing or future loading spaces, nor contribute to such adverse conditions in combination with other planned projects, including 88 Broadway and 753 Davis Street. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable developments in San Francisco, would result in *less-than-significant* cumulative impacts related to passenger and freight loading.

Emergency-Vehicle Access Impacts

There are no existing or planned facilities such as hospitals or fire stations in the immediate vicinity of the project site that would generate unusual amounts of emergency-vehicle activity under cumulative conditions. The project would generate automobile traffic on the surrounding street network, but would not make a considerable contribution to the increase in traffic levels between now and year 2040 such that substantial conflicts with emergency-vehicle access could occur. Although the proposed project and other cumulative projects may involve streetscape changes, emergency vehicles would continue to have access to the project site and surrounding properties, and along the surrounding street network, as under existing conditions. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable developments in San Francisco, would result in *less-than-significant* cumulative impacts on emergency-vehicle access.

Construction Impacts

Localized transportation impacts could occur under cumulative conditions as a result of construction activities for future, foreseeable projects that take place concurrently with construction activities for the proposed project. The 88 Broadway and 753 Davis Street project is anticipated to begin in 2019 and is likely to have some overlapping construction with the proposed project. The following improvement measures **I-TR-2e: Construction Truck Deliveries during Off-Peak Periods** and **I-TR-2f: Construction Management Plan** will help reduce potential cumulative impacts. In addition, the project sponsor has included measures under **I-TR-2f** to minimize parking demand and vehicle-trips associated with construction workers and the construction contractor(s) will include methods to encourage carpooling, transit and bicycle use, or on-foot travel to and from the project site by construction workers in the construction management plan contracts. Also, the sponsor will provide project construction updates which will minimize construction impacts related to the construction of the 88 Broadway and

⁷⁰ CHS Consulting Group, Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study, May 2018.

⁷¹ San Francisco Planning Department, *88 Broadway and 735 Davis Street Project Final Mitigated Negative Declaration*, Case No. 2016-007850ENV, October 25, 2017, amended February 27, 2018. http://sfmea.sfplanning.org/2016-007850ENV_FMND.pdf. Project was approved but construction has not begun.

753 Davis Street project as well as nearby businesses. The construction manager for each individual project would work with the various City departments to develop a detailed and coordinated plan that would address construction vehicle routing, traffic control, and circulation for all modes adjacent to the construction area for the duration of any overlap in construction activity. Overall, cumulative construction-related impacts would be temporary and limited in duration, and would be *less than significant*.

E.5. NOISE

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
5. NOISE- -Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within an airport land use plan area, within 2 miles of a public airport or public use airport, or in the vicinity of a private airstrip. The nearest public airport is approximately 10 miles from the project site. As such, questions 5e and 5f are not applicable and will not be discussed further.

AECOM prepared a technical report to evaluate the potential noise and vibration effects associated with the proposed project. The analysis methods and results of the noise report have been incorporated into this initial study and are included in the project case file.⁷² Noise impacts as they relate to traffic and construction activities also relied on data provided in the transportation impact study prepared by CHS Consulting Group⁷³ and the preliminary geotechnical reports prepared by ENGEO Incorporated,^{74, 75} respectively.⁷⁶

Noise and Vibration Overview

Noise

Noise is generally defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. Pitch is the height of a tone; higher-pitched sounds are louder to humans than lower-pitched sounds. Loudness is the intensity or amplitude of sound. The sound-pressure level is the most common descriptor used to characterize the loudness of a sound level. Because sound pressure can vary enormously within the range of human hearing, the logarithmic decibel scale (dB) is used to quantify sound levels.

⁷² AECOM, *ZinZanni Hotel & Theater Noise and Vibration Technical Report*, July 20, 2018.

⁷³ CHS Consulting Group, 2018. *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018.

⁷⁴ ENGEO Incorporated, 2016. *Geotechnical Exploration for the Hotel and Teatro ZinZanni Project*, September 13, 2016.

⁷⁵ ENGEO Incorporated, 2018. *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies*, April 6, 2018.

⁷⁶ The updated traffic analysis in the May 2018 Project Final Transportation Impact Study would not change the results in this section which are based on a greater number of daily vehicle trips.

The human ear is not equally sensitive to all frequencies within the entire sound spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive. This specific “filtering” of sound is called “A-weighting.” Because humans are less sensitive to low-frequency sound than to high-frequency sound, A-weighted decibel (dBA) levels deemphasize low-frequency sound energy to better represent how humans hear.

Different descriptors for sound-level measurements are used to characterize the time-varying nature of sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that noise effects are dependent on the total acoustical energy content and the time and duration of occurrence.

In a typical environment, the day-night sound level (DNL or L_{dn}) and community noise equivalent level noise descriptors rarely differ by more than 1 decibel (dB). As a matter of practice, L_{dn} and community noise equivalent level values are considered to be equivalent and are treated as such in this section. For a stationary point-source of sound, sound typically attenuates at a rate of 6 dB per doubling of distance (i.e., 6 dB at 50 feet, 12 dB at 100 feet, 18 dB at 200 feet). For a line source of sound such as free-flowing traffic on a freeway, sound attenuates at a rate of approximately 3 dB per doubling of distance (i.e., 3 dB at 50 feet, 6 dB at 100 feet, 9 dB at 200 feet). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, an increase of 5 dB is generally perceived as a distinctly noticeable increase, and an increase of 10 dB is generally perceived as a doubling of loudness.

Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates (travel) over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface such as grass attenuates at a greater rate than sound that travel over a hard surface such as pavement. The increased attenuation due to ground sound absorption is typically in the range of 1–2 dB per doubling of distance. Barriers such as building and topography that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Vibration

Construction activity can result in varying degrees of ground vibration depending on the equipment and method used. Equipment such as air compressors, light trucks, and hydraulic loaders generate little or no ground vibration. Dynamic construction equipment such as pile drivers can create vibrations that radiate along the surface and downward into the earth. These surface waves can be felt as groundborne vibration. However, no pile driving is proposed under this project. Vibration can result in effects ranging from annoying people to damaging structures. Variations in geology and distance result in different vibration levels comprising different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance from the vibration source.

Noise and Vibration Regulations

The City has adopted regulations and policies that are based in part on federal and state regulations and guidelines, and are intended to control, minimize, or mitigate environmental noise. Standards and guidelines applicable to the proposed project are discussed below.

San Francisco Noise Control Ordinance

The San Francisco Noise Control Ordinance regulates both construction noise and stationary-source noise within the city limits, such as transportation, construction, mechanical equipment, entertainment, and human or animal behavior. Found in article 29, “Regulation of Noise,” of the San Francisco Police Code, the ordinance addresses noise from construction

equipment, nighttime construction work, and noise from stationary mechanical equipment and waste processing activities.⁷⁷ Section 2907 of the Noise Control Ordinance limits noise levels from construction equipment to maximum 80 dBA at 100 feet (or other equivalent noise level at another distance) between 7 a.m. and 8 p.m. The provisions of section 2907 do not apply to impact tools and equipment that have intake and exhaust mufflers as recommended by the manufacturers and are approved by the director of SFPW or the director of DBI as accomplishing maximum noise attenuation. The noise exemption also does not apply to pavement breakers and jackhammers that are equipped with acoustically attenuating shields or shrouds as recommended by the manufacturers and are approved by the director of SFPW or the director of DBI as accomplishing maximum noise attenuation. In addition, construction work at night (between 8 p.m. and 7 a.m.) may not exceed the ambient level by 5 dBA at the nearest property lane, unless a permit is granted by the director of SFPW or the director of DBI, pursuant to section 2908 of the Noise Control Ordinance.

Section 2904 of the Noise Control Ordinance provides a maximum noise limit of 75 dBA as measured at 50 feet from a waste disposal truck. The noise limit applies only to the truck's mechanical or hydraulic system, and not to the noise associated with crushing, impacting, dropping, or moving garbage on the truck.

Section 2909 of the Noise Control Ordinance regulates noise from onsite stationary noise sources within specific land uses. Section 2909 states that the noise levels from equipment operating on the project property shall not exceed the ambient noise levels at the property line by 5 dBA if the noise source is on residential property, 8 dBA if the noise source is on a commercial/industrial property, and 10 dBA if the noise source is on a public property. In addition, section 2909(d) states that no fixed (permanent) noise source, as defined by the ordinance, may cause the noise level inside any sleeping or living room in a residential dwelling unit to exceed 45 dB between 10 p.m. and 7 a.m. or 55 dB between 7 a.m. and 10 p.m. when windows are open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

San Francisco General Plan Noise Compatibility Standards



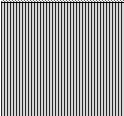
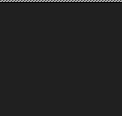
The Environmental Protection Element of the San Francisco General Plan contains land use compatibility guidelines for community noise. These guidelines, which are similar to state guidelines promulgated by the Governor's Office of Planning and Research, indicate maximum acceptable noise levels for various newly developed land uses. The uses for the proposed project correspond to the "transient lodging," "playgrounds, parks," and "auditoriums, concert halls, amphitheaters, music shells" land use categories in the land use compatibility guidelines, re-created below in Table 9.⁷⁸ For a transient lodging use, the maximum "satisfactory, with no special insulation requirements" exterior noise levels are approximately 60 dBA L_{dn} . Where exterior noise levels exceed 60 dBA L_{dn} for new transient lodging, it is generally recommended that a detailed analysis of noise reduction requirements be conducted before final review and approval of the project, and that the needed noise insulation features be included in the project design. For a playground/parks land use, the maximum "satisfactory, with no special insulation requirements" exterior noise levels are approximately 70 dBA L_{dn} .⁷⁹ Where exterior noise levels exceed 70 dBA L_{dn} for a playground/parks land use, it is generally recommended that a detailed analysis of noise reduction requirements be conducted before final review and approval of the project, and that the needed noise insulation features be included in the project design. For any new auditorium, concert hall, amphitheater, or music shell land use, it is recommended that a detailed analysis of noise reduction requirements be conducted before final review and approval of the project, and that the needed noise insulation features be included in the project design.

⁷⁷ San Francisco Police Code, article 29, Regulation of Noise, *Guidelines for Noise Control Ordinance Monitoring and Enforcement*, <https://www.sfdph.org/dph/files/EHSdocs/ehsNoise/GuidelinesNoiseEnforcement.pdf>, accessed April 2018.

⁷⁸ *San Francisco General Plan*, Environmental Protection Element, Land Use Compatibility Chart for Community Noise, http://generalplan.sfplanning.org/16_Environmental_Protection.htm#ENV_TRA_9_I, accessed January 9, 2018.

⁷⁹ Ibid.

TABLE 9 GENERAL PLAN LAND USE COMPATIBILITY CHART FOR COMMUNITY NOISE

Land Use Category	Sound Levels and Land Use Consequences L _{dn} Value in Decibels						
	55	60	65	70	75	80	85
Residential: All Dwellings, Group Quarters							
Transient Lodging: Hotels and Motels							
Schools, Classrooms, Libraries, Churches, Hospitals, Nursing Homes, etc.							
Auditoriums, Concert Halls, Amphitheaters, Music Shells							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Parks							
Golf Courses, Riding Stables, Water-based Recreation Areas, Cemeteries							
Office Buildings: Personal Businesses and Professional Services							
Commercial: Retail, Movie Theaters, Restaurants							
Commercial: Wholesale and Some Retail, Industrial/Manufacturing, Transportation, Communications and Utilities							
Manufacturing Communications: Noise-Sensitive							
Notes: L _{dn} = day-night sound level							
	Satisfactory, with no special noise insulation requirements				New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.		
	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.				New construction or development should generally not be undertaken.		

Source: San Francisco General Plan Noise and Land Use Compatibility Guidelines.

Other Relevant Noise and Vibration Standards

- The 2016 California Building Code, CCR title 24, part 2, section 1207.4, mandates that an interior noise level attributed to exterior sources shall not exceed 45 dBA L_{dn} for any habitable room in a multifamily building.
- The CALGreen Code, which establishes noise criteria for commercial spaces, requires that interior noise levels be no greater than 50 dBA equivalent noise level (L_{eq}) during the noisiest hour of operation.

Existing Conditions

Noise-Sensitive Land Uses

Noise-sensitive land uses generally consist of those uses where exposure to noise would result in adverse effects, as well as uses for which quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise. Other noise-sensitive land uses include hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low noise levels are essential.

The project site is in a highly urbanized area of the city and is bounded by commercial, residential, and office uses. The nearest noise-sensitive land use to the project site is the Gateway Apartments, a five-story apartment building located across Broadway, about 80 feet south of the project site, as illustrated in Figure 18. The northern edge of the project site abuts a three-story office building occupied by the KGO-TV news station. Although the news station is a commercial use and typically would not be characterized as a noise-sensitive land use, the TV studio is considered a vibration-sensitive land use per Federal Transit Administration (FTA) guidance.⁸⁰ Two office buildings and a surface parking lot are located across Davis Street, about 50 feet west of the project site.⁸¹ Various Port commercial tenants, including the Waterfront Restaurant, are located across The Embarcadero from the project site to the east. These office and commercial uses are not considered noise-sensitive land uses.

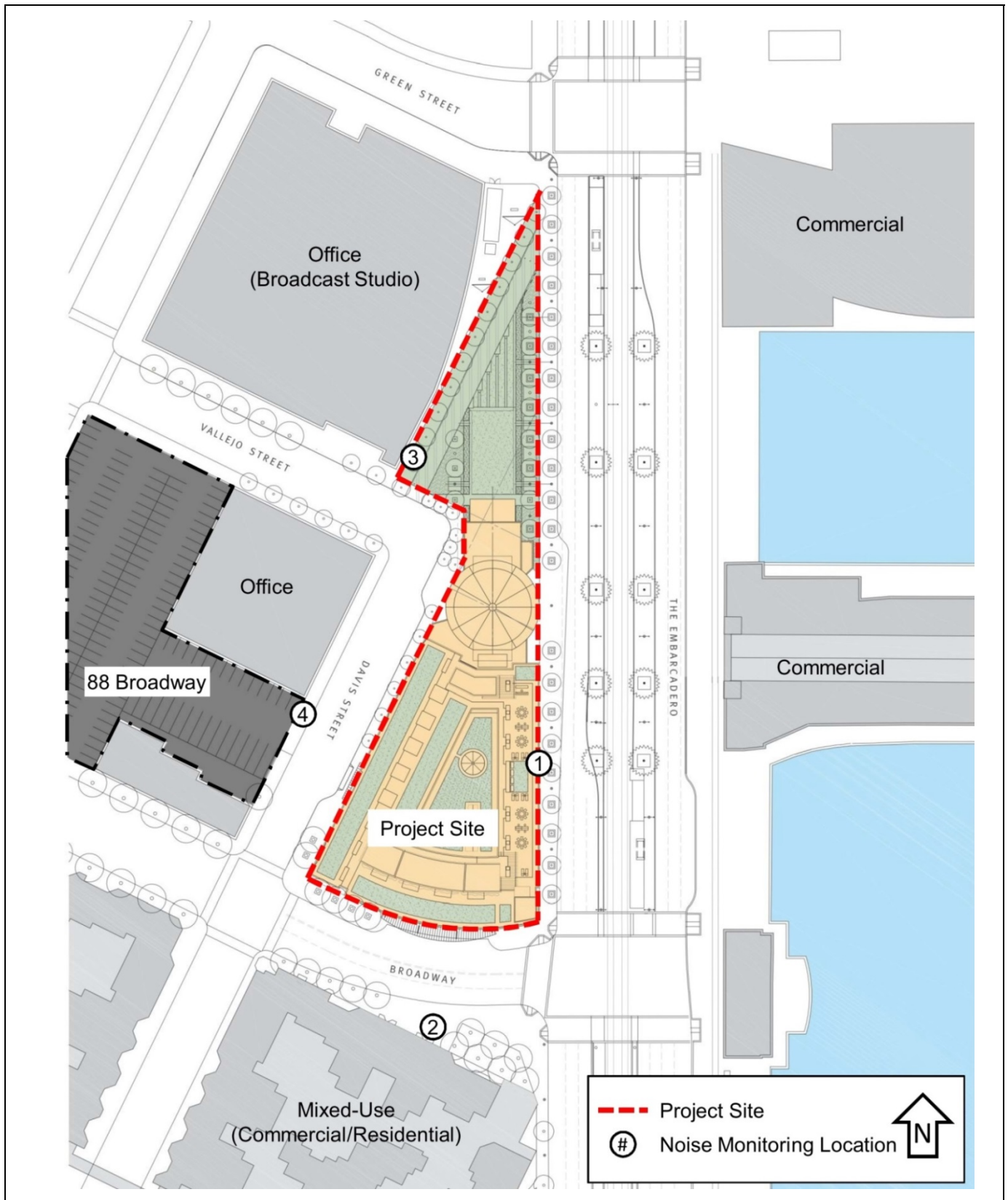
Existing Ambient Noise Levels

Ambient noise in the project vicinity is typical of noise levels found in San Francisco and includes noise caused by traffic, transit, and trucks, commercial activities, surface parking lot activities, and other miscellaneous noise sources associated with typical urban activities. This understanding is consistent with section 5.2 of the City's Guidelines for Noise Control Ordinance Monitoring and Enforcement, which state: "The ambient sound level measured may include regularly reoccurring noises such as traffic noise, construction, wind chimes, or other sounds from nearby sources not in the control of the owner or operator."⁸² Existing ambient noise measurements were conducted at four selected locations surrounding the project site (Figure 18). The ambient noise measurements were taken using a Larson Davis Model 870 integrated sound level meter, which is a Type 1 standard instrument as defined in American National Standards Institute S1.4. All instruments were calibrated and operated according to the manufacturer's specifications. The noise sensor device (microphone) was placed approximately 5 feet above the local grade. The ambient noise measurements were conducted on Sunday, July 10, 2016, and Monday, July 11, 2016. Two 15-minute measurements were conducted at each receptor location, representing daytime and nighttime hours.

⁸⁰ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006, Table 8-2.

⁸¹ San Francisco Planning Department, *88 Broadway and 735 Davis Street Project Final Mitigated Negative Declaration*, Case No. 2016-007850ENV, October 25, 2017, amended February 27, 2018. http://sfmea.sfplanning.org/2016-007850ENV_FMND.pdf.

⁸² San Francisco Police Code, article 29, Regulation of Noise, *Guidelines for Noise Control Ordinance Monitoring and Enforcement*, <https://www.sfdph.org/dph/files/EHSdocs/ehsNoise/GuidelinesNoiseEnforcement.pdf>, accessed April 2018.



Source: AECOM, 2017

FIGURE 18 NOISE MONITORING LOCATIONS

Table 11 shows the measured ambient noise levels. As shown, the existing daytime ambient noise levels ranged from 57.7 to 66.7 dBA L_{eq} for the weekend measurements (Sunday, July 10, 2016) and 56.9 to 68.1 dBA L_{eq} for the weekday measurements (Monday, July 11, 2016). The nighttime ambient noise levels ranged from 57.4 to 65.5 dBA L_{eq} for the weekend measurements and 53.4 to 64.6 dBA L_{eq} for the weekday measurements. Based on field observation and measured sound data, the current ambient noise environment in the vicinity of the project site (i.e., plan area) is influenced primarily by vehicular traffic on local roadways and public transit.

TABLE 11 EXISTING AMBIENT NOISE LEVELS

Location ¹	Description	Measurement Date/Time	Measured Noise Levels, A-Weighted Sound Level (dBA)		
			L_{eq}	L_{min}	L_{max}
1	Project site eastern boundary, along The Embarcadero	Sunday 7/10/2016			
		- 12:52 p.m.–1:07 p.m.	66.7	52.8	85.0
		- 10:41 p.m.–10:56 p.m.	65.5	51.9	87.3
		Monday 7/11/2016			
		- 10:24 a.m.–10:39 a.m.	68.1	51.8	86.6
2	Gateway Apartments (mixed-use), on the southern side of Broadway, south of the project site	- 1 a.m.–1:15 a.m.	61.9	46.6	75.8
		Sunday 7/10/2016			
		- 1:11 p.m.–1:26 p.m.	64.6	51.9	78.4
		- 11:02 p.m.–11:17 p.m.	65.5	51.6	80.4
		Monday 7/11/2016			
3	The office building (KGO-TV) at the northwestern corner of Vallejo Street and Davis Street, west of the project site	- 10:42 a.m.–10:57 a.m.	67.0	51.4	83.0
		- 12:41 a.m.–12: 56 a.m.	64.6	46.0	81.8
		Sunday 7/10/2016			
		- 1:48 p.m.–2:03 p.m.	59.5	49.6	75.2
		- 10:04 p.m.–10:19 p.m.	57.4	49.6	66.6
4	The office building/parking lot on western side of Davis Street, west of the project site (proposed housing project, 88 Broadway)	Monday 7/11/2016			
		- 11:01 a.m.–11:16 a.m.	56.9	49.5	71.7
		- 12:08 a.m.–12:23 a.m.	53.4	45.8	67.4
		Sunday 7/10/2016			
		- 1:30 p.m.–1:45 p.m.	57.7	50.0	73.7
		- 10:23 p.m.–10:38 p.m.	58.6	49.3	69.9
		Monday 7/11/2016			
		- 11:18 a.m.–11:33 a.m.	59.3	50.2	76.1
		- 12:25 a.m.–12:40 a.m.	58.5	45.0	74.0

Notes:

L_{eq} = equivalent noise level; L_{max} = maximum noise level; L_{min} = minimum noise level

¹ Monitoring locations correspond to those depicted in Figure 18.

Source: Data collected by AECOM on July 10 and 11, 2016

In addition to the ambient noise measurements, existing traffic noise on local roadways in the areas surrounding the project site was estimated to quantify the 24-hour L_{dn} noise levels, based on the existing traffic volumes as provided in the project's transportation impact analysis.⁸³ Traffic noise levels along local roadways were estimated based on daily volumes and their distribution, using the roadway noise calculation procedures provided in the California Department of Transportation *Technical Noise Supplement to the Traffic Noise Analysis Protocol*,⁸⁴ which is based on the roadway noise prediction methodologies in the Federal Highway Administration Highway Traffic Noise Prediction Model (RD-77-108).

⁸³ CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018.

⁸⁴ California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office, September 2013.

Table 12 provides the estimated traffic noise levels for the analyzed local roadway segments based on existing traffic volumes. As shown, the existing L_{dn} attributable to surface-street traffic volumes only ranged from 57.0 dBA L_{dn} along Green Street west of Front Street to 68.2 dBA L_{dn} along The Embarcadero south of Broadway. Estimates of traffic-related noise level estimates generally agree with the measured levels of outdoor ambient sound appearing in Table 11; for instance, the estimated existing traffic noise L_{dn} value for The Embarcadero segment between Green Street and Broadway appearing in Table 12, 66.9 dBA, is 3 dBA less than an L_{dn} value of 70 dBA calculated from the Monday morning and nighttime measured L_{eq} values presented in Table 11. Such close correlation between the measured and modeled levels suggests that roadway traffic noise is a dominant contributor to the current outdoor ambient sound environment, and that the traffic noise methodology should reasonably predict changes to the existing outdoor sound environment caused by project-related changes to existing roadway traffic volumes.

TABLE 12 PREDICTED EXISTING ROADWAY TRAFFIC NOISE LEVELS

Roadway Segment	Estimated Traffic Noise Levels, ¹ dBA L_{dn}	Adjacent Land Uses	Existing Noise Exposure Compatibility Category ²
The Embarcadero			
North of Green Street	66.6	Commercial/Office, Park	2
From Green Street to Broadway	66.9	Commercial, Parking	1
South of Broadway	68.2	Mixed-Use Commercial/ Residential, Park	2
Davis Street			
From Vallejo Street to Broadway	57.7	Office, Parking	1
South of Broadway	62.5	Mixed-Use Commercial/ Residential, Park	2
Front Street			
North of Green Street	55.9	Commercial/Office	1
From Green Street to Vallejo Street	58.4	Office (TV studio)	1
From Vallejo Street to Broadway	59.6	Commercial	1
South of Broadway	61.3	Mixed-Use Commercial/ Residential, Park	2
Green Street			
West of Front Street	57.0	Commercial/Office	1
From Front Street to The Embarcadero	57.9	Office (TV studio)	1
Vallejo Street			
West of Front Street	59.4	Commercial/Office	1
From Front Street to Davis Street	57.3	Office (TV studio)	1
Broadway			
West of Front Street	65.2	Commercial/Office	2
From Front Street to Davis Street	64.7	Mixed-Use Commercial/ Residential, Parking	2
From Davis Street to The Embarcadero	63.5	Mixed-Use Commercial/ Residential, Parking	2

Notes:

dBA = A-weighted decibels; L_{dn} = day-night sound level

¹ Predicted traffic noise levels do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

² The indicated noise exposure compatibility is based on the most stringent land use category, pursuant to the San Francisco General Plan, as follows:

1: Satisfactory, with no special insulation requirements.

2: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

3: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

4: New construction or development should generally not be undertaken.

Source: Data modeled by AECOM, 2017.

Impact NO-1: The proposed project would not result in a substantial permanent increase in ambient noise levels, expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and would not be substantially affected by existing noise levels. (Less than Significant)

Analysis under this criterion addresses potential noise-generated impacts on nearby sensitive noise receptors from operation of the proposed project. In *California Building Industry Association v. Bay Area Air Quality Management District (CBLA v. BAAQMD)*,⁸⁵ decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might affect a project's occupant, except with certain types of specified projects or where the project would significantly exacerbate an existing environmental condition.

Accordingly, the significance criteria listed above related to a substantial permanent increase in ambient noise levels and to exposure of people to noise levels in excess of standards specified in the San Francisco General Plan or the San Francisco Noise Ordinance (article 29 of the Police Code) or applicable standards of other agencies are relevant only to the extent that the project would significantly exacerbate the existing noise and vibration environment. Thus, the analysis below evaluates whether the proposed project could exacerbate the existing or future noise environment. An impact is considered significant if implementing the proposed project would exacerbate existing or future noise and vibration levels above the thresholds described in the "Noise and Vibration Regulations" subsection above.

Section 2909 of the Police Code requires that mechanical equipment noise and outdoor use areas not exceed 8 dBA over ambient noise levels at the property plane of the commercial noise-emitting property. Although the City does not have quantitative criteria for project-generated traffic noise, the San Francisco Planning Department often applies the following criteria: in general, traffic noise increases of less than L_{dn} 3 dBA are barely perceptible to people, while an increase of 5 dBA L_{dn} is readily noticeable. Therefore, permanent increases in ambient noise levels of more than L_{dn} 5 dBA are considered to be a significant noise impact in any existing or resulting noise environment. However, in places where the existing or resulting noise environment is "conditionally acceptable," "conditionally unacceptable," or "unacceptable" based on the San Francisco Land Use Compatibility Chart for Community Noise shown in Table 9 above, for sensitive noise receptors any noise increase greater than L_{dn} 3 dBA is considered a significant noise impact.

Operational Noise

Operational noise generated by the proposed project would result primarily from onsite stationary sources (heating, ventilation, and air conditioning [HVAC] equipment, loading dock/trash compactor, and amplified sound system) and offsite mobile sources (roadway traffic). Project-related noise impacts associated with onsite stationary sources were determined based on the standards set forth by the City's Noise Control Ordinance.

Mechanical Equipment Noise

Police Code section 2909(a),⁸⁶ part of the San Francisco Noise Ordinance, establishes a noise limit for the proposed project's rooftop mechanical equipment (e.g., HVAC systems, emergency backup generators) at the project's property plane. These noise limits are based on the outdoor ambient noise level plus 8 dBA. For purposes of this analysis, the lower of the two L_{eq} values (Sunday and Monday for the daytime or nighttime period of the study) shown in Table 11 conservatively represent the ambient noise level. The proposed project's HVAC mechanical equipment would be located mostly on the building rooftop within mechanical penthouses and within the interior of the building on the second floor. The main mechanical system for the

⁸⁵ *California Building Industry Association v. Bay Area Air Quality Management District*, December 17, 2015, <http://www.courts.ca.gov/opinions/documents/S213478.PDF>.

⁸⁶ San Francisco Police Code, article 29, Regulation of Noise, *Guidelines for Noise Control Ordinance Monitoring and Enforcement*, <https://www.sfdph.org/dph/files/EHSdocs/ehsNoise/GuidelinesNoiseEnforcement.pdf>, accessed April 2018.

theater would be a chilled water system along with primary and secondary chiller pumps that would be located in the mechanical room. For heating, hot water boilers would also be in the roof's mechanical room. In addition, an 800-kilowatt, diesel-powered emergency generator would be located in the mechanical penthouse.

Some mechanical equipment would be located outside of the mechanical room on the roof, where outside air is required to operate, such as heat pumps and an air scrubber/pollution unit for the main kitchen exhaust and a make-up air unit. Operation of the outdoor HVAC equipment may generate audible noise. Rooftop HVAC equipment and emergency generators for the proposed project are expected to be similar to the equipment used at the existing buildings surrounding the project site, and would likely generate noise at levels typical of standard HVAC systems and emergency generators suitable for the project's proposed services and operations. Standard noise reduction elements would be implemented (e.g., screening walls, parapet barriers) that meet the requirements established for fixed-source noise by Police Code section 2909(a), part of the San Francisco Noise Ordinance, and would acoustically occlude noise emissions from the project's HVAC equipment. The outdoor mechanical equipment outside the mechanical penthouse would be screened by a metal screen with green vegetation grown vertically to dampen the noise and provide a visual enhancement. All building mechanical equipment, including air intakes and exhaust openings, would be designed with appropriate noise control devices and sound abatement, such as the aforementioned screens and acoustically absorptive duct attenuators and equipment cabinet linings.

The intent of such a design would be to result in aggregate noise levels that do not exceed existing outdoor ambient levels by more than 8 dBA at the adjacent property plane. Based on the field-surveyed sound pressure levels presented in Table 11, the acoustical objective for the project's HVAC systems can be quantified as follows: 70 dBA L_{eq} for daytime and nighttime at the receiving property plane of the mixed-use development south of Broadway.

That is, the aggregate sound pressure level from the typical rooftop packaged air-conditioning unit(s) and accompanying HVAC equipment, with either noise control elements incorporated into their design or barriers placed on the rooftop to occlude their individual sound propagation paths, would need to be no greater than 70 dBA L_{eq} at the project's property plane where it adjoins the existing Broadway development. Such noise control features and sound abatement would keep the proposed project's HVAC noise levels compliant with the City's Noise Ordinance.

Operation of the project's proposed 800-kilowatt emergency generator, located inside the mechanical penthouse at roof level, would also need to comply with Police Code section 2909(a) during nonemergency testing conditions. In emergency situations, the generator would operate to offset local power outages and would thus be exempt from the City's Noise Control Ordinance (per section 2901[d]). For routine testing and maintenance, however, the emergency generator would be operated for short durations, approximately 30 minutes per month during a daytime hour. Noise control and sound abatement features for nonemergency operation of the emergency generator would be incorporated into the proposed project's design.

A typical 800 kW emergency generator would generate noise level of approximately 89 dBA at a distance of 23 feet, based on manufacturer noise data.⁸⁷ Based on distance sound attenuation, the mechanical penthouse, and insertion loss provided by the rooftop parapet, the noise level from the emergency generator would range from approximately 49.7 dBA at receptor/measurement location 3 from Table 11 to 63.8 dBA at receptor/measurement location 2 from Table 11. The estimated noise from the emergency generator at receptor 2 (63.8 dBA) when added to the existing ambient noise level (64.6 dBA) would equal to 67.2 dBA, which would result in maximum of 2.6 dBA increase over the daytime ambient noise level. In summary, mechanical systems (including the emergency generator) would feature a variety of noise reduction measures inherent to the proposed project design, and thus, would achieve the noise performance standards set by Police Code section 2909. Therefore, noise impacts from the project's mechanical equipment would be *less than significant*.

⁸⁷ Cummins Power Generator, Model DQFAB with standard weather protected enclosure.

Other Stationary Sources

The proposed project includes a loading dock located at the interior of the building, on the building's western side (facing Davis Street). A trash compactor would be located adjacent to the loading dock, inside an enclosed room. Operation of the loading dock and trash compactor would generate noise levels of approximately 71 dBA L_{eq} and 65 dBA L_{eq} , respectively, at a distance of 50 feet. As a result, the design and placement of the loading dock and trash compactor meet the City's Noise Control Ordinance noise limit of 75 dBA at a distance of 50 feet (section 2904). Accordingly, impacts would be *less than significant*.

Outdoor and Event Spaces

The proposed project includes various outdoor spaces, including one ground-level restaurant outdoor seating/dining area along The Embarcadero (at the southeastern corner), and others at The Embarcadero and Broadway and on the 3,970-square-foot rooftop deck. The rooftop deck would be accessible to hotel guests and patrons only. Noise associated with the restaurant's outdoor seating/dining area and the rooftop deck would typically include people talking and amplified sound (music). The amplified sound system at the outdoor seating/dining area would be used primarily for background music, and would be designed to be heard in the immediate vicinity of the outdoor speaker systems. The amplified sound systems were assumed to generate a maximum sound level of 70 dBA L_{eq} at 50 feet from the loudspeaker system at the restaurant's outdoor seating/dining area and 80 dBA L_{eq} at 50 feet from the loudspeaker system at the rooftop deck. The maximum sound levels for the amplified sound system are specified to meet the City's Noise Control Ordinance, to avoid an increase of 8 dBA at the proposed project's property plane (per Section 2909[b]) and avoid causing interior noise levels at neighboring residences in excess of 55 dBA with windows open (per Section 2909[d]). Table 13 presents the estimated noise levels from the outdoor uses. Additionally, there are no specific noise ordinance limits for unamplified voices, and unamplified voices are not considered an impact under CEQA unless the noise could rise to a level of substantial interference with activities such as sleep, speech, and learning, or physiological effects such as hearing loss. Published noise levels for typical males and females speaking at raised voice levels, 65 dBA and 62 dBA, respectively, were used for the noise analysis. As indicated, the estimated noise levels from the proposed project's outdoor uses would comply with the Noise Ordinance.

TABLE 13 ESTIMATED NOISE LEVELS FROM PROPOSED PROJECT OUTDOOR SPACES

Location	Ambient Noise Levels, ¹ dBA L_{eq}	Estimated Noise Levels from Outdoor Spaces, dBA L_{eq}	Estimated Noise Levels from Outdoor Spaces at Residential Interior, dBA L_{eq}	Outdoor / Interior Noise Thresholds ² , dBA L_{eq}	Estimated Noise Levels Comply?
1 ³	61.9	66.5	54.5 ⁴	69.9 / 55	Yes
2	64.6	64.0	52.0 ⁴	72.6 / 55	Yes
3	53.4	52.5	40.5 ⁴	61.4 / 55	Yes
4	58.5	54.4	42.4 ⁴	66.5 / 55	Yes

Source: Data modeled by AECOM in 2016; http://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf

Notes: dBA = A-weighted decibels; L_{eq} = equivalent noise level

¹ Measured nighttime ambient noise levels (see Table 11).

² The significance thresholds equal to the existing ambient noise levels plus 8 dBA at the property plane, and less than 55 dBA for estimated noise level at the nearest residential interior.

³ The estimated noise level at Location 1 is at the commercial use on the eastern side of The Embarcadero.

⁴ Includes application of a conservative minimum of a 12–18 dBA reduction to estimated outdoor noise levels with windows partially open, per State of California General Plan Guidelines (2017).

The proposed entertainment venue would be located at ground level and would include a 285-seat auditorium. The entertainment venue would be hosted inside the 100-year-old spiegel tent, which would be encased inside a pavilion. The entertainment venue would have two shows per day on the weekends. Measured sound levels from an existing theater of similar size, the Teatro ZinZanni in Seattle (a 292-seat theater), were used for the proposed project's noise analysis. The

measured sound levels varied from 83 to 102 dBA inside the entertainment venue and 76 to 84 dBA outside of the entertainment use tent.⁸⁸ The pavilion enclosing the area would be constructed of glass and metal walls and roof as illustrated in the elevations and sections shown in Figures 12 through 16. The pavilion structure is estimated to provide a minimum of 20 dBA interior-to-exterior sound reduction. Table 14 presents the estimated noise levels from the proposed entertainment venue. As indicated, the estimated noise levels from the proposed entertainment venue would be below the significance thresholds.

TABLE 14 ESTIMATED NOISE LEVELS FROM PROPOSED ENTERTAINMENT VENUE

Location	Ambient Noise Levels, ¹ dBA L _{eq}	Estimated Noise Levels from Theater, dBA L _{eq}	Estimated Noise Levels from Outdoor Spaces at Residential Interior, dBA L _{eq}	Outdoor / Interior Noise Thresholds, ² dBA L _{eq}	Estimated Noise Levels Comply?
1 ³	61.9	57.2	45.2 ⁴	69.9 / 55	Yes
2	64.6	35.7	23.7 ⁴	72.6 / 55	Yes
3	53.4	58.9	46.9 ⁴	61.4 / 55	Yes
4	58.5	64.1	52.4 ⁴	66.5 / 55	Yes

Source: Data modeled by AECOM in 2016; http://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf

Notes: dBA = A-weighted decibels; L_{eq} = equivalent noise level

¹ Measured nighttime ambient noise levels (see Table 11).

² The significance thresholds equal to the existing ambient noise levels plus 8 dBA at the property plane, and less than 55 dBA for estimated interior noise level noise level at the nearest residential interior.³ The estimated noise level at Location 1 is at the commercial use on the eastern side of The Embarcadero.

⁴ Includes application of a conservative minimum of a 12–18 dBA reduction to estimated outdoor noise levels with windows partially open, per State of California General Plan Guidelines (2017).

The proposed project includes a small outdoor stage area located at the south end of the proposed public park. The outdoor stage would be used for small-scale performances, including those for family gatherings, storytelling and neighborhood festivals, nonprofit gatherings, and other waterfront public events. These events would occur on weekdays and weekends during normal business hours, subject to Port requirements. In addition, the theater would include operable doors on the northern side of the theater building that would open up onto the outdoor stage area. However, the entertainment area doors would remain closed during regularly scheduled theater performances. The park would be only 14,000 square feet and would be limited in size, which would reduce the possibilities for large events. No large music festivals or other ticketed events would be held at the proposed outdoor stage or in the proposed public park. Section 2909(c) of the Noise Control Ordinance allows sound from “public property” to be up to 10 dBA above ambient at a distance of 25 feet. Amplified sound emanating from the outdoor stage or other portion of the public park that would exceed the ordinance would be required to obtain a permit from the Port in accordance with Section 2909(e) of the Noise Control Ordinance. The project sponsor would be required to apply for event permits from the Port to host these activities or events, which may occur approximately one time per week.

As shown in Table 14, noise from the outdoor use areas would not exceed the limit established by Police Code section 2909(b), part of the San Francisco Noise Ordinance, of 8 dBA above the existing ambient noise level at the proposed project’s property lines. Accordingly, impacts would be *less than significant* and no mitigation measures are required.

Project-Related Roadway Noise

As stated previously, for sensitive noise receptors, a traffic noise increase greater than L_{dn} 3 dBA is considered a significant noise impact. Generally, a doubling of traffic flows would be needed for traffic-generated noise levels to increase to 3 dBA above the existing L_{dn} ambient noise levels. As shown in Table 15, because the roadways adjacent to the project site currently

⁸⁸ Annie Jamison, Teatro ZinZanni Employee, email correspondence with the sponsor and AECOM about sound data, July 06, 2016.

experience high traffic volumes, the additional daily vehicle trips on these roadways would be expected to be marginal and would not double traffic volumes.

The proposed project would result in approximately 634 daily vehicle trips in the vicinity of the project site.⁸⁹ The increase in the traffic volumes was analyzed to determine whether any traffic-related noise impacts would result from the project. The project-related traffic noise impact is determined by comparing the increase in noise levels from existing conditions to existing plus project conditions with the project's significance threshold. Table 15 provides a summary of the roadway noise level analysis.

TABLE 15 ROADWAY TRAFFIC NOISE IMPACTS – PROJECT LEVEL

Roadway Segment	Calculated Traffic Noise Levels, ¹ dBA L _{dn}		Increase in Noise Levels due to Proposed Project, dBA L _{dn}
	Existing Conditions	Existing + Proposed Project	
The Embarcadero			
North of Green Street	66.6	66.6	0.0
From Green Street to Broadway	66.9	66.9	0.0
South of Broadway	68.2	68.3	0.1
Davis Street			
From Vallejo Street to Broadway	57.7	57.8	0.1
South of Broadway	62.5	62.5	0.0
Front Street			
North of Green Street	55.9	55.9	0.0
From Green Street to Vallejo Street	58.4	58.4	0.0
From Vallejo Street to Broadway	59.6	59.6	0.0
South of Broadway	61.3	61.3	0.0
Green Street			
West of Front Street	57.0	57.0	0.0
From Front Street to The Embarcadero	57.9	57.9	0.0
Vallejo Street			
West of Front Street	59.4	59.5	0.1
From Front Street to Davis Street	57.3	57.4	0.1
Broadway			
West of Front Street	65.2	65.3	0.1
From Front Street to Davis Street	64.7	64.9	0.2
From Davis Street to The Embarcadero	63.5	63.9	0.4

Source: Data modeled by AECOM in 2017.

Notes:

dBA = A-weighted decibels; L_{dn} = day-night sound level

¹ Predicted traffic noise levels do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

⁸⁹ CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro ZinZanni) Project Final Transportation Impact Study*, May 2018.

As shown in Table 15, the proposed project would result in a maximum traffic noise increase of 0.4 dBA L_{dn} along Broadway (from Davis Street to The Embarcadero). The estimated traffic noise increase would be lower at all other analyzed roadway segments. The incremental changes in traffic noise levels attributable to the proposed project would be below the 3 dBA L_{dn} significance criterion.

Project-related onsite stationary sources and offsite traffic would not result in a substantial increase in ambient noise levels in the project vicinity. Therefore, this impact would be *less than significant*.

Impact NO-2: During construction, the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels and vibration in the project vicinity above levels existing without the project. (*Less than Significant*)

The analysis under this criterion addresses potential noise and vibration impacts on nearby sensitive noise receptors during construction of the proposed project.

The primary noise impacts from construction would occur from noise generated by the operation of heavy equipment on the project site. Noise impacts would also result from construction trucks arriving to and departing from the site, which would be an intermittent source of construction noise. Project construction activities would include demolishing existing pavement, grading, installing utilities, landscaping, and erecting the buildings. The equipment typically used in these activities includes bulldozers, excavators, graders, backhoes, concrete trucks, loaders, and heavy-duty trucks. The closest noise-sensitive land uses that would experience noise generated by project construction are the Gateway Apartments (approximately 80 feet south of the project site) and the proposed 88 Broadway Apartments (approximately 60 feet west of the project site).⁹⁰ Demolition, excavation, and building construction would cause a temporary increase in noise levels in the project vicinity. Construction equipment would generate noise and vibration at nearby properties that could be considered an annoyance by occupants and potentially cause damage to historic architectural structures.

The proposed project would include excavation of material to a maximum depth of approximately 6 feet below grade to accommodate building foundations. Project construction is anticipated to occur for up to approximately 22 months, and to be completed in 2020. Project construction would generally include site preparation and demolition (1 month), excavation/foundation work (2 months), structure building (7 months), exterior buildout (4 months), and interior buildout (8 months). Export material (e.g., concrete and asphalt surfaces) and soil would be hauled from the project site during the site demolition and excavation phases. Construction hours would be from 7 a.m. to 5 p.m. Monday through Friday, with Saturdays as alternate dates. Impact pile driving is not required and nighttime construction is not proposed.

Noise impacts from construction activities would be a function of the noise generated by construction equipment, the location of the equipment, the timing and duration of the noise-generating construction activities, and the distance to noise-sensitive receptors. Construction activities for the proposed project would include development of the infrastructure and buildings.

Individual pieces of non-impact-type construction equipment that would be used for construction of the proposed project produce maximum noise levels of 74–84 dBA at a reference distance of 50 feet from the noise source, as provided in Table 16. The construction equipment noise levels at 50 feet distance (referenced maximum noise levels) are based on the *FHWA Roadway Construction Noise Model User's Guide*,⁹¹ a technical report that contains actual measured noise data for

⁹⁰ San Francisco Planning Department, *88 Broadway and 735 Davis Street Project Final Mitigated Negative Declaration*, Case No. 2016-007850ENV, October 25, 2017, amended February 27, 2018. http://sfmea.sfplanning.org/2016-007850ENV_FMND.pdf. Project was approved but construction has not begun.

⁹¹ Federal Highway Administration, *FHWA Roadway Construction Noise Model User's Guide*, 2006.

various types of construction equipment. The construction noise levels at a distance of 100 feet are calculated based on the reference noise level at 50 feet and based on a 6 dB attenuation (applicable to a point source).

Construction noise is regulated by the San Francisco Noise Ordinance, article 29 of the Police Code. Police Code section 2907 requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet. Section 2908 prohibits construction work between 8 p.m. and 7 a.m. if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the director of DBI. The proposed project would be required to comply with regulations set forth by the San Francisco Ordinance in Police Code section 2907. The estimated construction equipment noise levels at a distance of 100 feet (68–78 dBA) would be below the City’s specified 80 dBA noise limit (applicable to daytime construction activities). In addition, project construction activities would be limited to daytime hours, between 7 a.m. and 5 p.m. Therefore, project construction activities would comply with the City’s Noise Control Ordinance. As such, the construction noise impact would be *less than significant*.

TABLE 16 NOISE LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT

Construction Equipment	Reference Noise Levels at 50 Feet, ¹ dBA L _{max}	Estimated Noise Levels at 100 Feet, ² dBA L _{max}
Air Compressor	78	72
Auger Drill Rig (for shoring)	84	78
Backhoe	78	72
Compactor	83	77
Concrete Pump	79	73
Concrete Truck	81	75
Crane	81	75
Rubber-Tired Dozer	82	76
Excavator	84	78
Forklift	75	69
Generator	81	75
Loader	79	73
Dump/Haul/Delivery Truck	76	70
Welders	74	68

Notes:

dBA = A-weighted decibels; L_{max} = maximum noise level

¹ The Federal Highway Administration–published noise emission levels at 50 feet distance.

² Calculated noise levels at 100 feet distance.

Source: Federal Highway Administration, *FHWA Roadway Construction Noise Model User’s Guide*, 2006.

Construction Vibration Impacts

Construction activities can generate varying degrees of ground vibration, depending on the construction procedures and the type of construction equipment used. FTA has published vibration levels for various types of construction equipment, as provided in Table 17.⁹² As shown in the table, construction equipment would generate groundborne vibration from approximately 58 VdB (e.g., small bulldozer) to 87 VdB (e.g., large bulldozer or caisson drilling) at a distance of 25 feet from the equipment. The nearest residential use to the project site (receptor 2) would be exposed to groundborne vibration level up to 72 VdB, because of the larger bulldozer used during site excavation phase and caisson drilling during the

⁹² Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006, Table 12-2.

construction phase. The estimated vibration level at the nearest residential use would be below the FTA criterion of 80 VdB, applicable to residential use. Because project construction would occur only during the daytime hours, construction activities would avoid the more sensitive time period when residents are at home or sleeping (i.e., nighttime hours).

The estimated vibration level at either the KGO-TV building (receptor 3) or 60 Broadway caused by the project construction equipment would be up to 73 VdB. FTA provides a groundborne vibration impact criterion of 65 VdB for TV studios. Based on the FTA manual, a three- to four-story masonry building would provide approximately 10 VdB of vibration attenuation (coupling to building foundation).⁹³ Therefore, the groundborne vibration at the interior of the KGO-TV building would be attenuated from 73 VdB to 63 VdB, which would be below the FTA 65 VdB criterion. Additionally, Table 17 shows that with respect to building damage risk, for either typical masonry structures or those akin to historic structures that may be extremely susceptible to vibration; the anticipated construction-attributed vibration levels are lower than the applicable thresholds. Therefore, the project construction-related vibration impact would be *less than significant*.

TABLE 17 VIBRATION LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT

Construction Equipment	Reference Vibration Levels at 25 Feet, ¹ VdB	Estimated Vibration Levels, ² VdB		
		Receptor 2 (Gateway Apartment)	Receptor 3 (KGO-TV or 60 Broadway)	Receptor 4 (88 Broadway)
Large Bulldozer	87	72	63 ³	74
Caisson Drilling	87	72	63 ³	74
Loaded Trucks	86	71	62 ³	73
Jackhammer	79	64	55 ³	55
Small Bulldozer	58	43	34 ³	45
Significance Threshold (annoyance or operations interruption), VdB		80	65 ⁴	80
Significance Threshold (building damage risk), VdB		94 ⁶	90 ⁵	94 ⁶

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006; data modeled by AECOM in 2017

Notes:

VdB = vibration decibels

¹ Federal Transit Administration (FTA)–published vibration levels at 25 feet distance.

² Calculated vibration levels per FTA procedures.

³ After consideration of ground-to-building vibration coupling loss.

⁴ FTA-published vibration criterion for TV studios.

⁵ FTA-published vibration criterion for “IV. Buildings extremely susceptible to vibration damage” risk category.

⁶ FTA-published vibration criterion for “III. ...masonry buildings” risk category.

Impact-C-NO-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to noise. (*Less than Significant*)

The geographic context for an analysis of cumulative impacts related to noise is the immediate project area. As shown in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, reasonably foreseeable projects within a 0.25-mile radius of the project site include new residential, museum, a childcare facility, and senior housing, and space for community, retail, and office uses.

⁹³ Ibid., Table 10-1.

Construction Noise

Noise from construction activities would typically affect areas close to the construction site because noise impacts are typically localized. Construction noise dissipates/attenuates quickly as the distance between the construction site and the receptor increases, and as intervening structures provide noise reduction. Therefore, only those projects within 500 feet of the project site were considered for the analysis of cumulative construction noise impacts. The cumulative project within 500 feet of the project site is the proposed 88 Broadway and 753 Davis Street project, a senior housing development located directly west of the project site (on the western side of Davis Street). Construction of the 88 Broadway and 753 David Street project is anticipated to start in 2018, during the proposed project's exterior/interior buildout construction phase (which would generate less noise than other phases).

Construction activities for the cumulative project would generate noise at each project site, and cumulative construction noise could exceed ambient noise levels at the nearest sensitive uses. However, construction activities for the cumulative project would be required to comply with the City's noise limit for construction equipment (80 dBA) and time restriction (7 a.m. to 8 p.m.). In addition, construction noise would be intermittent and temporary and would cease at the end of the construction phase. Because construction activities would be required to comply with the City's Noise Control Ordinance, the cumulative construction-related noise impact would be ***less than significant***.

Operational Noise

The geographic context for the analysis of cumulative operational mobile-source (roadway) noise impacts is defined as the area immediately surrounding the roadways that would be affected by implementation of the proposed project and cumulative development. Potential cumulative operational impacts related to roadway noise were analyzed based on cumulative traffic conditions for the year 2040, which include both regional growth and approved developments.

Cumulative operational noise would be generated by both onsite stationary sources (e.g., mechanical equipment) and offsite sources (e.g., auto traffic). Onsite noise sources, such as mechanical equipment from the proposed project and the 88 Broadway and 753 Davis Street project, would be required to comply with the City's Noise Control Ordinance. Therefore, cumulative noise impacts associated with onsite stationary sources would be ***less than significant***.

Offsite auto traffic from the proposed project together with the 88 Broadway and 753 Davis Street project could contribute to the overall cumulative noise level along nearby roadway segments. Table 18 summarizes the analysis of cumulative offsite roadway noise impacts. As shown, the cumulative traffic would result in a maximum traffic noise increase of 1.3 dBA L_{dn} along Green Street west of Front Street. The incremental changes in traffic noise levels attributable to the proposed project would be below the 3 dBA L_{dn} significance criterion. Therefore, cumulative offsite traffic noise impacts would be ***less than significant***.

Construction-Related and Operational Vibration

Potential construction-related vibration impacts are generally limited to effects on buildings and structures located close to the construction site. Because of the rapid attenuation of groundborne vibration and the distance to the nearest sensitive receptors, cumulative construction impacts related to groundborne vibration are not anticipated. Although each individual project in the vicinity may produce construction vibration, the vibration levels would not combine to create or contribute to vibration impacts. The proposed project would not cause significant construction vibration to the same buildings as the 88 Broadway Street and 753 Street project. Such impacts, therefore, would be ***less than significant***.

Therefore, this impact would be ***less than significant***.

TABLE 18 ROADWAY TRAFFIC NOISE IMPACTS – CUMULATIVE LEVEL

Roadway Segment	Calculated Traffic Noise Levels, ¹ dBA L _{dn}		Increase in Noise Levels due to Cumulative Traffic, dBA L _{dn}
	Existing Conditions	Future Cumulative Conditions	
The Embarcadero			
North of Green Street	66.6	67.2	0.6
From Green Street to Broadway	66.9	67.5	0.6
South of Broadway	68.2	68.8	0.6
Davis Street			
From Vallejo Street to Broadway	57.7	56.3	-1.4
South of Broadway	62.5	62.7	0.2
Front Street			
North of Green Street	55.9	56.0	0.1
From Green Street to Vallejo Street	58.4	58.5	0.1
From Vallejo Street to Broadway	59.6	59.7	0.1
South of Broadway	61.3	61.4	0.1
Green Street			
West of Front Street	57.0	58.3	1.3
From Front Street to The Embarcadero	57.9	59.1	1.2
Vallejo Street			
West of Front Street	59.4	59.5	0.1
From Front Street to Davis Street	57.3	55.6	-1.7
Broadway			
West of Front Street	65.2	65.6	0.4
From Front Street to Davis Street	64.7	65.2	0.5
From Davis Street to The Embarcadero	63.5	64.0	0.5

Notes:

dBA = A-weighted decibels; L_{dn} = day-night sound level¹ Predicted traffic noise levels do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

Source: Data modeled by AECOM in 2017.

E.6. AIR QUALITY

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
6. AIR QUALITY.—Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overview

The Bay Area Air Quality Management District is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (SFBAAB), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties and portions of Sonoma and Solano counties. BAAQMD is responsible for attaining and maintaining air quality in the SFBAAB within federal and state air quality standards, as established by the federal Clean Air Act and the California Clean Air Act, respectively. Specifically, BAAQMD monitors ambient air pollutant levels throughout the SFBAAB and develops and implements strategies to attain the applicable federal and state standards.

The federal and California clean air acts require that plans be developed for areas that do not meet air quality standards, generally. The Bay Area's current clean air plan, titled *Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area, Final 2017 Clean Air Plan* (referred to in this initial study as the 2017 Clean Air Plan), serves as an update to the Bay Area 2010 Clean Air Plan and continues to provide the framework for the SFBAAB to achieve attainment of the national and California ambient air quality standards. The 2017 Clean Air Plan updates the Bay Area's ozone plan, which is based on the "all feasible measures" approach to meet the requirements of the California Clean Air Act. Additionally, it sets a goal of reducing health risk impacts on local communities by 20 percent by 2020. Furthermore, the 2017 Clean Air Plan lays the groundwork for reducing GHG emissions in the Bay Area to meet the state's 2030 GHG reduction target and 2050 GHG reduction goal. It also includes a vision for the Bay Area in a postcarbon year 2050 that encompasses the following actions:⁹⁴

- Construct buildings that are energy efficient and powered by renewable energy.
- Walk, bicycle, and use public transit for the majority of trips and use electric-powered autonomous public transit fleets.
- Incubate and produce clean energy technologies.

⁹⁴ Bay Area Air Quality Management District, *Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area, Final 2017 Clean Air Plan*, adopted April 19, 2017, <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

- Live a low-carbon lifestyle by purchasing low-carbon foods and goods in addition to recycling and putting organic waste to productive use.

The 2017 Clean Air Plan represents the most current applicable air quality plan for the SFBAAB. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of air quality plans.

Criteria Air Pollutants

In accordance with the federal and California clean air acts, air pollutant standards have been established for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM),⁹⁵ nitrogen dioxide, sulfur dioxide (SO₂), and lead. These air pollutants are termed “*criteria air pollutants*” because they are regulated by developing specific public health– and welfare-based criteria as the basis for setting permissible levels.

In general, the SFBAAB experiences low concentrations of most pollutants when compared to federal or state standards. The air basin is designated as either in *attainment* or *unclassified* for most criteria air pollutants, with the exceptions of ozone, PM_{2.5}, and PM₁₀, for which the air basin is designated as *nonattainment* for either the state or federal standard. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to result in nonattainment of air quality standards by itself. Instead, a project’s individual emissions contribute to existing cumulative air quality impacts. If a project’s contribution to cumulative air quality impacts is considerable, then the project’s impact on air quality would be considered significant.⁹⁶

Land use projects may contribute to regional criteria air pollutants during the projects’ construction and operational phases. Table 20 identifies air quality significance thresholds followed by a discussion of each threshold. Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the SFBAAB.

TABLE 20 CRITERIA AIR POLLUTANT SIGNIFICANCE THRESHOLDS

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other best management practices	Not applicable	

Source: Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009.

Notes: lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter; PM₁₀ = particulate matter equal to or less than 10 microns in diameter; ROG = reactive organic gases

⁹⁵ Particulate matter (PM) is subdivided into two classes based on particle size: PM equal to or less than 10 microns in diameter (PM₁₀) and PM equal to or less than 2.5 microns in diameter (PM_{2.5}).

⁹⁶ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, p. 2-1.

Ozone Precursors

As discussed previously, the SFBAAB is currently designated as nonattainment for ozone and particulate matter. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, is based on the emissions limits for stationary sources established by the federal and California clean air acts. To make sure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD regulation 2, rule 2 requires any new source that emits criteria air pollutants above a specified emissions limit to offset those emissions. For the ozone precursors ROG and NO_x, the offset emissions level is an annual average of 10 tons per year (or 54 pounds per day [lb/day]).⁹⁷ These levels represent emissions below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects generate ROG and NO_x emissions through increases in vehicle trips, architectural coatings, and construction activities. Therefore, the thresholds mentioned above can be applied to the construction and operational phases of land use projects. Those projects that would result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or to result in a considerable net increase in ROG and NO_x emissions. Because of the temporary nature of construction activities, only the average daily thresholds are applicable to construction-phase emissions.

Particulate Matter (PM₁₀ and PM_{2.5})⁹⁸

BAAQMD has not established an offset limit for PM_{2.5}. However, the emissions limit in the federal New Source Review for stationary sources in nonattainment areas is an appropriate significance threshold. For PM₁₀ and PM_{2.5}, the emissions limits under the New Source Review are 15 tons per year (82 lb/day) and 10 tons per year (54 lb/day), respectively. These emissions limits represent levels below which a source is not expected to have an impact on air quality.⁹⁹ As with ozone precursors as identified above, land use development projects typically generate PM emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the thresholds mentioned above can be applied to the construction and operational phases of land use projects. Again, because construction activities are temporary, only the average daily thresholds are applicable to construction-phase emissions.

Fugitive Dust

Fugitive dust emissions are typically generated during construction phases. Studies have shown that applying best management practices (BMPs) at construction sites significantly controls fugitive dust,¹⁰⁰ and individual measures have been shown to reduce fugitive dust by 30–90 percent.¹⁰¹ BAAQMD has identified a number of BMPs to control fugitive dust emissions from construction activities.¹⁰² The City's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) requires a number of measures to control fugitive dust. Employing BMPs in compliance with this City ordinance is an effective strategy for controlling construction-related fugitive dust.

⁹⁷ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 17.

⁹⁸ PM₁₀ is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM_{2.5}, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

⁹⁹ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 16.

¹⁰⁰ Western Regional Air Partnership. 2006. *WRAP Fugitive Dust Handbook*, September 7, 2006, http://www.wrapair.org/forums/dejffdh/content/FDHandbook_Rev_06.pdf, accessed February 16, 2012.

¹⁰¹ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 27.

¹⁰² Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2011.

Other Criteria Pollutants

Regional concentrations of CO in the Bay Area have not exceeded state standards in the past 11 years and SO₂ concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicle traffic. Construction-related SO₂ emissions represent a negligible portion of the total basinwide emissions and construction-related CO emissions represent less than 5 percent of the Bay Area's total basinwide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO₂. Furthermore, BAAQMD has demonstrated, based on modeling, that to exceed the California ambient air quality standard of 9.0 parts per million (8-hour average) or 20.0 parts per million (1-hour average) for CO, project traffic in addition to existing traffic would have to exceed 44,000 vehicles per hour at affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is limited). Therefore, given the Bay Area's attainment status and the limited CO and SO₂ emissions that could result from development projects, development projects would not result in a cumulatively considerable net increase in CO or SO₂, and a quantitative analysis is not required.

Local Health Risks and Hazards

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (long-duration) and acute (severe but short-term) adverse effects on human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risks they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs do not have ambient air quality standards. BAAQMD regulates TACs, using a risk-based approach to determine which sources and pollutants to control and the degree of control. A health risk assessment is an analysis that estimates human health exposure to toxic substances, and considers such exposure together with information regarding the substances' toxic potency to provide quantitative estimates of health risks.¹⁰³

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered the most sensitive to poor air quality: the population groups associated with these uses are more susceptible to respiratory distress, or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as *sensitive receptors*. Guidance on exposure assessment typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. Therefore, assessments of residential exposure to air pollutants typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM_{2.5}) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.¹⁰⁴ Diesel PM is also a concern. The California Air Resources Board (ARB) identified diesel PM as a TAC in 1998, based primarily on evidence

¹⁰³ In general, a health risk assessment is required if BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The project sponsor is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

¹⁰⁴ San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 2008.

demonstrating cancer effects in humans.¹⁰⁵ The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

In an effort to identify the areas of San Francisco most adversely affected by sources of TACs, the City partnered with the BAAQMD to conduct a citywide health risk assessment based on an inventory and assessment of air pollution and exposures from mobile, stationary, and area sources in San Francisco. Areas with poor air quality, termed “*air pollutant exposure zones*,” were identified based on health-protective criteria that consider estimated cancer risk, exposures to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations. The project site is located within an air pollutant exposure zone. Each criterion for an air pollutant exposure zone is discussed below.

Excess Cancer Risk

The criteria of greater than 100 per 1 million persons excess cancer risk is based on U.S. Environmental Protection Agency (U.S. EPA) guidance for conducting air toxics analyses and making risk management decisions at the facility and community levels.¹⁰⁶ As described by BAAQMD, U.S. EPA considers a cancer risk of 100 per million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking,¹⁰⁷ U.S. EPA states that it “...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately one in one million and (2) limiting to no higher than approximately one in ten thousand [100 in one million] the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.” The criterion of 100 per 1 million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on BAAQMD regional modeling.¹⁰⁸

Fine Particulate Matter

In April 2011, U.S. EPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*. In its PM policy assessment, U.S. EPA staff concludes that the then-current federal annual PM_{2.5} standard of 15 micrograms per cubic meter (µg/m³) should be revised to a level within the range of 11–13 µg/m³, with evidence strongly supporting a standard within the range of 11–12 µg/m³. The air pollutant exposure zones for San Francisco are based on the health-protective PM_{2.5} standard of 11 µg/m³, as supported by U.S. EPA’s PM policy assessment, although lowered to 10 µg/m³ to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

Proximity to Freeways

According to ARB, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, exacerbation of asthma cases, and decreases in lung function in children. Siting sensitive uses close to freeways increases both exposure to air pollution and the potential for adverse health effects. Because evidence shows that sensitive uses in areas within 500 feet of any freeway are at an increased health risk from air pollution,¹⁰⁹ lots that are within 500 feet of freeways are included in the air pollutant exposure zone.

¹⁰⁵ California Air Resources Board, Fact Sheet, “The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines,” October 1998.

¹⁰⁶ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 67.

¹⁰⁷ 54 *Federal Register* 38044, September 14, 1989.

¹⁰⁸ Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 67.

¹⁰⁹ California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005, <http://www.arb.ca.gov/ch/landuse.htm>.

Health-Vulnerable Locations

Based on BAAQMD's evaluation of health vulnerability in the Bay Area, those zip codes (94102, 94103, 94105, 94124, and 94130) in the worst quintile of Bay Area health vulnerability scores as a result of air pollution-related causes were afforded additional protection by lowering the standards for identifying lots in the air pollutant exposure zone to: (1) an excess cancer risk greater than 90 per 1 million persons exposed, and/or (2) PM_{2.5} concentrations in excess of 9 µg/m³.¹¹⁰

The above citywide health risk modeling was also used as the basis for approving a series of amendments to the San Francisco Building and Health codes, generally referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code article 38 (Ordinance 224-14, effective December 8, 2014). The purpose of Health Code article 38 is to protect the public health and welfare by establishing an air pollutant exposure zone and imposing an enhanced ventilation requirement for all urban infill development of sensitive uses within an air pollutant exposure zone. In addition, projects within an exposure zone require special consideration to determine whether project activities would add substantial emissions to areas already adversely affected by poor air quality. The proposed project is located within an air pollutant exposure zone.¹¹¹

IMPACT DISCUSSION

Project-related air quality impacts fall into two categories: short-term impacts from construction and long-term impacts from project operation.

Construction Air Quality Impacts

The following discussion addresses the proposed project's construction-related air quality impacts, which are estimated to last up to approximately 22 months. For the purposes of the environmental analysis, it is assumed that project construction would start 2019 and be completed by 2020 (approximately 484 workdays).

Impact AQ-1: The proposed project's construction activities would generate fugitive dust and criteria air pollutants, but would not violate air quality standards, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in air quality levels. (*Less than Significant*)

Construction activities (short-term) typically result in emissions of ozone precursors and particulate matter (PM₁₀ and PM_{2.5}) in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Such emissions are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROG are also emitted from activities that involve painting, other types of architectural coatings, or asphalt paving. The proposed project would include the demolition of the existing parking lot and construction of a mixed-use development consisting of a hotel, an entertainment venue, and a public park. During the project's approximately 22-month construction period, construction activities would have the potential to result in emissions of particulate matter, as discussed below, and ozone precursors, discussed below under "Criteria Pollutants."

Fugitive Dust

Project-related demolition, excavation, grading, and other construction activities may generate windblown dust that could contribute particulate matter into the local atmosphere. Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to affect human health throughout the country. California has found that PM exposure can cause health effects at lower levels than identified in national standards.

¹¹⁰ San Francisco Planning Department and San Francisco Department of Public Health, *2014 Air Pollutant Exposure Zone Map (Memo and Map)*, April 9, 2014. These documents are part of San Francisco Board of Supervisors File No. 14806, Ordinance No. 224-14.

¹¹¹ San Francisco Planning Department, San Francisco Property Information Map, Version 3.4.4 Map, 2016, <http://propertymap.sfplanning.org/?dept=planning>, accessed on September 29, 2016.

The current health burden of PM demands that, where possible, public agencies take feasible available actions to reduce sources of exposure. According to ARB, reducing PM_{2.5} concentrations to federal and state standards of 12 µg/m³ in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.¹¹²

Dust can be an irritant, causing eyes to water or irritating the lungs, nose, and throat. Demolition, excavation, grading, and other construction activities can generate windblown dust that adds particulate matter to the local atmosphere. Depending on exposure, adverse health effects can result from this PM in general and from specific contaminants such as lead or asbestos that may be constituents of soil.

In response, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health codes, generally referred hereto as the Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008). The intent of this ordinance is to reduce the quantity of dust generated during site preparation, demolition, and construction work to protect the health of the general public and onsite workers, minimize public nuisance complaints, and avoid stop-work orders by DBI.

The ordinance requires all site preparation work, demolition, or other construction activities in San Francisco that could create dust, or that could expose or disturb more than 10 cubic yards or 500 square feet of soil, to comply with specified dust control measures, whether or not the activity requires a permit from DBI. The director of DBI may waive this requirement for activities on sites less than one-half acre that are unlikely to generate any visible windblown dust.

In compliance with the Construction Dust Control Ordinance, the project sponsor and the contractor responsible for construction activities at the project site would be required to use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the director. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. During excavation and dirt-moving activities, contractors shall wet-sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday. Inactive stockpiles (where no disturbance occurs for more than 7 days) greater than 10 cubic yards or 500 square feet of excavated material, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 mil (0.01 inch) polyethylene plastic (or equivalent) tarp, shall be braced down, or shall use other equivalent soil stabilization techniques. City Ordinance 175-91 restricts the use of potable water for soil compaction and dust control activities during any construction or demolition project occurring within the boundaries of San Francisco, unless permission is obtained from SFPUC. Nonpotable water must be used for soil compaction and dust control activities during project construction and demolition. SFPUC operates a recycled-water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge.

For projects larger than one-half acre, such as the proposed project, the Construction Dust Control Ordinance requires the project sponsor to submit a dust control plan for approval by the San Francisco Department of Public Health. The Port's building department would not issue a building permit without written notification from the department's director that the project sponsor has a site-specific dust control plan, unless the director waives the requirement. Interior-only tenant improvement projects larger than one-half acre that would not produce exterior visible dust are exempt from the requirement for a site-specific dust control plan.

The site-specific dust control plan required by the Dust Control Ordinance would require the project sponsor to: (a) submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site; (b) wet down areas of soil at

¹¹² California Air Resources Board, *Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California, Staff Report*, Table 4c, October 24, 2008.

least three times per day; (c) provide an analysis of wind direction and install upwind and downwind particulate dust monitors; (d) record particulate monitoring results; (e) hire an independent third party to conduct inspections and keep a record of those inspections; (f) establish shutdown conditions based on wind, soil migration, etc.; (g) establish a hotline for surrounding community members who have the potential to be affected by project-related dust; (h) limit the area subject to construction activities at any one time; (i) install dust curtains and windbreaks on the property lines, as necessary; (j) limit the amount of soil in hauling trucks to the size of the truck bed and securing with a tarpaulin; (k) enforce a speed limit of 15 miles per hour for vehicles entering and exiting construction areas; (l) sweep affected streets with water sweepers at the end of the day; (m) install and use wheel washers to clean truck tires; (n) terminate construction activities when winds exceed 25 miles per hour; (o) apply soil stabilizers to inactive areas; and (p) sweep off adjacent streets to reduce particulate emissions.

The project sponsor would be required to designate an individual to monitor compliance with these dust control requirements. Compliance with the regulations and procedures set forth by the San Francisco Dust Control Ordinance would reduce potential dust-related air quality impacts to *less than significant*.

Criteria Air Pollutants

Construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. To assist lead agencies in determining whether short-term construction-related emissions of air pollutants require further analysis about whether the project may exceed the significance thresholds for criteria air pollutants shown in Table 20 above, BAAQMD developed screening criteria in its *CEQA Air Quality Guidelines* (May 2017). If a proposed project meets the screening criteria, then construction of the project would result in less-than-significant impacts with regard to criteria air pollutants. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The *CEQA Air Quality Guidelines* note that the screening levels are generally representative of new development on *greenfield*¹¹³ sites without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

The proposed construction activities are anticipated to include soil transport that would exceed the BAAQMD screening threshold of 10,000 cubic yards; therefore, a quantitative analysis was conducted. Construction-related criteria air pollutants generated by the proposed project were quantified using the California Emissions Estimator Model (version 2016.3.1) and provided in an air quality technical report.¹¹⁴ The model was developed, including default data (e.g., emission factors, meteorology), in collaboration with California air districts' staff. Default assumptions were used where project-specific information was unknown.

Construction of the proposed project would occur over a period of approximately 22 months and approximately 22 working days per month. Emissions were converted from tons per year to lb/day using the estimated construction duration of 484 working days. Table 21 presents the proposed project's total and average daily construction emissions from criteria pollutants.¹¹⁵

Construction of the proposed project would generate emissions associated with heavy-duty construction equipment, material-hauling trucks, and construction worker vehicles. Construction would involve demolishing an existing onsite parking lot, and

¹¹³ A greenfield site refers to agricultural or forest land or an undeveloped site earmarked for commercial, residential, or industrial projects.

¹¹⁴ AECOM, *Zinzanni Hotel & Theater Project Final Air Quality Technical Report*, July 2017.

¹¹⁵ To present the most conservative scenario for estimating emissions, the construction emission estimates contained herein assume that construction would begin in fall 2018. As described under "Estimation Methodology," these emissions estimates present worst-case emissions resulting from construction of the proposed project.

new construction activities would include grading, building construction, and exterior and interior buildout. Emissions were calculated using project-specific equipment lists and construction schedules estimated by the project sponsor. California Emissions Estimator Model outputs including full construction assumptions were calculated. The following primary construction assumptions were used to model construction-related air pollutant emissions:

- *Construction Schedule:* Up to 22 months
- *Acres to be Disturbed:* 1.33 acres
- *Demolition (existing parking lot):* 3,000 cubic yards of asphalt
- *Cut/Fill Volumes:* 11,100 cubic yards exported
- *Maximum Daily Construction Workers:* 125 workers per day assumed during all phases

TABLE 21 CONSTRUCTION-RELATED CRITERIA AIR POLLUTANT EMISSIONS ESTIMATES

Construction Year/Phase	Emissions (tons)			
	ROG	NOx	PM ₁₀ exhaust	PM _{2.5} exhaust
2017				
Demolition	0.02	0.16	0.00	0.00
Grading	0.08	0.79	0.02	0.02
2018				
Grading	0.00	0.05	0.00	0.00
Building Construction	0.20	1.41	0.07	0.07
Exterior	0.08	0.54	0.02	0.02
Interior	0.02	0.11	0.01	0.01
2019				
Interior	0.13	0.85	0.04	0.03
Total Construction Emissions (tons)	0.53	4.31	0.16	0.15
Average Daily Construction Emissions (lb/day) ¹	2.18	17.83	0.68	0.63
Significance Threshold	54	54	82	82
Exceed Threshold? (Yes/No)	No	No	No	No

Source: Estimated by AECOM in 2017. The shift in the construction start dates would not change these estimates in a perceptible manner.

Notes:

lb/day = pounds per day; NOx = oxides of nitrogen; PM₁₀ = particulate matter equal to or less than 10 microns in diameter; PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter; ROG = reactive organic gases

Exhaust emissions from the construction equipment fleet are expected to decrease over time as stricter standards take effect; as advancements in engine technology occur, as older equipment is retrofitted; and as turnover occurs. Therefore, exhaust emissions are anticipated to result in lower levels of emissions if construction occurs in later years.

¹ Average daily construction emissions calculated assuming a total construction duration of 22 months, 22 days per month.

As shown in Table 21, emissions of criteria air pollutants from construction equipment exhaust would not exceed the average daily thresholds. Impacts from project-related construction activities on regional air quality would be *less than significant*.

Impact AQ-2: The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, that may expose sensitive receptors to substantial pollutant concentrations. (*Less than Significant with Mitigation*)

As stated previously, the project site is located within an air pollutant exposure zone, as mapped and defined by Health Code article 38. The following is a list of the nearest sensitive receptors:

- Gateway Apartments, 80 feet away to the south
- Kai Ming Head Start Broadway Center, 0.12 mile to the west
- John Yehall Chin Elementary School, 0.25 mile to the west
- Wu Yee Children's Services, 0.28 mile to the west

Additionally, an affordable family and senior housing residential complex has been proposed to be located at 88 Broadway and 735 Davis Street, which is approximately 60 feet west of the project site.¹¹⁶

With regard to construction emissions, off-road equipment (which includes construction-related equipment) is a large contributor to diesel PM emissions in California, although since 2007, ARB has found the emissions to be substantially lower than previously expected.¹¹⁷ Newer and more refined emission inventories have substantially lowered the estimates of diesel PM emissions from off-road equipment, such that off-road equipment is now considered the sixth largest source of such emissions in California.¹¹⁸ For example, revised PM emission estimates for the SFBAAB for the year 2010 (diesel PM is a major component of total PM) have decreased by 83 percent from previous 2010 emissions estimates.¹¹⁹ Approximately half of the reduction in emissions can be attributed to the economic recession and half to updated methodologies used to better assess construction emissions.¹²⁰

Additionally, a number of federal and state regulations require cleaner off-road equipment. Specifically, both U.S. EPA and California have set emissions standards for new off-road equipment engines, ranging from tier 1 to tier 4. Tier 1 emission standards were phased in between 1996 and 2000 and tier 4 interim and final emission standards for all new engines were phased in between 2008 and 2015. To meet the tier 4 emission standards, engine manufacturers must produce new engines with advanced emission-control technologies. Although the full benefits of these regulations would not be realized for several years, U.S. EPA estimates that implementing the federal tier 4 standards would reduce NO_x and PM emissions by more than 90 percent.¹²¹

In addition, construction activities do not lend themselves to analysis of long-term health risks because of their temporary and variable nature. As explained in BAAQMD's *CEQA Air Quality Guidelines*:

Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (ARB 2005). In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk.¹²²

¹¹⁶ San Francisco Planning Department, *88 Broadway and 735 Davis Street Project Final Mitigated Negative Declaration*, Case No. 2016-007850ENV, October 25, 2017, amended February 27, 2018. http://sfmea.sfplanning.org/2016-007850ENV_FMND.pdf.

¹¹⁷ California Air Resources Board, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010, p. 1 and p. 13 (Figure 4).

¹¹⁸ Ibid.

¹¹⁹ California Air Resources Board, *In-Use Off-Road Equipment, 2011 Inventory Model*, http://www.arb.ca.gov/msei/categories.htm#inuse_or_category, accessed April 2, 2012.

¹²⁰ California Air Resources Board, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

¹²¹ U.S. Environmental Protection Agency, "Clean Air Nonroad Diesel Rule: Fact Sheet," May 2004.

¹²² Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2011, p. 8-6.

Therefore, project-level analyses of construction activities have a tendency to produce overestimated assessments of long-term health risks. However, within an air pollutant exposure zone, as discussed above, additional construction activity may adversely affect populations that are already at higher risk for adverse long-term health risks from existing sources of air pollution.

Project construction activities would result in short-term emissions of diesel PM and other TACs. The project site is located in an area that already experiences poor air quality and project construction activities would generate additional air pollution, affecting nearby sensitive receptors and resulting in a significant impact. Implementation of **Mitigation Measure M-AQ-2, Construction Air Quality**, would reduce the magnitude of this impact to a less-than-significant level. Emission reductions from limiting idling, educating workers and the public, and properly maintaining equipment are difficult to quantify. However, other measures, specifically the requirement for equipment with tier 2 engines and the level 3 verified diesel emission control strategy (VDECS),¹²³ can reduce construction emissions by 89–94 percent compared to equipment with engines meeting no emission standards and without VDECS.⁵³ Emissions reductions from the combination of tier 2 equipment with level 3 VDECS is almost equivalent to requiring only equipment with tier 4 final engines. Therefore, compliance with **Mitigation Measure M-AQ-2** would reduce construction emissions impacts on nearby sensitive receptors to *less than significant with mitigation*.

Mitigation Measure M-AQ-2: Construction Air Quality

The project sponsor or the project sponsor's contractor shall comply with the following:

A. Engine Requirements.

Where access to alternative sources of power is available, portable diesel engines shall be prohibited. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than 2 minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas, and at the construction site to remind operators of the 2-minute idling limit.

The contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment, and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.

¹²³ PM emissions benefits are estimated by comparing off-road PM emission standards for tier 2 with tier 1 and 0. Tier 0 off-road engines do not have PM emission standards, but the U.S. Environmental Protection Agency's Exhaust and Crankcase Emissions Factors for Nonroad Engine Modeling – Compression Ignition has estimated tier 0 engines between 50 hp and 100 hp to have a PM emission factor of 0.72 g/hp-hour and greater than 100 hp to have a PM emission factor of 0.40 g/hp-hour. Therefore, requiring off-road equipment to have at least a tier 2 engine would result in between a 25 percent and 63 percent reduction in PM emissions, as compared to off-road equipment with tier 0 or tier 1 engines. The 25 percent reduction comes from comparing the PM emission standards for off-road engines between 25 hp and 50 hp for tier 2 (0.45 g/boiler horsepower [bhp]-hour) and tier 1 (0.60 g/bhp-hour). The 63 percent reduction comes from comparing the PM emission standards for off-road engines above 175 hp for tier 2 (0.15 g/bhp-hour) and tier 0 (0.40 g/bhp-hour). In addition to the tier 2 requirement, ARB level 3 VDECSs are required and would reduce PM by an additional 85 percent. Therefore, the mitigation measure would result in between an 89 percent (0.0675 g/bhp-hr) and 94 percent (0.0225 g/bhp-hour) reduction in PM emissions, as compared to equipment with tier 1 (0.60 g/bhp-hour) or tier 0 engines (0.40 g/bhp-hour).

B. Waivers.

1. The Planning Department's environmental review officer or designee may waive the alternative source of power requirement of subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of subsection (A)(1).
2. The ERO may waive the equipment requirements of subsection (A)(1) if: a particular piece of off-road equipment with an ARB Level 3 VDECS is technically not feasible; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use off-road equipment that is not retrofitted with an ARB level 3 VDECS. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, according to Table M-AQ-2.

TABLE M-AQ-2 OFF-ROAD EQUIPMENT COMPLIANCE STEP-DOWN SCHEDULE
COMPLIANCE

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	ARB Level 2 VDECS
2	Tier 2	ARB Level 1 VDECS
3	Tier 2	Alternative Fuel*

How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor would need to meet Compliance Alternative 1. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the contractor must meet Compliance Alternative 2. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 2, then the contractor must meet Compliance Alternative 3. Alternative fuels are not a VDECS.

C. Construction Emissions Minimization Plan. Before starting onsite construction activities, the contractor shall submit a construction emissions minimization plan to the ERO for review and approval. The plan shall state, in reasonable detail, how the contractor will meet the requirements of Section A.

1. The plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For VDECS installed, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
2. The project sponsor shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement that the contractor agrees to comply fully with the plan.
3. The contractor shall make the plan available to the public for review onsite during working hours. The contractor shall post at the construction site a legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

D. Monitoring. After start of construction activities, the contractor shall submit quarterly reports to the ERO documenting compliance with the plan. After completion of construction activities and prior to receiving a final

certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the plan.

Operational Air Quality Impacts

Land use projects typically result in criteria air pollutant and TAC emissions primarily from an increase in motor vehicle trips. However, land use projects may also result in emissions of criteria air pollutants and TACs from combustion of natural gas, landscape maintenance, use of consumer products, and architectural coatings. The following discussion addresses the proposed project's operational air quality impacts.

Impact AQ-3: The proposed project would result in emissions of criteria air pollutants, but not at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (*Less than Significant*)

BAAQMD, in its *CEQA Air Quality Guidelines* (May 2017), has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If a proposed project meets all the screening criteria, then the lead agency or project sponsor does not need to perform a detailed air quality assessment. BAAQMD's *CEQA Air Quality Guidelines* identify screening criteria for operational criteria air pollutant emissions for a "hotel" development at 489 rooms, a "quality restaurant" at 47,000 square feet, a "city park" at 2,613 acres, and a "regional shopping center" (assumed in place of the theater use) at 99,000 square feet; the proposed project falls substantially below the screening criteria for operational criteria pollutants for a hotel, quality restaurant, city park, or regional shopping center. Additionally, new buildings are required to comply with the current building energy efficiency standards and the CALGreen Code. Thus, quantification of project-generated criteria air pollutant emissions is not required, and the proposed project would not exceed any of the significance thresholds for criteria air pollutants. Therefore, the proposed project would result in a *less-than-significant* impact with respect to criteria air pollutants.

Impact AQ-4: The proposed project could generate substantial amounts of toxic air contaminants or expose sensitive receptors to substantial air pollutant concentrations. (*Less than Significant with Mitigation*)

Sensitive uses were described previously under Impact AQ-2. Although a recent California Supreme Court decision in *CBIA v. BAAQMD* held that impacts of the environment on a project generally are not within the purview of the CEQA statute, the following assessment is provided for the purpose of informing decision-makers.¹²⁴

Vehicle Trips

Individual projects result in emissions of TACs primarily as a result of an increase in vehicle trips. BAAQMD considers roads with fewer than 10,000 vehicles per day "minor, low-impact" sources that do not pose a significant health impact even in combination with other nearby sources and recommends that these sources be excluded from the environmental analysis. The proposed project's approximately 634 daily vehicle trips would be well below this level and would be distributed among the local roadway network; therefore, an assessment of project-generated TACs resulting from vehicle trips is not required,

¹²⁴ In a decision issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents except with certain types of specified projects or where a project or its residents may exacerbate existing environmental hazards (*California Building Industry Association v. Bay Area Air Quality Management District*, December 17, 2015, Case No. S213478, <http://www.courts.ca.gov/opinions/documents/S213478.PDF>). Thus, the analysis herein focuses on whether the proposed project would exacerbate existing or future air quality emissions in the project area. It is noted that existing local regulations, including article 38, would reduce exposure of new sensitive uses to air pollutant concentrations.

and the proposed project would not generate a substantial amount of TAC emissions that could affect nearby sensitive receptors.

Onsite Backup Diesel Generators

The proposed project includes a backup emergency generator. This diesel-fueled, 800-kilowatt generator would be located within the rooftop mechanical enclosure. Emergency generators are regulated by BAAQMD through its New Source Review (regulation 2, rule 5) permitting process. The project sponsor would be required to obtain applicable permits to operate an emergency generator from BAAQMD. Although emergency generators are intended only to be used in periods of power outages, monthly testing of the generator would be required. BAAQMD limits testing to no more than 50 hours per year. Additionally, as part of the permitting process, BAAQMD would limit the excess cancer risk from any facility to no more than 10 per 1 million population and would require any source that would result in an excess cancer risk greater than 1 per 1 million population to install best available control technology for toxics. However, because the project site is located in an area that already experiences poor air quality, the proposed emergency backup generator has the potential to expose sensitive receptors to substantial concentrations of diesel emissions, a known TAC, resulting in a significant air quality impact. Implementation of **Mitigation Measure M-AQ-4, Best Available Control Technology for Diesel Generators**, would reduce the magnitude of this impact to a less-than-significant level by reducing emissions by 89–94 percent compared to equipment with engines that do not meet any emission standards and without a VDECS. Therefore, although the proposed project would add a new source of TACs in an area that already experiences poor air quality, implementation of **Mitigation Measure M-AQ-4** would reduce this impact to *less than significant with mitigation*.

Mitigation Measure M-AQ-4: Best Available Control Technology for Diesel Generators

The project sponsor shall ensure that the backup diesel generator meets or exceeds one of the following emission standards for particulate matter: (1) tier 4 certified engine, or (2) tier 2 or tier 3 certified engine that is equipped with an ARB level 3 verified diesel emissions control strategy (VDECS). A nonverified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical ARB-verified model and if BAAQMD approves of its use. The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (regulation 2, rule 2, and regulation 2, rule 5) and the emission standard requirement of this mitigation measure to the Planning Department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.

Impact AQ-5: The proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. (Less than Significant)

The most recently adopted air quality plan for the air basin is the 2017 Clean Air Plan. The plan is a road map that demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards as expeditiously as practicable and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the 2017 Clean Air Plan, this analysis considers whether the project would: (1) support the primary goals of the 2017 Clean Air Plan; (2) include applicable control measures from the 2017 Clean Air Plan; and (3) avoid disrupting or hindering implementation of control measures identified in the 2017 Clean Air Plan.

The primary goals of the 2017 Clean Air Plan are to: (1) Protect air quality and health at the regional and local scale; (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and (3) protect the climate by reducing GHG emissions. To meet the primary goals, the 2017 Clean Air Plan recommends specific control measures and actions. These control measures are grouped into various categories and include stationary- and area-source measures, mobile-source measures, transportation control measures, land use measures, and energy and climate measures. The plan recognizes that to a great extent, community design dictates individual travel mode, and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and GHGs from motor vehicles is to channel future Bay Area

growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options. To this end, the 2017 Clean Air Plan includes 85 control measures aimed at reducing air pollution in the air basin.

The measures most applicable to the proposed project are transportation control measures and energy and climate control measures. The proposed project's impact with respect to GHGs are discussed in Section E7, Greenhouse Gas Emissions, which demonstrates that the proposed project would comply with the applicable provisions of the City's GHG reduction strategy.

The compact development of the proposed project and high availability of viable transportation options ensure that residents could bicycle, walk, and ride transit to and from the project site instead of taking trips via private automobile. These features ensure that the project would avoid substantial growth in automobile trips and vehicle miles traveled. The proposed project's anticipated 1,160 vehicle trips would result in a negligible increase in air pollutant emissions. Furthermore, the proposed project would be generally consistent with the General Plan, as discussed in Section A, Project Description. Transportation control measures that are identified in the 2017 Clean Air Plan are implemented by the General Plan and the Planning Code, such as through the City's Transit First Policy, bicycle parking requirements, and transit impact development fees. Compliance with these requirements would ensure that the project would include relevant transportation control measures specified in the 2017 Clean Air Plan. Therefore, the proposed project would include applicable control measures identified in the 2017 Clean Air Plan to meet the plan's primary goals.

Examples of a project that could cause the disruption or delay of 2017 Clean Air Plan control measures are projects that would preclude the extension of a transit line or bike path, or projects that propose excessive parking beyond parking requirements. The proposed project would construct a mixed-use development consisting of three components – an approximately 29,570-gsf dinner theater–entertainment venue; an approximately 118,000-square-foot hotel with 192 rooms; and an approximately 14,000-gsf, privately financed and maintained public park – in a dense, walkable urban area near a concentration of regional and local transit service. It would not preclude the extension of a transit line or a bike path or any other transit improvement, and thus, would not disrupt or hinder implementation of control measures identified in the 2017 Clean Air Plan.

For the reasons described above, the proposed project would not interfere with implementation of the 2017 Clean Air Plan. Because the proposed project would be consistent with the applicable air quality plan that demonstrates how the region would improve ambient air quality and achieve the federal and state ambient air quality standards, this impact would be *less than significant*.

Air quality plans describe air pollution control strategies to be implemented by a city, county, or region. The primary purpose of such a plan is to bring an area that does not attain federal and state air quality standards into compliance with the requirements of the federal and California clean air acts. BAAQMD prepares plans to attain national and California ambient air quality standards in the SFBAAB. BAAQMD adopted the 2017 Clean Air Plan on April 19, 2017. This plan provides a regional strategy to attain federal and state air quality standards by reducing emissions of ozone, PM, and TACs.

Air quality plans identify potential control measures and strategies, including rules and regulations that could be implemented to reduce air pollutant emissions from industrial facilities, commercial processes, on- and off-road motor vehicles, and other sources. The primary goals of the 2017 Clean Air Plan are to protect public health and the climate by reducing emissions, concentrations of harmful air pollutants, and exposure to the pollutants that pose the greatest health risk. The 2017 Clean Air Plan includes individual control measures that describe specific actions to reduce emissions of air pollutants and GHGs, with measures assigned into categories such as mobile-source, stationary-source, and land use and local impacts measures.

The proposed project would be consistent with the 2017 Clean Air Plan if it would support the plan's goals, would include applicable control measures from the plan, and would not disrupt or hinder implementation of any of the plan's control measures. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan.

For mobile sources, the 2017 Clean Air Plan includes measures applicable to the project related to the use of off-road construction equipment. Mobile Source Measure C-1, Construction and Farming Equipment, calls for incentives to retrofit construction equipment with diesel PM filters or upgrade to tier 3 or 4 engines and use renewable alternative fuels in applicable equipment. The proposed project would be consistent with Mobile Source Measure C-1 because it would use construction equipment equipped with diesel PM filters or tier 4 engines, as required by the Clean Construction Ordinance.

For stationary sources, the 2017 Clean Air Plan includes stationary-source control measures to enhance BAAQMD's regulatory program. Stationary-Source Measure 21, Revise Regulation 2, Rule 5: New Source Review for Air Toxics, supports implementing more stringent requirements. The proposed project would be consistent with these control measures from the 2017 Clean Air Plan.

The 2017 Clean Air Plan also includes Transportation Control Measure D3, Local Land Use Strategies. This measure calls for promoting and supporting land use patterns, policies, and infrastructure investments that support high-density mixed-use, residential, and employment development to facilitate walking, bicycling, and transit use. The compact, dense development of the proposed project would be consistent with the goals of the 2017 Clean Air Plan control measures. In addition, section 169 of the San Francisco Planning Code requires that the project sponsor develop a TDM plan to reduce the use of single-occupancy vehicles and encourage the use of transit and nonmotorized travel modes. The proposed project would include TDM measures to further reduce impacts, resulting in a *less-than-significant* impact.

Impact AQ-6: The proposed project would not create objectionable odors that would affect a substantial number of people. (*Less than Significant*)

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. During construction, diesel exhaust from construction equipment would generate some odors. However, construction-related odors would be temporary and would not persist upon project completion. Observation indicates that the project site is not substantially affected by sources of odors.¹²⁵ Additionally, the proposed project would include hotel, entertainment, and retail/restaurant uses, which would not be a significant source of new odors. Any proposed restaurant would be required to meet regulations regarding proper venting of stove and other kitchen equipment, and an application to be reviewed and approved by DBI would be required before construction of a restaurant. Therefore, odor impacts from the proposed project would be *less than significant*.

Impact-C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would not contribute to cumulative air quality impacts. (*Less than Significant with Mitigation*)

The geographic context for an evaluation of cumulative air quality impacts is the SFBAAB, as governed by BAAQMD. Emissions from past, present, and future projects contribute to the region's adverse air quality on a cumulative basis. No single project would be sufficient in size to result in regional nonattainment of ambient air quality standards by itself. Instead,

¹²⁵ A reconnaissance of the project site and environs was conducted by AECOM staff on December 21, 2016.

a project's individual emissions contribute to existing cumulative adverse air quality impacts.¹²⁶ The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Because the proposed project's construction-related (Impact AQ-1) and operational (Impact AQ-3) emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not be considered to result in a cumulatively considerable contribution to regional air quality impacts.

As discussed above, the project site is located in an air pollution exposure zone, an area that already experiences poor air quality; thus, past, present, and reasonably foreseeable development would worsen air quality and result in a significant cumulative impact. The proposed project would be required to implement **Mitigation Measure M-AQ-2, Construction Air Quality**, which could reduce construction period emissions, and **Mitigation Measure M-AQ-4, Best Available Control Technology for Diesel Generators**, which requires best available control technology to limit emissions from the project's emergency backup generator. Implementing these mitigation measures would reduce the project's contribution to cumulative air quality impacts to a *less-than-significant* level.

¹²⁶ Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2011, p. 2-1.

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E.7. GREENHOUSE GAS EMISSIONS

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
7. GREENHOUSE GAS EMISSIONS.— Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Greenhouse gas emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects have contributed and would continue to contribute to global climate change and its associated environmental impacts.

BAAQMD has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*,¹²⁷ which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA Guidelines. These GHG reduction actions have resulted in a 28 percent reduction in GHG emissions in 2015 compared to 1990 levels,¹²⁸ exceeding the year 2020 reduction goals outlined in BAAQMD's 2017 Clean Air Plan, Executive Order S-3-05, and AB 32 (also known as the Global Warming Solutions Act).¹²⁹

Given that the City has met the state's and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under Executive Orders S-3-05¹³⁰ and

¹²⁷ San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, 2017, <http://sf-planning.org/strategies-address-greenhouse-gas-emissions>.

¹²⁸ San Francisco Department of the Environment, *San Francisco's Carbon Footprint*, <https://sfenvironment.org/carbon-footprint>, accessed July 19, 2017.

¹²⁹ Executive Order S-3-05, AB 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.

¹³⁰ Office of the Governor, Executive Order S-3-05, June 1, 2005, <http://www.pcl.org/projects/2008symposium/proceedings/Coatsworth12.pdf>, accessed March 16, 2016. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents [MTCO₂e]); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO₂e); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO₂e). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

B-30-15^{131,132} and SB 32,^{133,134} the City's GHG reduction goals are consistent with Executive Orders S-3-05 and B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing GHG emissions. (*Less than Significant*)

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during the construction and operational phases. Direct emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

The proposed project would increase activity onsite through removal of the surface parking lot and construction of the proposed mixed-use development that would include a hotel and theater. Once in operation, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and hotel and entertainment operational activities that would result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG Reduction Strategy. As discussed below, compliance with the applicable regulations would reduce the proposed project's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

The proposed project would not provide any on-site vehicle parking. This combined with compliance with the City's Commuter Benefits Program, Emergency Ride Home Program, Transportation Sustainability Fee, Jobs-Housing Linkage Program, and bicycle parking requirements would reduce the proposed project's transportation-related emissions. The proposed project would not provide any vehicle parking but would offer valet parking at offsite facilities. This combined with compliance with the bicycle parking requirements that promote alternative forms of transportation would reduce the proposed project's transportation-related emissions. The sponsor has agreed to TDM measures consisting of a bicycle repair station in the onsite employee bicycle room, real-time transportation information displays in prominent locations within the project site, multimodal wayfinding signage in key locations to support access to transportation services and infrastructure, and a staffed

¹³¹ Office of the Governor, Executive Order B-30-15, April 29, 2015, <https://www.gov.ca.gov/news.php?id=18938>, accessed March 3, 2016. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO₂e).

¹³² San Francisco's GHG reduction goals are codified in section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

¹³³ SB 32 amends California Health and Safety Code division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding section 38566, which directs that statewide GHG emissions are to be reduced by 40 percent below 1990 levels by 2030.

¹³⁴ SB 32 was paired with AB 197, which would modify the structure of the California Air Resources Board; institute requirements for the disclosure of emissions of criteria pollutants and TACs; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of GHG emissions.

delivery reception area. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of sustainable transportation modes with zero or lower GHG emissions on a per-capita basis.

The proposed project would be required to comply with the energy efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, and Water Conservation and Irrigation ordinances. Such compliance would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions. The proposed project may include solar panels and a partial green roof, which would meet the renewable energy criteria of the Green Building Code, further reducing the proposed project's energy-related GHG emissions.

The proposed project's waste-related emissions would be reduced through compliance with the City's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote the reuse of materials, conserving their *embodied energy*¹³⁵ and reducing the energy required to produce new materials.

Compliance with the City's street tree planting requirements would serve to increase *carbon sequestration*. Other regulations, including those limiting refrigerant emissions and the Wood Burning Fireplace Ordinance, would reduce emissions of GHGs and *black carbon*, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds (VOCs).¹³⁶ Thus, the proposed project is determined to be consistent with San Francisco's GHG reduction strategy.¹³⁷

The project sponsor is required to comply with these regulations, which have proven effective, as San Francisco's GHG emissions have measurably decreased by 28 percent as of 2015¹³⁸ when compared to 1990 emissions levels, demonstrating that the City has met and exceeded Executive Order S-3-05, AB 32, and the Bay Area 2017 Clean Air Plan's GHG reduction goals for the year 2020. Other existing regulations, such as those implemented through AB 32, would continue to reduce the proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of Executive Orders S-3-05 and B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan. Because the proposed project is consistent with the City's GHG Reduction Strategy, it is also consistent with the GHG reduction goals of Executive Orders S-3-05 and B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan; would not conflict with these plans; and would therefore not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project would result in a *less-than-significant* impact with respect to GHG emissions.

¹³⁵ Embodied energy is the total energy required for the extraction, processing, manufacture, and delivery of building materials to the building site.

¹³⁶ Although they are not GHGs, VOCs are precursor pollutants that form ground-level ozone. Increased ground-level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing emissions of VOCs would reduce the anticipated local effects of global warming.

¹³⁷ San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for ZinZanni Hotel and Theater Project*, November 16, 2016.

¹³⁸ San Francisco Office of the Environment, San Francisco's Carbon Footprint, <https://sfenvironment.org/carbon-footprint>, accessed September 16, 2017.

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E.8. WIND AND SHADOW

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
8. WIND AND SHADOW.—Would the project:					
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact WS-1: The proposed project would not alter wind in a manner that substantially affects public areas.
(*Less than Significant*)

A proposed project's wind impacts are directly related to its height, orientation, design, location, and surrounding development context. Based on wind analyses for other development projects in San Francisco, a building that does not exceed a height of 85 feet generally has little potential to cause substantial changes to ground-level wind conditions. At a height of 40 feet (with an additional 15 feet for rooftop appurtenances), the proposed project would be approximately the same height as existing nearby buildings, which are approximately 45–55 feet tall, except for the Gateway Apartments building, which is 65 feet tall, and the proposed 88 Broadway and 753 Davis Street project, which would be approximately 75 feet tall. Given its height, orientation, design, and location and the surrounding development context, the proposed 40-foot-tall building (plus 15 feet for mechanical equipment and elevator penthouse) has little potential to cause substantial changes to ground-level wind conditions in public areas adjacent to and near the project site. For these reasons, the proposed project would not alter wind in a manner that substantially affects public areas. This impact would be *less than significant*.

Impact WS-2: The proposed project would not create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas. (*Less than Significant*)

Planning Code section 295 generally prohibits new structures taller than 40 feet that would cast additional shadows on open space that is under the jurisdiction of the San Francisco Recreation and Park Department (SFRPD) between 1 hour after sunrise and 1 hour before sunset, at any time of the year, unless that shadow would not result in a significant adverse effect on the use of the open space.

The threshold for determining the significance of impacts under CEQA is whether the proposed project would create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas, regardless of whether those facilities or areas are protected by planning code section 295 (i.e., under jurisdiction of public entities other than the Recreation and Park Commission [Rec Park] or privately owned and publicly accessible open space). In addition, as under planning code section 295, the CEQA analysis of shadow impacts takes into account usage of the open space; the time of day and year of project shadow; the physical layout and facilities affected; the intensity, size, shape, and location of the shadow; and the proportion of open space affected.

Because the proposed building would be 40 feet tall as measured by the planning code, it would be exempt from the shadow protection requirements of planning code section 295. Additionally, there are no nearby parks under Rec Park jurisdiction that could be affected by the proposed project. Non-section 295 properties in the project vicinity include: Sydney G. Walton Square (approximately 0.1 mile south of the project site), The Embarcadero Promenade (promenade) (sidewalks adjacent to the project site) and Pier 7½ Open Space. However, Sydney G. Walton Square is too far from the project site to be effected by the proposed project. The proposed project is located adjacent to designated public open spaces within the Port jurisdiction including, promenade, Pier 7 and Pier 7½ public spaces; therefore, the potential for the project to shadow these areas was evaluated below. Figure 19 shows the location of the proposed project and The Embarcadero with the pier structures and public space along the promenade evaluated for shadow impacts.

The San Francisco Planning Department prepared a preliminary shadow fan analysis that determined that the proposed project would have the potential to cast new shadow on the promenade and Pier 7½ Open Space. Therefore, a technical memorandum was prepared detailing potential new shadow impacts on promenade and Pier 7½ Open Space.¹³⁹

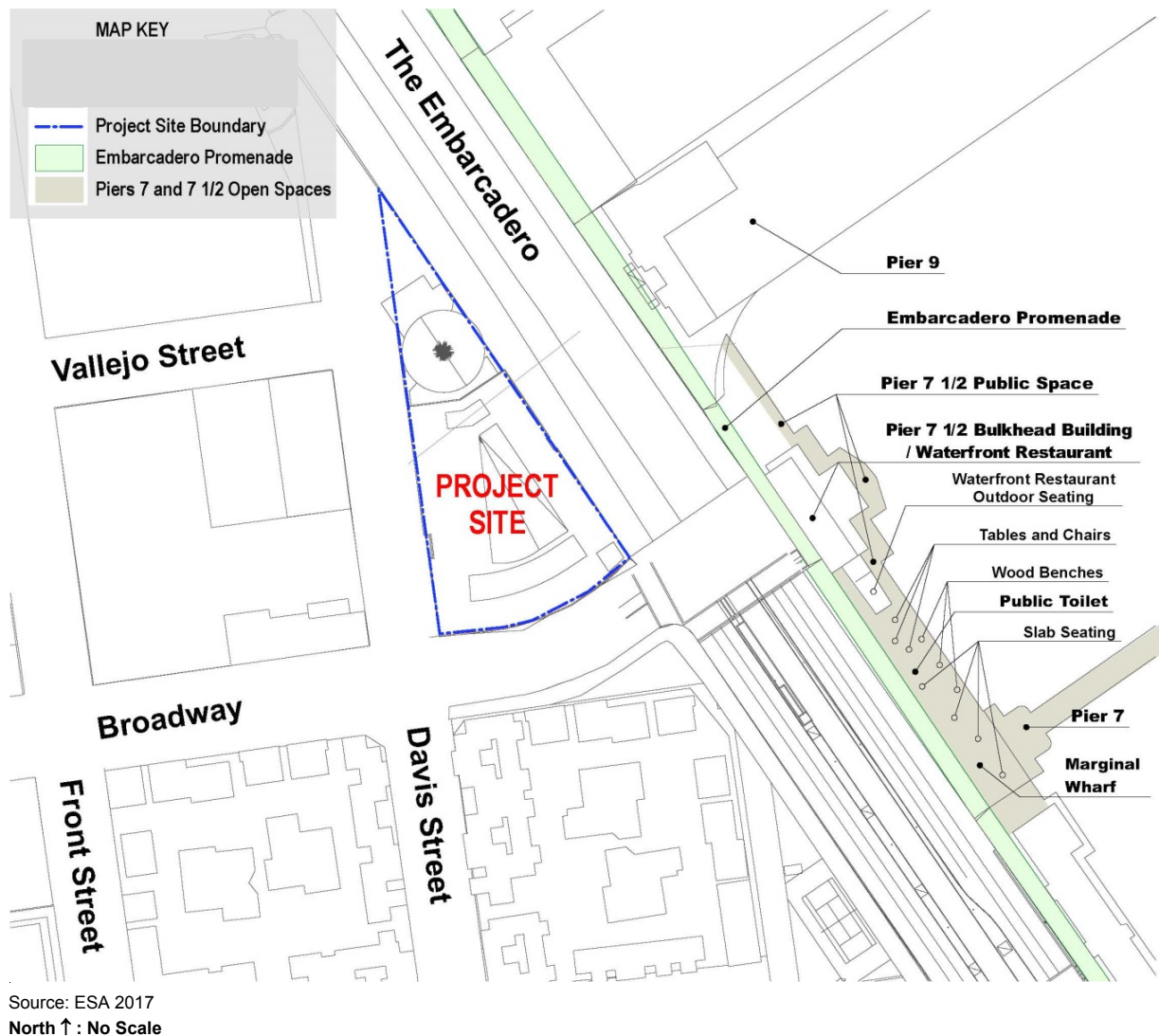


FIGURE 19 PROPOSED PROJECT WITH PROMENADE PIER STRUCTURES AND PUBLIC SPACE EVALUATED

Embarcadero Promenade

The Embarcadero Promenade (promenade) is a waterfront pedestrian promenade that runs along the eastern side of The Embarcadero. The promenade is more than 3 miles long and extends from Fisherman’s Wharf to China Basin. The promenade is identified as an “Open Space and Public Access” site in the Waterfront Land Use Plan and that plan’s Waterfront Design and Access Element.¹⁴⁰ It is a public open space resource that functions as both a pedestrian corridor and a waterfront open space destination, attracting downtown office workers, tourists, and residents. There are public art installations and seating areas at various locations along the promenade. Throughout the year, portions of the promenade near

¹³⁹ Environmental Science Associates, *Teatro ZinZanni and Hotel Shadow Study Technical Memorandum*, January 6, 2017.

¹⁴⁰ Port of San Francisco, *Waterfront Land Use Plan*, June 2004; Revised October 2009, <http://sfport.com/waterfront-land-use-plan-0>.

the project site are shadowed by the existing piers' bulkhead and shed buildings in the early morning and by existing buildings on the western side of The Embarcadero in the late afternoon.

The proposed project would cast net new shadow on a short section of the promenade in the late afternoon or evening each day of the year.¹⁴¹ The net new project shadow would begin at approximately 7:30 p.m. (Figure 21) during the summer and approximately 3 p.m. (Figure 22) during the winter. In the late afternoon or evening on any given day, the proposed project would shadow a segment of promenade measuring up to 250–300 feet long. Over the full year, the proposed project would affect an approximately 600-foot-long segment of the promenade. This 600-foot-long segment consists mostly of sidewalk with some seating areas and extends from just north of the Pier 7 Public Pier to the north end of the Pier 9 bulkhead building, which is less than 4 percent of the 3-mile-long promenade. Pier 7 Public Pier and the Pier 7½ - Waterfront Restaurant and Public Area are the two other designated public open spaces within Port jurisdiction nearby. Shadow from the proposed project would not reach other portions of the promenade. The shadow effect on the promenade would be seasonal, occurring on the southern part of the affected segment in late spring and early summer, primarily on the central part near the spring (March 20) and fall (September 20) equinoxes, and on the northern part only in fall and winter. The new project shadow on the promenade is not likely to adversely affect the late afternoon use of this primarily pedestrian area, because the activities of many pedestrians, runners, and bicyclists typically are not sensitive to shadow. Although those who wish to sit may prefer to sit in the sun, pedestrian walkways and open seating close to the water, such as those that exist east of the promenade at the Pier 7½ Public Space would be shadowed by the proposed project for a short time frame in winter after 3:30 p.m.. However, the project's net new shadow on the promenade would not be expected to affect its use or enjoyment.

Pier 7½ Public Space

The Pier 7½ Public Space is an open space area along The Embarcadero between Pier 7 and Pier 9 adjacent to San Francisco Bay and is divided into two segments southeast of the project site. The northern segment, between Pier 9 and the Waterfront Restaurant, includes a waterside walkway. There are no seating areas or amenities at the northern segment of the Pier 7½ public space. The southern segment, between the Waterfront Restaurant and Pier 7, includes a larger public space immediately adjacent to the restaurant's outdoor eating area and contains several public seating areas and amenities: three groups of wooden benches spaced along the eastern margin of the wharf that provide seating close to the bay; three small, fixed tables centrally located between the restaurant's outdoor seating and the public toilet; and eight large, low concrete blocks spaced throughout the area to provide added informal seating.

In addition to shadow on The Embarcadero promenade, the proposed project would cast late afternoon and evening shadow on the Pier 7½ public space that is located adjacent to and east of the promenade and between Pier 7 and Pier 9. New shadow would not reach Pier 7½ itself, because that area is already in the shadow of the Waterfront Restaurant at all times when project shadow could reach it.

New project shadow resulting from the project on the Pier 7½ public space would vary by season, but would occur only in late afternoon or evening, beginning within approximately one-half hour after the shadow reaches the promenade. The seasonal variations of new project shadow for the northern and the southern segments of this open space are described below.

On the summer solstice (June 20), new project shadow would not reach the northern segment of this public space, see Figures 20 and 21. New project shadow would reach the northern segment on the fall equinox (September 20) and the winter solstice (December 20), as well as through the fall and winter. On the fall equinox, project shadow would reach the bayfront pedestrian strip in the northern segment by approximately 6:09 p.m., and would cover it by 6:15 p.m. On the winter solstice, the new shadow from the project would reach the northern bayfront pedestrian strip shortly before 3:30 p.m. and would cover it by 4:00 p.m. as depicted in Figures 22 and 23.

¹⁴¹ Environmental Science Associates, *Teatro ZinZanni and Hotel Shadow Study Technical Memorandum*, January 6, 2017.

On the summer solstice (June 20), new project shadow would reach the promenade, but would not reach the southern segment of the public space as indicated in Figures 20 and 21, reflecting 7:00 p.m. and 7:30 p.m. time slots. In late spring and early summer, net new project shadow would reach only the western edge of the southern segment, and would not reach the public seating and amenities located farther east. On the equinox, net new project shadow would not reach the southern segment of the open space, between 1 hour after sunrise and 1 hour before sunset. Later that day, shortly after 6:15 p.m., net new project shadow would extend beyond the Waterfront Restaurant and would cover the immediately adjacent public space and the restaurant's outdoor seating area, and would reach into the bayfront open space, covering it by 6:30 p.m. This shadow would not reach the seating areas or other amenities in the southern segment of the Pier 7½ public space. On the winter solstice, net new shadow from the project would not reach as far south as the Waterfront Restaurant building or the southern segment of the Pier 7½ public space.

The new project shadow on the Promenade and 7½ public space is not likely to adversely affect the late afternoon use of this primarily pedestrian area, because the activities of many pedestrians, runners and bike riders typically are not sensitive to shadow. While those who wish to sit may prefer to sit in the sun, pedestrian walkways and open seating close to the water, such as those that exist east of the Promenade at the Pier 7 ½ public space, would remain in sunlight for up to approximately another half-hour after shadow first reaches the Promenade. Those users who do not need to walk or sit in the sun would not be adversely affected by the new shadow, therefore impacts would be *less than significant*.

Figures 22 through 24 below, depict the proposed project and existing shadow during the winter solstice on December 20, at 3:00 p.m., 3:30 p.m., and 4:00 p.m. New project shadow would not reach the Pier 7 Public Pier open space and therefore impacts would be less than significant.

Additionally, at times, the proposed project would shadow portions of other nearby streets and sidewalks and private property such as along Broadway and The Embarcadero, in the project vicinity. Shadows on streets and sidewalks would not exceed levels commonly expected in urban areas and would be considered a less-than-significant effect under CEQA.

Although occupants and visitors of nearby properties may regard the increase in shadow as undesirable, the limited increase in shading of public and private properties resulting from the proposed project would not be considered a significant impact under CEQA. For the reasons discussed above, shadow impacts would be *less than significant*.

Impact-C-WS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to wind and shadow. (*Less than Significant*)

As discussed above under Impact WS-1, buildings shorter than 85 feet have little potential to cause substantial changes to ground-level wind conditions. Because the nearby cumulative development projects would be less than 85 feet tall, the cumulative project would not alter wind in a manner that substantially affects public areas. For these reasons, the proposed project with other cumulative projects would have a *less-than-significant* cumulative wind impact.

As described above under Impact WS-2, the proposed project would not cast net new shadow on any park protected by planning code section 295 or on Sydney G. Walton Square. Therefore, the proposed project has no potential to result in cumulative impacts on section 295, Rec Park open spaces. However, the proposed project would add new shadow to 4 percent of the Embarcadero sidewalks. General shadow in the immediate vicinity of the project site is prescribed by the existing buildings to the south and west of the vacant project site and pier bulkhead buildings along The Embarcadero to the east of the project site. Throughout the year, portions of the promenade near the project site are shadowed by the existing piers' bulkhead and shed buildings in the early morning and by existing buildings on the west side of The Embarcadero in the late afternoon. Similarly, the Pier 7½ public open space north of the Waterfront Restaurant and the larger Pier 7½ public open space on the wharf between the Waterfront Restaurant and Pier 7 are shadowed in early morning and in late afternoon

throughout the year by existing buildings. In contrast, Pier 7 and its marginal wharf remain in full sunlight from sunrise until late in the afternoon, and the Pier 7½ public open space east of the Waterfront Restaurant remains in sunlight from sunrise until after midday, when the shadow from the existing restaurant building covers that public space for the rest of the day. The proposed 88 Broadway and 735 Davis Street developments in the area adjacent to the project site could also increase shadows on The Embarcadero sidewalks.

A shadow analysis was performed for the proposed 88 Broadway and 735 Davis Street project. The analysis concluded that the project would cast a shadow on Sydney G. Walton Square and The Embarcadero promenade. However, this analysis also concluded that existing shadow already exists at Sydney G. Walton Square from existing surrounding buildings, and this cumulative project would not contribute to net new shadow any time of the year, given the distance and position from the park. As a result of this project, a minimal shadow impact is expected to occur on The Embarcadero. Based on the evidence provided above, the shadows created by the cumulative projects, listed in Section B.3, Cumulative Projects, would not exceed levels commonly expected in urban areas. As a result, the cumulative impact with respect to shadow from cumulative projects in combination with the proposed seawall lots 323 and 324 projects would be *less than significant*.



FIGURE 20

PROPOSED PROJECT AND EXISTING SHADOW, JUNE 20TH, 7:00 P.M.

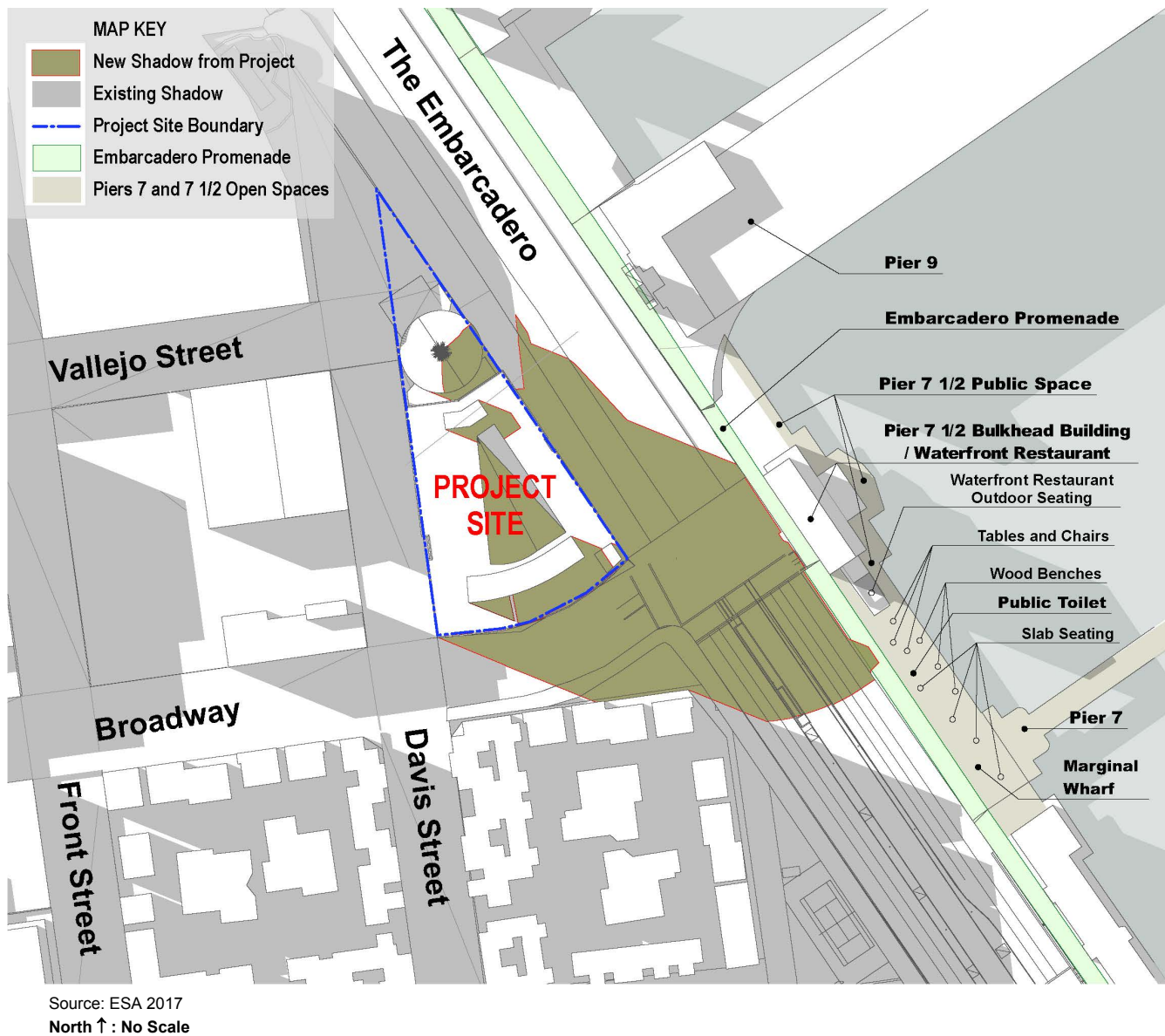


FIGURE 21 PROPOSED PROJECT AND EXISTING SHADOW, JUNE 20TH, 7:30 P.M.

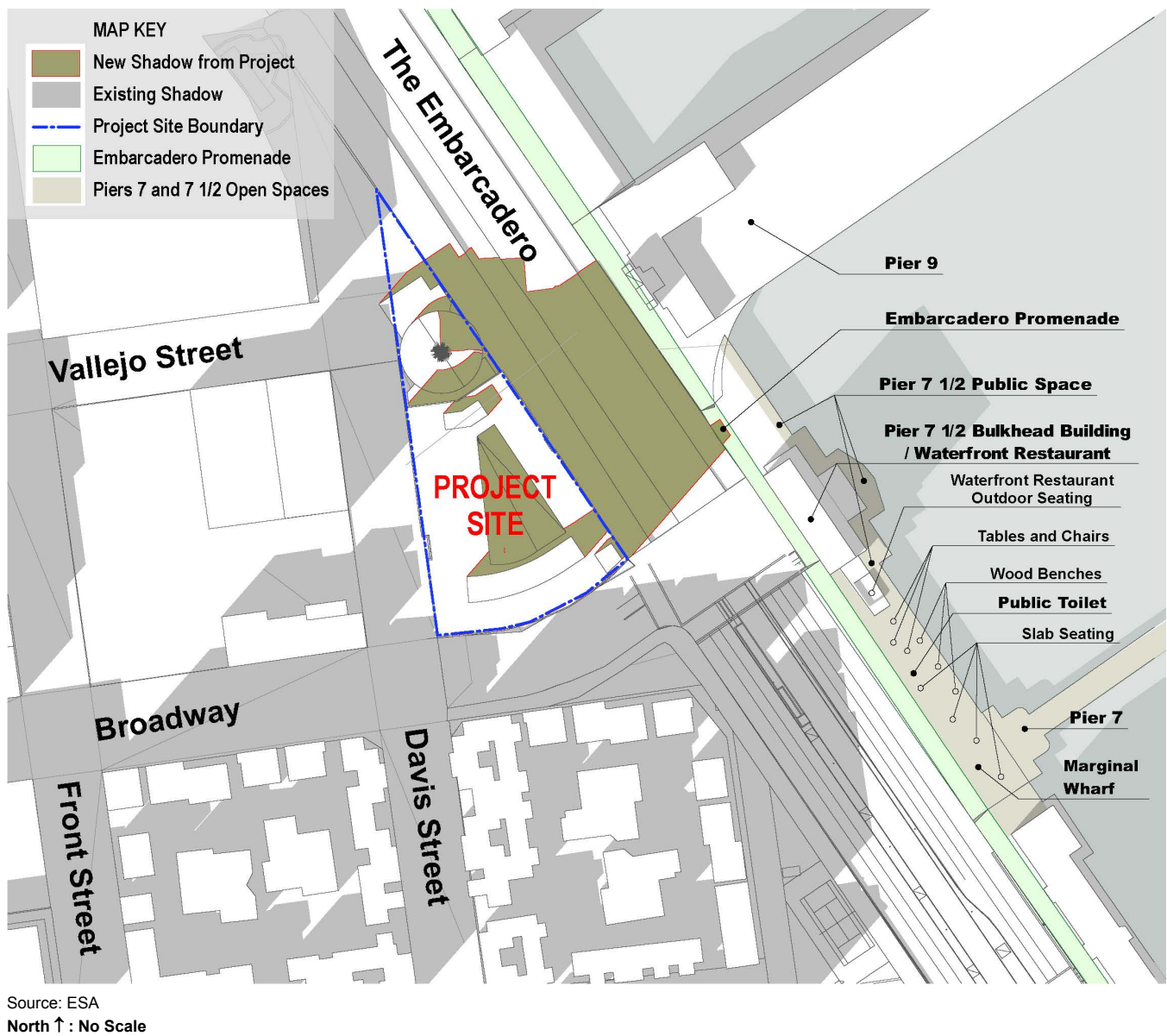


FIGURE 22 **PROPOSED PROJECT AND EXISTING SHADOW, DECEMBER 20TH, 3:00 P.M.**



FIGURE 23 **PROPOSED PROJECT AND EXISTING SHADOW, DECEMBER 20TH, 3:30 P.M.**



Source: ESA
North ↑ : No Scale

FIGURE 24 **PROPOSED PROJECT AND EXISTING SHADOW, DECEMBER 20TH, 4:00 P.M.**

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E.9. RECREATION

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
RECREATION.					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact RE-1: The proposed project would not result in a substantial increase in the use of existing parks and recreational facilities, the deterioration of such facilities, include recreational facilities, or require the expansion of recreation facilities the construction of which could affect the environment. (*Less than Significant*)

The new entertainment venue and hotel uses would be served by Rec Park, which administers more than 220 parks, playgrounds, and open spaces throughout the city, as well as recreational facilities, including recreation centers, swimming pools, golf courses, and athletic fields, tennis courts, and basketball courts.¹⁴² The project site is in an intensely developed urban neighborhood that does not contain large regional park facilities, but includes a number of neighborhood parks and open spaces, as well as other recreational facilities. The San Francisco General Plan's Recreation and Open Space Element identifies areas throughout the city that have a high need for open space. "High-need" areas are defined as those with high population densities, high concentrations of seniors and youth, and lower income populations that are located outside of existing parking service areas.¹⁴³ Although neighboring areas west of the project site are classified as high-need areas, the project site is located on parcels classified as having a lesser need for open space.

There are several Rec Park–managed recreation and open space facilities near the project site:

- **Maritime Plaza** (at 285 Washington Street): An approximately 2.01-acre landscaped plaza connected by pedestrian bridges to Golden Gateway and Embarcadero Center, located approximately 0.22 mile south of the project site.
- **Sue Bierman Park** (at the intersection of Washington and Drumm streets): An approximately 4.41-acre park containing a playground and reservable picnic areas, located approximately 0.30 mile southeast of the project site.
- **Justin Herman–Embarcadero Plaza** (at the intersection of Steuart and Market streets): An approximately 4.43-acre park containing a fountain, a winter ice skating rink, reservable picnic areas, and a bocce ball court, located approximately 0.37 mile southeast of the project site.
- **Portsmouth Square** (at the intersection of Washington Street and Walker Lum Place): An approximately 1.29-acre park containing benches and a children's play area, located approximately 0.43 mile southwest of the project site.
- **Washington Square** (at the intersection of Filbert and Stockton streets): An approximately 2.26-acre park containing benches, located approximately 0.58 mile northwest of the project site.

¹⁴² San Francisco Planning Department, *San Francisco General Plan, Recreation and Open Space Element*, April 2014, http://www.sf-planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf, accessed January 18, 2017.

¹⁴³ Ibid.

- **Telegraph Hill–Pioneer Park** (at Telegraph Hill Boulevard): An approximately 4.89-acre park containing Coit Tower, located approximately 0.43 mile northwest of the project site.

In addition to these facilities, Sydney G. Walton Square is the nearest public open space to the project site that is not owned or managed by Rec Park. The park is located 0.1 mile southwest, occupying half of the block south from the project site, and is bounded by Front Street to the east, Jackson Street to the south, and Davis Street to the west. The approximately 2-acre park is known for its public art and is a popular lunchtime spot for nearby employees and residents. Project residents also have close access (one block to the east) to The Embarcadero sidewalks, which are waterfront sidewalks located alongside the eastern portion of the Port. The sidewalks are along a 3-mile stretch of seawall that features piers, sidewalks, restaurants, parks, and other attractions. Additionally, neighborhood residents have access to the Pier 7½ Public Space, which is located along The Embarcadero between Pier 7 and Pier 9 and contains many features such as outdoor seating at the Waterfront Restaurant, public benches and tables, a public toilet, and informal seating next to San Francisco Bay. The proposed entertainment venue and hotel uses would increase the number of employees, hotel guests, and theatergoers at the project site. Although some of the population associated with the site would be onsite for entertainment events only and would be unlikely to make regular use of recreational facilities, hotel guests, and employees may use local recreational facilities in the vicinity of the proposed project.

As discussed in Section A, Project Description, the proposed project includes a 14,000-gsf public park at the north end of the project site. The public park would include landscaped and hardscape areas with benches and pathways for pedestrian and bicycle use. The population associated with the proposed project would use the proposed public park, which is anticipated to alleviate use of other nearby recreational facilities. The population of the proposed project is also expected to use the promenade and facilities along the bay, both recreationally and as a means of connection to other parts of the city. The incremental increase in use associated with the proposed project is not anticipated to contribute to deterioration of the recreational facilities in the vicinity of the project site. Moreover, construction of a new public park onsite would create additional recreational resources in the project area. Therefore, the impact of the proposed project would be *less than significant*.

The proposed project would not result in direct physical alteration of recreational facilities. The closest recreational facilities to the project site are the promenade (approximately 100 feet east of the project site); Pier 7 (approximately 300 feet southeast of the project site); and Sydney Walton Park (0.1 mile southwest of the project site). Construction of the proposed project is not anticipated to affect access to these facilities. Therefore, the proposed project would have a *less-than-significant* impact on recreational facilities and resources.

Impact-C-RE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to recreation. (*Less than Significant*)

Past, present, and reasonably foreseeable future projects located within approximately 0.25 mile of the project site are identified in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects. These projects would add approximately 427 new residents in 189 dwelling units in the project vicinity. In addition, the cumulative projects would add an estimated 160 new employees (including the 129 net new employees associated with the proposed project) within 0.25 mile of the project site. Recreational facility use in the project area would most likely increase with development of the proposed project, as well as the past, present, and reasonably foreseeable future projects identified in Table 3.

The proposed project includes a new 14,000-gsf public park that would be available to the increased residential population in the area. Furthermore, it is not anticipated that the proposed project population would increase the use of existing neighborhood and regional parks or other recreational facilities to such an extent that substantial physical deterioration of those facilities would occur, given that not all residents would necessarily use local parks and that other recreational

opportunities are available citywide. The added residential population resulting from development of the cumulative projects also would not require the construction or expansion of recreational facilities, nor would it physically degrade existing recreational resources. Each project identified in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, would be subject to compliance with the City’s open space requirements, as defined in section 135 of the planning code, regarding provision of public and/or private open space to partially meet the demand for recreational resources from future residents of those projects. Moreover, in June 2016, San Francisco voters approved Local Measure (Proposition) B, which extends until 2046 a funding set-aside in the City budget for SFRPD and provides for annual increases through 2026–2027 in General Fund monies provided to SFRPD, meaning that SFRPD would have additional funding for programming and park maintenance.¹⁴⁴ For these reasons, when considered in combination with other past, present, or reasonably foreseeable future projects, the proposed project would not result in a cumulative impact on recreational facilities or resources. The impact would be *less than significant*.

¹⁴⁴ San Francisco Department of Elections, June 7, 2016 Official Election Results, <http://www.sfelections.org/results/20160607/>, last updated June 24, 2016, accessed August 17, 2016.

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E.10. UTILITIES AND SERVICE SYSTEMS

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
10. UTILITIES AND SERVICE SYSTEMS.— Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is in an urban area that is served by utility service systems, including water, wastewater and stormwater collection and treatment, and solid waste collection and disposal. The proposed project would add new daytime and nighttime populations to the project site that would increase the demand for utilities and service systems on the site. However, as discussed in Section E.2, Population and Housing, the growth associated with the proposed project would not be in excess of growth planned for the city.

Impact UT-1: The proposed project would not exceed wastewater treatment requirements of the applicable regional water quality control board; would not exceed the capacity of the wastewater treatment provider serving the project site; and would not require construction of new stormwater drainage facilities, wastewater treatment facilities, or expansion of existing facilities. (*Less than Significant*)

The project site is served by San Francisco's combined sewer system, which handles both sewage and stormwater runoff. The Southeast Water Pollution Control Plant provides wastewater and stormwater treatment and management for the eastern side of the city, including the project site. Stormwater Management Ordinance compliance approvals for this project would be conducted by the SFPUC and Port. As described in Impact PH-1 in Section E.2, Population and Housing, the proposed project would add approximately 129 employees of the theater, hotel, restaurant, and bar; patrons of the 285-seat entertainment venue, restaurant, and bar; and approximately 365 hotel guests to the project site, which would increase the amount of wastewater generated at the project site by approximately 54,250 gallons per day.¹⁴⁵ This increase would not be

¹⁴⁵ The 90 percent of water use (see Impact UT-2) assumed to be discharged to the combined sewer system is consistent with SFPUC's standard assumption for nonresidential buildings, "Wastewater Service Charge Appeal," <http://www.sfwater.org/index.aspx?page=132>, accessed January 2018. SFPUC assumes that nonresidential uses discharge 90 percent of water used to the combined sewer. The 90 percent figure is used in these calculations for a conservative assessment of combined

substantial and would represent only a 0.09 percent increase in the Southeast Water Pollution Control Plant's average daily treatment capacity of 60,000,000 gallons per day.¹⁴⁶ In addition, the proposed project would incorporate water-efficient fixtures, as required by CCR title 24 and the San Francisco Green Building Ordinance. Specifically, the project must comply with the following measures:

- Title 24, part 11 (2016 CALGreen Code), Residential Mandatory Measures, division 4.3, Water Efficiency and Conservation
- Title 24, part 11 (2016 CALGreen Code), Nonresidential Mandatory Measures, division 5.3, Water Efficiency and Conservation

Compliance with these regulations would reduce wastewater flows and the amount of potable water used for building functions. The incorporation of water-efficient fixtures into new development is also accounted for by SFPUC in its projections of water demand (i.e., 2015 Urban Water Management Plan [2015 UWMP]), because widespread adoption can lead to more efficient use of existing capacity. The proposed project would also meet SFPUC's wastewater pretreatment requirements, as required by the San Francisco Industrial Waste Ordinance to meet the requirements of the San Francisco Bay RWQCB (see discussion under Impact HYD-1 in Section E.14, Hydrology and Water Quality, for additional stormwater management requirements).¹⁴⁷ Although the proposed project would add new hotel and entertainment visitors and employees to the project site, which would increase wastewater generation, this additional population is not beyond the growth projections included in long-range plans. Therefore, the incremental increase in demand for wastewater would not require construction of new wastewater treatment facilities or expansion of existing facilities.

The project site is currently entirely covered by impervious surfaces and the proposed project would not create any additional impervious surfaces; therefore, the proposed project would not result in an increase in stormwater runoff. Compliance with the City's Stormwater Management Ordinance, adopted in 2010 and amended in 2016, and the 2016 Stormwater Management Requirements and Design Guidelines would require the proposed project to reduce the existing volume and rate of stormwater runoff discharged from the project site. The project site has more than 50 percent impervious surface at present, the proposed project would create or replace more than 5,000 square feet of impervious surface, and the site is served by the combined sewer system. Thus, the stormwater management approach for the proposed project must reduce the existing runoff flow rate and volume by 25 percent for a 2-year, 24-hour design storm. The Stormwater Management Requirements set forth a hierarchy of BMPs to meet the stormwater runoff requirements. First-priority BMPs involve reducing stormwater runoff through approaches such as rainwater harvesting and reuse (e.g., for toilets and urinals and/or irrigation); infiltration through a rain garden, swale, trench, or basin; or the use of permeable pavement or a green roof. Second-priority BMPs include using biotreatment approaches such as flow-through planters or, for large sites, constructed wetlands. Third-priority BMPs, permitted only under special circumstances, involve using a filter to treat stormwater.

To achieve compliance with the Stormwater Management Requirements, the proposed project would implement and install appropriate stormwater management systems, such as low impact design approaches, rainwater reuse systems, cisterns, and green roofs that would manage stormwater onsite and limit demand on both the collection system and wastewater facilities resulting from stormwater discharges. A stormwater control plan would be designed for review and approval by SFPUC. The stormwater control plan would also include a maintenance agreement that must be signed by the project sponsor to guarantee

sewer system demand. 60,279 gallons per day x 90 percent = 54,251 gallons per day. The calculation for the project's water demand is shown in Impact UT-2.

¹⁴⁶ San Francisco Public Utilities Commission, *San Francisco's Wastewater Treatment Facilities*, June 2014, <http://sfwater.org/modules/showdocument.aspx?documentid=5801>, accessed January 2018
54,251 gallons per day/60,000,000 gallons per day = 0.090%

¹⁴⁷ City and County of San Francisco, Ordinance No. 19-92, San Francisco Municipal Code (Public Works), part II, chapter X, article 4.1 (amended), January 13, 1992.

proper care of the necessary stormwater controls. Therefore, the proposed project would not substantially increase the amount of stormwater runoff to the extent that existing facilities would need to be expanded or new facilities would need to be constructed; as such, the impact on the stormwater system would be less than significant.

Overall, although the proposed project would add to wastewater flows in the area, it would not cause the collection treatment capacity of the City's sewer system to be exceeded. The proposed project also would not exceed wastewater treatment requirements of the San Francisco Bay RWQCB, and would not require the construction of new wastewater/stormwater treatment facilities or expansion of existing ones. Therefore, because the proposed project would not require the construction of new or expanded wastewater or stormwater collection, conveyance, or treatment facilities that could have a significant impact on the environment, the impact would be *less than significant*.

Impact UT-2: SFPUC has sufficient water supply available to serve the project from existing entitlements and resources, and the proposed project would not require expansion or construction of new water supply resources or facilities. (*Less than Significant*)

As noted above under Impact UT-1, the proposed project would add hotel, entertainment, and public park uses to the project site, which would increase the demand for water on the site, but not in excess of amounts planned and provided for in the project area. SFPUC currently serves approximately 2.7 million customers in the Bay Area. Existing gross (all-sector) water use and residential-only water use by in-city retail customers are 77 and 44 gallons per capita per day, respectively.¹⁴⁸ Conservatively assuming that future project employees, patrons of the entertainment venue, restaurant, and bar, and hotel guests use the same amount of water, the proposed project would use an estimated 63,5829 gallons of water per day or 0.0635 million gallons per day.¹⁴⁹

As the water provider for San Francisco, SFPUC prepares an urban water management plan every 5 years to project future demand and evaluate the adequacy of existing and projected supply. Demands that are not met by local runoff are met with water diverted from the Tuolumne River through the Hetch Hetchy System. SFPUC's 2015 plan estimates that current and planned future supplies will be sufficient to meet future retail demands through 2035 under normal, dry, and multiple dry years; however, for 2040, a water shortfall of 1.1 million gallons per day is estimated for the city during the second and third years of multiple-dry-year conditions. The 2015 plan estimates a projected in-city water demand of 84.9 million gallons per day for 2040. The population generated by the proposed project would account for less than 0.02 percent of this projected demand. Therefore, although the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase would not exceed the amounts expected and provided for in the project area, and the increase in demand is not significant compared to the demand projected for 2040.

The proposed project would be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the San Francisco Green Building Ordinance. The project site is located in a designated recycled-water-use area, as defined in the Recycled Water Ordinance (sections 390-91 and 393-94). The ordinance requires projects of new construction totaling 40,000 square feet or more, such as the proposed project, to install recycled-water systems for all uses authorized by the State of California, including landscape irrigation and toilet and urinal flushing. Additionally, because the

¹⁴⁸ San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016, p. 4-2, <https://sfwater.org/modules/showdocument.aspx?documentid=9300>, accessed September 2018.

¹⁴⁹ Ibid., p. 4-2 and Appendix D, <http://sfwater.org/modules/showdocument.aspx?documentid=9301>, The proposed project would employ 129 workers, the theater would accommodate 285 patrons, and the hotel would accommodate 365 guests (779 total). This total (779), multiplied by 77 gallons per capita per day yields a total of 59,983 gallons per day. A 6.0 percent water loss factor is also included in the total water usage per the 2015 UWMP's projected water loss rate for 2040 (see 2015 UWMP Table 4-1). Therefore, the anticipated total gallons per day usage for the proposed project would be 59,983 plus 3,599 (6.0 percent of 59,983) equals 63,582 gallons per day or 0.0635 million gallons per day.

project contains 500 square feet or more of landscape area through the community open space, street trees, and partial green roof, the project sponsor would be required to comply with San Francisco's Water Efficient Irrigation Ordinance, adopted as chapter 63 of the San Francisco Administrative Code, and the SFPUC Rules & Regulations Regarding Water Service to Customers. This ordinance requires projects to design, install, and maintain efficient irrigation systems, utilize low-water-use plantings, and set a maximum applied water allowance that is part of the annual water budget. The project's landscape and irrigation plans must be reviewed and approved by SFPUC before installation.

During project construction, the project sponsor and project building contractor must comply with article 21 of the San Francisco Public Works Code, which requires that nonpotable water be used for dust-control activities. City Ordinance 175-91 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition project occurring within the boundaries of San Francisco, unless permission is obtained from SFPUC. Furthermore, to guarantee the welfare and safety of people and structures in the city, the project sponsor would be required to design all applicable water facilities, including potable water, fire suppression, and nonpotable water systems, to conform to the current standards and practices of SFPUC's City Distribution Division and SFFD.

In addition, a hydraulic analysis would be required to confirm the adequacy of the water distribution system for potable, nonpotable, and fire suppression use at the time of building permit review. If the current distribution system's pressures and flows are inadequate, the project sponsor would be responsible for any capital improvements required to meet the proposed project's water demands.

Because the proposed project's water demand could be accommodated by the existing and planned water supply and conveyance infrastructure anticipated under the 2015 UWMP, no expansion or construction of new water supply resources or facilities would be required. The proposed project would result in *less-than-significant* water supply impacts.

Impact UT-3: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs. (*Less than Significant*)

In September 2015, the City entered into a landfill disposal agreement with Recology Incorporated for disposal of all solid waste collected in San Francisco at the Recology Hay Road Landfill in Solano County for 9 years, or until 3.4 million tons have been disposed, whichever occurs first. The City would have an option to renew the agreement for a period of 6 years, or until an additional 1.6 million tons have been disposed, whichever occurs first.¹⁵⁰ The Recology Hay Road Landfill is permitted to accept up to 2,400 tons per day of solid waste; at that maximum rate, the landfill would have capacity to accommodate solid waste until approximately 2034. At present, the landfill receives an average of approximately 1,850 tons per day from all sources, with approximately 1,200 tons per day from San Francisco; at this rate, landfill closure would occur in 2041.¹⁵¹ The proposed project would be required to comply with the City's mandatory recycling and composting ordinance requiring separation of compost and recyclables from landfill waste (see Section E.7, Greenhouse Gas Emissions). The proposed project would be served by landfills with sufficient permitted capacity to accommodate its solid waste disposal needs. Therefore, solid waste disposal impacts would be *less than significant*.

¹⁵⁰ San Francisco Planning Department, *Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County Final Negative Declaration*, Planning Department Case No. 2014.0653, May 21, 2015, http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed February 10, 2017.

¹⁵¹ Ibid.

Impact UT-4: Construction and operation of the proposed project would comply with all applicable statutes and regulations related to solid waste. (*Less than Significant*)

The California Integrated Waste Management Act of 1989 requires municipalities to adopt an integrated waste management plan to establish objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. Reports filed by the San Francisco Department of the Environment show the City generated approximately 476,424 tons of waste material in 2013.¹⁵² Waste diverted from landfills is defined as recycled or composted. San Francisco has a goal of 100 percent of waste diverted from landfills by 2020. As of 2011, 80 percent of San Francisco's solid waste was being diverted from landfills, having met the 2010 diversion target of 75 percent, and a target of zero waste by 2020 was established.

San Francisco Ordinance No. 27-06 requires that a minimum of 65 percent of all construction and demolition debris be recycled and diverted from landfills. The San Francisco Green Building Code also requires certain projects to submit a recovery plan to the Department of the Environment demonstrating recovery or diversion of at least 75 percent of all demolition debris. Furthermore, the proposed project would be required to comply with City Ordinance 100-09, the Mandatory Recycling and Composting Ordinance, which requires everyone in San Francisco to separate their refuse into recyclables, compostables, and trash. The Recology Hay Road Landfill is required to meet federal, state, and local solid waste regulations. The proposed project would comply with the solid waste disposal policies and regulations identified above and would have a *less-than-significant* impact with respect to solid waste statutes and regulations.

Impact-C-UT-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result cumulative significant impacts related to utilities or service systems. (*Less than Significant*)

Past, present, and reasonably foreseeable projects in the vicinity of the project site would incrementally increase utilities demand in the city, such as water supply, water and wastewater conveyance and treatment facilities, and solid waste services. As noted above, SFPUC has accounted for such growth in its water demand and wastewater service projections, and the City has implemented various programs with a goal to achieve 100 percent landfill diversion by 2020. Cumulative development projects would be subject to water conservation, wastewater discharge, recycling and composting, and construction demolition and debris ordinances. Compliance with these City ordinances would reduce the effects of cumulative development projects in the city. None of the projects would result in substantial population growth beyond what has been planned by the City and ABAG, which the service providers have used to determine demand projections for the construction timelines of the reasonably foreseeable projects. Moreover, these projects would also be required to comply with the requirements of the City, SFPUC, and the San Francisco Bay Regional Water Quality Control Board related to the sustainable use of utilities.

None of the cumulative projects are expected to result in unusual quantities or types of discharge that would cause the local wastewater treatment facilities to exceed the applicable standards of the San Francisco Bay RWQCB. Projects would be required to comply with City ordinances related to water conservation. Projects creating or replacing at least 5,000 square feet of impervious surface would be required to prepare a stormwater control plan describing the postconstruction stormwater controls that would be implemented onsite to prevent pollutant runoff during project operation. Compliance with waste diversion ordinances to meet the City's goal for 100 percent diversion from landfills would be required for all projects. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a *less-than-significant* cumulative impact.

¹⁵² San Francisco Indicator Project, <http://www.sfindicatorproject.org/indicators/view/4>, accessed February 10, 2017.

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E.11. PUBLIC SERVICES

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
11. PUBLIC SERVICES.					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project's impacts on parks and open spaces are discussed in Section E.9, Recreation. Impacts on other public services are discussed below.

Impact PS-1: The proposed project would not increase demand for police protection, fire protection, schools, or other services to an extent that would result in substantial adverse physical impacts associated with the construction or alteration of government facilities. (*Less than Significant*)

Police Protection

The project site currently receives police services from the San Francisco Police Department's Central Police Station, located at 766 Vallejo Street, approximately 0.6 mile from the project site. The proposed project, involving the demolition of an existing surface parking lot and construction of a hotel, entertainment venue, and public park, would result in more intensive use of the project site than currently exists, and thus, would likely incrementally increase police service calls in the project area. Most of the population associated with the uses onsite would be temporary. Although the proposed project could increase the number of calls received from the area, the increase in responsibilities would not be substantial in light of the existing demand for police protection services. In addition, security for the proposed public park would be provided by a private security service. The Central Station would be able to provide the necessary police services and crime prevention in the area.¹⁵³ Meeting the project's additional service demand would not require the construction of new police facilities that could cause significant environmental impacts. Hence, the proposed project would have a *less-than-significant* impact related to the provision of police services.

Fire Protection

SFFD currently provides fire protection to the project site. The two closest fire stations are Station 13, at 530 Sansome Street approximately 0.4 mile from the project site, and Station 2, at 1340 Powell Street approximately 0.65 mile from the project site. The proposed project, involving the demolition of an existing surface parking lot and construction of a hotel, entertainment venue, and public park, would result in more intensive use of the project site than currently exists. The project is expected to support approximately 129 employees of the theater, hotel, restaurant, and bar; patrons of the 285-seat entertainment venue, restaurant, and bar; and approximately 365 hotel guests. This increase in population associated with the proposed project would incrementally increase fire service calls in the project area. Although the proposed project would likely increase the number of calls received from the area, the increase in responsibilities would not be so substantial in light of existing demand for fire protection services that new or altered fire stations would be required to serve the proposed project. Furthermore, construction of the proposed project would be required to comply with all applicable building and fire

¹⁵³ San Francisco Police Department, 2014 Annual Report, p. 112, <http://sanfranciscopolice.org/annual-reports>, accessed January 18, 2017.

code requirements, including the California Fire Code, which establishes requirements for fire protection systems, including providing state-mandated fire alarms, fire extinguishers, appropriate building access and egress, and emergency response notification systems. Compliance with all applicable building and fire codes would further reduce the demand for SFFD service and oversight. For these reasons, the impact of the proposed project on fire protection services would be *less than significant*.

Schools

San Francisco Unified School District provides public and secondary education throughout the city. The proposed project would not include any residential units that would generate new students. The approximately 129 additional employees at the project site are likely to be residents of San Francisco or the Bay Area, and the number of additional school-aged children associated with them would be very small compared to the total school district enrollment. Therefore, the project would have a *less-than-significant impact* on schools.

Other Government Services

The proposed project would not add any permanent residents to the area. The population associated with the proposed project could result in a minor increase in demand for government services, including libraries, but the increase would be small compared to existing demand and projected capacity. The proposed project would not result in a demand for government services that would result in the need to construct or alter facilities. The proposed project would have a *less-than-significant impact* on government services.

Impact-C-PS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to public services. (Less than Significant)

Development of the proposed project in conjunction with the cumulative projects identified within a 0.25-mile radius of the project site listed in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects and projected population growth in the in the project area and within the city would incrementally increase demand for public services in the city for police protection, fire protection, schools, and other government services, such as public libraries. Only one of the projects listed in Table 3 propose a large residential component the 88 Broadway and 753 Davis Street project, which would construct an additional 178 affordable residential units in the project vicinity. Because demand for public services is typically higher at projects with residential uses, because of their permanent occupants and the presence of school-aged children, it is not anticipated that cumulative development within 0.25 mile of the project site would contribute to a cumulative impact on public services.

In addition, as discussed in Section E.2, Population and Housing, the projects listed in Table 3 would not result in population growth beyond what has been projected by the City and ABAG, which have accounted and planned for such growth to continue to provide public services to San Francisco residents. This increase would not be considerable because this growth would not exceed growth projections for the area or the region. Further, the proposed project and cumulative projects in the vicinity would contribute to an increased demand for police services provided by the Central Station and fire services provided by Fire Stations 2 and 13, but the increased demand would not require the construction of new facilities or the expansion of existing facilities.

For these reasons, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact on public services such that new or expanded facilities would be required. This impact would be *less than significant*.

E.12. BIOLOGICAL RESOURCES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
12. BIOLOGICAL RESOURCES:— Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is in a developed urban area completely covered by impervious surfaces. The project site does not support riparian habitat or other sensitive natural communities, as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. The project site's eastern boundary is located approximately 165 feet from San Francisco Bay. Because the proposed project would be physically separated by The Embarcadero from riparian and aquatic communities in the bay, the proposed project would not involve any changes to riparian habitat. Therefore, question 12b is not applicable to the proposed project. In addition, the project vicinity does not contain wetlands, as defined by section 404 of the Clean Water Act; therefore, question 12c is not applicable to the proposed project. Moreover, the project site is not located within the jurisdiction of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; therefore, question 12f is not applicable to the proposed project.

Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species, riparian habitat or sensitive natural communities, and would not interfere substantially with any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (*Less than Significant*)

The project site and surrounding area are entirely covered with impervious surfaces and do not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Migrating birds do pass through San Francisco. Nesting birds, their nests, and their eggs are fully protected by California Fish and Game Code sections 3503 and 3503.5 and the federal Migratory Bird Treaty Act. The proposed

project would be subject to the Migratory Bird Treaty Act, which would prevent impacts on nesting birds from occurring as a result of the proposed project, as discussed further below under Impact BI-2.

The project site is located within an urban bird refuge. The location, height, and material of buildings, particularly transparent or reflective glass, may present risks for birds as they travel along their migratory paths. The City has adopted guidelines to address this issue and provided regulations for bird-safe design in the city. Planning code section 139, Standards for Bird-Safe Buildings, establishes building design standards to reduce avian mortality rates associated with bird strikes.¹⁵⁴ Section 139 identifies two types of bird hazards: location-related hazards, where the siting of a structure creates a high risk to birds, and feature-related hazards, which include building design features that create a high risk to birds, such as freestanding glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments 24 square feet and larger in size.

Projects located less than 300 feet from an urban bird refuge that are located in an unobstructed line to the refuge are considered to pose location-related hazards. San Francisco Bay and its shoreline are considered an urban bird refuge because of the presence of open water. The project site is located approximately 165 feet from the bay and may be located in an unobstructed line to the bay. The proposed project would also include feature-related hazards, including freestanding glass walls enclosing the tent. As such, the proposed project is required to include bird-safe glazing treatment. Treatment may include fritting, netting, permanent stencils, frosted glass, exterior screens, physical grids placed on the exterior of the glazing, or ultraviolet patterns visible to birds. The treatment would be applied to the walls of the glass enclosing the tent. Section 139 also requires that exterior lighting be minimized and shielded. The proposed project would shield exterior lighting where included.

Overall, the proposed project would be subject to, and would comply with, City-adopted regulations for bird-safe buildings and federal and state migratory bird regulations; therefore, the proposed project would not interfere with the movement of native resident or wildlife species or with established native resident or migratory wildlife corridors. This impact would be *less than significant*.

Impact BI-2: The proposed project would not conflict with the City's local tree ordinance. (*Less than Significant*)

The City's Urban Forestry Ordinance (Public Works Code section 801 et seq.) requires a permit from SFPW to remove any protected trees. Protected trees include landmark trees, significant trees, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco.

There are 28 existing street trees along The Embarcadero, Broadway, and Davis Street adjacent to the project site. As part of the proposed project, all 28 existing street trees would be retained. Therefore, no impact on protected trees would occur, and no mitigation measures are required.

In addition, Public Works Code section 806(d)(2) requires that one 24-inch box tree be planted for every 20 feet of property frontage along each street, with any remaining fraction of 10 feet or more of frontage requiring an additional tree. The proposed project would consist of approximately 600 feet of frontage on The Embarcadero, 290 feet of frontage on Davis Street, and 210 feet of frontage on Broadway. Therefore, street frontage for the project site would total approximately 1,100 feet, which would require a total of 55 street trees. The proposed project would comply with planning code section 138.1(c)(1) by retaining the 28 existing trees along The Embarcadero, Broadway, and Davis Street, and by planting an additional 28 trees, for a total of 56 street trees. The locations of the new street trees would be subject to constraints

¹⁵⁴ San Francisco Planning Department, *Standards for Bird-Safe Buildings*, July 14, 2001, http://208.121.200.84/ftp/files/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%2011-30-11.pdf, accessed August 18, 2016.

regarding the location of underground utilities. Public Works Code section 806(d)(4) includes a provision that the director may waive street tree requirements if planting a street tree would interfere with preexisting subsurface features. However, for each required street tree the director waives, the project sponsor must pay an in-lieu fee to fulfill all or a portion of the street tree requirement, or provide alternative landscaping comparable to or greater than the number of street trees waived. The proposed project would comply with the San Francisco Planning and Public Works codes. Because the proposed project would not conflict with the City's local tree ordinance, this impact would be *less than significant*.

Impact C-BI-1: The proposed project in combination with other past, present, and reasonably foreseeable future projects would not result in cumulative impacts on biological resources. (*Less than Significant*)

The cumulative development projects shown in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, would result in an overall intensification of land uses typical of infill development in the project vicinity. The project site and the surrounding area do not currently support any candidate, sensitive, or special-status species, any riparian habitat, or any other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The cumulative project sites do not contain habitat that supports any candidate, sensitive, or special-status species; does not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service, including onsite or street trees that could provide habitat for birds protected under the Migratory Bird Treaty Act; does not contain any wetlands as defined by section 404 of the Clean Water Act; and does not fall within any local, regional, or state habitat conservation plans. Therefore, the development of these projects would not have the potential to result in a cumulative impact on these resources.

The cumulative development projects could add a number of buildings that could potentially injure or kill birds in the event of a bird-strike collision. However, like the proposed project, nearby cumulative development projects would be subject to the City's bird-safe building regulations. Compliance with these regulations would reduce the effects of cumulative development projects to less-than-significant levels. Similarly, cumulative development projects would be required to comply with the Urban Forestry Ordinance. For these reasons, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact on biological resources, and cumulative impacts would be *less than significant*.

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E.13. GEOLOGY AND SOILS

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
13. GEOLOGY AND SOILS.— Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table-18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would connect to the combined municipal sewer system, which is the conveyance system for San Francisco, and would not use septic tanks or alternative wastewater disposal systems. Therefore, question 13e is not applicable to the proposed project.

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,¹⁵⁵ the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing seismic hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Thus, the following analysis evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact is considered significant if the proposed project would exacerbate existing or future seismic hazards or unstable soils by increasing the severity of these hazards that would occur or be present without the project.

Regulatory Setting

Existing laws and regulations that stipulate a regulatory process to address seismic and geologic safety of new construction are described below.

¹⁵⁵ *California Building Industry Association v. Bay Area Air Quality Management District*, December 17, 2015.

Federal Regulations to Address Seismic Hazards

Earthquake Hazard Reduction Act of 1977. Federal laws codified in United States Code Title 42, Chapter 86, were enacted to reduce risks to life and property from earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. Implementation of these requirements are regulated, monitored, and enforced at the state and local levels. Key regulations and standards applicable to the proposed project are summarized below.

California Regulations to Address Seismic Hazards

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act). The Alquist-Priolo Act (Public Resources Code section 2621 et seq.) is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location and construction of most types of structures intended for human occupancy¹⁵⁶ over active fault traces and strictly regulates construction in the corridors along active faults (i.e., earthquake fault zones).

The Seismic Hazards Mapping Act of 1990. Similar to the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (seismic hazards act, located in Public Resources Code section 2690 et seq.) is intended to reduce damage resulting from earthquakes. Although the Alquist-Priolo Act addresses surface fault rupture, the seismic hazards act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act (i.e., the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped seismic hazard zones).

A primary purpose of the seismic hazards act is to assist cities and counties in preparing the safety elements of their general plans and encourage land use management policies and regulations that reduce seismic hazards. The intent of this act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. Under the act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans. In addition, the California Geologic Survey's Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*, provides guidance for evaluating earthquake-related hazards for projects in the designated zones and includes a description of required investigations and recommends mitigation measures, as required by Public Resources Code section 2695(a).

The project site is within an area that may be prone to earthquake-induced ground failure during a major earthquake due to liquefaction hazard as mapped by the California Geological Survey. Because of this, site design and construction must comply with the seismic hazards act, its implementing regulations, and the California Department of Conservation's guidelines for evaluating and mitigating seismic hazards.

California Building Standards Code. The California Building Standards Code, or state building code, is codified in title 24 of the California Code of Regulations. The state building code provides standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the state. The state building code generally applies to all occupancies in California, with modifications adopted in some instances by state agencies or local governing

¹⁵⁶ With reference to the Alquist-Priolo Act, a *structure for human occupancy* is defined as one "used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year" (California Code of Regulations, title 14, division 2, section 3601[e]).

bodies. The current state building code incorporates, by adoption, the 2016 edition of the International Building Code of the International Code Council with the California amendments. These amendments include significant building design and construction criteria that have been tailored for California earthquake conditions.

Chapter 16 of the state building code deals with structural design requirements governing seismically resistant construction (section 1604), including, but not limited to, factors and coefficients used to establish a seismic site class and seismic occupancy category appropriate for the soil/rock at the building location and the proposed building design (sections 1613.5 through 1613.7). Chapter 18 includes, but is not limited to, the requirements for foundation and soil investigations (section 1803); excavation, grading, and fill (section 1804); allowable load-bearing values of soils (section 1806); foundation and retaining walls, (section 1807); and foundation support systems (sections 1808 through 1810). Chapter 33 includes, but is not limited to, requirements for safeguards at work sites to ensure stable excavations and cut-or-fill slopes (section 3304) and the protection of adjacent properties including requirements for noticing (section 3307). Appendix J of the state building code includes, but is not limited to, grading requirements for the design of excavations and fills (sections J106 and J107) specifying maximum limits on the slope of cut and fill surfaces and other criteria, required setbacks and slope protection for cut and fill slopes (J108), and erosion control in general and regarding the provision of drainage facilities and terracing (sections J109 and J110). San Francisco has adopted Appendix J of the state building code with amendments to J103, J104, J106, and J109 as articulated in the local building code.

California Division of Occupational Safety and Health Regulations. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching, as specified in California Division of Occupational Safety and Health (Cal/OSHA) regulations (title 8).

San Francisco Building Code and Review

San Francisco Building Code. The City's building construction standards are based on the state building code, and include local amendments to reflect local conditions. These amendments are found in the Building Code of the San Francisco Building Inspection Commission Codes (local building code) including administrative bulletins. In addition, the building department clarifies implementing procedures within information sheets.¹⁵⁷

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project. Responses in this section rely on the information and findings provided in geotechnical investigations for the project site prepared by ENGEO Incorporated.^{158, 159} The geotechnical studies relied on available literature, geologic maps, and geotechnical reports pertinent to the site to develop conclusions and recommendations, including performing a field exploration. The field exploration at the subject site generally consisted of three mud-rotary borings to depths ranging from 121 to 132 feet below ground surface (bgs), and four cone penetrometer test soundings that were advanced to a maximum depth of approximately 130½ feet bgs.¹⁶⁰ The majority of the project site's subsurface material is undocumented fill composed of loose to medium dense sand and gravels intermixed with layers of medium stiff clays ranging from approximately 20 to 50 feet bgs. Below the undocumented fill lies a layer of soft to medium stiff, highly compressible Young Bay Mud, which varies in thickness from approximately 40 to 70 feet bgs at the site. Beneath the Young Bay Mud, there are stiff to hard clays and medium dense to dense sands that are approximately 40 feet thick. The Franciscan complex is anticipated to be at lower depths in the range of 50–80 feet bgs. Bedrock was found sloping down toward the northeast with approximate depths

¹⁵⁷ Available at <http://sfdbi.org/administrative-bulletins> and <http://sfdbi.org/information-sheets>.

¹⁵⁸ ENGEO Incorporated, *Geotechnical Feasibility Assessment for the Hotel and Teatro ZinZanni Project*, December 8, 2015.

¹⁵⁹ ENGEO Incorporated, *Geotechnical Exploration for the Hotel and Teatro ZinZanni Project*, September 13, 2016.

¹⁶⁰ ENGEO Incorporated, *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies*, April 6, 2018.

ranging from 100 to 130 feet bgs. The presence of a buried seawall along the eastern boundary of the site has been identified in historic maps. Groundwater occurs between 6 and 10 feet bgs. However, because groundwater levels can fluctuate over time as a result of variations in temperature, precipitation, irrigation, or other factors such as proximity to San Francisco Bay, a design water level of elevation 5 feet bgs is recommended. The artificial fill material below the groundwater table is potentially liquefiable and the project site is mapped in a California Geological Survey (CGS) seismic hazard zone map for the area titled *State of California Seismic Hazard Zones, City and County of San Francisco, Official Map*, dated November 17, 2000.¹⁶¹

The geotechnical investigation recommended soil improvement to stabilize undocumented fill and address and mitigate liquefaction and lateral spreading risks.¹⁶² Approximately 11,100 cubic yards of existing fill would be removed, amended, and reused onsite as engineered fill to the extent possible; the remainder of the existing fill would be exported offsite to an appropriate disposal facility. The soil improvement is anticipated to involve in-place cement mixing of fill soils, which is a process to improve the strength of the underlying existing artificial fill. The depth of the treatment below excavation bottom would vary up to 39 feet.

The proposed building would be founded on a stiff reinforced structural mat foundation, shallow continuous footings, with interconnecting grade beams, or a combination of both of these systems to support anticipated structural loads. The uppermost 6 feet of the building pad area would be excavated, and approximately 5 feet of lightweight cellular concrete would be placed up to the bottom of the 1-foot-thick shallow mat foundation to reduce loads and potential settlement of the underlying Young Bay Mud.

Approach to Analysis

The preceding Regulatory Setting section presented the state and local laws that are currently in effect to ensure that proposed development sites are adequately investigated and that potential seismic hazards are evaluated and mitigated during the project design and construction phases of the project. This section discusses the roles and responsibilities of the engineers and building officials, and processes that ensure site investigations, grading, and construction is completed in accordance with the state and local laws developed to protect the public and property from adverse effects of earthquake-induced ground-shaking and ground failure.

The Building Department Role and Permit Review Process

In San Francisco, the building department implements and enforces the regulatory requirements of the state and local building code described above, and the project engineer as the registered design professional for the project is responsible for ensuring that a building is constructed in compliance with these standards.

The geotechnical engineer¹⁶³ is responsible for investigating the underlying soils and bedrock on a site and, if necessary, developing remedies to improve soil conditions based on standard, accepted, and proven engineering practices. The geotechnical investigation must characterize, log, and test soils and bedrock conditions, and determine the anticipated response of those underlying materials to ground shaking generated during an earthquake. Further, the geotechnical

¹⁶¹ California Geological Survey, *Seismic Hazard Zones, City and County of San Francisco, Official Map*, scale 1:24,000, released November 17, 2000.

¹⁶² ENGEO Incorporated, *Geotechnical Exploration for the Hotel and Teatro ZinZanni Project*, September 13, 2016.

¹⁶³ The geotechnical engineer, as a registered professional with the state, is required to comply with the California Building Standards Commission and local codes while applying standard engineering practice and the appropriate standard of care for the particular region in California. The California Professional Engineers Act (Business and Professions Code sections 6700-6799), and the Codes of Professional Conduct, as administered by the California Board of Professional Engineers and Land Surveyors, provide the basis for regulating and enforcing engineering practice in California.

investigation would result in a report that may include recommended methods and materials for all aspects of the site development, including the site preparation, building foundations, structural design, utilities, sidewalks and roadways, to remedy any geotechnical conditions related to potential seismic impacts. The geotechnical report must be reviewed, signed, and stamped by a qualified engineer and in some cases also a geologist.

Once finalized, the geotechnical report is submitted to building department for review and comment. The building department works with the applicant and the geotechnical engineer to resolve inconsistencies and ensure that the investigation complies with the state and local building codes, local administrative bulletins and implementing procedures. The building department reviews the permit including the construction plans for conformance with the recommendations provided in the geotechnical report and ensures permit requirements for grading, foundation, building, and other site development permits are based on the recommendations in the project-specific geotechnical report and state building code provisions. On large scale developments, the City may rely on expertise of outside professionals to peer review geotechnical studies, conclusions, and recommendations.

The following list outlines the typical geotechnical investigation and review process in the city.

1. The applicant prepares a preliminary geotechnical investigation (or a master plan geotechnical investigation for larger project sites).
2. The city fulfills environmental review requirements under the California Environmental Quality Act (CEQA), including the application of any relevant mitigation measures as part of the conditions of project approval.
3. The city approves project entitlements and issues a site permit.
4. The applicant prepares site-specific geotechnical investigations, which entail the following:
 - a. Conduct subsurface exploration of project site;
 - b. Submit soil samples for laboratory analysis;
 - c. Review results of soil sample engineering properties;
 - d. Conduct seismic hazards evaluation based on site location and engineering properties of site soils;
 - e. Assess effects of seismic hazards; and
 - f. Identify appropriate strategies to address seismic hazards.
5. The applicant submits site-specific, design-level geotechnical investigation report and construction plans to the building department.
6. The building department reviews the site-specific, design-level geotechnical investigation report and plans and recommendations for adherence to the local and state building code requirements and conformance with recommendations in the geotechnical investigation.
7. The applicant addresses the building department's comments.
8. The applicant resubmits modified construction plans based on the building department's comments.
9. The building department approves grading and foundation permits.

Impact GE-1: The proposed project would not expose people or structures to potential substantial adverse effects, including the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides. (*Less than Significant*)

Fault Rupture

With respect to potential rupture of a known earthquake fault, no known active faults cross the project site and the site is not within an earthquake fault special zone. Therefore, the potential of surface rupture to occur at the site is very low. The proposed project would not exacerbate the potential for surface rupture. Therefore, the proposed project would have ***no impact*** on fault ruptures.

Strong Seismic Ground Shaking

In terms of the potential for strong seismic ground shaking, the project site is located 9 miles from the San Andreas Fault. According to the U.S. Geological Survey, the overall probability of a magnitude 6.7 or greater earthquake to occur in the San Francisco Bay region during the next 30 years is 63 percent. Therefore, it is possible that a strong to very strong earthquake would affect the project site during the lifetime of the proposed project. The severity of the event would depend on a number of conditions including distance to the epicenter, depth of movement, length of shaking, and the properties of underlying materials.

The proposed project would be designed in accordance with the 2016 California Building Code and therefore would not have the potential to exacerbate seismic-related ground shaking. Therefore, the proposed project would have a ***less-than-significant impact*** related to strong seismic ground shaking.

Landslides, Liquefaction, Lateral Spreading, and Seismic Settlement

Landslides

With respect to landslides, based on the San Francisco General Plan, the project site is relatively level and is not located within a mapped landslide zone.¹⁶⁴ The site is not within a designated earthquake-induced landslide zone as shown on the CGS seismic hazard zone map for the area. Therefore, the proposed project would have a no impact with respect to potential for landslides, and this topic is not discussed further.

Liquefaction and Lateral Spreading

Lateral spreading typically forms on gentle slopes that have rapid fluid-like flow movement and can occur when there is potential for liquefaction in underlying, saturated soils. Liquefaction occurs when saturated soils lose strength and stiffness when there is an applied stress such as an earthquake which causes solid soils to behave like a liquid when there is no cohesion, resulting in ground deformations. Ground deformations can take on many forms, including, but not limited to, flow failure, lateral spreading, lowering of the ground surface, or ground settlement, loss of bearing, ground fissures, and sand boils. Liquefaction of subsurface layers, which could occur during ground-shaking associated with an earthquake, could potentially result in ground settlement. In terms of seismic-related ground failure, including liquefaction, the site is within a designated liquefaction hazard zone as shown on the CGS seismic hazard zone map for San Francisco.¹⁶⁵ This means that there is a potential for permanent ground displacement onsite, such as liquefaction.¹⁶⁶ CGS provided recommendations for the content of site investigation reports within seismic hazard zones in Special Publication 117A, *Guidelines for Evaluating*

¹⁶⁴ San Francisco Planning Department, *San Francisco General Plan*, Community Safety Element, Map 4, http://www.sf-planning.org/ftp/General_Plan/Community_Safety_Element_2012.pdf, accessed June 22, 2017.

¹⁶⁵ California Geological Survey, *Seismic Hazard Zones, City and County of San Francisco, Official Map*, scale 1:24,000, released November 17, 2000.

¹⁶⁶ Ibid.

and Mitigating Seismic Hazards in California, which recommends that at least one exploration point extend to a depth of at least 50 feet to evaluate liquefaction potential.

Review of borings from the geotechnical investigations indicates that loose to medium dense sand is likely present both above and below the natural groundwater table in the site area. The site-specific explorations encountered fill that is potentially liquefiable based on the cone penetration test results and standard penetration test blow counts. The estimated liquefaction-induced settlement ranges between 3.6 and 10.5 inches because of thick layers of artificial fill extending up to 40 feet bgs. Loose sand above the groundwater table may densify and loose to medium dense sand below the groundwater table may liquefy during strong ground shaking associated with a seismic event on a nearby fault. The preliminary geotechnical reports also determined that the lateral displacement would not affect the foundation of the proposed building.

Based on the geotechnical investigation borings, the potential for liquefaction was analyzed. The analysis as discussed above determined that soils consisted of undocumented fill composed of loose to medium dense sand and gravels intermixed with layers of medium stiff clays ranging from approximately 20 to 50 feet bgs. Below the undocumented fill lies a layer of soft to medium stiff, highly compressible Young Bay Mud, which varies in thickness from approximately 40 to 70 feet bgs at the site. Beneath the Young Bay Mud, there are stiff to hard clays and medium dense to dense sands that are approximately 40 feet thick. The soil improvement is anticipated to involve in-place cement mixing of fill soils, which is a process to improve the strength of the underlying existing artificial fill. The depth of the treatment below excavation bottom would vary up to 39 feet. The Franciscan complex is anticipated to be at lower depths in the range of 50–80 feet bgs with a lower likelihood to liquefy or settle. Some of the on-site sand could generally be re-used and combined to make engineered fill around the foundation including use of crushed rock or other controlled density fill to strengthen the existing soil. Where the marsh deposit and/or loose sands are present and thicker than 2 feet, the soil may have to be improved in situ using a soil-cement mixing method to create columns of soil-cement. These soil improvements would secure the foundation reducing the potential for the proposed project to exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading.

As discussed above under “Regulatory Framework,” to ensure that the potential for adverse geologic, soils, and seismic hazards is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Standards Code (state building code, California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department’s implementing procedures including Administrative Bulletins and Information Sheets, and the state seismic hazards act (Public Resources Code sections 2690 to 2699.6).

As discussed previously, the preliminary geotechnical reports recommended that the proposed project seismic design comply with the provisions of the 2016 California Building Code and Special Publication 117A.. Additionally, the building department permit review process would ensure that the project’s structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and recommendations made by the engineering design review team as required by IS S-18, AB-082, and AB-083; ensuring that the proposed project would not exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this impact would be *less than significant*.

Impact GE-2: The proposed project would not result in substantial erosion or loss of topsoil, nor would the project change substantially the topography of any unique geologic or physical features of the site. (*Less than Significant*)

The project site is generally flat and covered entirely with impervious surfaces. The proposed project would require grading but would not substantially change the general topography of the site or any unique geologic or physical features of the proposed project. Therefore, the proposed project would result in *less-than-significant* impact with respect to topography, or unique geologic or physical features.

However, construction-related activities would be required to comply with the Construction Site Runoff Ordinance (Ordinance No. 260-13), which requires all construction sites, regardless of size, to implement best management practices to prevent construction site runoff discharges into the City's combined stormwater/sewer system. Furthermore, construction sites that disturb 5,000 square feet or more of ground surface are required to apply for a construction site runoff control permit from the SFPUC, and submit an erosion and sediment control plan that includes best management practices to prevent stormwater runoff and soil erosion during construction. Compliance with the Construction Site Runoff Ordinance would ensure that the project would not result in the loss of topsoil or erosion, and no mitigation is required.

As discussed previously in Section A.4, Construction Activities and Schedule, the proposed project would involve excavation to a depth of 6 feet bgs and removal of approximately 11,100 cubic yards of soil and debris, and soil mixing and construction of a mat foundation for the proposed building. Because the project site occupies more than 1 acre (it is 1.37 acres), the project sponsor would be required to obtain a National Pollutant Discharge Elimination System (NPDES) general construction permit. The NPDES permit would require the project sponsor and its contractor to implement BMPs that include erosion and sedimentation control measures, as required by the City and/or resource agencies. Implementing these measures would reduce short-term construction-related erosion impacts to *less-than-significant* levels.

Impact GE-3: The project site is not located on a geologic unit or soil that is unstable, or that could become unstable as a result of the proposed project. (*Less than Significant*)

The area around the project site is a flat urban area and does not include hills or cut slopes that could be subject to landslide; however, as discussed under Impact GE-1, the project site is within a state-designated seismic hazard zone for liquefaction. Recommendations in the preliminary geotechnical reports for the proposed project include a stiff reinforced structural mat foundation, shallow continuous footings, with interconnecting grade beams, or a combination of both of these systems. The reports also include earthwork recommendations for demolition and site preparation, and excavation and underpinning, use of appropriate fill, surface drainage, and stormwater infiltration and bioretention areas.

The proposed project would be constructed on a mat foundation with a depth of approximately 1 foot bgs on top of 5 feet of lightweight cellular concrete to support anticipated structural loads. The geotechnical investigation recommends soil improvement to stabilize undocumented fill and address and mitigate liquefaction and lateral spreading risks. The final design of the foundation system would be included in a design-level geotechnical investigation based on the site-specific data to be prepared in accordance with San Francisco Building Code requirements.

The California Seismic Hazards Mapping Act of 1990, PRC sections 2690 to 2699.6, was enacted to identify and map seismic hazard zones for cities and counties to encourage land use management policies and regulations to reduce and address seismic hazards to protect public safety. Section 2697 states that before approval of a project within a seismic hazard zone, cities and counties must require preparation of a geotechnical report defining and delineating the seismic hazard on the site (i.e., a design-level geotechnical investigation). In conjunction with these provisions in the Public Resources Code, CCR title 14, section 3724 specifies that a project located in a state seismic hazard zone shall be approved only when the nature and severity of the seismic hazards at the site have been evaluated in a geotechnical report and appropriate measures have been proposed. CGS Special Publication 117A provides considerations to address earthquake hazards.

Pursuant to the Seismic Hazards Mapping Act, DBI, the local permitting authority, must regulate certain development projects within the mapped hazard zones. For projects in a hazard zone, such as the proposed project, DBI requires that appropriate measures, if any, be incorporated into the development plans and made conditions of the building permit. DBI would review the design-level geotechnical report prepared for the proposed project to confirm that the potential settlement and subsidence impacts of excavation and dewatering are addressed appropriately in accordance with section 1704.15 of the San Francisco Building Code. DBI would also require that the report include a determination as to whether a lateral movement and settlement survey should be done to monitor any movement or settlement of surrounding buildings and

adjacent streets during construction. If a monitoring survey were recommended, DBI would require that a special inspector be retained by the project sponsor to perform this monitoring.

With adherence to San Francisco Building Code requirements, the project sponsor would address the potential impacts related to unstable soils as part of the design-level geotechnical investigation prepared for the proposed project. Therefore, any potential impacts related to unstable soils would be *less than significant*.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. (*Less than Significant*)

Expansive soils expand and contract in response to changes in soil moisture and are characterized by their ability to undergo significant volume change (i.e., to shrink and swell), particularly when near-surface soils fluctuate from saturated to low-moisture-content conditions and back again. Expansive soils are typically very fine grained and have a high to very high percentage of clay. They can damage structures and buried utilities and increase maintenance requirements. The presence of expansive soils is typically associated with high clay content and determined based on site-specific data. As outlined in the preliminary geotechnical investigation, the site is underlain by a 20- to 50-foot-thick layer of undocumented fill. The undocumented fill contains loose to medium dense sand and gravels intermixed with layers of medium stiff clays, and these clays have the potential to create expansive soil conditions.¹⁶⁷ Section 1803 of the state building code states that in areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist, and if so, the geotechnical report must include recommendations and special design and construction provisions for foundations of structures on expansive soils, as necessary. However, through the DBI review and approval of this project, the design-level geotechnical investigation would address the potential impacts of expansive soil, if present, and incorporate measures into the design of the project. Any foundation fortification would be included in the design phase of this project. Compliance with San Francisco Building Code requirements would ensure that potential impacts related to expansive soils would be *less than significant*.

Impact GE-5: The proposed project would not directly or indirectly destroy a unique paleontological resource or site. (*Less than Significant*)

Paleontological resources include fossilized remains or traces of mammals, plants, and invertebrates, as well as their imprints. Such fossil remains and the geological formations that contain them are also considered a paleontological resource. Together, they represent a limited, nonrenewable scientific and educational resource. Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. If the rock types representing a deposition environment conducive to deposition and preservation of fossils are not favorable, fossils would not be present. Lithological units that may be fossiliferous include sedimentary formations. Artificial fills do not contain paleontological resources. There is a 20- to 50-foot-thick layer of undocumented fill underneath the project site. Typically, undocumented fill does not contain paleontological resources. Based on the type of soil underlying the project site, it is unlikely that paleontological resources would be discovered during ground-disturbing activities.

The potential to affect fossils varies with the depth of disturbance, construction activities, and previous disturbance. The logistics of excavation also affect the possibility of recovering scientifically significant fossils because information regarding location, vertical elevation, geologic unit of origin, and other aspects of context is critical to the significance of any paleontological discovery. The Franciscan complex that is located at lower depths of 50–80 feet bgs is anticipated to be under the project site, and if so, it may be fossiliferous. However, the proposed project would not involve grading or ground

¹⁶⁷ ENGEO Incorporated, *Geotechnical Feasibility Assessment for the Hotel and Teatro ZinZanni Project*, December 8, 2015.

disturbance at these depths. Accordingly, impacts on paleontological resources during ground-disturbing activities would be *less than significant*.

Impact-C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in cumulative impacts related to geology, seismicity, or and soils. (*Less than Significant*)

Geology and soils impacts are generally site-specific. Past, present, and foreseeable cumulative projects could require various levels of excavation or cut and fill, which could affect local geologic conditions. The San Francisco Building Code regulates construction in the City and County of San Francisco, and all development projects would be required to comply with its requirements for maximum feasible seismic safety and reduction of geologic impacts. Site-specific geotechnical measures would also be implemented as site conditions warrant to reduce potential impacts from unstable soils, ground shaking, liquefaction, or lateral spreading. The cumulative development projects located within an approximate 0.25-mile radius of the project site identified in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, would be subject to the same seismic safety standards and design review procedures applicable to the proposed project. Compliance with the seismic safety standards and the design review procedures would reduce potential cumulative seismic and geotechnical hazard impacts to *less than significant*.

E.14. HYDROLOGY AND WATER QUALITY

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
14. HYDROLOGY AND WATER QUALITY.— Would the project:					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is not within a 100-year flood hazard area designated on the City's interim floodplain map, and would not place housing or structures within a 100-year flood hazard area that would impede or redirect flood flows as shown on the Federal Emergency Management Agency's Preliminary Flood Insurance Rate Map for the northeast quadrant of San Francisco.¹⁶⁸ Therefore, questions 14g and 14h are not applicable to the proposed project. The site also is not within a dam inundation zone or subject to flooding from levee failure.¹⁶⁹ In addition, the project site would not be subject to mudflows because the project site is not near any landslide-prone areas.¹⁷⁰ Thus, question 14i is not applicable.

¹⁶⁸ Federal Emergency Management Agency, *San Francisco Interim Floodplain Map: NE San Francisco*, Preliminary, 2015, http://sfgsa.org/sites/default/files/Document/SF_NE.pdf, accessed May 16, 2016.

¹⁶⁹ San Francisco Planning Department, Map 06 – Potential Inundation Areas Due to Reservoir Failure, *San Francisco General Plan Community Safety Element*, October 2012.

¹⁷⁰ San Francisco Planning Department, Map 04 – Seismic Hazard Zones (Landslide Zones), *San Francisco General Plan Community Safety Element*, October 2012.

Impact HY-1: The proposed project would not violate water quality standards or waste discharge requirements. (*Less than Significant*)

The project site is in an area of the city served by a combined stormwater and sewer system. With the proposed development, stormwater and wastewater from the site would continue to be discharged to an underground piping network, which conveys the waters to the Southeast Water Pollution Control Plant for treatment. The City currently holds a National Pollutant Discharge Elimination System permit (San Francisco Bay Regional Water Quality Control Board Order No. R2-2013-0029) that covers the Southeast Water Pollution Control Plant, the North Point Wet Weather Facility, and all of the Bayside wet-weather facilities, including combined sewer discharge structures along the bayside waterfront from Marina Green to Candlestick Point. Collected wastewater and stormwater flows in the combined sewer system are directed first to the Southeast Water Pollution Control Plant and North Point Wet Weather Facility for primary or secondary treatment and disinfection. Flows in excess of the capacity of these facilities are diverted to combined sewer discharge structures throughout the city and receive the equivalent of primary treatment before being discharged into San Francisco Bay.

New development projects must comply with article 4.2, section 147 of the San Francisco Public Works Code, which was last updated on April 2, 2016. The intent of this San Francisco Stormwater Management Ordinance (No. 64-16) is to reduce the volume of stormwater entering the City's combined and separate sewer systems. Stormwater Management Ordinance compliance approvals for this project will be conducted by the SFPUC and Port. SFPUC has developed the 2016 Stormwater Management Requirements and Design Guidelines in accordance with the requirements of this ordinance.

Construction Impacts

Construction activities have the potential to result in runoff of surface water that contains sediments and other pollutants from the site, which could drain into the combined sewer and stormwater system. Stormwater runoff from temporary onsite use and storage of vehicles, fuels, wastes, and building materials could also carry pollutants into the Southeast Water Pollution Control Plant or receiving water if improperly handled. Construction-related stormwater discharges to the combined sewer system would occur in accordance with the Bayside NPDES permit and site runoff would be subject to the Construction Site Runoff requirements of article 4.2 of the Public Works Code. This requires any construction activity that disturbs 5,000 square feet or more of ground surface to obtain a construction site runoff control permit and to implement and maintain BMPs to minimize surface runoff, erosion, and sedimentation. The application for the permit must also include an erosion and sediment control plan that contains a vicinity map; a site survey; depictions of existing and proposed topography and area drainage; proposed construction sequencing; proposed drainage channels; erosion and sediment controls; dewatering controls, if applicable; sampling, monitoring, and reporting schedules; and other information deemed necessary by SFPUC. Improvements to any existing grading, ground surface or site drainage must also meet the requirements of article 4.2 for new grading, drainage, and erosion control. A building permit would not be issued until a construction site runoff control permit has been submitted and approved. In addition, the proposed project would be required to comply with the Maher Ordinance (article 22A of the San Francisco Health Code), which requires further site management and reporting requirements for potential hazardous soils (see Impact HY-2 for discussion of the Maher Ordinance).

The provisions of the construction site runoff control permit would require the project sponsor to conduct daily inspections and maintenance of all erosion and sediment controls and to provide inspection and maintenance information to SFPUC. SFPUC may also inspect the site periodically to confirm compliance with the erosion and sediment control plan. The project sponsor must notify SFPUC at least 2 days before the start of construction, when the erosion and sediment control measures have been installed, and upon completion of final grading. SFPUC has the discretion to require sampling, metering, and monitoring, if necessary. Compliance with these regulatory requirements, implementation of the erosion and sediment control plan and BMPs during construction activities, and the fact that site runoff would be treated pursuant to the City's National Pollutant Discharge Elimination System permit before discharge to receiving waters would reduce construction impacts on water quality to *less than significant*.

Operational Impacts

Runoff from mixed-use properties and parking lots can contain oil and grease; dissolved metals such as lead, zinc, cadmium, copper, chromium, and nickel; nutrients from fertilizers; sediments and trash; and organic compounds. Pollutants at the beginning of the rainy season may result in an initial stormwater runoff (first flush) with high pollutant concentrations. Stormwater runoff is regulated locally by the San Francisco Stormwater Management Ordinance, which provides implementation guidance with the San Francisco Stormwater Management Requirements and Design Guidelines. In accordance with these guidelines, project developers that create and/or replace 5,000 square feet of impervious surface and discharge to the combined sewer system must implement low impact design and best management practices to manage the flow rate and volume of stormwater that enters the combined sewer system.

Because more than 50 percent of the project site is covered with existing impervious surfaces, the proposed project's stormwater management approach must reduce the existing runoff flow rate and volume by 25 percent for a 2-year, 24-hour design storm, using a hierarchy of best management practices set forth in the Stormwater Management Requirements. Examples of BMPs that may be implemented for mixed-use projects include rainwater harvesting, vegetated roofs, permeable paving, and bioretention planters. Alternatively, if site conditions limit the potential for stormwater infiltration, the project sponsor may apply for modified compliance in accordance with the Stormwater Management Ordinance and Stormwater Management Requirements and Design Guidelines to adjust the amount by which the proposed project must reduce stormwater runoff volume and flow rates as compared to existing conditions. Stormwater Management Ordinance compliance approvals for this project will be conducted by the SFPUC and Port. Additionally, a maintenance agreement also must be signed by the project sponsor so that the stormwater controls are maintained in perpetuity.

In summary, the proposed project would be required to comply with state and City regulations requiring the preparation of an erosion and sediment control plan for construction activities, a stormwater control plan for postconstruction activities, and the implementation of low impact design and best management practice features. Additionally, through the development review process, the City would confirm that the proposed project complies with various statutory requirements necessary to minimize stormwater pollutants. Site runoff would also be treated pursuant to the City's National Pollutant Discharge Elimination System permit before discharge to receiving waters. Therefore, impacts related to water quality from development of the proposed project would be *less than significant*.

Impact HY-2: The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (*Less than Significant*)

The project site is currently entirely covered in impervious surfaces; therefore, the proposed project would not increase the amount of impervious surface and would not result in any substantial change in infiltration or runoff on the project site. As noted above in Section E.13, Geology and Soils, groundwater was encountered between 6 and 10 feet bgs during the geotechnical investigation. The proposed project would necessitate excavation to a maximum depth of approximately 6 feet for construction of the foundation. If groundwater were encountered onsite, then temporary dewatering activities would be necessary. SFPUC's Bureau of Systems Planning, Environment, and Compliance must be notified regarding projects necessitating dewatering. SFPUC may require a water analysis before discharge. The proposed project would be required to obtain a batch wastewater discharge permit from SFPUC's Wastewater Enterprise Collection System Division before any dewatering activities. Groundwater encountered during construction of the proposed project would be subject to requirements of Public Works Code article 4.1, Industrial Waste, requiring that groundwater meet specified water quality standards before it may be discharged into the sewer system. These measures would protect water quality during construction of the proposed project. In addition, the proposed project would not extract any underlying groundwater supplies. Therefore, groundwater resources would not be substantially degraded or depleted, and the proposed project would not substantially interfere with groundwater recharge. Thus, the proposed project would have a *less-than-significant* impact on groundwater.

Impact HY-3: The proposed project would not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion, siltation, or flooding onsite or offsite. (*Less than Significant*)

The project site is currently covered by impervious surfaces and no streams or creeks occur on the project site. Impervious surfaces at the site would not substantially change as part of the proposed project and drainage patterns would remain generally the same. The project would incrementally reduce the amount of impervious surface on the project site through implementation of low impact development and other measures identified in the Stormwater Management Ordinance, which also requires that the project decrease stormwater runoff. In particular, because the project site is within the combined sewer area and is more than 50 percent impervious, the proposed project would be required to decrease the stormwater runoff rate and volume by 25 percent from predevelopment conditions for the 2-year, 24-hour design storm. Therefore, the proposed project would not be expected to result in substantial erosion or flooding associated with changes in drainage patterns. The impact of the proposed project related to potential erosion or flooding would be *less than significant* through compliance with the City's regulatory requirements.

Impact HY-4: The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (*Less than Significant*)

The proposed project involves the construction of mixed-use development, including a hotel, entertainment venue, and public park, on an existing developed parking lot that is currently connected to the City's combined sewer system. The proposed project would not result in an increase in impervious surfaces that would increase the amount of stormwater runoff from the property. In addition, during construction and operation, the proposed project would be required to comply with local wastewater discharge, stormwater runoff, and water quality requirements, including the 2016 San Francisco Stormwater Management Requirements and Design Guidelines, and the Stormwater Management Ordinance (No. 64-16). Stormwater Management Ordinance compliance approvals for this project will be conducted by the SFPUC and Port. Compliance with these guidelines requires that specified quantity of stormwater generated by the proposed project be managed onsite, resulting in a reduction in the existing runoff flow rate and volume by 25 percent for a 2-year, 24-hour design storm. Therefore, the proposed project would not result in an exceedance of existing storm drainage system capacity and impacts would be *less than significant*.

The project site is located in an area that was previously part of San Francisco Bay and was filled with material of unknown origin in the 1860s.¹⁷¹ Areas located on fill or Bay Mud can subside to a point at which the combined sewers do not drain freely during a storm event, and backups or flooding can occur near these streets and sewers.¹⁷² Additionally, the project site is in an area identified as being prone to flooding hazards as a result of the underlying fill and close proximity to San Francisco Bay. The proposed project would be referred to SFPUC at the beginning of the building permit process to determine whether the project would result in ground-level flooding during storms. If SFPUC determines that the proposed project would result in ground-level flooding, the side sewer connection permits would be reviewed and approved by SFPUC at the beginning of the review process for all permit applications submitted to the San Francisco Planning Department or DBI. The project sponsor must then comply with SFPUC requirements for projects in flood-prone areas. Such requirements may include providing a pump station for sewage flow, raising the elevations of entryways, and constructing special sidewalks and deep gutters.

¹⁷¹ ENGEO Incorporated, *Environmental Site Characterization Work Plan*, August 2016.

¹⁷² San Francisco Planning Department, 2007. *Planning Director Bulletin No. 4: Review of Projects in Areas Prone to Flooding*, April 2007, http://www.sf-planning.org/ftp/files/publications_reports/DB_04_Flood_Zones.pdf, accessed on February 16, 2018.

With the implementation of site design, source control, treatment control, low impact design, and best management practice features, and with compliance with SFPUC requirements for projects in flood-prone areas, the proposed project would not contribute additional volumes of polluted runoff to the City's combined sewer system. In addition, the proposed project would be required to comply with local wastewater discharge, stormwater runoff, and water quality requirements, pursuant to the effluent discharge standards of the City's National Pollutant Discharge Elimination System permit for the Southeast Water Pollution Control Plant. Therefore, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be *less than significant*. No mitigation measures are required.

Impact HY-5: The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow. (Less than Significant)

No levees or dams are located in the area.

The project site is located approximately 100 feet from San Francisco Bay, within a tsunami inundation zone.¹⁷³ A tsunami is an ocean wave originating from an underwater disturbance, such as earth movement caused by an earthquake, volcanic eruption, landslide, or explosion. San Francisco's Emergency Response Plan reports that a 100-year return period tsunami wave could have a runup elevation of 8.2 feet (National Geodetic Vertical Datum of 1929) at the Golden Gate Bridge, but this wave runup would dissipate as it moved eastward.¹⁷⁴

A seiche is an oscillation wave generated in an enclosed or partially enclosed body of water, such as San Francisco Bay. Because the project site is within the tsunami inundation zone, it would also be subject to seiches and could expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche and tsunami.¹⁷⁵ Tidal records of San Francisco Bay, maintained for more than a century, indicate that no damaging seiche has occurred during this period.¹⁷⁶ The 1906 earthquake, which caused a seiche of approximately 4 inches, had a magnitude of about 8.3 on the Richter scale. It is likely that an earthquake of the same magnitude as the 1906 earthquake would be the largest to occur in the Bay Area.¹⁷⁷ Therefore, a seiche larger than 4 inches is considered unlikely.

The National Warning System would notify San Francisco if an earthquake occurred with the potential to cause a tsunami or seiche. San Francisco has an established outdoor warning system for tsunamis or similar natural events, in which sirens and loudspeakers are initiated to sound an alarm alerting the public to tune into local TV, cable TV, or radio stations, which would carry instructions for appropriate actions to be taken as part of the Emergency Alert System. Police would also canvass the neighborhoods sounding sirens and bullhorns, and knocking on doors as needed, to provide emergency instructions. Evacuation centers would be set up if required. The advance warning system would allow people to evacuate before a seiche and would provide a level of protection for public safety. Therefore, the impact would be *less than significant*.

¹⁷³ California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning, State of California – City and County of San Francisco, San Francisco North Quadrangle, San Francisco South Quadrangle (San Francisco Bay)*, June 15, 2009.

¹⁷⁴ City and County of San Francisco, *Emergency Response Plan: An Element of the CCSF Emergency Management Program, Tsunami Response Annex*, September 2008, p. 24, <http://www.sfdem.org/fip/uploadedfiles/DEM/PlansReports/TsunamiAnnex-2008.pdf>, accessed February 28, 2017.

¹⁷⁵ California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning, State of California – City and County of San Francisco, San Francisco North Quadrangle, San Francisco South Quadrangle (San Francisco Bay)*, June 15, 2009.

¹⁷⁶ San Francisco Planning Department, *Candlestick Point–Hunters Point Draft Environmental Impact Report*, 2009, p. III.M-14.

¹⁷⁷ Working Group On California Earthquake Probabilities, *Earthquake Probabilities in the San Francisco Bay Region: 2002–2031*, United States Geological Survey Open-File Report 03-214, Appendix D. Magnitude and Area Data for Strike Slip Earthquakes, Dr. William L. Ellsworth, Research Seismologist, United States Geological Survey, 2003.

Impact-C-HY-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in less-than-significant cumulative impacts related to hydrology and water quality. (*Less than Significant*)

The proposed project would result in no impact with respect to 100-year flood zones, failure of dams or levees, and/or mudflow hazards. Therefore, the project would not have the potential to contribute to cumulative impacts related to these issue areas. The proposed project itself is within the seiche and tsunami inundation zone. However, San Francisco has alert systems and evacuation plans in place. As stated above in Impacts HY-1, HY-2, HY-3, and HY-4, the proposed project would result in less-than-significant impacts related to water quality, groundwater levels, alteration of drainage patterns, and the capacity of drainage infrastructure. The proposed project and all future projects within San Francisco would be required to comply with the water quality and drainage control requirements that apply to all land use development projects in the city, including the development of an erosion and sediment control plan for construction activities and a stormwater control plan for postconstruction operation. Because development projects would be required to follow the same regulations as the proposed project, peak stormwater drainage rates and volumes resulting from design storms would gradually decrease over time with the implementation of new, conforming development projects. As a result, cumulative impacts with respect to drainage patterns, water quality, stormwater runoff, and stormwater capacity of the combined sewer system would be less than significant.

In addition, San Francisco's very limited current use of groundwater would preclude any significant adverse cumulative effects on groundwater levels, and the latest urban water management plan states that there are sufficient water supplies to meet demand for existing and future projects through the year 2040.

Cumulative impacts are not anticipated because all development projects would be required to comply with the same drainage, dewatering, and water quality regulations as the proposed project. Thus, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact related to hydrology and water quality, and cumulative impacts would be *less than significant*.

E.15. HAZARDS AND HAZARDOUS MATERIALS

Topics:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
15. HAZARDS AND HAZARDOUS MATERIALS.— Would the project:						
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within an airport land use plan or within 2 miles of a public or private airport. Therefore, questions 15e and 15f are not applicable to the proposed project. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires because of the urbanized nature of the project site. There are no residences intermixed with wildlands in the project vicinity. Therefore, question 15h is not applicable to the proposed project.

Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Construction-related activities would involve soil disturbance of approximately 11,100 cubic yards. This could result in the generation of hazardous soil and asphalt materials for transport off-site. The City would require the project sponsor and its contractor to comply with the Maher Ordinance, as discussed under Impact HZ-2 below, which would require material sampling and analysis before demolition and excavation to ensure proper handling of any hazardous materials in accordance with state and federal laws. Construction activities associated with the proposed new buildings would require the use of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials that would not result in a significant impact on the environment. The City requirements, such as article 22, section 1203 of the San Francisco Health Code, would require the project sponsor to comply with the minimum standards of management of hazardous waste as specified in Title 22 of the California Code of Regulations, chapter 30, division 4, and grants the City the

right to conduct inspections of “any factory, plant, construction site, waste disposal site, transfer station, establishment or any other place or environment where hazardous wastes are stored, handled, processed, disposed of, or being treated to recover resources.”¹⁷⁸ As a result of existing regulations requiring the proper disposal of hazardous materials, construction-related transport and disposal of hazardous materials would not result in a significant impact on the environment.

Once constructed, the project would likely result in use of common types of hazardous materials typically associated with cleaning products and disinfectants. These products are labeled to inform users of their potential risks and to instruct them in appropriate handling procedures. However, most of these materials are consumed through use, resulting in relatively little waste. Businesses are required by law to guarantee employee safety by identifying hazardous materials in the workplace, providing safety information to workers who handle hazardous materials, and adequately training workers. For these reasons, hazardous materials used during project operation would not pose any substantial public health or safety hazards resulting from hazardous materials. In addition, transportation of hazardous materials would be regulated by the California Highway Patrol and the California Department of Transportation. These hazardous materials are not expected to cause any substantial health or safety hazards. Therefore, potential impacts related to the routine use, transport, and disposal of hazardous materials would be *less than significant*.

Impact HZ-2: The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5, and the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (*Less than Significant*)

Several environmental site investigations and analyses have taken place for the project site, with the latest performed in April 2018^{179, 180, 181, 182}. Baseline Environmental Consulting and ENGEO Incorporated prepared a Phase I and other environmental site assessments (ESAs) that analyzed the potential for adverse environmental impacts from the proposed project related to the contemporary and historical uses and practices on the project site and the surrounding area.

Historic documents and previous reports indicated that the site was previously part of San Francisco Bay and located between two wharves. The site was filled with material of unknown origin in the 1860s. The site was used as a wood and coal yard and a railyard from 1913 until 1960. The Embarcadero Freeway ramp traversed a southern portion of the site from 1958 through 1991. The site has been a paved parking lot since that time.

Phase I Environmental Site Assessments

The purpose of the Phase I ESA is to determine the potential for site contamination and level of exposure risk associated with the project. Based on that information, the project sponsor may be required to conduct soil and/or groundwater sampling and analysis. Where such an analysis reveals the presence of hazardous substances in excess of federal or state standards, the project sponsor is required to submit a *site mitigation plan* to the San Francisco Department of Public Health or other appropriate federal or state agency (or agencies), and to remediate any site contamination in accordance with an approved *site mitigation plan* before the issuance of any building permit.

¹⁷⁸ City of San Francisco, San Francisco Health Code, article 22: Hazardous Waste Management, section 1203, Implementation and Enforcement of Hazardous Waste Control Act, [http://library.amlegal.com/nxt/gateway.dll/California/health/article22hazardouswastemanagement?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$anc=JD_Article22](http://library.amlegal.com/nxt/gateway.dll/California/health/article22hazardouswastemanagement?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_Article22), accessed June 22, 2018.

¹⁷⁹ ENGEO Incorporated, *Geotechnical Feasibility Assessment for the Hotel and Teatro ZinZanni Project*, December 8, 2015.

¹⁸⁰ ENGEO Incorporated, *Environmental Site Characterization Work Plan*, August 2016.

¹⁸¹ ENGEO Incorporated, *Environmental Site Characterization*, September 7, 2016.

¹⁸² ENGEO Incorporated, 2018, *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies, Hotel and Theater Project Seawall Lots 323 and 324, San Francisco, California*, April 6, 2018.

In compliance with the Maher Ordinance, the project sponsor has submitted a Maher application to the San Francisco Department of Public Health¹⁸³ and an updated Summary of Geotechnical and Environmental Studies¹⁸⁴ has been prepared to assess the potential for site contamination. No observed evidence of any significant staining, spillage, and/or ponded liquids or unconfined solids was discovered on the project site during site reconnaissance. No recognized environmental conditions associated with the storage of hazardous materials at the project site were observed during a site reconnaissance for the Phase I and other ESAs. A summary of the findings from the Phase I and other ESAs prepared for the project site follows.

Earlier environmental site assessments, until recently (2015–2016), date back to October 1998 and before. In 1995 a 10,000-gallon underground storage tank was removed and replaced with a new tank. In 1997 the San Francisco Department of Public Health indicated that the storage tanks had not impacted groundwater and issued a closure letter. Previous contaminants included metals, polynuclear aromatic hydrocarbons, petroleum hydrocarbons, VOCs, and unknown hazardous materials.

The project site is not on a list of identified hazardous material sites pursuant to Government Code section 65962.5, as determined by the database searches compiled for the Phase I ESA reports, which include databases maintained by U.S. EPA, the California Department of Toxic Substances Control, and the State Water Resources Control Board. One site that is hydraulically upgradient of the project site had previously reported a release of gasoline that may affect subsurface conditions at the project site. According to the State Water Resources Control Board's GeoTracker website, this hydraulically upgradient site was closed on October 11, 2009. Sites previously identified as leaking underground storage tank cleanup sites are present in surrounding areas; however, those sites have since been designated as completed–case closed, and have been remediated to the satisfaction of the applicable regulatory authority (San Francisco Bay RWQCB, California Department of Toxic Substances Control, or San Francisco Department of Public Health).

The most recent environmental soil and groundwater samples were analyzed as part of an additional site characterization analysis completed on August 12, 2016 by Torrent Laboratory, Inc.¹⁸⁵ Nine exploratory borings were taken on the southern end and four borings were taken on the northern end, where the future public park would be located, in addition to 66 soil samples that were taken within the borings at depths ranging from one to 20 feet below ground surface. The findings indicated that select VOC and semivolatile organic compound analytes were in excess of either and/or both residential or commercial screening levels established by San Francisco Bay Regional Water Quality Control Board. Three groundwater samples were taken from the boring locations which exhibited detectable concentrations of petroleum hydrocarbons, VOCs, SVOCs and metallic analytes.

Based on the results of the soil and groundwater samples, ENGEO Incorporated concluded that due to past site use it is possible that unknown areas with potentially impacted soil, buried debris or solid waste could be encountered and should be handled under observation of an environmental professional. Preparation of a Soil Management Plan with procedures and protocols was also recommended. Additional environmental site characterization should be done in conformance with the Maher Ordinance program to address potential soil and groundwater impacts that may have resulted from earlier industrial and commercial uses associated with the railyard, gasoline service station, and surface parking lot. Demolition, excavation, and construction activities would follow all appropriate standards and regulations for hazardous materials, including the California Health and Safety Code.

¹⁸³ The project sponsor submitted the Maher Application to the San Francisco Department of Public Health in accordance with San Francisco Health Code article 22A on June 26, 2016 and received the letter of compliance on April 26, 2017.

¹⁸⁴ ENGEO Incorporated, 2018, *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies, Hotel and Theater Project Seawall Lots 323 and 324, San Francisco, California*, April 6, 2018.

¹⁸⁵ ENGEO Incorporated, *Environmental Site Characterization*, September 7, 2016.

Lead Exposure

According to the environmental site assessments, lead was detected at elevated levels in most of the samples; therefore, before excavation of soil for off-site disposal, further characterization and testing would be necessary to determine characterization for appropriate removal and disposal.¹⁸⁶ Demolition of the parking lots and excavation of underlying soil also would be subject to the Division of Occupational Safety and Health's Lead in Construction Standard (CCR title 8, section 1532.1). This standard requires development and implementation of a *lead compliance plan* when materials containing lead would be disturbed during construction. The plan must describe activities that could emit lead, methods that would be used to comply with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. The Division of Occupational Safety and Health would require 24-hour notification if more than 100 square feet of materials containing lead would be disturbed. Implementation of procedures required by section 3426 of the San Francisco Building Code and the Lead in Construction Standard would guarantee that potential impacts of demolition or excavation with lead-contaminated asphalt or soil would not be significant.

A Maher response letter from the City Department of Public Health was provided on April 26, 2017,¹⁸⁷ and indicated based on the Phase I and other ESAs, the subsurface investigation work plan, and the environmental site characterization report were approved and the geotechnical feasibility assessment report was accepted; however, further investigation and documentation may be warranted and a *site mitigation plan* will be required. As described in the letter, the project sponsor would be required to remediate any groundwater or soil contamination in accordance with an approved *site mitigation plan* before issuance of any building permit pursuant to the Maher Ordinance. Normal grading procedures, including dust control regulations, routine soil disposal criteria mandated by landfills and the use of approved fill material, if needed, would offset any adverse site conditions.

Based on mandatory compliance with existing regulatory requirements, the information and conclusions from the Phase I and other ESAs, and adherence to the Maher Ordinance, the proposed project would result in a ***less-than-significant*** impact on the public or environment from releasing contaminated soil, groundwater, or construction debris.

Impact HZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (*Less than Significant*)

One school is within 0.25 mile of the project site: John Yehall Chin Elementary School, a San Francisco Unified School District school at 350 Broadway, about 0.20 mile west of the project site.

As stated in this section the proposed project would not result in the storage, handling, or disposal of significant quantities of hazardous materials and would not otherwise include any uses that would result in the emission of hazardous substances. Any hazardous materials currently on the site, such as contaminated soil or asphalt, would be sampled, analyzed, and removed before or during demolition of the parking lots and excavation for the foundation and before project construction. Such materials would be handled in compliance with applicable laws and regulations as described in this section. With the required adherence to these regulations, the impact related to hazardous emissions or the handling of hazardous materials during construction or post-construction would be ***less than significant*** for the nearby school.

¹⁸⁶ ENGEO Incorporated, 2018, *Summary of Geotechnical and Environmental Studies and Summary of Project Construction Methodologies, Hotel and Theater Project Seawall Lots 323 and 324, San Francisco, California*, April 6, 2018.

¹⁸⁷ City and County of San Francisco Department of Public Health and Environmental Health, April 26, 2017. *San Francisco Health Code article 22A, Compliance, Hotel and Teatro ZinZanni Project Seawall Lots 323 and 324, San Francisco, CA*, EHB-SAM NO. – SMED: 1461.

Impact HZ-4: The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving fires, nor would the project interfere with the implementation of an emergency response plan. (*Less than Significant*)

San Francisco applies fire safety measures primarily through provisions of the building and fire codes. Final building plans are reviewed by SFFD (as well as DBI) to confirm conformance with these provisions. In this way, potential fire hazards, including those associated with hydrant water pressures and emergency access, would be addressed during the permit review process. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan, or expose people or structures to a significant risk of loss, injury, or death involving fires. This impact would be *less than significant*.

Impact C-HZ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in less-than-significant cumulative impacts related to hazards and hazardous materials. (*Less than Significant*)

Impacts from hazardous materials are generally site-specific and typically do not result in cumulative impacts. Any potential hazards occurring at nearby sites would be subject to the same safety, investigation, and/or remediation requirements discussed for the proposed project, which would reduce any cumulative hazardous effects to less-than-significant levels. As such, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact related to hazards and hazardous materials. Cumulative impacts would be *less than significant*.

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E.16. MINERAL AND ENERGY RESOURCES

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
16. MINERAL AND ENERGY RESOURCES.—Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is designated by the California Division of Mines and Geology as Mineral Resource Zone (MRZ) 4 under the Surface Mining and Reclamation Act of 1975.¹⁸⁸ The MRZ-4 designation indicates that the site does not belong to any other MRZ and does not have any significant mineral deposits. As a result, the proposed project's development and operation would not have an impact on operational mineral resource recovery sites. Therefore, questions 16a and 16b are not applicable to the proposed project.

Impact ME-1: The proposed project would not encourage activities that would result in the use of large amounts of fuel, water, or energy or use these resources in a wasteful manner. (*Less than Significant*)

The proposed project would demolish an existing parking lot and construct a mixed-use development with an entertainment venue and a 192-room hotel, which would increase the intensity of uses at the project site, although not to an extent that would exceed planned growth in the area. Because it would include a new building in San Francisco, the proposed project would be subject to the energy conservation standards included in the San Francisco Green Building Code and Title 24 of the California Code of Regulations (Title 24). The San Francisco Green Building Code would require the project to meet a number of conservation standards, including installation of water-efficient fixtures and energy-efficient appliances. The proposed project would also provide features that encourage alternative modes of transportation, such as bicycle racks and car-share parking spaces. Documentation showing compliance with the San Francisco Green Building Code would be submitted with the application of the building permits, and would be enforced by DBI. In addition, the proposed project would be required to comply with Title 24, which regulates energy consumption for the heating, cooling, ventilation, and lighting of residential and nonresidential buildings and is enforced by DBI. Compliance with Title 24 and the San Francisco Green Building Code would guarantee a reduction in the use of fuel, water, and energy by the proposed project.

In addition, San Francisco has a lower VMT ratio than the Bay Area region as a whole. The transportation analysis zone in which the project site is located (TAZ 830) has between 25 and 85 percent fewer daily VMT per employee than the Bay Area's regional average.¹⁸⁹ Furthermore, the following transportation-related aspects of the proposed project would discourage single-occupancy vehicle trips: proximity to transit, bicycle storage, and a transportation demand management plan with strategies to discourage the use of automobiles and to encourage transit and other modes of transportation. Because the proposed project is an infill mixed-use development in a transit-rich area, the proposed project's vehicle trips and

¹⁸⁸ California Division of Mines and Geology, *Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region*, Open-File Report 96-03 and Special Report 146, parts I and II.

¹⁸⁹ CHS Consulting Group, *Seawall Lot 323 and 324 (Teatro Zinzanni) Project Final Transportation Impact Study*, May 2018.

associated fuel use would not constitute wasteful use of energy, and therefore would be consistent with the *Plan Bay Area* land use strategy, which seeks to reduce per-capita VMT.

For the above reasons, the proposed project would not result in the use of large amounts of fuel, water, or energy, or result in the use of these resources in a wasteful manner. Impacts related to the use of these resources would be *less than significant*.

Impact C-ME-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in a cumulative impact on mineral and energy resources. (*Less than Significant*)

No known minerals exist in the project site or in the vicinity, because all of San Francisco falls within MRZ-4, meaning that no known minerals exist in the project site or in the vicinity. Therefore, there would be no cumulative impacts on mineral resources.

The cumulative development projects identified in Table 3 and mapped in Figure 17 in Section B.3, Cumulative Projects, as well as other projects in the city would be required by DBI to conform to Title 24 and the San Francisco Green Building Code. They would be required to minimize the use of large amounts of fuel, water, or energy by, for instance, installing energy-efficient appliances and water-efficient fixtures, which would preclude cumulative significant impacts on fuel, water, or energy. Furthermore, the cumulative projects are also infill projects and would contribute to reduced transportation-related fuel demand compared to projects located in a less VMT efficient setting. Additionally, statewide efforts are being made to increase power supply and to encourage energy conservation, the demand for energy created by the proposed project would be insubstantial in the context of the total demand in San Francisco and the state, and would not require a major expansion of power facilities. The City also plans to reduce GHG emissions to 25 percent below 1990 levels by 2017, and ultimately reduce GHG emissions to 80 percent below 1990 levels by 2050, which would be achieved through a number of different strategies, including energy efficiency. Thus, the proposed project combined with cumulative projects would result in a *less-than-significant* cumulative impact on fuel, water, and energy resources.

E.17. AGRICULTURE AND FORESTRY RESOURCES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
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17. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as a model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding State inventory of forest land, including the Forest and Range Assessment and Forest Legacy Assessment projects; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

—Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is in an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts.¹⁹⁰ No land in San Francisco is designated as forest land or timberland by the California Public Resources Code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, questions 17a, 17b, 17c, 17d, and 17e are not applicable to the proposed project.

¹⁹⁰ San Francisco is identified as "Urban and Built-Up Land" on the California Department of Conservation Important Farmland in California Map, 2012, <http://www.consrv.ca.gov>, accessed January 12, 2017.

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E.18. MANDATORY FINDINGS OF SIGNIFICANCE

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
18. MANDATORY FINDINGS OF SIGNIFICANCE—					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As discussed in the previous sections (E.1 through E.17), impacts of the proposed project are anticipated to be less than significant or less than significant with mitigation in the areas discussed. The foregoing analysis identifies potentially significant impacts related to cultural resources and air quality, which would be mitigated through implementation of mitigation and improvement measures, as described in the following paragraphs. Section F, Mitigation Measures and Improvement Measures, identifies mitigation and improvement measures applicable to the proposed project.

As described in Section E.3, Cultural Resources, the proposed project could result in a substantial adverse change on historic and archeological resources, including tribal cultural resources. In addition, the proposed project could disturb human remains. Implementation of **Mitigation Measures M-CR-2, Archeological Testing**, and **M-CR-4, Tribal Cultural Resources Interpretive Program**, would reduce the impacts to **less-than-significant** levels. Therefore, the proposed project would not result in a significant impact through the elimination of important examples of major periods of California history or prehistory.

As described in Section E.6, Air Quality, the proposed project’s construction activities would generate TACs, including diesel PM, which could expose sensitive receptors to substantial pollutant concentrations. The proposed project would add a new source of TACs in an area that already experiences poor air quality. Implementation of **Mitigation Measures M-AQ-2, Construction Emissions Air Quality**, and **M-AQ-4, Best Available Control Technology for Diesel Generators**, would reduce the impacts to **less-than-significant** levels. With implementation of these measures, the proposed project would not result in a significant air quality impact.

Both long-term and short-term environmental effects, including substantial adverse effects on human beings, associated with the proposed project would be **less than significant with mitigation**, as discussed under each environmental topic. Each environmental topic area includes an analysis of cumulative impacts. This initial study concludes that cumulative impacts for all environmental topic areas would be **less than significant**.

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F. MITIGATION MEASURES AND IMPROVEMENT MEASURES

The following mitigation measures have been identified to reduce potentially significant impacts resulting from the proposed project to a less-than-significant level. Improvement measures recommended to reduce or avoid less-than-significant impacts are also identified below. Accordingly, the project sponsor has agreed to implement the mitigation measures and improvement measures described below.

F.1. MITIGATION MEASURES

Mitigation Measure M-CR-2: Archeological Testing

Based on a reasonable presumption that archeological resources may be present on the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources.

The project sponsor shall retain the services of an archeological consultant from the rotational Department Qualified Archaeological Consultants List maintained by the San Francisco Planning Department's archeologist. The project sponsor shall contact the department's archeologist to obtain the names and contact information for the next three archeological consultants on the list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the environmental review officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities: On discovery of an *archeological site*¹⁹¹ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative¹⁹² of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan. The archeological testing program shall be conducted in accordance with the approved testing plan. The archeological testing plan shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent

¹⁹¹ The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

¹⁹² An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the Department archeologist.

possible the presence or absence of archeological resources and to identify and evaluate whether any archeological resource encountered on the site constitutes a historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine whether additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the San Francisco Planning Department's archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program a reasonably prior to any project-related soil-disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soil-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (e.g., foundation, shoring), and site remediation, shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), how to identify the evidence of the expected resource(s) and the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project's archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving or deep foundation activities (e.g., foundation, shoring), the archeological monitor has cause to believe that the pile driving or deep foundation activities may affect an archeological resource, the pile driving or deep foundation activities shall be terminated until an appropriate evaluation of the

resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accordance with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the plan's scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of the selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program.* Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and unintentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains, Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws, including immediate notification of the Office of the Chief Medical Examiner of the City and County of San Francisco and, in the event of the medical examiner's determination that the human remains are Native American, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (MLD) (PRC section 5097.98). The ERO shall also be immediately notified upon discovery of human remains. The archeological consultant, project sponsor, ERO, and MLD shall have up to but not beyond 6 days after the discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and

associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines, section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept the recommendations of an MLD. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement, if such as agreement has been made, or otherwise, as determined by the archeological consultant and the ERO. If no agreement is reached, state regulations shall be followed, including the reburial of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC section 5097.98).

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the draft final archeological resources report shall be distributed as follows: The California Archaeological Site Survey Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning Division of the San Francisco Planning Department shall receive one bound, one unbound, and one unlocked, searchable PDF copy on CD of the report, along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CR-4: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation in place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Mitigation Measure M-AQ-2: Construction Air Quality

The project sponsor or the project sponsor's contractor shall comply with the following:

A. Engine Requirements. Where access to alternative sources of power is available, portable diesel engines shall be prohibited. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than 2

minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas, and at the construction site to remind operators of the 2-minute idling limit.

The contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment, and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.

B. Waivers.

1. The Planning Department's environmental review officer or designee may waive the alternative source of power requirement of subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of subsection (A)(1).
2. The ERO may waive the equipment requirements of subsection (A)(1) if: a particular piece of off-road equipment with an ARB Level 3 VDECS is technically not feasible; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use off-road equipment that is not retrofitted with an ARB level 3 VDECS. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, according to Table M-AQ-2.

TABLE M-AQ-2 OFF-ROAD EQUIPMENT COMPLIANCE STEP-DOWN SCHEDULE
COMPLIANCE

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	ARB Level 2 VDECS
2	Tier 2	ARB Level 1 VDECS
3	Tier 2	Alternative Fuel*

How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor would need to meet Compliance Alternative 1. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the contractor must meet Compliance Alternative 2. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 2, then the contractor must meet Compliance Alternative 3. Alternative fuels are not a VDECS.

C. Construction Emissions Minimization Plan. Before starting onsite construction activities, the contractor shall submit a construction emissions minimization plan to the ERO for review and approval. The plan shall state, in reasonable detail, how the contractor will meet the requirements of Section A.

1. The plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For VDECS installed, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
2. The project sponsor shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement that the contractor agrees to comply fully with the plan.

3. The contractor shall make the plan available to the public for review onsite during working hours. The contractor shall post at the construction site a legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

D. Monitoring. After start of construction activities, the contractor shall submit quarterly reports to the ERO documenting compliance with the plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the plan.

Mitigation Measure M-AQ-4: Best Available Control Technology for Diesel Generators

The project sponsor shall ensure that the backup diesel generator meets or exceeds one of the following emission standards for particulate matter: (1) tier 4 certified engine, or (2) tier 2 or tier 3 certified engine that is equipped with an ARB level 3 verified diesel emissions control strategy (VDECS). A nonverified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical ARB-verified model and if BAAQMD approves of its use. The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (regulation 2, rule 2, and regulation 2, rule 5) and the emission standard requirement of this mitigation measure to the Planning Department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.

F.2. IMPROVEMENT MEASURES

Improvement measures have been identified to further reduce any potential effects related to conflicts between vehicles (general traffic and freight/delivery trucks) and other users of roadways at the project site (e.g., pedestrians and bicyclists) and encourage bicycle use by residents, employees, and patrons of the proposed project. Although the proposed project's pedestrian impacts would be less than significant, implementation of the following transportation improvement measures would reduce and/or eliminate any potential conflicts and improve circulation for pedestrians, bicyclists, and drivers engaged with the site.

Improvement Measure I-TR-2a: Monitoring and Abatement of Queues

As an improvement measure to reduce the potential for queuing of vehicles accessing the project site, it will be the responsibility of the project sponsor or subsequent property owner to ensure that recurring vehicle queues do not occur adjacent to the site (i.e., along Davis Street and Broadway loading areas or other surrounding streets).

It will be the responsibility of the owner/operator of the building to ensure that recurring vehicle queues do not occur on the public ROW. A vehicle queue is defined as one or more vehicles (destined to the loading zones on Davis Street or Broadway) blocking any portion of any public street, alley, or sidewalk for a consecutive period of 3 minutes or longer on a daily or weekly basis.

If a recurring queue occurs, the owner/operator of the building will employ abatement methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, as well as the characteristics of the loading zone, the street(s) adjacent to the zone, and the associated land uses (if applicable).

Suggested abatement methods include but are not limited to the following: redesign of loading zones to improve vehicle circulation; use of additional offsite parking facilities or shared parking with nearby uses; and travel demand management strategies such as additional bicycle parking, customer shuttles, and delivery services.

If the planning director, or his or her designee, suspects that a recurring queue is present, the San Francisco Planning Department will notify the property owner in writing. Upon request, the owner/operator will hire a qualified transportation consultant to evaluate the conditions at the site for no less than 7 days. The consultant will prepare a monitoring report to be submitted to the planning department for review. If the planning department determines that a recurring queue does exist, the owner/operator will have 90 days from the date of the written determination to abate the queue.

Improvement Measure I-TR-2b: Active Valet Parking Management

Queues for arriving hotel patrons at the curbside valet passenger loading zone on Broadway will be managed by professionally trained valet staff to ensure that valet vehicle queues are confined within the valet loading zone and there is no vehicle spillover into the travel lanes on westbound Broadway back to The Embarcadero. The proposed project will provide adequate valet staffing to ensure the most efficient processing of arriving and departing hotel patron vehicles, which will be parked in an offsite garage facility under a covenant agreement with the project sponsor. Guests returning to the project curbside for their vehicles will be retrieved by valet staff and returned to the proposed 80-foot-long passenger loading zone along the project frontage on Broadway. Although no spillover queues are anticipated, if any recurring queues occur, the owner/operator of the project building will employ abatement methods as needed to abate such queues. Appropriate abatement methods will vary depending on the characteristics and causes of recurring queues, as well as the characteristics of the loading zone, the street(s) adjacent to the zone, and the associated land uses (if applicable), and are detailed in **Improvement Measure I-TR-2a, Monitoring and Abatement of Queues**.

Improvement Measure I-TR-2c: Active Loading Dock Driveway Controls

As an improvement measure to reduce and/or eliminate any potential conflicts between freight delivery vehicles entering and exiting the project driveway to and from the off-street freight loading spaces and conflicts between moving vehicles and other users of the roadway (e.g., cyclists, pedestrians in sidewalk areas), it will be the responsibility of the project sponsor and/or property owner to install active management controls at the off-street freight loading space driveway and within the off-street freight loading area.

It is recommended that sensors be installed at the gated loading dock ramp and at the driveway entrance/exit lane at Davis Street to detect any outbound vehicles and pedestrians within the driveway and ramp area. Upon exiting the loading dock, vehicles traveling along the garage ramp and approaching the gate would then trigger a sensor that would activate an electronic sign, signal, or audible devices at the driveway entrance to notify any vehicles, pedestrians, or bicyclists of the exiting vehicle.

Additional traffic calming and safety treatments will be installed within the loading dock area. Specific signage will be installed to notify drivers exiting the parking driveway to slow, stop, and yield to any pedestrians walking along the sidewalk on Davis Street (e.g., “Caution: Pedestrian Crossings,” “Watch for Pedestrians,” “Exit Slowly,” “STOP”). Diagonal mirrors will also be installed so that motorists exiting the loading dock area and pedestrians on the sidewalk can see each other. The project sponsor will also install rumble strips or similar devices to maintain slow speeds for vehicles exiting the loading dock.

Improvement Measure I-TR-2d: Coordination of Large Deliveries and Garbage Pickup

Trucks exceeding 40 feet in length will be scheduled and coordinated through hotel management and restaurant tenants, and directed to use the proposed curbside 142½-foot-long commercial loading zone along the Davis Street frontage of the project site.

To reduce the potential for double-parking (or other illegal parking activity) by delivery or trash vehicles in the travel lanes along the Davis Street or Broadway frontages of the project site (in the event that the existing or proposed on-street loading spaces are occupied), appropriate delivery and trash pickup procedures will be enforced to avoid any blockages of Davis Street or Broadway over an extended period of time and reduce any potential conflicts between deliveries and pedestrians walking along Davis Street or Broadway.

The building manager will notify the hotel, restaurant, entertainment venue, and retail tenants of garbage pickup times and locations so that they are efficiently coordinated and result in minimum conflict with other loading activity and traffic circulation in the immediate vicinity of the project.

Improvement Measure I-TR-2e: Construction Truck Deliveries during Off-Peak Periods

Any construction traffic occurring between 7 a.m. and 9 a.m. or between 3:30 p.m. and 6 p.m. on weekdays would coincide with weekday commute-period traffic and could temporarily disrupt traffic and transit flow, although it would not be considered a significant impact. Limiting truck movements to the hours between 9 a.m. and 3:30 p.m. on weekdays (or other times, if approved by SFMTA) would further minimize disruptions to circulation along adjacent streets during the weekday a.m. and p.m. peak periods.

As required, the project sponsor and construction contractor(s) will meet with SFMTA, SFFD, and the San Francisco Planning Department to determine feasible measures to reduce traffic congestion, including potential transit disruption and pedestrian circulation impacts, during construction of the project. To minimize cumulative traffic impacts due to project construction, the project sponsor will coordinate with construction contractors for any concurrent nearby projects that are planned for construction or which later become known, including the proposed mixed-use development at 88 Broadway and 753 Davis Street.

Improvement Measure I-TR-2f: Construction Management Plan

In addition to items required in the construction management plan, the project sponsor will include the following:

- *Carpool and Transit, and Other Access for Construction Workers.* As an improvement measure to minimize parking demand and vehicle-trips associated with construction workers, the construction contractor(s) will include methods to encourage carpooling, transit and bicycle use, or on-foot travel to and from the project site by construction workers in the construction management plan contracts.
- *Project Construction Updates.* As an improvement measure to minimize construction impacts on nearby businesses, the project sponsor will provide regularly updated information (typically in the form of a website, news articles, and onsite postings) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns.

G. PUBLIC NOTICE AND COMMENT

On October 6, 2016, the Planning Department mailed a Notice of Project Receiving Environmental Review to property owners within 300 feet of the project site, adjacent tenants, and other potentially interested parties. Nine comments received addressed the following:

- Waterfront views and protection of view corridors from residential properties
- Height of 55 foot hotel building will block residential views of waterfront
- Passenger and commercial loading zones will cause traffic congestion on streets
- Loss of a parking lot will cause parking problems
- Increased traffic congestion from hotel and theater patrons on streets around the project site
- Increase in pollution from buses and trucks
- Proximity of hotel drop-off and interference with vehicle, bicycle or pedestrian traffic on Broadway
- Vacating street areas
- Increased noise from hotel roof deck and hotel operations; noise from theater performances
- Light and glare from roof deck
- Roof treatment incorporation of industrial skylights
- Proximity to designated historic and cultural resources
- Construction of project in area potentially subject to liquefaction during earthquake
- Construction of project in area potentially affected by seismic failure of seawall
- Conflicts with sea level rise
- Sensitivity of project's location at Broadway gateway to North Beach and Chinatown
- Cumulative effects of proposed project including proposed 88 Broadway Project and Davis Street Project

The comments that directly relate to a physical impact on the environment were directly addressed in: section E.3, Cultural Resources (historic resources); section E.4, Transportation and Circulation (transit demand); section E.5, Noise (noise concerns); section E.6, Air Quality (emissions); section E.13, Geology and Soils; and section E.14, Hydrology and Water Quality.

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H. DETERMINATION

On the basis of this Initial Study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

DATE

10/17/18

for



Lisa Gibson
Environmental Review Officer
for
John Rahaim
Director of Planning

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I. INITIAL STUDY PREPARERS

Planning Department, City and County of San Francisco

Environmental Planning Division

1650 Mission Street, Suite 400

San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson

Environmental Planner: Laura Lynch

Principal Planner: Chelsea Fordham

Archeologist: Randall Dean

Preservation Planner: Eiliesh Tuffy

Transportation Planner: Chris Espiritu

AECOM

300 California Street, Suite 600

San Francisco, CA 94104

Project Director: David Reel

Deputy Project Manager: Jillian Adams

Senior Reviewer: Rod Jeung

Cultural Resources Specialist: Mark Hale

Noise Specialist: Mark Storm

Air Quality Specialists: Jason Paukovits, Paola Pena

Transportation Planner: Anthony Mangonon

Biologist: Lidia D'Amico

Environmental Planner: Jillian Adams

ESA (Shadow)

550 Kearny Street, Suite 800

San Francisco, CA 94108

Charles Bennett

CHS (Transportation)

220 Montgomery Street, Suite 346

San Francisco, CA 94104

Andrew Kluter

Charles Felder

Project Sponsor

TZK Broadway LLC

1215 K Street, Suite 1150

Sacramento, CA 95814

Jay Wallace

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From: [Spencer Hudson](#)
To: [Fewer, Sandra \(BOS\)](#); [Stefani, Catherine \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Tang, Katy \(BOS\)](#); [Brown, Vallie \(BOS\)](#); [Kim, Jane \(BOS\)](#); [Yee, Norman \(BOS\)](#); [MandelmanStaff, \[BOS\]](#); [Ronen, Hillary](#); [Cohen, Malia \(BOS\)](#); [Safai, Ahsha \(BOS\)](#)
Cc: [Mayor London Breed \(MYR\)](#); [Board of Supervisors, \(BOS\)](#)
Subject: Indivisible SF opposes Amendment to the Inclusionary Housing Ordinance
Date: Saturday, October 20, 2018 8:12:06 PM
Attachments: [2018-10-20 SF BoS Amendment to the Inclusionary Housing Ordinance.pdf](#)

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Attached is a letter from Indivisible SF requesting that you vote No on the upcoming Amendment to the Inclusionary Housing Ordinance when it is considered by the Board of Supervisors

Please let me know if you have any questions

Spencer Hudson
Indivisible SF
indivisible.spencer@gmail.com
(415) 373-8476

INDIVISIBLE SF

Date: 19 October 2018
To: San Francisco Board of Supervisors
cc: Mayor London Breed
re: Amendment to the Inclusionary Housing Ordinance

Indivisible SF opposes Mayor Breed's Amendment to the Inclusionary Housing Ordinance.

This amendment modifies the date by which projects eligible for temporary Inclusionary Housing requirements must obtain a building or site permit. We ask that you vote No on this legislation when it is considered by the Board of Supervisors.

In June 2016, a super-majority of San Francisco voters passed Proposition C to raise the inclusionary requirements for affordable on-site units in new housing developments from 12% to 25%. Some in-process development projects were grandfathered in and exempted from the 25% requirement for a grace period of two years, ending December 7, 2018, as follows:

- If a project received its entitlement within this period, it could adhere to the former 12% inclusionary requirement.
- If a project did not receive its entitlement within this period, it would be subject to the new 25% requirement.

Mayor Breed's proposed legislation extends the exemption, possibly indefinitely. The duration of her proposed grace period would start whenever a project was approved by the Planning Commission and last for 30 months (2.5 years).

Mayor Breed's stated concern that developers will abandon projects if they are required to increase the number of affordable units is unfounded. At least two developments are already underway with even higher inclusionary rates: Transbay Area Project (35%) and the SF Giants' Mission Rock project (40%). A 25% affordable housing requirement is clearly attainable.

Indivisible SF believes that our elected representatives must heed the voice of the voters. In 2016, voters clearly supported a 25% inclusionary rate and the Board of Supervisors have a responsibility to uphold that mandate. Mayor Breed's amendment is a brazen attempt to circumvent the democratic process.

We ask that you speak up and show your support for San Franciscans who are struggling to meet the cost of housing in our city. Please vote No on Mayor Breed's proposal.



**San Francisco Wholesale
Produce Market**

2095 Jerrold Avenue, Suite 212
San Francisco, California 94124

PHONE
415.550.4495

FAX
415.821.2742

October 22, 2018

The Honorable London Breed, Mayor
The Honorable Supervisor Malia Cohen, Chair, Budget and Finance Committee
The Honorable Supervisor Ahsha Safai
San Francisco Office of the Mayor
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

RE: REQUEST TO CONTINUE: File #180646, Refuse Separation Compliance Legislation

Dear Mayor Breed, Chair Cohen, and Supervisor Safai,

The San Francisco Wholesale Produce Market, San Francisco's nonprofit wholesale marketplace connecting growers to food businesses throughout the region, has concerns as to how Supervisor Safai's Refuse Separation Compliance legislation (File #180646) may impact our individual merchants and The SF Market as a whole.

As you may know, The SF Market was created in 1963 when the City relocated independent produce merchants from downtown San Francisco and built a shared facility in Bayview Hunters Point. Thirty produce wholesalers and distributors provide the food infrastructure and programs that feed the Bay Area and its \$113 billion food economy. Hundreds of food-centered companies shop our streets each night, loading trucks with local produce destined for local markets, caterers and restaurants. The SF Market is a key PDR employer: our merchants employ over 850 people, many from our neighborhood and city.

We have a long-standing commitment to waste management best practices. We are proud that the City piloted its compost collection program at The SF Market in 1996. Our Food Recovery Program feeds the hungry while continuing our long tradition of diverting food from going into the waste stream. With support from the Department of the Environment's Zero Waste Grant Program, we and our merchants have recovered over 1 million pounds of healthy food, which our 20 community partners turned into healthy meals for the needy. Through SF Market's Food Recovery Program:

- 1,243,276 pounds of produce have been saved since 2016
- 1,036,063 meals have been provided by our partners
- 1,243 cubic yards have been diverted from the waste stream



www.sfproduce.org

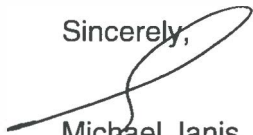
The SF Market regularly partners with Recology in education and enforcement for proper sorting practices and to minimize what is added to our landfills. Our relationship with Recology is excellent and we are able to problem-solve with them to quickly correct waste-sorting deficiencies. Our concern with this legislation is that, rather than furthering our partnership with Recology and the City to help achieve zero waste goals through facilitation and incentives, we will be penalized if we don't pass an audit; we may even be required to hire full-time staff as exclusive waste facilitators for two years, regardless of whether that is the best course of action or consideration of financial impact.

Each merchant at The SF Market has its own account with Recology for waste management. Some of our merchants generate more than 30 cubic yards/week and so would be considered a Large Refuse Generator (LRG) now, even though some are small businesses. In the future the Market will move to a centralized system for all waste management and will certainly fit the LRG definition. We therefore have concerns that our individual businesses and The SF Market as a whole could face challenging hiring requirements should we inadvertently fail an audit.

Refuse separation compliance should continue to focus on outreach and education and use of existing penalties to ensure that those not meeting zero waste goals are aware of their lack of compliance, instructed on how to comply, and given time and opportunity to do so before hiring requirements kick in.

Due to these concerns, The SF Market requests that this legislation not be passed out of committee, and that we be given more opportunities to work with our city partners on policies that will continue our collective march toward meeting zero waste goals.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Janis', written over the word 'Sincerely,'.

Michael Janis
General Manager

cc: Clerk of the Board of Supervisors, to be distributed to all Supervisors; Department of the Environment Director Deborah Raphael; Office of Small Business Director Regina Dick-Endrizzi

From: [i yasu](#)
To: [Mayor London Breed \(MYR\)](#); [Board of Supervisors \(BOS\)](#); [Tang, Katy \(BOS\)](#); [Stefani, Catherine \(BOS\)](#); [Ronen, Hillary](#); [Safai, Ahsha \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [MandelmanStaff, \[BOS\]](#); [Cohen, Malia \(BOS\)](#); [Brown, Vallie \(BOS\)](#); [Fewer, Sandra \(BOS\)](#); [Kim, Jane \(BOS\)](#); [Yee, Norman \(BOS\)](#)
Subject: Regarding to the friendship city relationship with Osaka City
Date: Sunday, October 21, 2018 5:18:04 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Mayor of San Francisco
 Dear Supervisors of City and County of San Francisco,

(Let me send again.)

I regret that there is a memorial for "comfort women" in San Francisco.
 Also, I am concerned that Osaka City has canceled the friendship city relationship with San Francisco.
 Asahi Shimbun, which is one of the newspaper in Japan, made the first comment on 'comfort women' in 1982.
 After that, the Asahi newspaper admits that the article is a fictional work by reporters.

<https://www.asahi.com/articles/SDI201408213563.html>

Chinese and Korean interest has been waging a concerted anti-Japan/Japanese movements all over the United States. The "hate Japan" education in their homeland has been promoting the atmosphere even in the U.S. 70 years after the last war. We should work toward the future for the benefits of the younger generations in a more constructive way rather than destructively.

Please listen not only to opinions from Chinese and South Korean side but also to opinions from Japanese side.

I strongly recommend that you will encourage San Francisco and Osaka City to rebuild the friendly city relationship at the next meeting.

Thank you very much.

Sincerely,
 Yasushi Ito
 Kanagawa-Prefecture
 Japan

From: [Board of Supervisors, \(BOS\)](#)
To: [BOS-Supervisors](#)
Subject: FW: hH
Date: Wednesday, October 17, 2018 11:15:00 AM

From: Rosie Z.Matin <rosieziaie@gmail.com>
Sent: Thursday, October 11, 2018 2:30 PM
To: Board of Supervisors, (BOS) <board.of.supervisors@sfgov.org>; Mayor London Breed (MYR) <mayorlondonbreed@sfgov.org>
Subject: hH

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Greetings to the district II supervisor and who it may concern!

I've been living across the Lafayette park (Sacramento and Gough in Pacific Heights hood) for the past 12 years and I thought to write to you regarding our problems to see if you can find a solution for that, cause they are getting out of control and we are losing our patience!

- Ever since the Van Ness Avenue has been transformed to a construction zone (many thanks to the never ending new CPMC project) some 12 months ago, most of the cars choose Gough and Franklin for a faster route (Bus line number one passes every 15', sometimes there are 4 of them mostly empty lining up on Sacramento to pass the light! Do we need that many buses during non rush hour?? Laud motor bikes and cars are not tolerable passing through during early mornings and late nights.) We feel like we are sleeping in the middle of the freeway here!!!! We had a very calm residential area and never had this problem before! Nowadays we have difficulty sleeping at nights and don't know what to do, Ny'quils can not be the long-term remedy!!!
- Beside the car and bike noises in the middle of the night, there is one more to add. The loud yelling sound of the drunk/high fellows swearing to the universe. I've already called 3 times in the past 2 months to come and pick them up and many thanks to them that they sure did. We never had this experience in this hood and that's why we chose this area to live and we are paying for it.
- Every week there is a street blocked in our area for a repair; PG&E, water,... and after a week of finishing their job, they leave the road with patches of unfinished patchy asphalt that's difficult to drive over. The funny thing is that that the same street will get another redo few mons after!!! Is there anybody supervising them to see what they do and why they do that????
- We have had many instances recently that the thieves got into the buildings and indoor parkings to break into the cars or steal the parcels from the lobby section. Not to forget that every weekend morning that you stroll around the Lafayette park you will see most of SUV's

window shattered glass on the pavement!

I really don't want to continue with more complaints as for the dirty streets (thank God we don't have the needles in our hood yet), but it's very sad to live in this lovely city and seeing it going down like this. San Francisco is an affluent city and the residents are paying top money to live here and it's logical to ask you to at least please restore it back to where it was before. I hope it's not too much to ask.

Warm regards,

Rosie Matin

650.454.7414

From: [Rebecca Evans](#)
To: [Board of Supervisors, \(BOS\)](#); [Fewer, Sandra \(BOS\)](#); [Stefani, Catherine \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Tang, Katy \(BOS\)](#); [Brown, Vallie \(BOS\)](#); [Kim, Jane \(BOS\)](#); [Yee, Norman \(BOS\)](#); [Mandelman, Rafael \(BOS\)](#); [Ronen, Hillary](#); [Cohen, Malia \(BOS\)](#); [Safai, Ahsha \(BOS\)](#); MTABoard@sfmta.com
Subject: transit only lanes
Date: Sunday, October 21, 2018 9:43:38 PM
Attachments: [transit_only_lanes.doc](#)

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Hon. Board of Supervisors

Dear Supervisors:

Attached please find the Sierra Club letter opposing opening transit-only lanes to private, for-profit buses.

Sincerely,

Becky Evans
Chair
San Francisco Group
Sierra Club



San Francisco Bay Chapter

Serving Alameda, Contra Costa, Marin and San Francisco counties

SAN FRANCISCO GROUP

Please reply c/o Evans, 1474 Sacramento St., #305, San Francisco, CA 94109

October 21, 2018

San Francisco Board of Supervisors
San Francisco City Hall, Room 240
1 Dr. Carlton Goodlett Plaza
SF, CA 94102

Dear Supervisors:

The Sierra Club opposes opening transit-only lanes to private, for-profit buses such as tech shuttle buses, casino buses, tour buses, Chariots, and other vehicles, without any study to show such permission won't harm MUNI and without compensation to the City for the use of a scarce public resource (city streets).

A system of comprehensive, affordable public transportation is part of our city's effort to combat [income inequality](#) and [climate change](#). Muni offers discount fares to seniors, the disabled, low-income people and youth. Federal law also requires Muni to serve all neighborhoods and demographics equitably -- unlike private services. Moreover, as of 2015 Muni used [less than two percent](#) of all the energy consumed in San Francisco for transportation, making expanded public transportation an ideal option for reducing the City's total carbon emissions.

Dedicated, transit-only lanes are a part of that system, and for years the San Francisco Municipal Transportation Agency (SFMTA) has promoted the creation of transit-only lanes as projects to improve Muni performance. In fact, the first improvement item listed as part of the [Geary Rapid Project](#) is, "Red, dedicated transit lanes to reduce unpredictable delays."

Additionally, San Francisco's population is projected to increase. Ridership on the Geary corridor alone is expected to go from the current average daily count of 54,000 to up to 99,000, according to the [Geary BRT environmental impact report](#).

How will the San Francisco Municipal Transportation Agency be able to expand its fleet of public buses to meet growing demand if its public buses are competing for dedicated lane space with private, for-profit vehicles?

Moreover state and local law prohibit access to these lanes by private, for-profit buses. State law defines a "transit bus" as a "any bus owned or operated by a publicly owned or operated transit system ..." ([CVC I.A.642](#)) It logically follows that transit-only lanes are for transit vehicles. The Board of Supervisors has also





San Francisco Bay Chapter

Serving Alameda, Contra Costa, Marin and San Francisco counties
passed an ordinance ([Section 7.2.72](#)) forbidding the operation of “a vehicle or any portion of a vehicle within ... a transit-only area.” The SFMTA Board of Directors does not have the authority to pass contradictory legislation.

The Sierra Club calls on the Board of Supervisors to assert its power and reaffirm that transit-only lanes are for public transit only vehicles.

Sincerely,

Becky Evans
Chair
San Francisco Group

CC: Board.of.Supervisors@sfgov.org , Sandra.Fewer@sfgov.org , Catherine.Stefani@sfgov.org ,
Aaron.Peskin@sfgov.org , Katy.Tang@sfgov.org , Vallie.Brown@sfgov.org , Jane.Kim@sfgov.org ,
Norman.Yee@sfgov.org , Rafael.Mandelman@sfgov.org , Hillary.Ronen@sfgov.org ,
Malia.Cohen@sfgov.org , Ahsha.Safai@sfgov.org , MTABoard@sfmta.com



T 510.836.4200
F 510.836.4205

410 12th Street, Suite 250
Oakland, Ca 94607

www.lozeaudrury.com
richard@lozeaudrury.com

By Email and Overnight Mail

October 22, 2018

San Francisco Board of Supervisors
Clerk of the San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
Board.of.Supervisors@sfgov.org

Lisa M. Gibson, Environmental Review Officer
1650 Mission Street, Suite 400
San Francisco, CA 94103
lisa.gibson@sfgov.org
(By Email only)

RE: Central SoMa Plan and Environmental Impact Report for Central SoMa
Plan (SCH NO. 2013042070). Request for Supplemental EIR.

Honorable Members of the Board of Supervisors and Clerk of the Board:

We present these comments on behalf of Paul Phillips and Genia Phillips, who are residents living at 631 Folsom Street, members of 631 Folsom O.A. ("SF Blu"), and members of Central SoMa Neighbors (CSN). Paul and Genia Phillips hereby join in all of the comments that have been made by this law firm on behalf of SF Blu and Central SOMA Neighbors. Rather than repeat those comments, we incorporate all prior comments in their entirety herein by reference as if set forth in full.

Sincerely,

Richard Toshiyuki Drury