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Mitigated Negative Declaration

Date:	October 25, 2017; amended on February 27, 2018 (amendments to the Initial Study/Preliminary Mitigated Negative Declaration are shown as deletions in ~~strikethrough~~ and additions in double underline)
Case No.:	**2016-007850ENV**
Project Title:	**88 Broadway & 735 Davis Street Project**
Zoning:	C-2 (Community Business) Use District Waterfront 3, Special Use District 65-X Height and Bulk District
Block/Lot:	0140/007, 008
Lot Size:	48,620 square feet
Project Sponsor:	Marie-Therese Debor, BRIDGE Housing 949-229-7075 Mdebor@bridgehousing.com Margaret Miller, The John Stewart Company 415-345-4400 mmiller@jsco.net
Lead Agency:	San Francisco Planning Department
Staff Contact:	Jenny Delumo (415) 575-9146 Jenny.Delumo@sfgov.org

PROJECT DESCRIPTION:

The 48,620-square-foot project site, at 88 Broadway and 735 Davis Street, is located on the block bound by Vallejo Street to the north, Davis Street to the east, Broadway to the south, and Front Street to the west in San Francisco's North Beach neighborhood. The two-parcel, T-shaped project site currently contains two surface parking lots which provide 180 public parking spaces.

The project sponsors, BRIDGE Housing and the John Stewart Company, propose to construct two new 6-story buildings, approximately 65 feet tall (with an additional 10 feet for the elevator and stair penthouses), and decreasing in height in proximity to Broadway Street and the waterfront. The 88 Broadway and 735 Davis Street Project (the proposed project) would contain 178 affordable family and senior housing units and approximately 6,500 square feet of commercial space, resulting in an approximately ~~191,300~~191,000-square-foot development. The first floor level would provide ground floor units, commercial space (retail space and a childcare facility), bike parking and common space and social services for residential use, as well as property management space. Floors two through six would consist primarily of residential dwelling units, shared laundry rooms, mechanical spaces, and common spaces for residential use. A variety of open spaces is proposed throughout at the roof and terrace levels. There are two mid-block passages proposed for the project site, and an approximately 4,300-square-foot childcare facility with outdoor space is proposed at ground level. The proposed project would result in an approximately ~~191,300~~191,000-square-foot development. Pedestrian bulb-outs are proposed on Front

Street and Broadway. No off-street parking is proposed. Approximately 120 class 1 bicycle parking spaces (*i.e.,* bicycle lockers or spaces in a secure room) and 20 class 2 bicycle parking spaces (*i.e.,* publicly accessible bicycle racks) are proposed. Additionally, the proposed project would include an emergency backup diesel generator and heating, ventilation, and air conditioning equipment (HVAC) equipment at both buildings.

The proposed project would demolish the two existing surface parking lots and generate approximately 365 tons of asphalt demolition debris and 4,000 cubic yards of soil export. Construction on the 1.12-acre site is estimated to take approximately 19 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 of this Mitigated Negative Declaration, pages 201 - 208.

In the independent judgment of the Planning Department, there is no substantial evidence that the project could have a significant effect on the environment.

Lisa Gibson
Environmental Review Officer

3/9/18
Date of Issuance of Final Mitigated Negative Declaration

cc: Marie-Therese Debor, Project Sponsor
Margaret Miller, Project Sponsor
Distribution List

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Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACL	Absolute Cumulative Limits
ADA	Americans with Disabilities Act
ADRP	Archeological data recovery plan
AMP	Archeological monitoring program
ARB	California Air Resources Board
ARDTP	Archeological Research Design and Treatment Plan
ASTM	American Society for Testing and Materials
ATP	Archeological testing plan
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
bgs	below ground surface
BWDP	Batch Wastewater Discharge Permit
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalOSHA	Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CBC	California Building Code
CBIA	California Building Industry Association
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CO	Carbon monoxide
COA	Certificate of Appropriateness
CSD	Combined sewer discharge
CV	Sensitive construction vibration location
dB	decibel
dBA	A-weighted decibels
DBI	San Francisco Department of Building Inspection
DPM	Diesel particulate matter
DTSC	Department of Toxic Substance Control
EO	Executive Order
ERO	Environmental Review Officer
ESA	Environmental Site Assessment
ESCP	Erosion and Sediment Control Plan
FARR	Final Archeological Resources Report
FTA	Federal Transit Administration
GHG	Greenhouse gas emissions
gpcd	gallons per capita per day

gpd	gallons per day
gsf	gross square feet
HVAC	Heating, Ventilation, and Air Conditioning
L_{90}	Highest and lowest noise level that was exceeded 90 percent of the time
lbs	pounds
L_{dn}	Day-night average sound level
L_{eq}	Equivalent Sound Level
L_{eq} 1h	1-hour A-weighted equivalent sound level
L_{max}	Maximum sound level
LT	Long Term
LUST	Leaking Underground Storage Tank
L_v	Reference vibration level
mgd	million gallons of water per day
MLD	Most Likely Descendant
MRZ	Mineral Resource Zone
NAHC	California State Native American Heritage Commission
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_2	Nitrogen dioxide
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
NWIC	California Archeological Site Survey Northwest Information Center
O&M	Operations and maintenance
OPR	State Office of Planning and Research
PDA	Priority Development Area
PM	Particulate matter
PM_{10}	PM composed of particulates that are 10 microns in diameter or less
$PM_{2.5}$	PM composed of particulates that are 2.5 microns in diameter or less
ppd	pounds per day
PPV	Peak particle velocity
PUD	Planned Unit Development
PWL	Sound power levels
QACL	Qualified Archeological Consultants List
Qaf	Artificial fill
ROG	Reactive organic gases
ROSE	San Francisco General Plan Recreation and Open Space Element
RWS	Regional water system
SB	Senate Bill
SCP	Stormwater Control Plan
SEWPCP	Southeast Water Pollution Control Plant
SFBAAB	San Francisco Bay Area Air Basin
SF-CHAMP	San Francisco Chained Activity Model Process

SFDPH	San Francisco Department of Public Health
SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFPUC	San Francisco Public Utilities Commission
SFRPD	San Francisco Recreation and Parks Department
SFUSD	San Francisco Unified School District
SHMA	California Seismic Hazards Mapping Act of 1990
SMP	Site mitigation plan
SO_2	Sulfur dioxide
SPL	Sound pressure levels
ST	Short Term
SWRCB	State Water Resources Control Board
TAAS	Theoretically Available Annual Sunlight
TAC	Toxic air contaminants
TAZ	Traffic analysis zone
TBACT	Best Available Control Technology for Toxics
TCR	Tribal cultural resource
TDM	Travel Demand Management
TTLC	Total Threshold Limit Concentration
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
VdB	Vibration decibel level
VMT	Vehicle miles traveled
WSI	William-Sonoma Incorporated

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A. Project Description

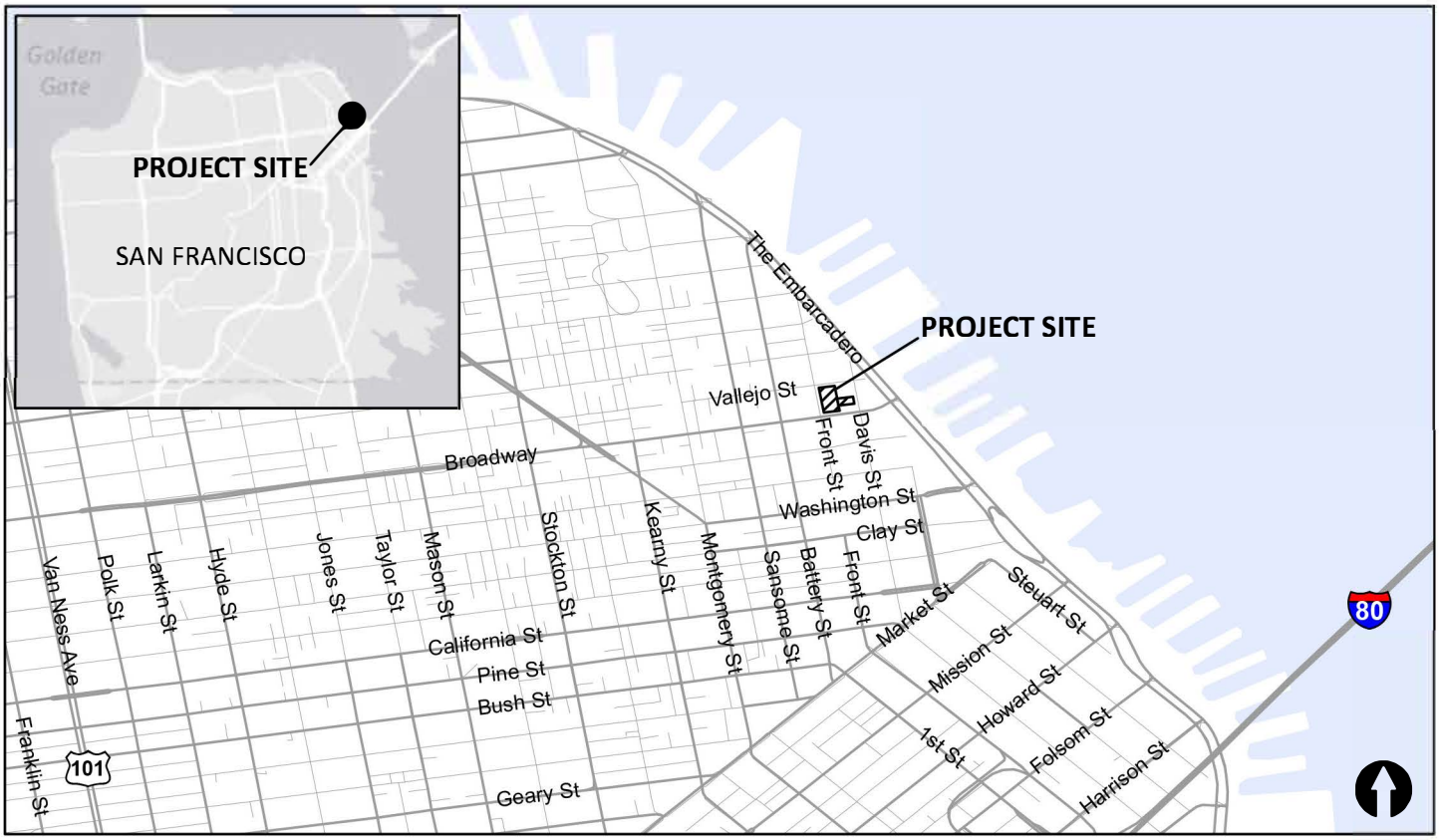
The proposed project is located at 88 Broadway and 735 Davis Street. The proposed project would involve the demolition of two existing surface parking lots containing 180 public parking spaces and the construction of two new 65-foot-tall (with an additional 10 feet for the elevator and stair penthouses), 6-story, mixed-use residential buildings with up to 178 affordable dwelling units (125 family units and 53 senior units). The buildings would include approximately 6,500 square feet of commercial space (approximately 5,300 square feet in the family housing building and approximately 1,200 square feet in the senior housing building). An approximately 4,300-square-foot childcare facility for public use would also be included on the ground floor of the family housing building. This section includes a description of the existing conditions, project characteristics, and project approvals.

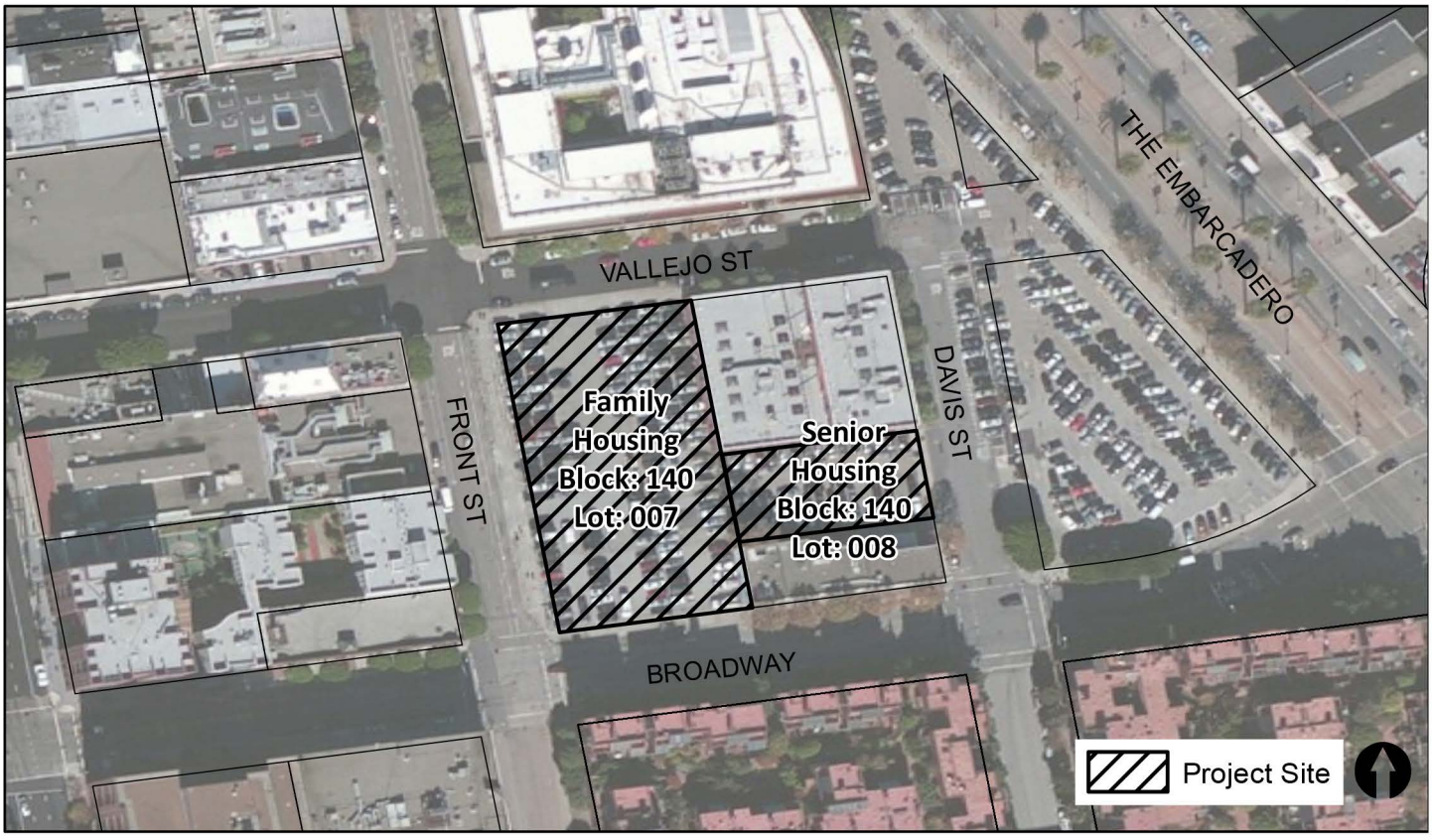
1. EXISTING CONDITIONS

PROJECT LOCATION AND SITE CHARACTERISTICS

The approximately 48,620-square-foot (1.12-acre), T-shaped project site is located at Assessor's Block 140, Lot 007 (88 Broadway) and Assessor's Block 140, Lot 008 (735 Davis Street). The project site is located on the block bounded by Vallejo Street to the north, Davis Street to the east, Broadway to the south, and Front Street to the west in the North Beach neighborhood (see Figure 1). The project site's two existing surface parking lots currently provide 180 public parking spaces. There are no physical structures or landscaping on the project site. The public parking lots are operated by SP Plus Parking (88 Broadway) and Aqua Parking (735 Davis Street). The project site shares the block with two other businesses: a 2-story office building that is home to the William-Sonoma Incorporated (WSI) corporate office on the northeast corner of the block (fronting Vallejo and Davis street) and a 2-story building that is home to Autodesk offices on the southeast corner of the block (fronting Davis Street and Broadway). The surrounding uses in the project site vicinity include television broadcasting offices to the north (KGO, KRON4, and ABC7), a public parking lot to the east (Seawall Lots 323/324 with proposed theater and hotel development),[1] a 4-story, mixed-use building to the south, and a public parking structure to the west.

[1] Seawall Lots 323/324, Case No. 2015-016326ENV, is undergoing separate environmental review.





Source: PlaceWorks, 2018.

88 BROADWAY & 735 DAVIS STREET PROJECT INITIAL STUDY

Case No. 2016-007850ENV

FIGURE 1

Project Site Location

LAND USE AND ZONING

The *San Francisco General Plan* (General Plan) land use designation for the project site is General Commercial. The General Plan also identifies the project site as being within the Base of Telegraph Hill Subarea of the *Northeast Waterfront* Area *Plan* ~~*Area*~~. 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 *San Francisco Planning Code* (Planning Code) zoning for the project site is in the C-2 (Community Business) and 65-X Height and Bulk (65-foot maximum height, no bulk limit) zoning districts designations. The project site is also located within the Northeast Waterfront Landmark District, also known as the Northeast Waterfront Historic District, (a Planning Code Article 10 historic district[2]) and the Waterfront Special Use District No. 3. See section C, Compatibility with Existing Zoning and Plans, for further discussion of the proposed project and these land use designations.

SITE ACCESS AND TRANSIT

Access to the project site is provided via the four surrounding two-way streets: Vallejo Street to the north (east-to-west traffic flow), Davis Street to the east (south- to-north traffic flow), Broadway to the south (east-to-west traffic flow), and Front Street to the west (south- to-north traffic flow). Street parking is provided along all sides of the block the project site is located on, including one Americans with Disabilities Act (ADA) parking spot at the northwest corner of Front Street and Broadway, and four motorcycle parking spots at the southwest corner of Vallejo Street and Front Street. There is one commercial loading zone on Davis Street in front of the building at 753-777 Davis Street. Broadway is designated as a Class III bicycle route and Front Street is designated as a Class II bicycle lane.3 No bicycle routes are located on Vallejo or Davis Streets. The closest San Francisco Municipal Transportation Agency (SFMTA) Muni Metro station to the project site is the Embarcadero Station approximately 0.5 miles 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 Embarcadero Station is a stop for all six Muni Metro underground lines (Lines N-Judah, L-Taraval, M-Ocean View, K-Owl, T-Owl, and J-Church), and four BART lines (Pittsburg/Bay Point to/from SFO/Millbrae, Dublin/Pleasanton to/from Daly City, Daly City to/from Fremont, and Richmond to/from Daly City/Millbrae). The project is located within 0.25 miles of four local Muni bus lines (Lines 1-California, 10-Townsend, 12-Folsom/Pacific, and 39-Coit); two express Muni bus lines (Lines 30X-Marina Express and 82X-Levi Plaza Express); three Muni cable car/trolley lines (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 0.5 miles south of the project site and the Caltrain Station is located approximately 2 miles south of the project site.

[2] Per *San Francisco Planning Code* Article 10 section 1004, a historic district is a Board of Supervisors-approved designated area containing a number of structures having a special character or special historical, architectural or aesthetic interest or value, and constituting a distinct section of the City, as a historic district.

[3] Class III Bikeway (Bicycle Route): shared use with pedestrian or motor vehicle traffic. Class II Bikeway (Bicycle Lane): striped lane for one-way bike travel on a street or highway.

2. PROJECT CHARACTERISTICS[4]

The proposed project would involve demolition of the two existing surface parking lots and the construction of two new 6-story, mixed-use residential buildings for family and senior housing connected by open mid-block passageways as shown on Figure 2 and summarized in Table 1.

PROJECT BUILDING CHARACTERISTICS

The proposed family housing building would provide 125 affordable family units totaling approximately ~~98,900~~98,300 gross square feet (gsf) of residential dwelling space and approximately 47,100 gsf of non-residential space. Residents would have access to a common use community room on the ground floor, an open podium courtyard on the second floor, two open decks on the ~~fifth and~~ sixth floors, and a rooftop terrace and community garden. Non-residential uses that are available to the general public would include a childcare facility with an outdoor play area and a childcare arcade, and commercial space on the ground floor (see Figures 3 through 9).

The proposed senior housing building would provide 53 affordable housing units totaling approximately 28,~~1~~000 gsf of residential dwelling space and approximately 17,200 gsf of non-residential space. Residents would have access to a community room, an open courtyard on the first floor, and a roof deck on the fifth floor. Non-residential uses would include commercial space on the ground floor (see Figures 3 through 9).

The proposed project would include solar panels and green roofs on the roof level (see Figure 9). In addition, the heating, ventilation, and air conditioning equipment, commonly referred to as "HVAC" systems and an emergency back-up diesel generator would be located on the rooftop of each building.

Project renderings for the proposed buildings show the proposed project would have a contemporary architectural style (see Figures 12 through 15 for informational purposes.)

The proposed project would also provide open space as shown on Figure 16. Additional descriptions on these project features are discussed in more detail below.

The proposed family housing building would be approximately 65 feet in height to the top of the roof (with an additional 10 feet for the elevator and stair penthouses) at the northwest corner (Front Street and Vallejo Street corner) and a portion of the building facing Front Street. The proposed family housing building would step down to 54 feet at portions of this building facing Front Street and at the corner of Front Street and Broadway.~~, while t~~The adjacent senior housing structure would step down from a height of approximately 65 feet at the western façade to a height of approximately 45 feet at the Davis Street façade (see Figures 10 and 11).

[4] Figures 2 through 16 that depict the proposed project have been updated for this FMND to reflect the proposed changes as described in this section.

TABLE 1 PRELIMINARY PROJECT BUILDING SUMMARY

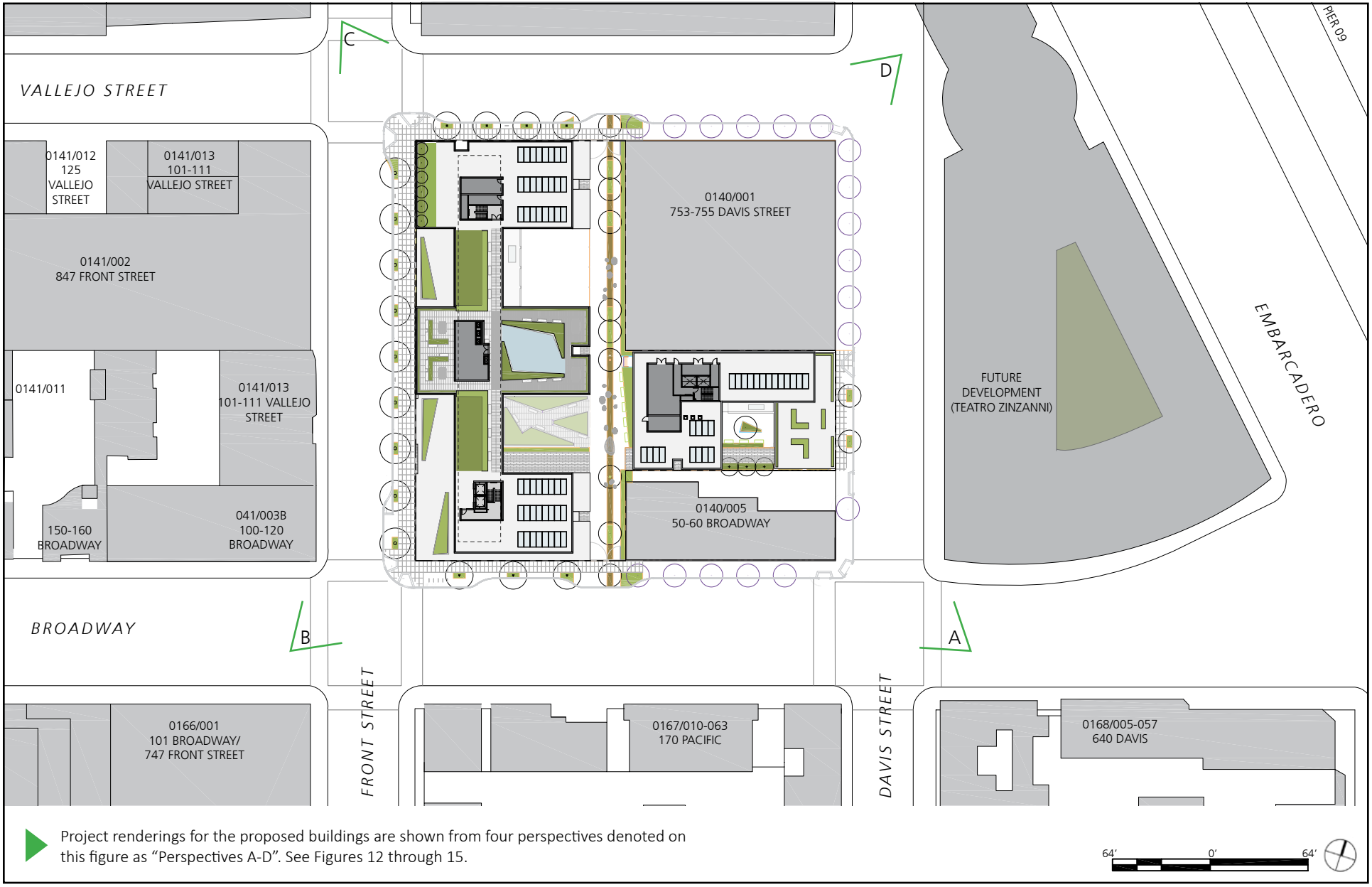
	Residential		Non-residential Gross Square Feet					
Floor Level	Units	Gross Square Feet	Other[a]	Service[b]	Bike Parking	Circulation	Commercial	Childcare
Family Housing								
1	5	5,200	4,800	4,200	1,300	430	5,200	4,300
2	24	19,400	-	750	-	5,000	-	-
3	25	19,800	-	750	-	4,500	-	-
4	25	19,800	-	750	-	4,500	-	-
5	~~24~~26	~~18,600~~19,800	-	750	-	4,500	-	-
6	~~22~~20	~~16,100~~14,300	-	750	-	4,500	-	-
Subtotal	*125*	*~~98,900~~98,300*	*4,800*	*8,000*	*1,300*	*23,500*	*5,200*	*4,300*
Total	*125*	*~~98,900~~98,300*	*47,100*					
Senior Housing								
1	2	1,200	2,000	1,700	140	1,200	1,200	-
2	11	6,000	-	260	-	1,800	-	-
3	12	6,400	-	260	-	2,000	-	-
4	12	6,400	-	260	-	2,000	-	-
5	8	4,000	-	260	-	2,000	-	-
6	8	4,000	-	260	-	2,000	-	-
Subtotal	*53*	*28,000*	*2,000*	*3,000*	*140*	*11,000*	*1,200*	*-*
Total	*53*	*28,000*	*17,200*					
Combined Building Totals								
Use Total	***178***	***~~127,000~~126,400***	***6,800***	***11,000***	***1,400***	***34,400***	***6,400***	***4,300***
Overall Total	***178***	***~~127,000~~126,400***	***64,300***					

Notes: These are preliminary estimates used for environmental review purposes and are subject to minor and more precise changes as the project is finalized for the construction phase. These numbers have been rounded.

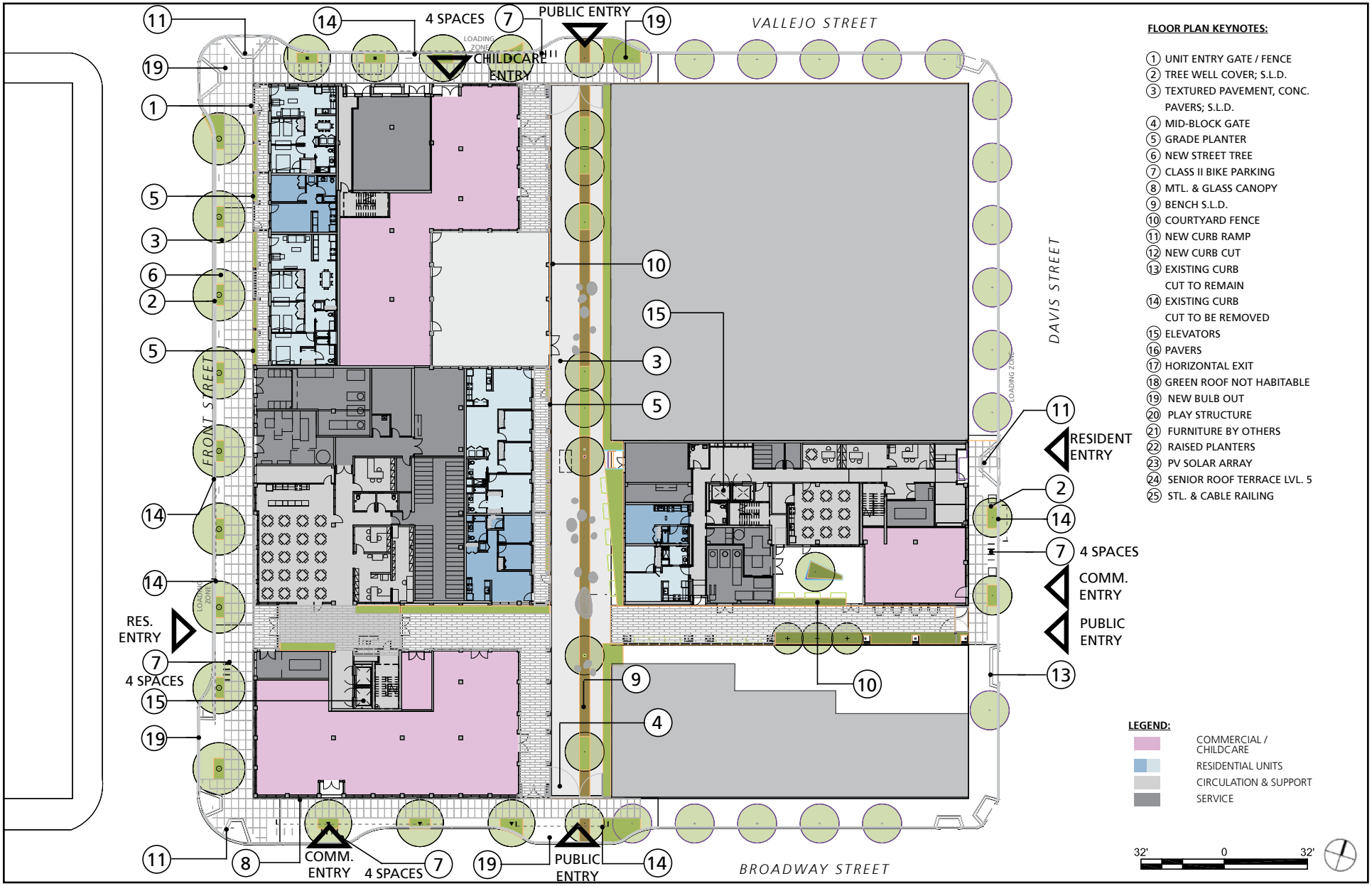
a. Other = Multi-purpose space/storage/file/property management offices/bathrooms/lobby/mailroom

b. Service = Laundry rooms/trash rooms/ mechanical rooms

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, Sheets A0.3 and A0.4, March 24, 2017, and February 26, 2018.



Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.



Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

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FIGURE 3

Proposed Level 1 (Ground Floor) Plan

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

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FIGURE 5

Proposed Level 3 Plan

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

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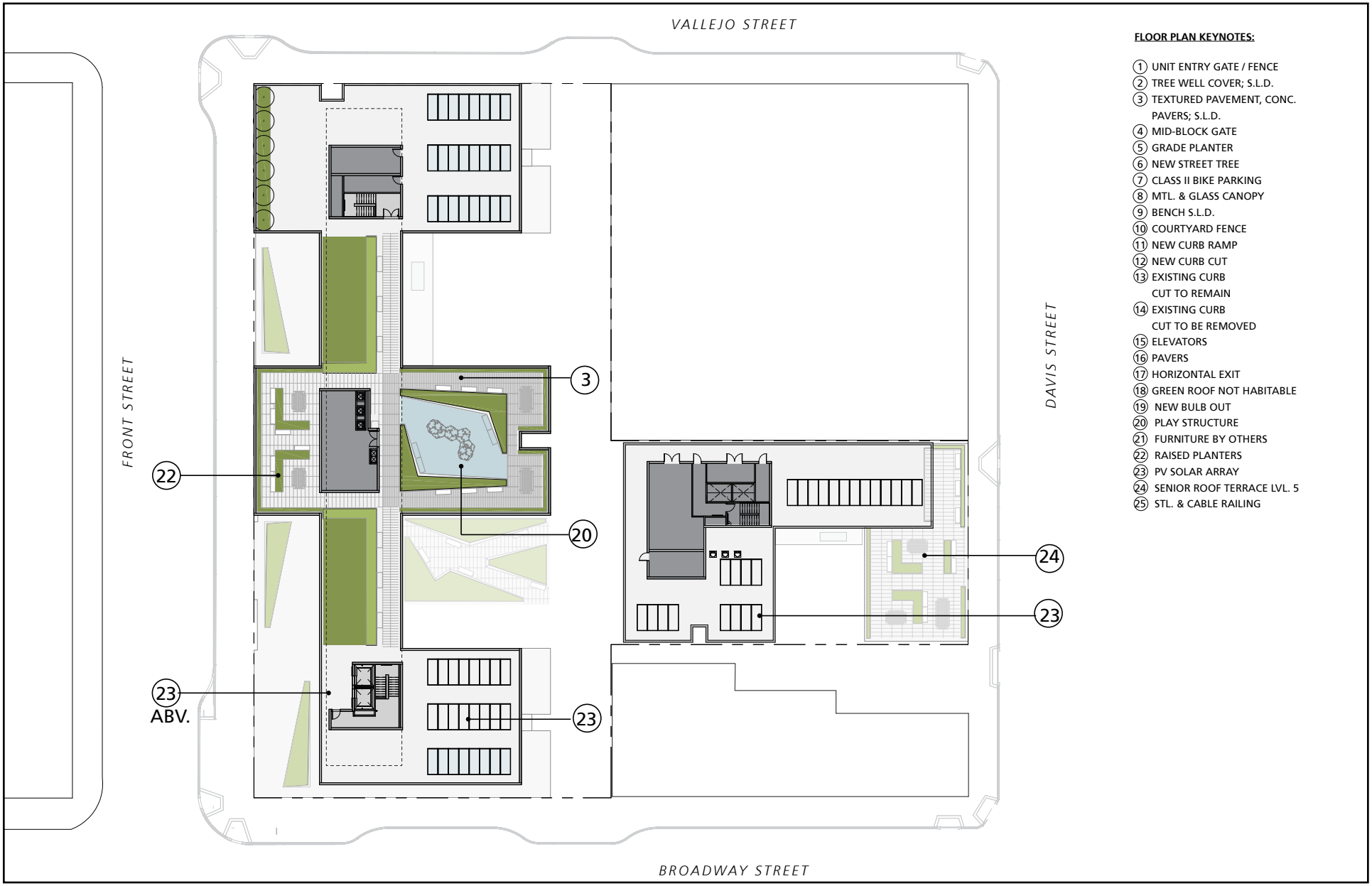
FIGURE 7

Proposed Level 5 Plan

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.



Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Perspective A: Davis Street/Broadway Intersection

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

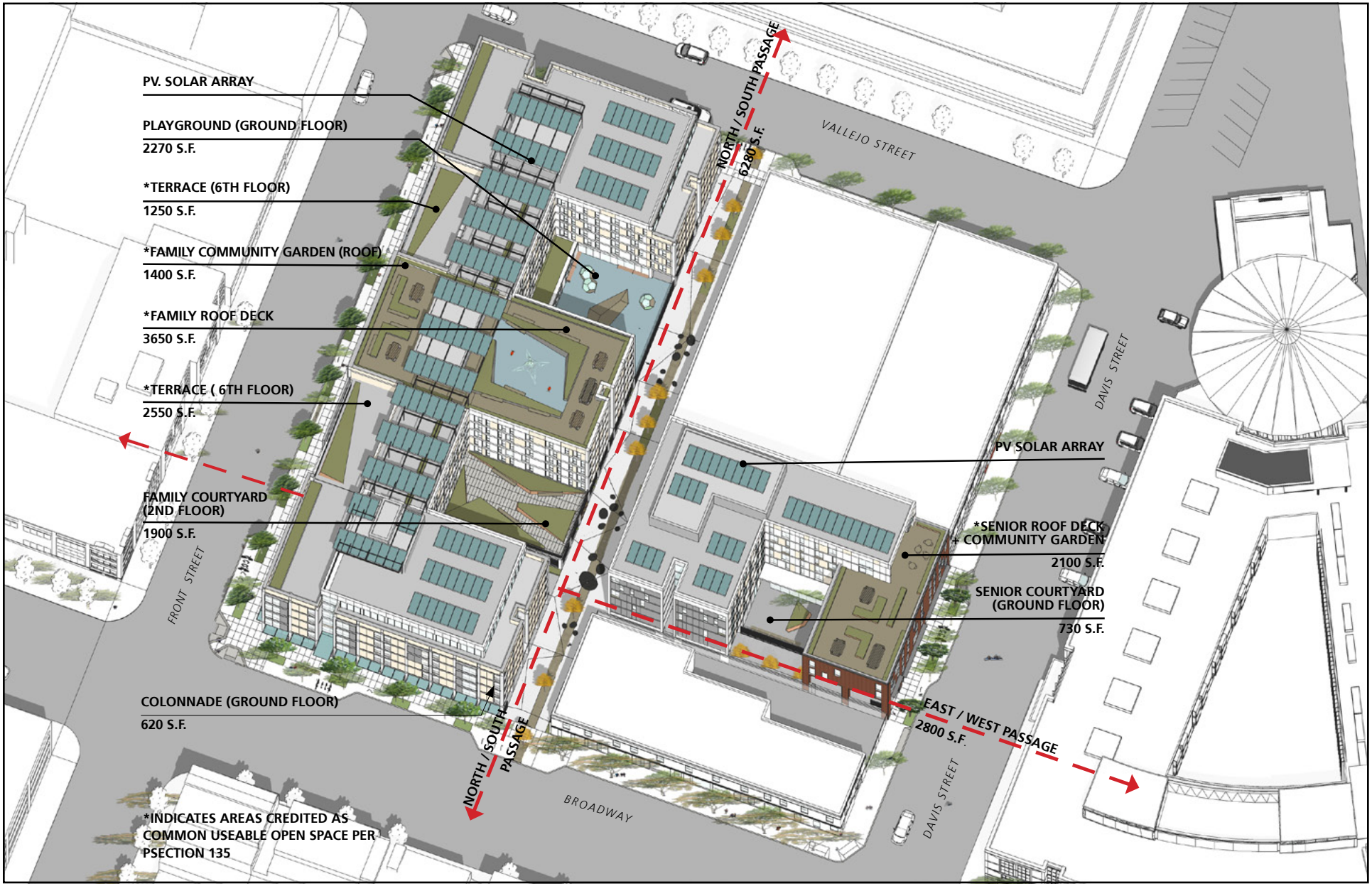
Perspective B: Front Street/Broadway Intersection

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Perspective C: Front Street/Vallejo Street Intersection

Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

Perspective D: Vallejo Street/Davis Street Intersection



Source: The John Stewart Company, Bridge Housing, Leddy Maytum Stacy Architects, February 26th, 2018.

OPEN SPACE

The proposed project would provide open space for residents, tenants, and members of the general public. The proposed open space is shown on Figures 3 and 4, and Figures 7 through 9 above.

Per Planning Code section 135, the proposed project is required to provide 48 square feet of common open space per family housing unit.[5] As shown above on Figure 16, the approximately ~~6,900~~8,850 square feet of common open space for residents of the family housing building would be comprised of an approximately ~~1,100~~1,250-square-foot terrace on the ~~fifth~~sixth floor, a second ~~1,200~~2,550-square-foot terrace on the sixth floor, a ~~3,200~~3,650-square-foot roof deck, and a 1,400-square-foot community garden on the roof. The proposed total of approximately ~~6,900~~8,850 square feet of common open space would exceed the City's open space requirements for the family housing building by approximately ~~900~~2,850 square feet.

Per Planning Code section 135(d)(3),[6] the proposed project is required to provide 24 square feet of common open space per senior housing unit.[7] As shown on Figure 16, the common open space for residents of the senior housing building would be comprised of an approximately 2,100-square-foot roof deck and community garden on the fifth floor. The proposed total of approximately 2,100 square feet of common open space would exceed the City's open space requirements for the senior housing by approximately 800 square feet. Per section 135(g)(2), the proposed project would also be required to meet the City's inner court dimension requirements.

Other proposed open space areas that do not meet Planning Code section 135(d)(3) and are not credited towards the City's open space requirement include the approximately ~~3,200~~2,270-square-foot playground on the ground floor, the approximately ~~700~~620-square-foot colonnade (for the commercial space) on the ground floor, and the approximately ~~2,000~~1,900-square-foot family courtyard on the second floor of the family housing building, as well as the approximately ~~1,300~~730-square-foot senior courtyard on the ground floor of the senior housing building.

The proposed project also includes open space in the form of the two mid-block passages. While it is anticipated that the majority of the users of these passage ways would be residents of the proposed project and users of the childcare facility and retail space, these mid-block passages would be publically accessible during certain times. The north-south mid-block passage that would connect Vallejo Street and Broadway would include approximately ~~6,600~~6,280 square feet of open space. The east-west mid-block passage would connect the family housing building's residential lobby to Davis Street and would include approximately ~~2,100~~2,800 square feet of open space. Both mid-block passages would be open to the public during general retail hours (8:00 a.m. to 8:00 p.m.), and these hours are subject to assessment once the project is in operation.

[5] 48 square feet of family housing common open space x 125 units = 6,000 square feet

[6] *San Francisco Planning Code* section 135(d) references the actual amount of reduced square footage to satisfy open space requirement for senior housing projects defined pursuant to Planning Code section 202.2(f)(1).

[7] 24 square feet of senior housing common open space x 53 units = 1,272 square feet

BICYCLE FACILITIES, ACCESS, AND LOADING

The proposed project would provide *class 1* and *class 2* bicycle parking spaces.[8] Per Planning Code sections 155.1 and 155.2, total bicycle parking would be provided via 120 *class 1* spaces (110 spaces for the family housing building[9] and 10 spaces for the senior housing building[10]) and 20 *class 2* bicycle parking spaces (16 for the family building and four for the senior building) for residential and commercial[11] uses (see Figure 3). An approximately 1,300-square-foot bike room would be located at the ground level of the family housing building. This bike room would hold residential *class 1* bicycle parking spaces and cargo spaces. A second approximately 100-square-foot bike room would be located in the senior housing building on the ground floor. Both *class 1* bike rooms would be accessed through the residential lobbies of both buildings via Front Street, Davis Street, and the east-west mid-block passage. The *class 2* spaces would be located at Vallejo Street and Broadway Street adjacent to the entrances to the north-south mid-block passage and at Davis Street in front of the senior building.

As shown on Figure 3 above, pedestrians and bicyclists would access the project site via the proposed north-south mid-block passage, and east-west mid-block passage, and the sidewalks adjacent to the project site frontages.

No off-street vehicular parking spaces or off-street loading zones would be provided at the project site; however, the project proposes three on-street loading zones that would meet the ADA standards. The proposed project would convert two existing metered parking spaces on Front Street to a freight loading zone to service the family housing building; two existing metered parking spaces on Davis Street to a passenger loading zone to service the senior housing building; and two existing metered parking spaces on Vallejo Street to a passenger loading zone to service the childcare space. The three proposed on-street loading zones would each be 35 feet long. The conversion of metered parking spaces to loading zones would require approval at a public hearing of the SFMTA.

New ADA-compliant curb ramps would be constructed for both connecting crosswalks at the northeast corner of the Front Street /Broadway intersection and the southeast corner of the Front Street/Vallejo Street intersection. Additional ADA-compliant curb ramps would be provided at the north end of the proposed passenger loading zone along Davis Street, at the north end of the proposed sidewalk extension along Front Street (immediately south of the proposed commercial loading zone), and at the east end of the corner bulb-out into Vallejo Street at the Front Street/Vallejo Street intersection.

[8] The *class 1* bicycle spaces are in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, non-residential occupants, and employees; and *class 2* bicycle spaces are 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.

[9] Family Housing: *class 1* bicycle parking for buildings over 100 units is required to provide 100 spaces plus one space for every four units over 100; and *class 2* bicycle parking is one space per 20 units.

[10] Senior Housing: *class 1* bicycle parking is one space for every 10 units or beds, whichever is applicable; *class 2* bicycle parking is two spaces for every 50 units or beds, whichever is applicable, or a minimum of two spaces.

[11] Childcare Facility: *class 1* bicycle parking is a minimum two spaces or one space for every 20 children; *class 2* bicycle parking is one space for every 20 children.

LANDSCAPING

There are no existing street trees adjacent to the project site. A total of 18 new trees would be planted on the sidewalks along all four frontages of the proposed project (see Figure 3), in accordance with the *San Francisco Public Works Code* (Public Works Code) section 806, which requires that one street tree be planted per every 20 linear feet of project site frontage. Ten trees would be planted along Front Street, four trees along Vallejo Street, four trees along Broadway, and three trees along Davis Street. All of the new street trees would be placed in continuous soil-filled trenches. Along the 88 Broadway project location frontages (Front, Broadway, and Vallejo), 27 street trees are required; however, only 18 street trees are proposed. Therefore, the proposed project would require a waiver for providing fewer than the minimum number of street trees required under Public Works Code section 806. No trees may be located within 25 feet of an intersection, for pedestrian safety. Raised planters and approximately eight trees would be planted along the north-south and east-west public passages between the two buildings.

FOUNDATION AND EXCAVATION

The proposed project would include demolition of approximately 365 tons of asphalt debris and include excavation of approximately 4,000 cubic yards of soil material. Excavation would extend to a maximum depth of approximately 4 feet below grade to accommodate building foundations and between 70 to 100 feet below grade to accommodate the required piles.[12] The proposed project is anticipated to be constructed applying a deep foundation system with piles and grade beams. The family building (88 Broadway) would require 123 piles plus an allowance for an additional three piles. The senior building (735 Davis Street) would require 47 piles plus an allowance for two piles, for a total of approximately 175 piles across the project site. The project would not use the high-impact method of pile driving.

CONSTRUCTION SCHEDULE

The project sponsor estimates that the demolition of the existing surface parking lots and construction of the proposed project would occur over an approximately 19-month period with both buildings being constructed concurrently. The construction of the family building (the larger building) would occur over the full 19-month period and construction of the senior building (the smaller building) would take place over the first 16 months. Construction of the two buildings would include the following: demolition (1 month), shoring and excavation (1 month), foundation (1 to 3 months), building construction (10 to 12 months), and installation of facades (3 to 4 months). The proposed project would generate approximately 365 tons of asphalt demolition debris and 4,000 cubic yards of soil material during construction which would be exported offsite. During the construction phase of the proposed project, worker parking would

[12] Bedrock depth varies across the project site and ranges from 50 to 70 feet below the surface at the 88 Broadway location (page 5, *88 Broadway Geotechnical Exploration* dated June 22, 2017) and 70 to 80 feet below the surface at the 735 Davis Street location (page 5, *735 Davis Street Geotechnical Exploration* dated June 22, 2017). As shown in Table 4.1.1-1 (Estimate of Vertical Capacities) of both geotechnical reports, the embedment into the bedrock ranges from 10 to 20 feet. All documents cited in this report (unless otherwise noted) and used in its preparation are hereby incorporated by reference into this initial study. Copies of documents referenced herein are available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2016-007850ENV.

occur off-site. As the entire project site would be under construction at the same time, no designated parking for construction workers would be provided on-site, and they would be expected to park on the street or in nearby garages, or use transit.

3. APPROVALS REQUIRED FOR THE PROPOSED PROJECT

The proposed project would require the following approvals from the City and County of San Francisco:

BOARD OF SUPERVISORS

- Approval of a ground lease for Assessor's Block 140, Lot 007 (88 Broadway) owned by the Port of San Francisco.
- Approval of a ground lease for Assessor's Block 140, Lot 008 (735 Davis Street) owned by the San Francisco Public Works Department.

PLANNING DEPARTMENT

- Administrative approval of an Affordable Housing Project Authorization per Planning Code section 315, of the Conditional Use Authorization (section 303 of the Planning Code) for a Planned Unit Development (PUD) per Planning Code section 304. Implementation of the proposed project would require modification of the following Planning Code requirements through the approval of a PUD: modifications for the rear yard configuration per sections 130 and 134, dwelling unit exposure for 14 family housing units and three senior housing units located on the mid-block passage per section 140, active use depth setback per section 145.1, childcare parking requirement per section 151, and off-street loading per section 152.

HISTORIC PRESERVATION COMMISSION

- Approval of a Certificate of Appropriateness from the Historic Preservation Commission for new construction within the Northeast Waterfront Landmark District (a Planning Code Article 10 historic district).

ACTIONS BY OTHER CITY DEPARTMENTS (APPROVING BODIES NOTED IN PARENTHESES)

- Urban design recommendations following the waterfront design review process (Design Advisory Committee)
- Approval of demolition and site permits permit (Planning Department and Department of Building Inspection).
- Approval of demolition, grading, and building permits (Department of Building Inspection).
- Approval of dewatering well permits, if dewatering is required, (Public Utilities Commission).
- Approval of permits for streetscape improvements in the public right-of-way (Public Works).
- Approval of a waiver for providing nine fewer street trees than required under Public Works Code section 806 (Public Works).

- Approval of a request for curb cut, color curb, and on-street parking changes on Front Street, Vallejo Street, and Davis Street (SFMTA).
- 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 Non-potable Implementation Plan per the Non-potable Water Ordinance (Public Utilities Commission).
- Approval of and use of dewatering wells (should they be used) per Article 12B of the San Francisco Health Code (joint approval Public Utilities Commission and Department of Public Health).
- Approval of a Site Mitigation Plan, Soil Mitigation Plan, and Dust Control Plan prior to commencement of excavation work pursuant to the *San Francisco Health Code* Article 22A (Department of Public Health).

ACTIONS BY OTHER GOVERNMENT AGENCIES

- Approval of non-public trust uses of the project and ground lease (State Lands Commission).
- Approval of permit for installation, operation, and testing of diesel backup generators (Bay Area Air Quality Management District).

APPROVAL ACTION

The approval of the Conditional Use Authorization for a Planned Unit Development under an Affordable Housing Project Authorization by the Planning Department constitutes the Approval Action for the proposed project, pursuant to section 31.04(h)(3) of the *San Francisco Administrative Code*. The Approval Action date establishes the start of the 30-day appeal period for this California Environmental Quality Act (CEQA) determination pursuant to section 31.(d) of the *San Francisco Administrative Code*.

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B. Project Setting

1. PROJECT SITE AND SURROUNDING LAND USES

The project site is located in the North Beach neighborhood one block west of Pier 7, Pier 9, and the Embarcadero, which is a major arterial road to get around San Francisco. It is bounded on all sides by two-way streets: Vallejo Street to the north, Davis Street to the east, Broadway to the south, and Front Street to the west. Access to the project site is currently available via each of the four surrounding streets. The project site consists of two separate parcels, with the larger western parcel (Lot 007) fronting Vallejo Street, Front Street, and Broadway and the smaller eastern parcel (Lot 008) fronting Davis Street, in between two existing buildings. Both parcels are relatively flat and currently serve as surface parking lots without existing structures.

The project site is located within the Northeast Waterfront Landmark District, which is a Planning Code Article 10 historic district, and the Waterfront Special Use District No. 3, and the Base of Telegraph Hill Subarea of the *Northeastern Waterfront Area Plan* area of the General Plan. There are two landmarked historic buildings near the project site along Front Street, including the Gibb-Sanborn Warehouse (North) to the north of the project site at 901 Front Street at Vallejo Street and the Gibb-Sanborn Warehouse (Trinidad) to the west of the project site at 855 Front Street at Vallejo Street.[13] The project site is also within the C-2 (Community Business) Zoning District and a 65-X Height and Bulk District (65-foot maximum height, no bulk limit). Most properties to the north, east, and west of the project site have a General Plan land use designation of General Commercial and are within the C-2 Zoning District with a mix of 65-X and 40-X Height and Bulk Districts. Most properties to the south and southeast of the project site have a General Plan land use designation of High Density Residential and are within the RC-4 (High Density, Residential Commercial) Zoning District with a mix of 275-E and 84-E Height and Bulk Districts. The project site is also within the area that was the subject of the 2010 Northeast Embarcadero Study,[14] guidelines which were incorporated into the *Northeast Waterfront Area Plan*.

The types of land uses in the surrounding area include mixed-use, commercial offices, and some residential uses with most of the buildings two to five stories high (approximately 35 to 55 feet tall.) The area does not have nearby community facilities, but has diverse commercial businesses and offices. The project site shares a block with two existing office buildings. Directly to the north of the project site is a building used for various local news outlets, including KRON 4, KGO, and ABC7. Directly to the west and south of the proposed project are public parking garages, and more offices, and residences. To the east of the project site is a parking lot used by the Port of San Francisco. The project site's Front Street sidewalk is currently used for A Moveable Feast's food truck events from time to time.

[13] The Gibb-Sanborn Warehouses are listed at the local level, for Article 10 of the *San Francisco Planning Code*.

[14] This is an urban design analysis for the northeast embarcadero area that presents public realm improvements and urban design guidelines for new development consistent with eight design principles established during the Planning Department's analysis.

The nearest parks or public open spaces are the Levi's Plaza and Seawall Lot approximately 0.3 miles to the north of the project site, Sydney G. Walton Square approximately 0.1 miles to the south of the project site on Jackson Street, Sue Bierman Park approximately 0.3 miles to the south of the project site along the Embarcadero, and the Filbert Steps approximately 0.5 miles to the west of the project site. The piers and sidewalks along the Embarcadero (one block to the east) are used for recreation and entertainment including the Exploratorium to the north and Ferry Building to the south.

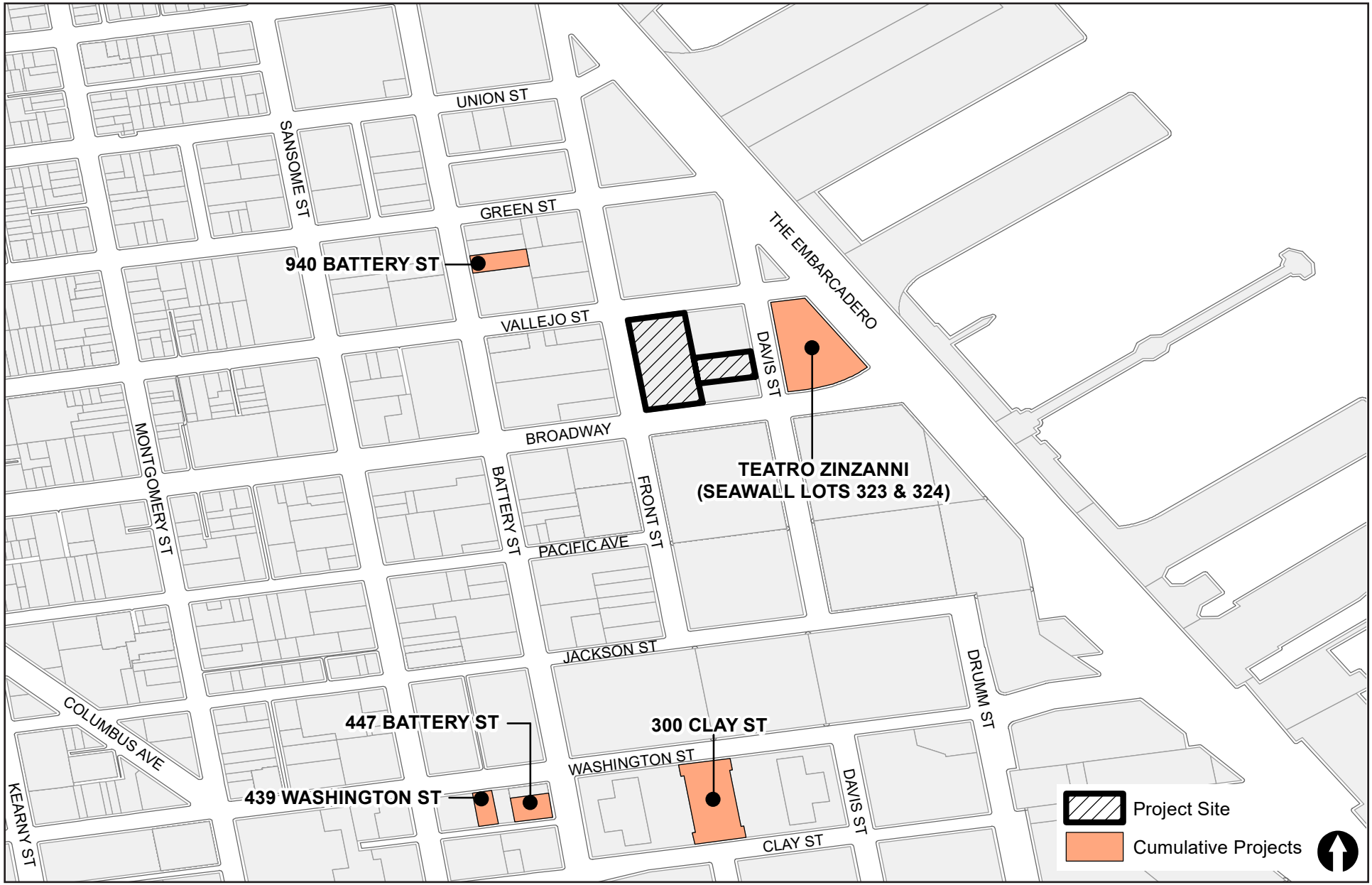
2. CUMULATIVE PROJECTS

Past, present, and reasonably foreseeable cumulative development projects within a 0.25-mile radius of the project site are listed below in Table 2 and mapped on Figure 17. These cumulative projects are either under construction or the subject of an Environmental Evaluation Application currently on file with the Planning Department. As shown in Table 2, reasonably foreseeable projects within a 0.25-mile radius of the project site includes new residential, museum, hotel and theater development as well as space for community, retail, and office uses.

TABLE 2 CUMULATIVE PROJECTS WITHIN A 0.25-MILE RADIUS OF THE PROPOSED PROJECT

#	Address	Case File No.	Dwelling Units	Open Space	Retail	Office	Museum	Hotel	Theater
				(Gross Square Feet)					
1	Seawall Lots 323/324	2015-016326ENV		7,500				183,000 (200 rooms)	25,000 (280 seats)
2	439 Washington Street	2015-015553ENV			4,500			101,000 (189 rooms)	
3	447 Battery Street	2014-1036ENV	9		2,470			85,510 (188 rooms)	
4	300 Clay Street [a]	2015-006980ENV				16,230			
5	940 Battery Street [b]	2015-001033ENV			625	11,470	28,669		
Totals			**9**	**7,500**	**7,595**	**27,700**	**28,669**	**369,510**	**25,000**

Notes:
a. The 300 Clay Street project would enclose approximately 16,230 gross square feet of open air space on the ground and plaza levels within an existing office building.
b. The 940 Battery Street is for interior and exterior alterations to create a new fourth floor and fifth floor at the roof level. This project also proposes a change of use from warehouse to museum and retail.
Source: City of San Francisco.



Source: City of San Francisco, 2017; PlaceWorks, 2018.

88 BROADWAY & 735 DAVIS STREET PROJECT INITIAL STUDY

Case No. 2016-007850ENV

FIGURE 17

Cumulative Projects within 0.25-mile Radius

Cumulative analysis under CEQA may use a list-based or projections-based approach depending on the environmental topic and resources addressed. The above Table 2 represents cumulative projects within a 0.25-mile radius of the project site that may be considered in determining environmental effects that are more localized. A projections-based analysis would consider county-wide or regional growth and is typically based on growth projections developed by the Association of Bay Area Governments (ABAG) and refined by Planning Department staff.

For 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 shadowed by the project. In other cases, such as air quality, the context would be the San Francisco Bay Area Basin.

C. Compatibility With Existing Zoning and Plans

	Applicable	*Not Applicable*
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	☒	☐
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	☒	☐
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.	☒	☐

1. SAN FRANCISCO PLANNING CODE

All projects for the City of San Francisco are required to abide by the Planning Code, which includes the City's zoning, land uses, densities, and building configurations requirements. Unless projects conform to the Planning Code, including any exceptions, special authorizations, and amendments, permits to construct, alter, or demolish buildings may not be issued. The following section presents federal, local, and regional plans, policies, and goals that are applicable to the proposed project. Additionally, where inconsistencies are identified that could result in physical effects on the environment, the reader is directed to analysis of those effects below in section E: Evaluation of Environmental Impacts. Any conflicts of the project with applicable plans and policies would not, in and of themselves, constitute significant environmental impacts. Decision-makers will consider the consistency of the project that do not directly relate to physical environmental issues when they determine whether to approve or disapprove the project.

Overall, the proposed project would be 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 within the C-2 (Community Business) Zoning District. The proposed project would develop 125 affordable family units and 53 affordable senior units in two 6-story buildings, which would include approximately 5,300 square feet of commercial development and an approximately 4,300-square-foot childcare facility in the family housing building and approximately 1,200 square feet of commercial space in the senior housing building. Per Planning Code section 210.1, residential, commercial, and institutional uses are principally permitted uses within the C-2 Zoning District.
- **Height and Bulk:** The project site is within the 65-X Height and Bulk District, which has a 65-foot maximum height and no bulk limit. Mechanical equipment and appurtenances, and elevator and stair penthouses are permitted to extend an additional 10 feet beyond the height limit, pursuant to Planning Code section 260(b). The proposed six-story buildings would be 65 feet tall and with roof top appurtenances would extend to a maximum of 75 feet tall. Accordingly, the proposed project would meet the City's height restrictions for the project site.

- **Residential Density:** The base density (dwelling units per acre) permitted for the proposed project is based on its C-2 Zoning designation, which permits one unit per 200 square feet of lot area. Therefore, under the C-2 Zoning District, 243 units are permitted.[15] However, if a PUD is granted, the proposed project would be allowed the density equivalent to the next highest zoning district, minus one unit (C-3 Zoning District), which allows one unit per 125 square feet of lot area. Therefore, the permitted density through a PUD would be 388 units.[16] Additionally, pursuant to section 202.2(f)(E) of the Planning Code and relevant zoning sections, more density would be permitted for senior housing. The proposed 178 units is within the permitted density under any of these scenarios; thus, the proposed project is consistent with the City's density requirements.
- **Residential Open Space:** Per Planning Code section 135, the C-2 Zoning District abides by the nearest R (Residential) district to establish the residential density and open space requirements. The adjacent RC-4 Zoning District requires 36 square feet of private open space or 48 square feet of common open space for each dwelling unit. Under this requirement the proposed project is required to provide 48 square feet of common open space per family housing unit. The proposed approximate 9,000 square feet of common open space in the family housing building would exceed the City's 6,000-square-foot[17] open space requirements by approximately 3,000 square feet. Per Planning Code section 202.2(f)(1) the proposed project is required to provide 24 square feet of common open space per senior housing unit. The approximately ~~3~~2,100 square feet of common open space proposed in the senior housing building would exceed the City's 1,272-square-foot[18] open space requirements by approximately ~~1,~~800 square feet. Accordingly, the proposed project would comply with the City's open space requirements. Per section 135(g)(2), the proposed project would also be required to meet the City's inner court dimension requirements.
- **Rear Yard Requirements:** The rear yard requirements under Planning Code sections 130 and 134 are intended to ensure the protection and continuation of established mid-block, landscaped open spaces, and maintenance of a scale of development appropriate to each zoning district, consistent with the location of adjacent buildings. Under Planning Code section 134, a rear yard equivalent to 25 percent of the average lot depth, starting at the lowest story containing a dwelling unit and at each succeeding level of the building is required. The proposed project is required to provide 9,453 square feet of rear yard space for the family housing building and 2,701 square feet of rear yard space for the senior housing building. Open space for residents is proposed; however, the open space will not be a rear yard at 25 percent of lot depth. Thus, the proposed project would require modifications through a PUD for the proposed rear yard configuration because the project would not provide a rear yard at 25 percent of lot depth per Planning Code sections 130 and 134.
- **Active Depth Setbacks:** Planning Code section 145.1 regulates street frontages to ensure that they are attractive and pedestrian-oriented, and are appropriate and compatible with the surrounding

[15] 48,620-square-foot lot/200 square feet of lot area = 243.1 units

[16] 48,620-square-foot lot/125 square feet of lot area = 388.96 units

[17] 48 square feet x 125 units = 6,000 square feet required open space

[18] 24 square feet x 53 units = 1,272 square feet required open space

buildings and uses. The proposed project would require a PUD modification for the proposed active use depth setback per section 145.1.

- **Dwelling Unit Exposure:** Planning Code section 140 requires that each dwelling unit have at least one room that meets the 120-square-foot minimum superficial floor area requirement of section 503 of the *San Francisco Housing Code* which has a window that faces directly on a street right-of-way, code-complying rear yard, or an appropriately sized courtyard. The proposed project would require a modification through the PUD process for 10 dwelling units in the senior housing building located on the mid-block passage because these units face onto courtyards that do not meet the minimum dimensional requirements in Planning Code section 140.
- **Parking and Loading:** Pursuant to Planning Code section 151, vehicular parking is not required for affordable housing or senior housing projects, nor is vehicular parking required for the commercial uses. Per Planning Code section 151, the childcare use requires one vehicular parking space for each 25 children to be accommodated at any one time, where the number of such children exceeds 24. The childcare facility is expected to accommodate up to 55 children, requiring two vehicular parking spaces.[19] The proposed project does not include vehicular parking. Therefore, the proposed project would meet the residential and general commercial parking requirements, but would not meet the childcare parking requirement and requires an exception from the Planning Code. Pursuant to Planning Code section 152.1, one off-street loading space is required for residential use between 100,001 to 200,000 gsf. No off-street loading spaces are proposed. However, the conversion of six existing metered parking spaces to three 35-foot-long on-street loading spaces is proposed for the project. As shown on Figure 2, a freight loading zone would be provided on Front Street for the family housing building, a passenger loading zone would be provided on Vallejo Street for the childcare facility, and another passenger loading zone would be provided on Davis Street for the senior housing building. Therefore, the proposed project would require a PUD modification per section 152 because no off-street loading would be provided.

  Planning Code sections 155.1 and 155.2 require that the project provide *class 1* and *class 2* bicycle parking for residential (family and senior housing) and commercial (retail and childcare) uses. The project proposes bicycle parking rooms in both buildings on Level 1 (ground level) (see Figure 3). The family housing building requires 110 *class 1* bicycle parking spaces as follows: 106 residential spaces, one commercial space and three childcare facility spaces. Additionally, 16 *class 2* bicycle parking spaces are required as follows: six residential spaces, seven commercial spaces, and three childcare facility spaces. The family housing building would provide 110 *class 1* and 16 *class 2* bicycle parking spaces and would therefore meet these requirements. The senior housing building requires five *class 1* bicycle parking spaces as follows: five residential spaces and zero commercial spaces. The senior housing building also requires four *class 2* bicycle parking spaces as follows: two residential spaces and two commercial spaces. The senior housing building would provide 10 *class 1* and four *class 2* spaces and would therefore meets these requirements. Accordingly, the proposed project meets the City's bicycle parking requirements.

[19] AECOM, 2017. *88 Broadway Transportation Impact Study*, San Francisco, CA, June 20. page 8.

- **Street Trees:** Public Works Code section 806(d)(2) requires 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 is required to make pedestrian and streetscape improvements to the public right-of-way 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 blockface. There are no existing street trees adjacent to the project site. The proposed project would add a total of 21 trees along the frontages on Vallejo Street, Davis Street, Broadway, and Front Street. For the senior housing development, three street trees are required for the 30-foot frontage on Davis Street and three street trees are proposed. However, for the family housing building, 27 trees are required but only 18 street trees are proposed. The proposed project does not comply with the street tree ordinance required by the City and is seeking an approval of a waiver for providing nine fewer trees than is required under Public Works Code section 806. To fulfill the requirement, an in-lieu fee shall be paid or alternative landscaping is required in amount comparable to or greater than the number of street trees waived.

  Additionally, the City's Urban Forestry Ordinance, Public Works Code sections 801 et seq., requires a permit from Public Works 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 project site does not include any on-site or streets trees under existing conditions and therefore would not violate the ordinance.
- **Historic District/Special Use District:** The project site is a 'non-contributing'[20] property within the Northeast Waterfront Landmark District, which is 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, and Appendix D establishes the location and boundaries of the historic district and outlines the acceptable styles and criteria for alterations and new construction. Due to 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. The review would determine if the proposed project is consistent with sections 6 and 7 of Appendix D of Article 10, which require that the proposed project maintain the scale and basic character of the Northeast Waterfront Landmark District. Section 6 and section 7 describe the requirements for the overall form and continuity, scale, and proportion, fenestration (i.e., the arrangement of windows and doors on the elevations of a building), and types of building materials, color, texture, and use of decorative elements appropriate for this historic district. Per the requirements in Appendix D, fenestration must be rhythmically spaced and related in shape

[20] According to Appendix D of Article 10 of the *San Francisco Planning Code*, the characteristics of the contributing buildings in the Northeast Waterfront Landmark District (a historic district) important to compatibility of new construction include: height, scale and proportion, detail, fenestration, materials, color, texture, façade line continuity, skylights, and infill construction. Under existing conditions, the project site does not include any buildings; therefore, the project site does not contain a contributor to the Northeast Waterfront Landmark District in which it is located.

and proportion to those in nearby buildings, and have building materials that are rough-textured in appearance similar to surrounding buildings in the district.

The project is also within the Waterfront Special Use District No. 3, and is subject to the requirements outlined in Planning Code section 240.3. Planning Code section 240 sets forth regulations to preserve the unique characteristics of waterfront special use districts, requiring developments to undergo a Waterfront Design Review process. Planning Code section 240.3 discusses the specific design, land use, scale, and other factors for development within Waterfront Special Use District No. 3 to ensure that new developments adhere to the character of surrounding areas of the city, have higher portions near Telegraph Hill and lower portions near the Embarcadero, conform to the *Northeast Waterfront Area Plan*, and are consistent with the Waterfront Land Use Plan's Waterfront Design and Access goals, policies, and criteria.

The project is an affordable housing project and shall undergo administrative review and approval procedures for an Affordable Housing Project Authorization (Planning Code section 315). As described above, implementation of the proposed project would require modification of the Planning Code requirements for rear yard setbacks, dwelling unit exposure, active use depth setback, and vehicular parking (for the childcare facility) through the approval of a PUD. The project also seeks an approval of a waiver for providing nine fewer trees than is required under Public Works Code section 806. In addition, the project requires review and approval of a Certificate of Appropriateness from the Historic Preservation Commission for new construction within the Northeast Waterfront Landmark District (a Planning Code Article 10 historic district).

2. PLANS AND POLICIES

SAN FRANCISCO GENERAL PLAN

In addition to the Planning Code, the proposed project is subject to the General Plan. The General Plan provides general policies and objectives to guide land use decisions. The General Plan contains 10 elements (Commerce and Industry, Recreation and Open Space, Housing, Community Facilities, Urban Design, Environmental Protection, Transportation, Air Quality, Community Safety, and Arts) that set forth goals, policies, and objectives for physical development within the city. In addition, the General Plan includes area plans that outline goals and objectives for specific geographic planning areas, such as the *Northeast Waterfront Area Plan*, which includes the project site.

A conflict between a proposed project and a General Plan policy does not, in itself, indicate a significant effect on the environment within the context of CEQA. Any physical environmental impacts that could result from such conflicts are analyzed in this initial study. Where inconsistencies are identified that could result in physical effects on the environment, the reader is directed to the analysis of those effects in section E, Evaluation of Environmental Effects. In general, potential conflicts with the General Plan are considered by the decisions-makers (typically the Planning Commission) independent of the environmental review process. Thus, in addition to considering inconsistencies that affect environmental issues, the Planning Commission considers other potential inconsistencies with the General Plan, independent of the environmental review process, as part of the decision to approve or disapprove a

proposed project. Any potential conflict not identified in this environmental document would be considered in that context and would not alter the physical environmental effects of the proposed project that are analyzed in this initial study.

Urban Design Element

The Urban Design Element addresses San Francisco's physical character and environment with respect to development and preservation.[21] The element primarily addresses objectives and policies relating to review of new development, or substantial alterations to existing buildings. Urban design policies require proposed projects to take into account the surrounding urban context through building design and placement. Policies strive to integrate proposed buildings with existing buildings by designing building height and bulk that respects adjacent buildings, establishing and protecting visual relationships and transitions, and respecting older or historical structures. Specifically, Policy 2.6 states that proposed buildings respect the character of older surrounding buildings. Additionally, Policy 2.6 protects prevailing heights, building lines, and dominant building features from new construction, ensuring that new construction complements the surrounding development using similar detail, texture, color, and materials. The proposed project would not obviously or substantially conflict with any goals, policies, or objectives of the General Plan, including those of the Urban Design Element. The proposed buildings would range from 6 to 4 stories in height, which is consistent with the prevailing heights in the area. In addition, 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.

Northeast Waterfront Area Plan

As part of the General Plan, the *Northeast Waterfront Area Plan* (Area 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 on the waterfront. Residential and commercial uses, such as housing, offices, neighborhood-oriented retail and service businesses, and community and cultural facilities, are identified as appropriate uses in the inland areas (*i.e.,* where the project site is located). The Area Plan also aims to re-integrate the waterfront area with the fabric of the City and continue to implement a robust multi-modal movement network that would connect recreational areas with community facilities, historic and architecturally significant buildings, residential areas, and employment centers. The project site is within the Base of Telegraph Hill Subarea, which is one of the Area Plan's four subareas and contains Pier 35 through Pier 7. The Area Plan recommends general objectives and policies for Land Use, Transportation, and Urban Design and specific objectives and policies that are explicit to each subarea. The following policies are examples of applicable policies for the proposed project:

- Policy 10.1 outlines preservation of physical form of the waterfront and reinforces San Francisco's distinctive hill form by maintaining low structures near the water, with an increase in vertical development near hills or the downtown core area.

[21] San Francisco General Plan, Urban Design Element (adopted by Planning Commission Resolution No. 12040, 1990, as amended through 2005.

- Policy 17.2 ensures the compatibility of new development with the historic and architectural maritime character of the Northeast Waterfront Landmark District.
- ~~For example,~~ Policy 18.2 encourages the development of residential uses as a major use on inland sites in this area, and states that such uses should be especially encouraged immediately adjacent to Telegraph Hill and at the upper levels of commercial development.
- Policy 20.1 maintains low structures near the water, with an increase in vertical development towards Telegraph Hill.

The proposed project would not obviously or substantially conflict with any goals, policies, or objectives of the General Plan, including those of the Area Plan. The proposed project would step down from 6 stories at the Front Street property line to 4 stories at the Davis Street property line, decreasing in height in proximity to the waterfront. In addition, an approximately 5-foot step back on the sixth floor of the Front Street façade of the proposed family housing building would reduce the appearance of mass along that property line making the building appear closer to 5 stories tall from Front Street. The stepping down of the proposed buildings would be consistent with the Policies 10.1 and 20.1, which call for lower structures near the water with an increase in height in the direction of Telegraph Hill and the downtown area. Furthermore, the Historic Preservation Commission's review of the proposed project for a Certificate of Appropriateness for new construction in the Northeast Waterfront Landmark District would ensure conformance with Policy 17.2. 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 proposed project does not encroach upon the Gibbs-Sanborn Warehouse historic landmarks and is subject to the approval of a Certificate of Appropriateness from the Historic Preservation Commission for new construction in the Northeast Waterfront Landmark District.

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 City's Planning Department. This study was conducted to assess empty surface parking lots, including the project site, along the west side of the Embarcadero for future infill development and was adopted on July 8, 2010. The guidelines from this study 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 ensure that new development fits into context of historic properties. The proposed project is compatible with the heights of the surrounding buildings and provides east-west and north-south landscaped mid-block passageways located between the two proposed buildings that generally accommodate pedestrians and cyclists.

WATERFRONT LAND USE PLAN

The portion of the project site that would contain the family housing building (the parcel at 88 Broadway) is within the boundary of the Port of San Francisco's *Waterfront Land Use Plan* (Land Use Plan), which was

adopted in 1997 and is currently being updated.[22] The Port of San Francisco Commission (Port Commission) is responsible for the seven and one-half miles of San Francisco Waterfront adjacent to San Francisco Bay, which the Port of San Francisco develops, markets, leases, administers, manages, and maintains. The project will require a ground lease agreement with the Port of San Francisco for the 88 Broadway parcel. Under the Land Use Plan, the 88 Broadway parcel is identified as Seawall Lot 322-I and is within the Northeast Waterfront Subarea. This subarea extends from Pier 35 to Pier 7 and is part of a former maritime and industrial district, which is successfully evolving into a vibrant urban neighborhood. The 88 Broadway parcel is a designated Waterfront Mixed Use Opportunity Area which are areas identified for mixed-use development.[23] Additionally, the Land Use Plan's Waterfront Design and Access Element includes the following policies that seek to ensure development on seawall lots under Port ownership are compatible with the seven city neighborhoods that begin at the waterfront, including the Base of Telegraph Hill Neighborhood:

- **Respect City Form:** Respect city form by stepping new building down toward The Embarcadero or other waterfront roadways.
- **Neighborhood Scale and Character:** New buildings should respect the scale and architectural character of adjacent neighborhoods.

The residential uses, open space, retail uses, architectural features, and community facilities identified in the proposed project are among the approved land uses under the Land Use Plan.[24] The proposed project is subject to review by the Waterfront Design Advisory Committee for consistency with the policies and design criteria Land Use Plan's Waterfront Design and Access Element to ensure the proposed project would be compatible with the surrounding neighborhood.

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 to establish eight Priority Policies. The Priority Policies, which provide general policies and objectives to guide certain land use decisions, contain policies that relate to physical environmental issues. Where appropriate these issues are discussed in the relevant environmental topical subsection of section E, Evaluation of Environmental Impacts, of this initial study. These policies are listed as follows with a description of the environmental topic subsection where they are addressed: 1) preservation and enhancement of neighborhood-serving retail uses; 2) protection of neighborhood character (see section E.3, Cultural Resources); 3) preservation and enhancement of affordable housing; (see section E.1, Land Use and Planning); 4) discouragement of commuter automobiles (see section E.4, Transportation and Circulation); 5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and

[22] Port of San Francisco, *Waterfront Plan Update*. Available at: http://sfport.com/waterfront-plan-update, accessed on March 1, 2017.

[23] Port of San Francisco, Waterfront Map. Available at: http://sfport.com/ftp/uploadedfiles/about_us/divisions/planning_development/MapD-Waterfront.pdf, accessed on March 1, 2017

[24] Port of San Francisco. Available at: http://sfport.com/sites/default/files/FileCenter/Documents/8521-ch4NEWF.pdf, page 7, accessed on March 1, 2017.

business ownership; 6) maximization of earthquake preparedness (see section E.13, Geology and Soils); 7) landmark and historic building preservation (see section E.3, Cultural Resources); and 8) protection of open space (see section E.8, Wind and Shadow, and section E.9, Recreation).

Prior to issuing a permit for any project which requires an initial study under CEQA; prior to issuing a permit for any demolition, conversion, or change of use; and prior to taking any action which requires a finding of inconsistency with the General Plan, the City is required to find that the proposed project would be consistent with the Priority Policies. As noted above, the physical environmental effects of the project as they may relate to the Priority Policies are addressed in the analyses in this initial study. The information contained in this initial study will be referenced as appropriate in the Planning Department's comprehensive project analysis and findings regarding the consistency of the proposed project with the Priority Policies.

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 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.
- ***Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Emissions*** 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. The 2013 Climate Action Strategy is an update to this plan.
- ***San Francisco Transit First Policy*** **(City Charter, section 8A.115)** is a set of principles that underscore the City's commitment to prioritizing travel by transit, bicycle, and on foot over travel by private automobile. These principles are embodied in the objectives and policies of the Transportation Element of the *General Plan*. All City boards, commissions, and departments are required by law to implement Transit First 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.
- ***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.

3. REGIONAL PLANS AND POLICIES

The proposed project must also be evaluated for consistency with regional plans and policies whose environmental, land use, and transportation plans and policies consider the growth and development on the nine-county San Francisco Bay Area. Some of these plans are advisory, and some include specific goals and provisions that must be considered when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project are discussed below.

- ***Plan Bay Area*** is the principal regional planning document that guides planning in the nine-county Bay Area, including the region's first Sustainable Communities Strategy, developed in accordance with Senate Bill 375 and jointly adopted by ABAG and the Metropolitan Transportation Commission (MTC) first on July 18, 2013 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 and is scheduled to be updated every four years. *Plan Bay Area 2040* calls for concentrating housing and job growth around transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas (PDAs). In addition, *Plan Bay Area 2040* 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. The project site is located in the Port of San Francisco PDA.[25] *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 MTC'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.
- ***Regional Housing Needs Plan for the San Francisco Bay Area: 2014–2022*** reflects projected future population growth in the Bay Area region as determined by ABAG and addresses housing needs across income levels for each jurisdiction in California. All of the Bay Area's 101 cities and nine counties are given a share of the Bay Area's total regional housing need. The Bay Area's regional housing need is allocated to each jurisdiction by the California Department of Housing and Community Development and finalized though negotiations with ABAG.
- ***2017 Clean Air Plan: Spare the Air, Cool the Climate*** (2017 Clean Air Plan) is the Bay Area Air Quality Management District's (BAAQMD) update to the *Bay Area 2010 Clean Air Plan*. The 2017 Clean Air Plan is based on the "all feasible measures" approach to meet the requirements of the California Clean Air Act to reduce ozone and provide a control strategy to reduce ozone, particulate matter (PM), air toxics, and GHG emissions throughout the region.
- ***Water Quality Control Plan for the San Francisco Bay Basin*** (Basin Plan) is the San Francisco Regional Water Quality Control Board's master water quality control planning document. The Basin Plan designates beneficial uses and water quality objectives for waters of the state,

[25] Association of Bay Area Governments, *Plan Bay Area*, Priority Development Area Showcase. Available at: http://gis.abag.ca.gov/website/PDAShowcase/, accessed on March 1, 2017.

including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.

The proposed project is an affordable housing residential infill project near transit that is generally considered small in scale and it would not conflict with the overall intent of these regional plans and policies. 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.

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D. Summary of Environmental Effects

The proposed project could potentially affect the environmental factor(s) checked below, for which mitigation measures 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.

❒ Land Use	❒ Greenhouse Gas Emissions	❒ Geology and Soils
❒ Population and Housing	❒ Wind and Shadow	❒ Hydrology and Water Quality
☑ Cultural Resources	❒ Recreation	❒ Hazards/Hazardous Materials
❒ Transportation and Circulation	❒ Utilities and Service Systems	❒ Mineral/Energy
❒ Noise	❒ Public Services	❒ Agricultural and Forest
❒Air Quality	❒ Biological Resources	❒ Mandatory Findings of Significance

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 greenhouse gas emissions (GHG), which is only evaluated 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/or 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.

SENATE BILL 743 AND PUBLIC RESOURECS CODE SECTION 21099

On September 27, 2013, Senate Bill (SB) 743 was signed into law and became effective on January 1, 2014. Among other provisions, SB 743 amends CEQA by adding Public Resources Code section 21099 regarding analysis of aesthetics, parking and transportation impacts for urban infill projects.[26]

[26] Public Resources Code section 21099(d).

Aesthetics and Parking Analysis

CEQA section 21099(d)(1), states, "Aesthetic 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:
a) The project is in a transit priority area,[27]
b) The project is on an infill site,[28] and
c) The project is residential, mixed-use residential, or an employment center.[29]

The proposed project meets each of the above three criteria because it (1) is located within 0.50 miles of several rail and bus transit (see section A.1, Existing Conditions); (2) is located on an infill site that is a surface parking lot and is surrounded by other urban development (see section A.1, Existing Conditions); and (3) would be a residential project with ground-floor commercial space (see section A.2, Project Characteristics).[30] Thus, this initial study does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

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. Therefore, some of the information that would have otherwise been provided in an aesthetics section of this initial study (such as project renderings and photo simulations) are included in section A, Project Description. Specifically, Figures 12, 13, 14, and 15 are provided to depict the project solely for informational purposes and are not used to determine the significance of the environmental impacts of the project, pursuant to CEQA.

[27] Public Resources Code section 21099(a)(7) defines a "transit priority area" as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in section 21064.3 of the California Public Resources Code 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.

[28] Public Resources Code section 21099(a)(4) defines an "infill site" as a lot located within 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.

[29] Public Resources Code section 21099(a) 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 located within a transit priority area.

[30] San Francisco Planning Department. Eligibility Checklist: CEQA section 21099 – Modernization of Transportation Analysis for 88 Broadway, March 10, 2017.

Automobile Delay and Vehicle Miles Traveled Analysis

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 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, OPR 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 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 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 is provided under section E.4, Transportation and Circulation. 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.

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E. Evaluation of Environmental Impacts

E.1 LAND USE AND LAND USE PLANNING

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
LAND USE AND LAND USE PLANNING — Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
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?	☐	☐	☒	☐	☐

Impact LU-1: The proposed project would not physically divide an established community. (No Impact)

The division of an established community would typically involve the construction of a barrier to neighborhood access (*e.g.*, a new freeway segment) or removal of a means of access, such as a roadway or bridge.

The proposed project site is composed of two lots that include two surface public parking lots operated by SP Plus Parking (88 Broadway) and Aqua Parking (735 Davis Street). The proposed project would include the construction of two buildings—one building for affordable senior housing and one for affordable family housing with commercial uses on the ground floor of each building. The proposed project would not disrupt or divide the physical arrangement of existing uses adjacent to the project site or impede the passage of persons or vehicles. Those surrounding uses would be expected to continue in operation and relate to each other as they do presently, without disruption from the proposed project. Although portions of the sidewalks adjacent to the project site would likely be closed for periods of time during project construction, these closures would be temporary in nature and sidewalk access would be restored following completion of construction. The project site is located within, but on the border of the North Beach neighborhood directly adjacent to the Financial District neighborhood. The proposed senior and family housing would not construct a physical barrier to the North Beach neighborhood area or remove an existing means of access, such as a bridge or roadway that would create an impediment to the passage of persons or vehicles. The proposed project has plans for north-south and east-west pedestrian- and cyclist-friendly passages between the buildings at street level. Both mid-block passages would be open to the public during general retail hours (8:00 a.m. to 8:00 p.m.) and these hours are subject to assessment once the project is in operation. Therefore, the proposed project would have ***no impact*** in physically dividing an established community and would not necessitate mitigation measures.

Impact LU-2: The proposed project would not conflict with any 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 impacts could be considered significant if the proposed project conflicts with any plan, policy, or regulation adopted for the purpose of avoiding an environmental effect, as discussed under section C, Compatibility with Existing Zoning and Plans. However, a conflict with a plan, policy, or regulation adopted for the purpose of mitigating an environmental effect does not necessarily indicate a significant effect on the environment.

As shown in section C, Compatibility with Existing Zoning and Plans, the proposed project would not substantially conflict with any applicable land use plan, policy, or regulation such that an adverse physical change in the environment would result.[31] The proposed affordable family and senior housing project is permitted in the General Plan's General Commercial land use designation and the C-2 Zoning District. Additionally, the proposed project is within the Northeast Waterfront Landmark District, a historic designated neighborhood per Planning Code Article 10. Based on the Historic Resources Evaluation[32] 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, visual complexity, and built 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 compliance with the Northeast Waterfront Landmark District development requirements. Further discussion of the Historic Resources Evaluation and the proposed project's potential impacts on the Northeast Waterfront Landmark District historical significance is provided in section E.3, Cultural Resources.

Environmental plans and policies are those, like the 2017 Clean Air Plan, which directly address environmental issues and/or contain targets or standards that must be met to preserve or improve characteristics of the City's physical environment. The proposed project would not conflict with any such adopted environmental plan or policy, including the 2017 Clean Air Plan, the City's *Strategies to Address Greenhouse Gas Emissions* (GHG Reduction Strategy), Urban Forestry Ordinance, and the Basin Plan, as discussed in sections E.6, Air Quality, E.7, Greenhouse Gas Emissions, E.12, Biological Resources, and E.14 Hydrology and Water Resources, respectively. Accordingly, the proposed project would have a ***less-***

[31] As described in section A, Project Description, the proposed project was revised to increase the step-backs from Front Street and Broadway, modify the building materials and fenestration (*i.e.,* the arrangement of windows and doors on the elevations of a building) that would further be compatible with the Northeast Waterfront Landmark District. As a result of this change, the dwelling unit mix of the family housing building was revised to reduce two one-bedroom units to two studio units, and one three-bedroom unit to a two-bedroom unit. In addition, text edits were made to further describe proposed project's consistency with the Planning Code and Land Use Plans in section C, Compatibility with Existing Zoning and Plans. No changes to the impact conclusions discussed in this section are required as a result of these changes and additions.

[32] Knapp Architects, 2017. *Historic Resource Evaluation: 88 Broadway & 735 Davis Street*, June.

than-significant impact with regard to conflicts with land use plans, policies, or regulations. No mitigation measures are necessary.

Impact C-LU-1: The proposed project would not, in combination with reasonably foreseeable cumulative projects, result in cumulative land use impacts. (Less than Significant)

Cumulative development projects located within an approximate 0.25-mile radius of the project site are identified in Table 2 and mapped on Figure 17 in section B.2, Cumulative Projects. With the exception of the mixed-use office buildings at 300 Clay Street and 940 Battery Street, the cumulative development projects primarily include hotels with ground-floor retail, such as Seawall Lots 323/324, 439 Washington Street, and 447 Battery Street. 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.

Similar to the proposed 88 Broadway & 735 Davis Street Project, some future projects may require modifications, variances, or exceptions to the Planning Code requirements. In addition, as with the proposed project, two of the cumulative projects (940 Battery Street and Seawall Lots 323/324) would be reviewed by the Historic Preservation Commission for compliance with the Northeast Waterfront Landmark District development requirements. Although these cumulative development projects would introduce new infill hotel, retail, office, entertainment, and residential uses in the project vicinity, they would be required to comply with the City's zoning and land use designations. In addition, 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, which include, but are not limited to, the 2017 Clean Air Plan, Strategies to Address Greenhouse Gas Emissions, Noise Ordinance, section 2909 of the Police Code (Article 29), Title 24, Part 11 (2016 CALGreen Code), San Francisco Green Building Ordinance, and the San Francisco Ordinance No. 27-06 for recycling construction and demolition debris, etc. Compliance with these plans and other mandatory regulations would ensure that development of cumulative development projects would not conflict with any applicable plans, policies, or regulations adopted to avoid or mitigate an environmental effect. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not combine with cumulative development projects to create or contribute to a cumulative land use impact, and therefore, the cumulative impact is ***less than significant***. No mitigation measures are necessary.

E.2 POPULATION AND HOUSING

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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)?	☐	☐	☒	☐	☐
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	☐	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

Impact PH-1: The proposed project would not induce substantial population growth in the area, either directly or indirectly. (Less than Significant)

The project would be considered growth inducing if its implementation would result in substantial population increases and/or new development that might not occur if the project were not approved and implemented. The proposed project would add approximately 125 new affordable family housing and 53 new affordable senior housing residential units, consisting of a mix of studio, one-bedroom, two-bedroom, and three-bedroom residences. The project would also include approximately 6,400 square feet of new commercial space and approximately 4,300 square feet of childcare facilities, which could generate the need for more housing.

The proposed project would prioritize housing for the chronically homeless in San Francisco and provide housing for seniors. Both of these populations would potentially already live in San Francisco. Housing projects, such as the proposed project, that are funded by the San Francisco's Mayor's Office of Housing and Community Development, prioritize residents from San Francisco for the lottery to get into City-funded housing. Furthermore, the project is not of regional significance so new employees associated with the proposed retail or childcare uses would likely come from San Francisco or the greater Bay Area and would not necessarily move to San Francisco as a result of the project. However, an analysis of a direct increase of population and employment at the project site and a contribution to anticipated population and employment growth in the neighborhood and citywide context is provided below.

Plan Bay Area 2040, which is the current regional transportation plan and Sustainable Communities Strategy adopted by MTC and ABAG on July 26, 2017, contains housing and employment projections anticipated to occur in San Francisco through 2040. *Plan Bay Area 2040* 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

and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth. Over the last several years, the supply of housing has not met the demand for housing within San Francisco. *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. As previously described, the project site is in the Port of San Francisco PDA, which is an area designated for concentrating housing and job growth around transit corridors.[33]

According to the 2010 U.S. Census, the proposed project is located within Census Tract 105, which had a reported population of 2,685 residents. The 2010 U.S. Census reported a population of 805,235 residents in the City and County of San Francisco, and a population of approximately 6,992 residents near the project site (within Census Tracts 105 and 611).[34] Based on the 2010 U.S. Census, the average household size in the City and County of San Francisco is 2.26 people per household,[35] the addition of 178 new residential units would increase the citywide population by approximately 402 residents.[36] The proposed project would bring a population increase of approximately 6.0 percent near the project site and 15 percent within Census Tract 105, and is not considered substantial within the neighborhood or citywide context.[37] Furthermore, the population of San Francisco is projected to increase by approximately 280,490 persons for a total of 1,085,725 by 2040.[38] The residential population introduced as a result of the proposed project would constitute approximately 0.14 percent of this population increase.[39] Therefore, this population increase would be accommodated within the projected growth for San Francisco. Thus, implementation of the proposed project would not directly induce substantial population growth.

The proposed project also would not indirectly induce substantial population growth in the project area, because it would be located on an infill site in an urbanized area and would not involve any extensions to area roads or other infrastructure that could enable additional development in currently undeveloped areas.

The proposed approximately 6,400 square feet of new commercial area and 4,300 square feet of childcare facilities would generate an estimated 31 employees.[40] However, as stated above, it is anticipated that

[33] Association of Bay Area Governments, *Plan Bay Area*, Priority Development Area Showcase. Available at: http://gis.abag.ca.gov/website/
PDAShowcase/, accessed on March 1, 2017.

[34] The population estimate is based on data from the 2010 U.S. Census for Census Tracts 105 and 611. Census Tract 611 is located to the west of the project site.

[35] 805,235 population / 356,299 households = 2.26 people her household

[36] 178 residential units x 2.26 people per household = 402.28 new residents

[37] Near project site (Census Tracts 105 and 611): 402 new residents/6,992 existing residents = 6 percent; Census tract 105: 402 new residents/2,685 existing residents = 15 percent

[38] Association of Bay Area Governments, *Plan Bay Area*. Available at:
http://files.mtc.ca.gov/pdf/Plan_Bay_Area_FINAL/
Plan_Bay_Area.pdf, accessed on February 1, 2017, page 40.

[39] 402 new residents / 280,490 residents = 0.14 percent

[40] The estimated number of employees is based on Planning Department Transportation Impact Analysis Guidelines for Environmental Review (October 2002) (SF Guidelines) and assumes an average of one employee per

most employees would likely come from the local and regional labor pools, and the number of employees moving from outside of the region would be negligible compared to the total population, and would not be a substantial increase in the citywide context. Therefore, it can be anticipated that most of the employees would already live in San Francisco (or nearby communities), and that the project would not generate demand for new housing from potential employees of the new commercial uses. Additionally, employment in San Francisco is projected to increase by 34 percent (191,740 jobs) between 2010 and 2040.[41] The project's increase of 31 employees would be accommodated within the projected employment growth in San Francisco.

Overall, the increase in the number of residents and employees on the project site would be noticeable near the project site. However, project-related population and employment increases would not be substantial relative to the existing number of residents and employees in the city, nor would the increase in residents and/or employees exceed regional projections for growth and employment. Therefore, direct or indirect population growth would be ***less than significant*** as a result of the proposed project. No mitigation measures are necessary.

Impact PH-2: The proposed project would not displace a substantial number of existing housing units, people, or employees, or create demand for additional housing elsewhere. (No impact)

The project site is located on two separate surface parking lots that currently serve the public. The proposed project would not displace any residents or housing units, because there is no existing residential development at the project site. The proposed project would displace parking for the public and the Port of San Francisco, but would not affect housing or employment. As the proposed project would not displace existing housing units or people, it would not generate demand for additional housing elsewhere. Therefore, the proposed project would have ***no impact*** in regards to displacing residents or employees and would not create demand for new housing. No mitigation measures are necessary.

Impact C-PH-1: The proposed project in combination with past, present, and reasonably foreseeable cumulative projects would not result in significant cumulative effects related to population or housing. (Less than Significant)

As described above, *Plan Bay Area 2040* contains housing and employment projections anticipated to occur in San Francisco through 2040 and its projections provide context for the population and housing cumulative analysis. *Plan Bay Area 2040* calls for an increasing percentage of Bay Area growth (jobs and

350 square feet of retail and restaurant. 6,522 square feet of commercial + 4,306 square feet of childcare = 10,828 square feet total; 10,828 square feet of commercial/childcare / 350 = 31 new employees

[41] Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy*, revised May 16, 2012. Available at: http://www.planbayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf, accessed on February 1, 2017, page 49.

housing) 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 and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth (jobs and housing). Additionally, the project site is in the Port of San Francisco Priority Development Areas[42] identified in *Plan Bay Area 2040*. Therefore, the *Plan Bay Area 2040* projections provide context for the population and housing cumulative analysis.

As described above, the proposed project would not induce substantial direct or indirect population growth or displace a substantial number of existing housing units, people, or employees, or create demand for additional housing elsewhere.

The approved and proposed projects identified in Table 2, and mapped on Figure 17 in section B.2, Cumulative Projects, would add approximately 20 new permanent residents within nine dwelling units in the 0.25-mile radius of the project site.[43] Overall, these approved and proposed projects, when combined with the proposed project, would add 422 new residents within a 0.25-mile radius of the project site, which would represent a residential population increase of 6.0 percent near the project site.[44] These projects would be required to comply with the City's Inclusionary Housing Program (*Planning Code* Sec. 415 et. seq.) and, therefore, would result in the creation of affordable housing in addition to market-rate housing. In addition, the cumulative projects would also introduce new employees associated with new retail, office, museum, hotel and theater uses. However, like the proposed project, these projects are not of regional significance so new employees would likely come from San Francisco or the greater Bay Area and would not necessarily move to San Francisco as a result of these projects.

In the last few years, the supply of housing has not met the demand for housing within San Francisco. In July 2013, ABAG projected regional housing needs in the *Regional Housing Need Plan for the San Francisco Bay Area: 2014 to 2022*. In 2013, ABAG projected housing needs in San Francisco for 2014 to 2022 as 28,869 dwelling units, consisting of 6,234 dwelling units within the very low income level (0 to 50 percent), 4,639 within the low income level (51to 80 percent), 5,460 within the moderate income level (81 to 120 percent), and 12,536 within the above moderate income level (120 percent plus).[45] As noted above, project site is in the Port of San Francisco Priority Development Areas. In addition, several cumulative projects identified in Table 2 and shown on Figure 17 in section B.2, Cumulative Projects**,** are located in Port of San Francisco Priority Development Area and the Downtown-Van Ness-Geary (San Francisco) Priority Development Area. These Priority Development Areas are existing neighborhoods near transit that are appropriate places to concentrate future growth of jobs and housing. Thus, although the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would increase the population in the vicinity of the project site by 6.0 percent, this population growth has been anticipated

[42] Association of Bay Area Governments, *Plan Bay Ar*ea, Priority Development Area Showcase. Available at: http://gis.abag.ca.gov/website/PDAShowcase/, accessed on March 1, 2017.

[43] 9 new dwelling units x 2.26 people per household = 20 new residents

[44] (402 new residents from project + 20 new residents from cumulative projects = 422 new residents; 422 new residents / 6,992 existing residents (Census Tracts 105 and 611)) x 100 = 6%

[45] Association of Bay Area Governments, *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022*. Available at: http://www.abag.ca.gov/planning/housingneeds/, accessed September 6, 2017.

and accounted for according to the City's and ABAG's projections and planned growth, and, therefore, would have a less-than-significant direct and indirect impact on the population and housing. Other sections of this document that address physical environmental impacts related to cumulative growth with regard to specific resources can be found in section E.4, Transportation and Circulation; section E.5, Noise; section E.6, Air Quality; section E.9, Recreation; section E.10, Utilities and Service Systems; and section E.11, Public Services.

Furthermore, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in substantial numbers of housing units or people being displaced because the majority of the approved and proposed cumulative projects would be constructed on underutilized lots with no residential units or are changes to existing developments.[46]

For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not combine with cumulative development projects to create or contribute to a cumulative impact to population or housing, and therefore the proposed project would result in a ***less-than-significant*** cumulative impact on population and housing and no mitigation measures are necessary.

E.3 CULTURAL RESOURCES

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
CULTURAL RESOURCES— Would the project:					
a) 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?	☐	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	☐	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	☐
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074?	☐	☒	☐	☐	☐

[46] The Seawall Lots 323/324 is a proposed development to be built on underutilized parking lots. Remaining projects are changes to existing buildings.

The following analysis is based on the *Final Addendum Archeological Research Design and Treatment Plan* prepared by WSA Incorporated,[47] the *Historic Resources Evaluation* report prepared by Knapp Architects,[48] and the Tribal notification outreach conducted by the City.[49]

Impact CR-1: The proposed project would not result in 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)

Historical resources are those properties that meet the definitions in Public Resources Code section 21084.1 and section 15064.5 of the CEQA Guidelines. Historical resources include properties listed in, or formally determined eligible for listing in the California Register of Historical Resources (California Register) or in an adopted local historic register. Historical resources also include resources identified in a historical resource survey meeting certain criteria. Additionally, properties that are not listed but are otherwise determined to be historically significant, based on substantial evidence, would also be considered historical resources. A property may be considered a historical 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 historical 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. The site is not listed on the National Register of Historic Places or the California Register and has not been rated by the California Historic Resources Information Center. However, the project site is within the Northeast Waterfront Landmark District, which is designated under Planning Code Article 10 as a historic district. As described above, a Historic Resources Evaluation was prepared to determine whether the project site is a historic resource and, thus, whether site development would result in a significant impact as defined under CEQA. The existing parking lots were determined to not be historic resources during the Historic Resource Evaluation scoping process the Planning Department conducted with the historic resources consultant. The Planning Department determined that the proposed new construction on the project site would not result in a significant impact on the historic district.[50]

The property was not listed in Here Today or Splendid Survivors, nor included in the 1976 Architectural Survey.[51] According to the San Francisco Property Information Map, parcel 0140-007 was given the status

[47] WSA Incorporated, 2017. *Addendum Archeological Research Design and Treatment Plan: 88 Broadway/735 Davis Street Project*, May.

[48] Knapp Architects, *Historic Resource Evaluation: 88 Broadway & 735 Davis Street*, June 2017.

[49] Tribal Notification Regarding Tribal Cultural Resources and CEQA sent on January 11, 2017.

[50] Marcelle Boudreaux, Flex Team Leader/Senior Planner, San Francisco Planning Department, e-mail correspondence with Jenny Delumo, Environmental Planner, San Francisco Planning Department, August 17, 2017 as proposed in the PMND and February 26, 2018 as revised and proposed in the FMND.

[51] Naploha, J. and Kortum, J. Northeast Waterfront District. Case report for district designation, unpublished official document. San Francisco, 1982.

code 7R (Not evaluated) in a reconnaissance-level survey for eligibility to the National Register of Historic Places. The Historic Resources Evaluation does not include an evaluation of significance or identification of character-defining features of the project site, because the existing surface parking lot is not an individual resource or a contributor to a historic district. The Historic Resources Evaluation evaluated the proposed project for compatibility with the Northeast Waterfront Landmark District, and determined it is compatible with the character of the Northeast Waterfront Landmark District and in conformance with the Secretary of the Interior's Standards for Rehabilitation (Secretary's Standards), specifically Standards number 9 and 10.[52,53] The proposed buildings would be compatible with the height range of contributing buildings to the district because it would:

- be articulated so that its visual components fit the scale and proportion that characterize the District;
- be nearly devoid of ornamentation;
- have fenestration much of which mirrors important characteristics of that in the District;
- employ materials that share key traits with the brick and concrete that characterize the District, in colors that predominate in the District; and
- achieve visual complexity giving the building a roughness compatible with the District; and
- will be built to the front lot lines on all four streets.[54, 55]

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.[56] Thus, the Northeast Waterfront Landmark District would remain eligible for listing in Article 10 of the San Francisco Planning Code.

[52] *Secretary of the Interior's Standards for 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.

[53] *Secretary of the Interior's Standards for 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.

[54] Knapp Architects, 2017. *Historic Resource Evaluation: 88 Broadway & 735 Davis Street*, June.

[55] As described in section A, Project Description, the proposed project was revised to increase the step-backs from Front Street and Broadway, modify the building materials and fenestration (*i.e.,* the arrangement of windows and doors on the elevations of a building) that would further be compatible with the Northeast Waterfront Landmark District. As a result of this change, the dwelling unit mix of the family housing building was revised to reduce two one-bedroom units to two studio units, and one three-bedroom unit to a two-bedroom unit. In addition, text edits were made to further describe proposed project's consistency with the Planning Code and Land Use Plans in section C, Compatibility with Existing Zoning and Plans. No changes to the impact conclusions discussed in this section are required as a result of these changes and additions.

[56] Knapp Architects, 2017. *Historic Resource Evaluation: 88 Broadway & 735 Davis Street*, June.

Because the proposed design would not diminish the significance of the district under CEQA Guidelines section 15064.5, the proposed project would have a ***less than significant*** impact on a historical resource. No mitigation measures are necessary.

Impact CR-2: Construction of the proposed project could result in physical damage to adjacent historical resources. (Less than Significant with Mitigation).

The proposed project is adjacent to three historical architectural resources: 735 Davis Street, 60 Broadway, and 75 Broadway. These buildings could be susceptible to ground-borne vibration from demolition and construction activities on the project site, including demolition and the use of heavy equipment , and could cause ground-borne vibration that could materially impair the identified adjacent buildings.

Construction vibration impacts are assessed based on standards from the Federal Transportation Authority (FTA) for vibration. As shown on Table 3, for architectural damage, FTA guidelines define an impact as significant if it exceeds peak particle velocity (PPV) measured in inches per second as follows: 0.2 PPV for non-engineered timber and masonry buildings, 0.3 PPV for engineered concrete and masonry (no plaster) buildings, and 0.5 PPV for reinforced concrete, steel, or timber buildings.

TABLE 3 CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	Peak Particle Velocity (PPV), in/sec[a]
Category I: reinforced concrete, steel or timber (no plaster)	0.5
Category II: engineered concrete and masonry (no plaster)	0.3
Category III: non-engineered timber and masonry buildings	0.2
Category IV: buildings extremely susceptible to vibration damage	0.12

Notes:
a. peak particle velocity (PPV) measured in inches per second
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 1.

The buildings at 753 Davis Street and 60 Broadway are of masonry construction and are therefore subject to the 0.3 PPV standard for architectural damage. The building at 75 Broadway is a steel building clad in brick veneer building, and is therefore, subject to the 0.5 PPV standard for architectural damage.

TABLE 4 CALCULATED CONSTRUCTION VIBRATION LEVELS FOR ARCHITECTURAL DAMAGE AT ADJACENT RECEIVERS

Receiver	Equipment	Distance to Construction Activity[a] (feet)	Calculated Vibration Level at the buildings, PPV (in/sec)	Criteria, PPV (in/sec)	Below PPV Criteria?
CV-1: Commercial	Large Bulldozer	8	0.49	0.3	N
753 Davis Street[b]	Loaded Trucks	15	0.16		Y
CV-2: Commercial	Large Bulldozer	10	0.35	0.3	N
60 Broadway[b]	Loaded Trucks	15	0.16		Y
CV-3: Residential	Large Bulldozer	90	0.01	0.5	Y
75 Broadway	Loaded Trucks	90	0.01		Y

Notes:
a. For architectural vibrations) the distance estimates are the PPVequip = PPVref x (25/D)1.5; Annoyance: Lv(D) = Lv(25 ft) – 30log(D/25 where D=receiver distance).
b. This is an historic building.
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 10.

As shown in Table 4 above, vibration from construction would not exceed the architectural damage criteria at 75 Broadway. However, vibration from large bulldozers would exceed the architectural damage criteria at 753 Davis Street and 60 Broadway, and impacts would be significant. However, if a minimum distance of 15 feet is maintained between the bulldozer and 753 Davis Street and 60 Broadway, the building damage criteria of 0.3 PPV would be met. Implementation of **Mitigation Measure M-CR-2, Vibration Monitoring Program for Adjacent Historical Resources**, would ensure the building damage criteria of 0.3 PPV would be met and architectural damage from construction vibration at 753 Davis Street and 60 Broadway would be ***less than significant with mitigation***.

Mitigation Measure M-CR-2: Vibration Monitoring Program for Adjacent Historical Resources

The project sponsor shall retain the services of a qualified structural engineer and preservation architect that meet the Secretary of the Interior's Historic Preservation Professional Qualification Standards to conduct a Pre-Construction Assessment of the adjacent historical resources at 753 Davis Street and 60 Broadway prior to any ground-disturbing activity. The Pre-Construction Assessment shall be prepared to establish a baseline, and shall contain written and/or photographic descriptions of the existing condition of the visible exteriors of the adjacent buildings. The structural engineer and/or preservation architect shall also develop and the project sponsor shall prepare and implement a Vibration Management and Monitoring Plan to protect the adjacent historical resources against damage caused by vibration or differential settlement caused by vibration during project construction activities. In this plan, the maximum vibration level not to be exceeded at each building shall be determined by the structural engineer and/or preservation architect for the project. The Vibration Management and Monitoring Plan shall document the criteria used in establishing the maximum vibration level for the project. The Vibration Management and Monitoring Plan shall include vibration monitoring and regular periodic inspections at the project site by the structural engineer and/or historic preservation consultant throughout the duration of the major structural project activities to ensure that vibration levels do not exceed the established standard. The Pre-Construction

Assessment and Vibration Management and Monitoring Plan shall be submitted to the Planning Department Preservation staff prior to issuance of any construction permits. Should damage to 753 Davis Street or 60 Broadway be observed, construction shall be halted and alternative techniques put in practice, to the extent feasible, and/or repairs shall be completed as part of project construction. A final report on the vibration monitoring of 753 Davis Street and 60 Broadway shall be submitted to Planning Department Preservation staff prior to the issuance of a Certificate of Occupancy for the project.

Therefore, with implementation of **Mitigation Measure M-CR-2, Vibration Monitoring Program for Adjacent Historical Resources**, impacts from construction vibration to historical architectural resources would be ***less than significant with mitigation.***

Impact CR-3: The proposed project could result in a substantial adverse change in the significance of an archeological resource. (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).

The potential for encountering archeological resources is determined by several relevant factors including archeological sensitivity criteria and models, local geology, site history, and the extent of potential projects' soils disturbance/modification, as well as any documented information on known archeological resources in the area. In 2003, Stanford Hospitality Incorporated planned to build the Broadway Hotel on three city blocks near the Embarcadero in San Francisco and an Archeological Research Design and Treatment Plan (ARDTP) was prepared for the proposed project; however, the project was never built.[57] An addendum to the 2003 ARDTP was prepared for the proposed project. The ARDTP addendum included the historical and archeological background of the area and assessed the possibility of encountering subsurface archeological resources. They reported that "there is a high potential of encountering materials from the Gold Rush (1849 to 1859) and later 19th century (1860 to 1906) periods, and a low potential of encountering prehistoric materials (4000 B.C. to A.D. 1776), or materials from the Contact Period or Spanish/Mexican Period (1776 to 1849)." The ARDTP recommended pre-construction archeological testing and data recovery, and monitoring during construction to mitigate adverse impacts.

There are no documented or recorded archeological sites in the immediate vicinity of the proposed project. The ARDTP determined that there are likely Gold Rush era maritime deposits and other late nineteenth century and early twentieth century remains still present. According to the project-specific preliminary geotechnical reports, there is between 20 to 40 feet of artificial fill across the senior housing site (735 Davis Street)[58] and 25 to 40 feet of artificial fill across the family housing site (88 Broadway).[59] Based on a historical map review, although the project site was submerged during most of the Gold Rush, historic maps and other archival sources reveal that wharves were situated adjacent to the project site

[57] WSA Incorporated, 2017. A*ddendum Archeological Research Design and Treatment Plan: 88 Broadway/735 Davis Street Project*, May.

[58] ENGEO Incorporated, 2017. *735 Davis Street Senior Housing Geotechnical Exploration, San Francisco, CA*, June 22.

[59] ENGEO Incorporated, 2017. *88 Broadway Family Housing Geotechnical Exploration, San Francisco, CA*, June 22.

(Vallejo Street Wharf, the Broadway Wharf, and Cunningham's Wharf). Remnants of the wharves themselves, refuse discarded from the wharves, or remnants of ship hulks could potentially lie beneath the project site. The project site was filled in by 1857 and several structures were present in the project area. Refuse and architecture from these buildings could also potentially still exist within the project parcel.

Based on the above analysis, there is a high potential for uncovering archeological resources during project implementation. It is possible that previously unrecorded and buried (or otherwise obscured) archeological deposits could be discovered during ground disturbing activities due to project implementation. Such ground disturbing activities would include demolition of the existing surface parking lots as well as overall grading of the project site and trenching for utilities installation.

Excavating, grading, and moving heavy construction vehicles and equipment used to construct the proposed project could expose and have impacts on unknown archeological resources. Thus, the proposed project could have a significant impact on archeological resources.

With implementation of **Mitigation Measure M-CR-3, 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.

Mitigation Measure M-CR-3: Archeological Testing

The project sponsor shall retain the services of an archeological consultant from the rotational Department Qualified Archeological Consultants List (QACL) 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 QACL. 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 four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four 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 section 15064.5(a) and (c).

Consultation with Descendant Communities. On discovery of an archeological site[60] associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant

[60] The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

group, an appropriate representative[61] 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 (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.

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 re-designed so as 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 (AMP) 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 AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be

[61] 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.

archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, site remediation, etc., 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 area according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with 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 artefactual/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/construction activities and equipment until the deposit is evaluated. 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. If required based on the results of the ATP, an 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.

If required, 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 on-site/off-site 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.

Final Archeological Resources Report. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) 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 FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR 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.

Impact CR-4: The project could disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)

There are no known human remains, including those interred outside of formal cemeteries, located in the immediate vicinity of the project site. In the event that construction activities disturb unknown human remains within the project site, any inadvertent damage to human remains would be considered a significant impact.

With implementation of **Mitigation Measure M-CR-4, Inadvertent Discovery of Human Remains**, impacts resulting from inadvertent discovery of human remains would be reduced to ***less than significant with mitigation***.

Mitigation Measure M-CR-4: Inadvertent Discovery of Human Remains

The treatment of human remains and of associated or unassociated funerary objects discovered during any soils 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 the Environmental Review Officer (ERO), and in the event of the Coroner's determination that the

human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Public Resources Code section 5097.98). The archeological consultant, project sponsor, ERO, and MLD shall have up to but not beyond six days of discovery to make all reasonable efforts to develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any associated items (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 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.

Impact CR-5: The project could result in 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, on the national, state, or local register of historical resources. Pursuant to CEQA section 21080.3.1(d), on January 11, 2017, the 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.

Based on the background research performed for the *Final Addendum Archeological Research Design and Treatment Plan* prepared by WSA Incorporated there are no known tribal cultural resources in the project area;[62] however, as discussed under Impact CR-3, the project site is an archeological sensitive area with the potential for prehistoric archeological resources. Prehistoric archeological resources may also be considered tribal cultural resources. In the event that construction activities disturb unknown archeological sites that are considered tribal cultural resources, any inadvertent damage would be considered a significant impact.

With implementation of **Mitigation Measure M-CR-5, Tribal Cultural Resources Interpretive Program**, impacts to previously unknown tribal cultural resources would be ***less-than-significant with mitigation.***

[62] WSA Incorporated, 2017. *Addendum Archeological Research Design and Treatment Plan: 88 Broadway/735 Davis Street Project*, May. page 51.

Mitigation Measure M-CR-5: Tribal Cultural Resources Interpretive Program

If the Environmental Review Officer (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 (TCR) and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned so as 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 TCR 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, artifacts displays and interpretation, and educational panels or other informational displays.

In the event that construction activities disturb unknown archeological sites that are considered tribal cultural resources, any inadvertent damage would be considered a significant impact. With implementation of Mitigation Measures M-CR-3, M-CR-4, and M-CR-5 as described above, the proposed project would have a ***less than significant impact with mitigation*** on previously unknown tribal cultural resources.

Impact C-CR-1: The proposed project in combination with past, present, and reasonably foreseeable future projects in the vicinity would result in cumulative impacts to cultural resources. (Less than Significant with Mitigation)

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. Future development facilitated by the proposed project, in conjunction with the cumulative development project listed in Table 2 and shown on Figure 17 in section B.2, Cumulative Projects, has the potential to cumulatively impact cultural resources including historic resources archaeological and paleontological deposits, human remains, and tribal cultural resources.

Project-related impacts on unknown archeological resources, tribal cultural resources, and human remains that may be discovered during project construction are site-specific and generally limited to a project's construction area. Therefore, like the proposed project, the other cumulative projects listed in Table 2 and shown on Figure 17 would be required to undergo site-specific evaluation for impacts for impacts to archeological resources, 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.

Implementation of **Mitigation Measure M-CR-3, Archeological Testing, Mitigation Measure M-CR-4, Inadvertent Discovery of Human Remains, and Mitigation Measure M-CR-5, Tribal Cultural Resources Interpretive Program**, would ensure project-specific impacts to unknown archaeological resources, human remains, or tribal cultural resources on the project site would not be adversely impacted. Thus, the proposed project would not combine with cumulative projects to result in a cumulative effect on unknown archaeological resources, human remains, or tribal cultural resources.

As shown in Table 2, the cumulative projects would involve modifications to existing buildings or the renovation/reuse of existing buildings for other uses, with the exception of Seawall Lots 323/324. The cumulative projects would involve changes to existing buildings that could result in impacts to historic buildings; however, the Seawall Lots 323/324 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 have a cumulative impact to the Northeast Waterfront Landmark District. The proposed Seawall Lots 323/324 is a surface parking lot. Therefore, development on this lot would not result in the direct loss or change to a historic structure; however, a determination as to whether this project would be compatible with the Northeast Waterfront Landmark District has yet to be determined. As noted in Table 2, the 940 Battery Street is for interior and exterior alterations to create a new fourth floor and fifth floor at the roof level, and also proposes a change of use from warehouse to museum and retail. The impacts to the potentially historic building at 940 Battery Street are currently unknown. However, all cumulative projects within the Northeast Waterfront Landmark District are subject to Article 10 of the Planning Code which required 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.

As discussed under Impact CR-2, the proposed project could result in a significant impact on adjacent historical structures from vibration generated by project construction. Cumulative effects related to construction vibration could occur if construction activities for other projects in proximity to the project site involve impact equipment (*e.g.*, pile driving, impact hammers/hoe rams, jackhammers) and would take place concurrent with construction of the proposed project. It is possible that construction of cumulative development projects could undergo construction activities that would involve use of impact equipment simultaneously with the proposed project. Therefore, cumulative vibration impacts on adjacent historical resources could be significant. However, with implementation of **Mitigation Measure M-CR-2, Vibration Monitoring Program for Adjacent Historical Resources**, the proposed project's contribution to cumulative vibration impacts on adjacent historical architectural resources would be reduced to a less-than-cumulatively-considerable level, by establishing vibration reduction performance standards and best management practices to ensure construction of the proposed project does not result in damage to adjacent historic architectural resources.[63]

[63] As described in section A, Project Description, the proposed project was revised to increase the step-backs from Front Street and Broadway, modify the building materials and fenestration (*i.e.*, the arrangement of windows and doors on the elevations of a building) that would further be compatible with the Northeast Waterfront Landmark District. As a result of this change, the dwelling unit mix of the family housing building was revised to reduce two

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, historic architectural resources from construction vibration, human remains, or tribal cultural resources. Therefore, in combination with past, present, and reasonably foreseeable projects, the proposed project would result in a ***less-than-significant with mitigation*** cumulative impact with respect to cultural resources.

E.4 TRANSPORTATION AND CIRCULATION

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
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?	☐	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (*e.g.*, sharp curves or dangerous intersections) or incompatible uses?	☐	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐

one-bedroom units to two studio units, and one three-bedroom unit to a two-bedroom unit. In addition, text edits were made to further describe proposed project's consistency with the Planning Code and Land Use Plans in section C, Compatibility with Existing Zoning and Plans. No changes to the impact conclusions discussed in this section are required as a result of these changes and additions.

The project is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, Question 4c 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*.[64]

The 48,620-square-foot project site is composed of two surface parking lots that provide 180 public parking spaces. The proposed project would construct two new 6-story, mixed-use residential buildings for family and senior housing connected by open mid-block passageways as shown on Figure 2 and summarized in Table 1 in section A, Project Description, of this Initial Study.[65] The family housing building would include a childcare facility accessed from Vallejo Street and commercial space (exact use to be determined) accessed from Broadway; both are also accessible off the north-south mid-block passage. The family housing building would not provide any accessory off-street automobile parking spaces, but would provide 110 *class 1* bicycle parking spaces and two cargo bicycle parking spaces. Another 16 *class 2* bicycle parking spaces would be provided at locations within portions of adjacent sidewalk on Vallejo Street and Broadway, subject to consultation with the Port of San Francisco, the SFMTA, and San Francisco Public Works (SFPW). The proposed project would also establish a 35-foot-long on-street passenger loading zone along Vallejo Street to serve the proposed childcare facility and a 35-foot-long on-street commercial loading zone along Front Street to accommodate freight loading needs for the family housing building. The senior housing building would not feature any accessory off-street automobile parking, but would include 10 *class 1* bicycle parking spaces, as well as four *class 2* bicycle parking spaces in the adjacent sidewalk along the west side of Davis Street (subject to consultation with the Port of San Francisco, SFMTA, and SFPW). The proposed project would also establish a 35-foot-long on-street passenger loading zone along Davis Street to service the senior housing building. These features are described and shown on Figure 3 in section A, Project Description.

Setting and Existing Conditions

Surrounding Streets, Pedestrian, Bicycle and Loading Facilities

The project site is located within the North Beach neighborhood, San Francisco's Waterfront Special Use District No. 3, and the *Northeastern Waterfront Area Plan* area on a block bounded by Vallejo Street to the north, Davis Street to the east, Broadway to the south, and Front Street to the west. The project site has frontages on all four surrounding streets. Broadway is a major east-west thoroughfare in the vicinity of

[64] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20.

[65] As described in section A, Project Description, the proposed project was revised to increase the step-backs from Front Street and Broadway, modify the building materials and fenestration (*i.e.,* the arrangement of windows and doors on the elevations of a building) that would further be compatible with the Northeast Waterfront Landmark District. As a result of this change, the dwelling unit mix of the family housing building was revised to reduce two one-bedroom units to two studio units, and one three-bedroom unit to a two-bedroom unit. Because trip generation is typically higher for dwelling units with more bedrooms, the reduction of three-bedroom and one-bedroom units would result in fewer person-trips than what was analyzed in the transportation impact study prepared for the proposed project (AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20). No changes to the impact conclusions discussed in this section are required as a result of this change to the dwelling unit.

the project site with two travel lanes and a parking lane in each direction. Vallejo Street is a minor collector roadway that runs east-west with one travel lane and a parking lane in each direction. Front Street is a north-south, minor collector roadway that runs along the eastern edge of the project site and has one travel lane, one bicycle lane, and a parking lane in both directions. Davis Street is a minor collector roadway that has one travel lane and a parking lane in both directions. Sidewalks of varying widths are provided on both sides of all four streets. There are existing Class II bicycle lanes on Front Street and Class III bicycle routes on Broadway. [66]

Site Access

Access to the project site by transit, foot, or bicycle is available through existing bus transit service, sidewalks, streets, and crosswalks near the site. Vehicular access to the project site is currently provided via curb cuts located on all four frontages. There are no existing passenger or commercial loading zones adjacent to the project site. The project site is surrounded by metered parking with one ADA-accessible parking zone located on Front Street at the northeast corner of Broadway and Front Street.

Emergency vehicle access to the project site would be provided along the adjacent street frontages of Vallejo Street, Broadway, Davis Street, and Front Street.

Local and Regional Transit

There are no Muni stops directly adjacent to the project site; however, the project site is located 1 block from the Embarcadero, where frequent service is provided by the E Embarcadero and F Market & Wharves historic streetcar lines, providing connections to major local transit corridors and hubs including Market Street. Additional local transit service is provided by the 10 Townsend and 12 Folsom–Pacific, operating along Sansome Street and Broadway/Pacific Avenue, with stops approximately 2 to 3 blocks west of the project site. Within a radius of approximately a 0.50 miles from the project site, Muni provides additional service on the 1 California, 8 Bayshore, 8AX Bayshore "A" Express, 8BX Bayshore "B" Express, 30 Stockton, 41 Union, and 45 Union–Stockton bus routes.

The following regional transit services operate within San Francisco and are accessible from the project site via Muni or other modes of travel: BART, Golden Gate Transit, Alameda-Contra Costa County Transit District, Caltrain, San Mateo County Transit District , Solano County Transit, the Western Contra Costa Transit Authority, and ferry operators including the Water Emergency Transportation Authority and Golden Gate Ferry. The BART station most easily accessible to the project site is the Embarcadero Station, located approximately 0.50 miles from the project site. The Golden Gate Transit buses that serve the project site are Commute Bus Route services that operate along Battery Street and Sansome Street, including routes 2, 4, 8, 18, 24, 24X, 27, 38, 44, 54, 56, 58, 72, 72X, 74, 76, and 97. The closest stops to the project site for these Golden Gate Transit services are Battery Street at Broadway (inbound) and Sansome Street at Vallejo Street (outbound), within 2 to 3 blocks of the project site. Golden Gate Transit also

[66] Class II Bikeway (Bike Lane): striped lane for one-way bike travel on a street or highway; Class III Bikeway (Bike Route): shared use with pedestrian or motor vehicle traffic, where bicyclists travel in the same lane as motor vehicle traffic.

operates ferry service between the North Bay and San Francisco, connecting Larkspur, Sausalito, and Tiburon with the Ferry Building during the morning and evening commute periods. The Ferry Building is approximately 0.50 miles southeast of the project site. Alameda-Contra Costa County Transit District (serving the East Bay), San Mateo County Transit District (serving the Peninsula/South Bay), Solano County Transit (serving Vallejo), and Western Contra Costa Transit Authority (serving Hercules) do not make local stops within 0.25 miles of the proposed project, but operate out of the Temporary Transbay Terminal, located at Howard Street and Beale Street, which is located approximately 1 mile southeast of the project site. The nearest Caltrain station is the Fourth/King Station, which is located approximately 2 miles south of the project site. Water Emergency Transportation Authority operates ferries under the "San Francisco Bay Ferry" brand, with terminals in Vallejo, at Oakland's Jack London Square, and in Alameda at Main Street and in Harbor Bay. Much like the Golden Gate Transit ferry service, Water Emergency Transportation Authority ferry services also terminate at the Ferry Building at the foot of Market Street along the Embarcadero, which is within extended walking or biking distance of the project site and easily accessible through transfers to and from Muni service along the Embarcadero.

Methodology and Standards of Significance

This section discusses the methods that were used to evaluate the project impacts related to VMT, traffic, transit, bicycle, pedestrian, loading, and emergency vehicles, under both "Existing plus Project" conditions and "Cumulative 2040 plus Project" conditions.

As part of the transportation impact study, PM peak hour[67] conditions were evaluated for two signalized, one all-way stop-controlled, and one uncontrolled intersections along roadways adjacent to or nearby the project site, including the north-south roadways: Front Street and Davis Street; and east-west roadways: Broadway and Vallejo Street. The PM peak hour was used to assess potential impacts to evaluate the worst-case scenario and because it is the adopted standard established by the *San Francisco Transportation Impact Analysis Guidelines for Environmental Review* (San Francisco Guidelines).

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 at great distance from other land uses located in areas with poor access to non-private vehicular modes of travel generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

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 other areas of the city. These areas of the city can be expressed geographically through transportation analysis zones. Transportation analysis zones are used in transportation planning models for transportation analysis and

[67] The weekday PM peak hour corresponds to the peak 60-minute period (i.e., four consecutive 15-minute periods) of the two-hour weekday PM peak period (4:00 p.m. to 6:00 p.m.).

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.

The San Francisco County Transportation Authority (Transportation Authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the *2010-2012 California Household Travel Survey*, Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. SF-CHAMP uses a synthetic population, which is a set of individual actors that represents the Bay Area's actual population, who make simulated travel decisions for a complete day. The Transportation Authority uses 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. For retail uses, the Transportation Authority uses trip-based analysis, which counts VMT from individual trips to and from the project (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 the summarizing of tour VMT to each location would over-estimate VMT.[68,69]

Table 5 shows the Bay Area regional average VMT and the VMT for the traffic analysis zone (TAZ) where the project site is located (TAZ 830) for existing and cumulative 2040 conditions. Note that the San Francisco 2040 cumulative conditions were projected using a SF-CHAMP model run, using the same methodology as outlined above for existing conditions, but including residential and job growth estimates and reasonably foreseeable transportation investments through 2040. As shown in Table 5, for residential development, the regional average daily VMT per capita is 17.2 and for retail development, regional average daily work-related VMT per employee is 14.9.

[68] To state 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, for example, 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. A trip- based approach allows the Transportation Authority to apportion all retail-related VMT to retail sites without double-counting.

[69] San Francisco Planning Department, *Executive Summary: Resolution Modifying Transportation Impact Analysis*, Appendix F, Attachment A. March 3, 2016.

TABLE 5 DAILY VEHICLE MILES TRAVELED

Land Use	Existing			Cumulative 2040		
	Bay Area Regional Average	Bay Area Regional Average minus 15%	TAZ 830[a]	Bay Area Regional Average	Bay Area Regional Average minus 15%	TAZ 830[a]
Residential	17.2	14.6	2.6	16.1	13.7	2.2
Retail	14.9	12.6	11.2	14.6	12.4	10.1
Childcare[b]	19.1	16.2	8.1	14.6	12.4	6.5

Notes:
a. The transportation analysis zone (TAZ) containing the project site is TAZ 830. TAZ 830 is bounded by Filbert Street to the north, Broadway to the south, the Embarcadero to the east, and Front Street to the west.
b. Office VMT standards are used as a proxy for childcare uses, because trips associated with childcare typically function similarly to office.
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Tables 11 and 21.

Vehicle Miles Traveled Standards

Land use projects may cause substantial additional VMT. The following identifies thresholds of significance and screening criteria used to determine if a land use project would result in significant impacts under the VMT metric.

Residential, Childcare, and Retail (and Similar) Projects

As documented in the *State Office of Planning and Research Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* (*i.e.*, the proposed transportation impact guidelines), a 15 percent threshold below existing development is "both reasonably ambitious and generally achievable."[70] For residential projects, a project would generate substantial additional VMT if it exceeds the regional household VMT per capita minus 15 percent.[71] For retail projects, the 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. Trips associated with childcare typically function similarly to office. While some of these uses may have some visitor/customer trips associated with them (*e.g.*, childcare and school drop-off, patient visits, etc.), those trips are often a side trip within a larger tour. 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. For the proposed childcare uses, the Planning Department

[70] Available at: https://www.opr.ca.gov/s_sb743.php, page III: 20.

[71] The California Office of Planning and Research's proposed transportation impact guidelines state that a project would cause substantial additional vehicle miles traveled (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.

treats these uses similar to office uses, and a project that exceeds the regional VMT rate per employee minus 15 percent would be a project that generates substantial VMT. This approach is consistent with CEQA section 21099 and the thresholds of significance for other land uses recommended in the State Office of Planning and Research's proposed transportation impact guidelines. For mixed-use projects, each proposed land use is evaluated independently, per the significance criteria described above.

The State Office of Planning and Research'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. The State Office of Planning and Research 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 VMT screening criteria applicable to the proposed project and how they are applied in San Francisco are described as follows:

- *Map-Based Screening for Residential, childcare, and Retail Projects.* OPR recommends mapping areas that exhibit VMT less than the applicable threshold for that land use. Accordingly, the Transportation Authority has developed maps depicting existing VMT levels in San Francisco for residential, office (*i.e.,* childcare), and retail land uses based on the SF-CHAMP 2012 base-year model run. The 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 and retail projects, as well as projects that are a mix of these uses, proposed within 0.50 miles 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 (1) have a floor area ratio of less than 0.75; (2) include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or (3) is inconsistent with the applicable Sustainable Communities Strategy (*i.e., Plan Bay Area 2040*).[72]
- *Small Projects Screening Criterion*. OPR recommends that lead agencies may generally assume that a project would not have significant VMT impacts if the project would either: (1) generate fewer trips than the level for studying consistency with the applicable congestion management program or (2) where the applicable congestion management program does not provide such a level, fewer than 100 vehicle trips per day. The Transportation Authority's Congestion Management Program, December 2015, does not include a trip threshold for studying consistency. Therefore, the Planning Department uses the 100 vehicle trip per day screening criterion as a level generally where projects would not generate a substantial increase in VMT.

Induced Automobile Travel Standards

Transportation projects may substantially induce additional automobile travel. The following identifies thresholds of significance and screening criteria used to determine if transportation projects would result

[72] 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.

in significant impacts by inducing substantial additional automobile travel. Pursuant 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 include a list of transportation project types that would not likely lead to a substantial or measureable increase in VMT. If a project fits within the general types of projects (including combinations of types) described above (*e.g.,* map-based screening for residential, childcare, and retail projects, proximity to transit stations, and small project screening criteria), it is presumed that VMT impacts would be less than significant and a detailed VMT analysis is not required. Although the project is not a transportation project, it would include some features that would modify the local circulation network, including, 20 *class 2* bicycle parking spaces, two new mid-block passages, and sidewalk widening (extensions and bulb-outs), ADA-compliant curb ramps at several locations, remove and/or reconfigure on-street parking to create sidewalk extensions and establish new on-street passenger and commercial loading zones at several locations; and remove existing curb cuts.

As shown on Table 6, the proposed project would generate 5,536 person-trips on a daily basis and 859 person-trips during the weekday PM peak hour.

TABLE 6 PROJECT TRAVEL DEMAND MODE: NEW PERSON-TRIPS BY LAND USE TYPE

Building / Land Use	Size	Trip Rates[a]		Person-Trips	
		Weekday Daily	Weekday PM Peak Hour Share	Weekday Daily	Weekday PM Peak Hour
88 Broadway					
Residential (general)					
Studio / one-bedroom	53 units	7.5 trips / unit	17.3%	398	69
Two-bedroom or larger	72 units	10.0 trips / unit		720	125
Subtotal Residential	*125 units*	*n/a*	*n/a*	*1,118*	*193*
Commercial[b]	5,246 square feet	600 trips / 1,000 square feet	13.5%	3,148	425
Childcare[c]					
Enrollment	55 children	4.0 trips / child[d]	50.0%	220	110
Staffing	18 persons	4.0 trips / person[e]	25.0%	72	18
Subtotal Childcare	*n/a*	*n/a*	*n/a*	*292*	*128*
Subtotal 88 Broadway	*n/a*	*n/a*	*n/a*	*4,557*	*746*
735 Davis Street					
Residential (senior housing)					
Studio/ one-bedroom	52 units	5.0 trips / unit	6.0%	260	16
Two-bedroom or larger	1 unit	5.0 trips / unit		5	0
Subtotal Residential	*53 units*	*n/a*	*n/a*	*265*	*16*
Commercial[c]	1,190 square feet	600 trips / 1,000 square feet	13.5%	714	96
Subtotal 735 Davis				*979*	*112*
Total					
Residential	178 units			1,383	209
Commercial	6,436 square feet			3,862	521
Childcare	4,306 square feet			292	128
Total				**5,536**	**859**

Notes: Component values may not sum to total values due to rounding.

a. Weekday daily trip rates and weekday PM peak hour shares from the *San Francisco Guidelines*, unless indicated otherwise.

b. Commercial tenants are unknown, the commercial uses are analyzed using the *composite* trip rate for retail from the *San Francisco Guidelines*.

c. Travel demand estimates for childcare are based on maximum enrollment and staffing levels (up to 55 children and up to 18 staff, respectively).

d. Each child is conservatively assumed to be dropped off/picked up individually (*i.e.,* no group travel/siblings being escorted together). All drop-off/pick-up activities are conservatively assumed to occur during the weekday AM and PM peak hour. The person-trips associated specifically with the children are ignored, resulting in approximately four trips per day enrolled child.

e. Conservatively assumes that each staff makes two trips per day (one to and one from the facility), with allowance for off-site trip activity (*e.g.,* lunch breaks, errands), visitors, and other ancillary trip activity.

Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, July 9, 2017, Table 8.

As shown on Table 7, during the weekday PM peak hour, the proposed project would generate 360 net new person-trips by automobile, 137 net new person-trips by transit, 292 net new person-trips by walking, and 70 net new trips by other modes. In addition, the proposed project would generate 234 net new vehicle-trips during the weekday PM peak hour.

TABLE 7 PROJECT TRAVEL DEMAND: NEW TRIPS BY MODE (WEEKDAY PM PEAK HOUR)

Direction	Weekday Daily						Weekday PM Peak Hour					
	Person-Trips					Vehicle Trips	Person-Trips					Vehicle Trips
	Auto	Transit	Walk	Other	Total		Auto	Transit	Walk	Other	Total	
Inbound												
Residential	272	90	311	18	691	222	55	18	63	4	139	45
Commercial	692	330	674	234	1,931	292	89	39	90	31	250	37
Childcare	97	30	17	2	146	92	42	6	7	0	55	42
Subtotal	*1,062*	*450*	*1,002*	*254*	*2,768*	*605*	*186*	*63*	*160*	*35*	*444*	*123*
Outbound												
Residential	272	90	311	18	691	222	28	9	32	2	70	22
Commercial	692	330	674	234	1,931	292	98	50	92	32	271	42
Childcare	97	30	17	2	146	92	49	15	9	1	73	46
Subtotal	*1,062*	*450*	*1,002*	*254*	*2,768*	*605*	*174*	*74*	*132*	*35*	*414*	*111*
Total	**2,124**	**900**	**2,005**	**507**	**5,536**	**1,211**	**360**	**137**	**292**	**70**	**859**	**234**

Notes: Component values may not sum to total values due to rounding
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Table 9.

Freight, Service Vehicle and Passenger Loading

Existing freight loading/service vehicle and passenger loading conditions were evaluated along the street segments bordering the project site. Freight loading and service vehicle demand (frequently referred to simply as "loading demand") consists of the number of delivery/service vehicle trips generated by the project, as well as the number of loading spaces that would be required to accommodate the expected demand during the average hour and peak hour of freight loading/service vehicle activity. In accordance with the standard methodology outlined in the San Francisco Guidelines, the number of daily delivery/service vehicle trips was estimated based on the size of each land use and a truck trip generation rate (specific to each land use). The number of loading spaces necessary to accommodate this demand was estimated based on the anticipated hours of operation, turnover of loading spaces, and an hourly distribution of trips. The information and rates used in the loading demand analysis were obtained from the San Francisco Guidelines for the relevant land uses. Under Planning Code section 152.1, the residential component of the proposed project would be required to provide two on-site loading spaces. A 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 on-site loading facilities or within convenient on-street loading zones, and if it would create potentially

hazardous conditions affecting traffic, transit, bicycles, or pedestrians or significant delays affecting transit.

Transit

Existing ridership and capacity data for local and regional public transit services were generally referenced from the San Francisco Planning Department's *Transit Data for Transportation Impact Studies Memorandum* (updated May 15, 2015). For Muni the ridership and capacity data published in the most recent update of the *Transit Data for Transportation Impact Studies Memorandum* are compiled from manual counts (for rail lines) and automatic passenger count (APC) data (for bus lines) collected in fall 2013.

Based on the ridership and capacity data, a capacity utilization[73] percentage was calculated as a measure of crowding inside transit vehicles. For each line, the capacity utilization is reported for the respective maximum load point (MLP), defined as the stop along a given line where average passenger loads reach their peak. For local public transit services, a capacity utilization greater than 85 percent is considered unacceptable. The SFMTA Board has determined that this threshold most accurately reflects actual operations and the likelihood of "pass-ups" (*i.e.*, vehicles not stopping to pick up more passengers). For regional public transit services, a capacity utilization standard of 100 percent was applied, equivalent to a full-seated load for all regional transit providers (with the exception of BART, which assumes a full-seated load plus standees). A capacity standard based on a full-seated load reflects the fact that regional transit operators generally serve longer-distance trips, and passengers would generally not be expected to stand for extended periods of time on these journeys. An increase in transit ridership generated by a project that represents more than 5.0 percent of the overall ridership on operators that currently exceed the 85 percent or 100 percent capacity utilization, or would exceed these capacity utilization thresholds under existing plus project conditions, would be considered a significant impact.

Impact TR-1: The proposed project would not cause substantial additional VMT or substantially induce automobile travel. (Less than Significant)

Vehicle Miles Traveled Analysis

The existing VMT by land use in the TAZ 830 is discussed above and shown in Table 5. The impacts by land use type are as follows:

- **Residential VMT:** The existing average daily VMT per capita for residential uses in TAZ 830 is 2.6 miles. This is 84.9 percent below the existing regional average daily VMT per capita of 17.2.[74] Given the project site is located in an area where existing VMT is more than 15 percent below the

[73] Capacity utilization is a calculation of ridership on a given transit service as a percentage of the total capacity of the service. The design capacity of transit vehicles can vary, but in the case of Muni is assumed to include both seated and standing capacity, where standing capacity is between 30 and 80 percent of the seated capacity depending on the vehicle design.

[74] (17.2 miles regional average daily VMT per capita – 2.6 miles TAZ 830 average daily VMT per capita) / 17.2 miles regional average daily VMT per capita = 84.88%

existing regional average, the proposed project's residential use would not result in substantial additional VMT.

- **Retail VMT:** The existing average daily VMT per employee for retail uses in TAZ 830 is 11.2 miles. This is 24.8 percent below the existing regional average daily VMT per capita of 14.9.[75] Given the project site is located in an area where existing VMT is more than 15 percent below the existing regional average, the proposed project's retail use would not result in substantial additional VMT.
- **Childcare VMT:** The existing average daily VMT per capita for childcare uses in TAZ 830 is 8.1 miles. This is 57.6 percent below the existing regional average daily VMT per capita of 19.1.[76] Given the project site is located in an area where existing VMT is more than 15 percent below the existing regional average, the proposed project's childcare use would not result in substantial additional VMT.

Furthermore, due to the proposed project's size (floor area ratio greater than 0.75), the project's location within 0.50 miles of an existing major transit stop (1 block from Muni stop E Embarcadero and F Market & Wharves historic streetcar lines, and 2 to 3 blocks from 10 Townsend and 12 Folsom–Pacific). Additionally, the project does not exceed vehicular parking requirements, and is within the Port of San Francisco Priority Development Area. The project would meet the Proximity to Transit Station criterion, which further indicates the project would not result in substantial additional VMT.

Induced Automobile Travel Analysis

The proposed project is not a transportation project. However, as discussed above, the proposed project would include features that would alter the transportation network. The proposed project would remove an existing surface parking lot at the site, and would include no new parking spaces; a reduction in off-street parking. These features fit within the general types of projects previously identified above that would not substantially induce automobile travel.

Based on the foregoing, the proposed project would not result in substantial additional VMT and would not substantially induce automobile traffic. Therefore, impacts on VMT would be ***less than significant***. No mitigation measures are required.

[75] (14.9 miles regional average daily VMT per capita – 11.2 miles TAZ 830 average daily VMT per capita) / 14.9 miles regional average daily VMT per capita = 24.8%

[76] (19.1 miles regional average daily VMT per capita – 8.1 miles TAZ 830 average daily VMT per capita) / 19.1 miles regional average daily VMT per capita = 57.59%

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 residential and commercial uses with no accessory off-street parking. The existing surface parking lots at the project site accommodates a total of approximately 180 parking spaces (not including additional capacity through tandem/valet arrangements), most of which is currently used by commuters traveling to and from workplaces in the area during the weekday AM and PM peak periods (*i.e.*, 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.). Furthermore, most of the street segments fronting the project site, including Vallejo Street, Davis Street, and Front 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 circulation would be ***less than significant***. No mitigation measures are required.

Freight and Passenger Loading

Freight Loading

Under Planning Code section 152.1, the residential component of the proposed project would be required to provide two on-site loading spaces; however, no loading spaces would be required for the retail component because the proposed area would be less than 10,000 square feet.

The proposed project would not provide any on-site loading spaces and, therefore, would not meet the Planning Code requirement for two on-site loading spaces for the residential component, and would seek approval of a Planned Unit Development, pursuant to Planning Code section 304, to permit modification of the on-site loading requirements of Planning Code section 152.

The proposed project would establish one on-street commercial loading zone (approximately 35 feet in length) along the east side of Front Street. As shown on Table 8, this on-street commercial loading zone would generally meet the average-hour loading demand (1.3 spaces), but would fall slightly short of the peak-hour loading demand (1.7 spaces).

TABLE 8 PROJECT LOADING DEMAND

Land Use	Project Size (square feet)	Daily Truck Trip Generation Rate (trucks per 1,000 gross square feet)	Freight Loading/Service Vehicle Demand (spaces)	
			Average Hour	Peak Hour
Residential	160,004	0.03	0.2	0.3
Retail[a]	6,436	3.70	1.1	1.4
Childcare[b]	4,306	0.10	0.0	0.0
Total			**1.3**	**1.7**

Notes: Component values may not sum to total values due to rounding.
a. Proposed commercial uses conservatively analyzed as "drug store", which has the highest daily truck trip generation rate of all retail uses cited in the San Francisco Guidelines.
b. The San Francisco Guidelines do not provide daily truck trip generation rates specific to childcare or educational uses. Proposed childcare use is approximated using truck trip generation rate for service ("institution") uses.
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Table 10.

According to the San Francisco Guidelines, approximately two-thirds (67 percent) of daily service vehicle activity typically consists of vehicle types similar to personal (household) automobiles, including 25 percent consisting of cars and pickups and 42 percent consisting of vans. Given the size and nature of the project, examples might include a small United States Postal Service truck delivering mail and parcels for residential tenants, a vendor van delivering a small batch of goods to commercial tenants, or a pickup truck for building maintenance contractors such as plumbers or electricians. Because of their size, these vehicles would have the option of using on- or off-street parking spaces in the vicinity of the project site, and would not necessarily be restricted to using the proposed on-street commercial loading zone. The remaining 33 percent of daily service vehicle activity, corresponding to up to one truck during the average hour and peak hour of freight loading/service vehicle activity, would consist of larger vehicles that would likely be restricted to using the proposed on-street commercial loading zone due to their size and limited maneuverability. This includes moving trucks used for residents moving in and out of the project site. Given these considerations, the proposed on-street commercial loading zone, in combination with on- and off-street parking spaces in the vicinity of the project site, would generally be adequate to meet the freight loading/service needs of the building, and the project would not generate a loading demand in excess of available and proposed on- or off-street accommodations such that substantial impacts to traffic, transit, bicycle, or pedestrian circulation could occur.

Passenger Loading

Passenger loading zones for the project are proposed along the west side of Davis Street and south side of Vallejo Street. While there may be some concentrated queuing during drop-off and pick-up periods at the proposed childcare facility, any potential effects on traffic circulation would be temporary and dissipate immediately with the conclusion of drop-off and pick-up activities. Unlike a school (which typically has fixed schedules), a childcare facility is typically designed for flexibility in drop-off and pick-up times, and any potential effects of passenger loading activities at the proposed Vallejo Street loading zone would likely be spread out over the course of the two-hour weekday AM and PM peak periods. Based on information provided by the planned operator of the childcare facility, drop-off activities would take place during a 3-hour window in the mornings between 7:00 and 10:00 a.m., while pick-up activities would take place during a similar window in the afternoons/evenings between 3:00 and 6:30 p.m. The

proposed restrictions described in Improvement Measure I-TR-2a below would be in effect at the Vallejo Street loading zone on weekdays during these time periods to accommodate drop-off/pick-up activities, with the loading zone reverting back to metered general-purpose parking at other times. Additionally, the proposed 35-foot-long passenger loading zone along Davis Street is intended to serve the senior housing building. Expected users of the zone could include paratransit vehicles, vanpools, taxis /rideshares, or other vehicles conducting pick-up/drop-off of building residents. Activity at this passenger loading zone is expected to be less concentrated than at the Vallejo Street passenger loading zone, and would likely be spread out over the course of the day according to residents' schedules, which could include medical appointments, shopping trips, group outings, visits with friends or family, or other types of trips. The zone would have sufficient capacity to accommodate the largest types of expected vehicles, which could include paratransit shuttles and cutaway vans. Similar to Vallejo Street, the affected segment of Davis Street functions as a low-volume collector roadway, and there is adequate space for vehicle traffic to safely bypass any temporary queuing that might exceed the capacity of the proposed passenger loading zone.

Based on the discussion of loading operations above, loading activities would not create potentially hazardous traffic conditions including those from double parking or significant delays affecting traffic, transit, bicycles or pedestrians; therefore, the proposed project would have a ***less-than-significant*** loading impact.

Although no significant loading impacts would occur, implementation of **Improvement Measure I-TR-2a, Passenger Loading Zone Management**, would further reduce these ***less-than-significant*** impacts.

Improvement Measure I-TR-2a: Passenger Loading Zone Management

Passenger loading would occur on Vallejo Street and Davis Street adjacent to the proposed daycare and proposed mid-block passageway respectively. The project sponsor should ensure that project-generated passenger loading activities along Vallejo Street and Davis Street are accommodated within the confines of the on-street passenger loading zones. Specifically, the project sponsor should monitor passenger loading activities at the proposed zones to ensure that such activities are in compliance with the following requirements:

- That double parking, queuing, or other project-generated activities do not result in intrusions into the adjacent travel lane or obstruction of the adjacent sidewalk. Any Project-generated vehicle conducting, or attempting to conduct, passenger pick-up or drop-off activities should not occupy the adjacent travel lane such that free-flow traffic circulation is inhibited, and associated passengers and pedestrian activity should not occupy the adjacent sidewalk such that free-flow pedestrian circulation is inhibited.
- That vehicles conducting passenger loading activities are not stopped in the passenger loading zone for an extended period of time. In this context, an "extended period of time" shall be defined as more than 5 consecutive minutes.

Should passenger loading activities at the proposed on-street passenger loading zones not be in compliance with the above requirements, the Project Sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or deployment of staff to direct passenger loading activities; use of off-site parking

facilities or shared parking with nearby uses; travel demand management strategies such as additional bicycle parking; and / or limiting hours of access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the Planning Department.

If the Planning Director, or his or her designee, suspects that Project-generated passenger loading activities in the proposed passenger loading zones are not in compliance with the above requirements, the Planning Department should notify the property owner in writing. The property owner, or his or her designated agent (such as building management), should hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant should submit a report to the Planning Department documenting conditions. Upon review of the report, the Planning Department should determine whether or not Project-generated passenger loading activities are in compliance with the above requirements, and should notify the property owner of the determination in writing.

If the Planning Department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner or his or her designated agent will have 90 days from the date of the written determination to carry out abatement measures. If after 90 days the Planning Department determines that the property owner or his or designated agent has been unsuccessful at ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure compliance. These restrictions should be determined by the Planning Department in coordination with SFMTA, as deemed appropriate based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner or his or her designated agent should be responsible for relaying these restrictions to building tenants to ensure compliance.

Construction

Project construction would last approximately 19 months and is planned to commence in August 2018. During the construction period, temporary and intermittent transportation impacts would result from truck movements to and from the project site. Truck movements during periods of peak traffic flow would have greater potential to create conflicts than during non-peak hours because of the greater numbers of vehicles on the streets during the peak hour that would have to maneuver around queued trucks. However, the majority of construction activity would occur during off-peak hours, when traffic volumes and the potential for conflicts are substantially lower than during peak hours.

Due to the undeveloped nature of the project site, construction staging would occur primarily within the confines of the project site, although the sidewalks fronting the site along Vallejo Street, Broadway, Davis Street, and/or Front Street may need to be closed on a temporary basis. Any closures would likely require the temporary closure of the adjacent parking lane to maintain pedestrian access but would likely otherwise have little effect on roadway capacity. Signage and pedestrian protection would be erected, as appropriate. It is anticipated that no roadways or travel lanes would need to be closed and no transit service or bus stops would need to be rerouted or relocated during the construction period.

Any temporary traffic lane closures would be coordinated with the City to minimize the impacts on local traffic. In general, lane and sidewalk closures are subject to review and approval by San Francisco Public

Works (Public Works) and the City's Transportation Advisory Staff Committee that consists of representatives of City departments including SFMTA, Public Works, Fire, Police, Public Health, Port and the Taxi Commission.

During the 19-month construction period, the grading construction phase is estimated to generate the greatest number of daily truck trips (55 trips) and the building construction phase is estimated to generate the greatest number of daily construction worker trips (up to 100 trips). However, the addition of the worker-related vehicle- or transit-trips would not substantially affect transportation conditions, as impacts on local intersections or the transit network would be substantially less than those associated with the proposed project because fewer trips would be generated (*e.g.,* 55 daily truck trips during grading phase and up to 100 daily construction worker trips during construction compared to 859 weekday PM peak hour person trips during project operation) and are temporary in nature. Also, the majority of construction activity would occur during off-peak hours, when traffic volumes and the potential for conflicts are substantially lower than peak-hour conditions. Construction workers who drive to the project site and the potential temporary parking restrictions along the building frontage would cause a temporary increase in parking demand and a decrease in supply. Construction workers would need to park either on-street or in parking facilities that currently have availability during the day or use other travel modes to reach the project site. However, parking shortfalls would be temporary and are not considered a significant environmental impact per SB 743 (see section D, Summary of Environmental Impacts). Furthermore, the temporary lessening of parking variability during construction is not anticipated to create hazardous traffic conditions. Therefore, the proposed project's construction impacts were determined to be ***less than significant***.

Although no significant construction impacts were identified, **Improvement Measure I-TR-2b, Construction Traffic Management**, has been identified to further minimize the project's ***less-than-significant*** impacts as a result of project-related construction activities.

Improvement Measure I-TR-2b: Construction Traffic Management

The project sponsor should implement measures to minimize the effects of project-related construction activities on traffic, transit, bicycle, and pedestrian circulation. Potential measures could include (but are not limited to) the following:

- Limit hours of construction-related traffic, including, but not limited to, truck movements, to avoid the weekday AM and PM peak hours (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) (or other times, if approved by the San Francisco Municipal Transportation Agency).
- Construction contractor(s) for the project should coordinate construction activities with other construction activities that may take place concurrently in the vicinity of the project site, including the Seawall Lots 323/324 and 940 Battery Street project. Potential measures could include establishing regular coordination protocols (*e.g.,* a weekly liaison meeting between general contractors to discuss upcoming activities and resolve conflicts); offsetting schedules (*e.g.,* scheduling materials deliveries, concrete pours, crane assembly/ disassembly, and other major activities at different hours or on different days to avoid direct overlap); shared travel and/or parking solutions for construction workers (*e.g.,* helping establish an informal vanpool/carpool program); and other measures.

The project sponsor should require that the construction contractor(s) for the project encourage workers to take transit, rideshare, bicycle, or walk when traveling to and from the construction site.

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 under section E.1, Land Use and Land Use Planning. Therefore, the proposed project would not cause adverse impacts associated with traffic hazards. In addition, the proposed project does not provide on-site parking facilities and would eliminate all existing curb cuts. As noted previously under Impact TR-2, loading zones during peak traffic hours would not interfere with bicycle, pedestrian or vehicular movements on Vallejo Street for daycare drop-off. Although the proposed project is not expected to result in substantial loading and impacts would be less than significant, Improvement Measure I-TR-2a has been identified to further decrease the severity of these less-than-significant impacts with regards to daycare drop-off. 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. No mitigation measures are required.

Impact TR-4: The proposed project would not result in inadequate emergency access. (Less than Significant)

The street network currently provides access to the project site for emergency vehicles. The proposed project would not modify existing emergency access conditions; emergency vehicles would continue to access the project site via all four streets fronting the project site: Front Street, Vallejo Street, Davis Street, and Broadway. The proposed project would not close off any existing streets or entrances to public uses. Aside from the general and relatively minor increase in vehicle traffic that would result from the additional activity at the project site, the proposed project would not inhibit emergency access to the project site. Therefore, the proposed project would have a ***less-than-significant*** impact to emergency access. No mitigation measures are required.

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

As previously shown on Table 7, the project is estimated to generate approximately 137 PM peak-hour transit trips (63 inbound transit person-trips and 74 outbound transit person-trips), which would be distributed among Muni, BART, Caltrain, Alameda-Contra Costa County Transit District, Golden Gate Transit, San Mateo County Transit District lines, and ferries. There are no transit stops adjacent to the

project site; however public transit is very accessible in the project vicinity. These bus lines link the neighborhood to the rest of the city, the East Bay, the North Bay, and the Peninsula.

This analysis of transit impacts focuses on the increase in transit patronage across "screenlines"[77] in the outbound direction during the weekday PM peak hour. Four screenlines have been established in San Francisco to analyze potential impacts of projects on Muni service, and three screenlines have been established for regional transit service. As shown on described above, Muni has a capacity utilization performance standard of 85 percent. The threshold of significance for identifying regional transit crowding impacts is 100 percent capacity utilization. There are no transit services operating on the street segments immediately abutting the project site. The closest transit stops are located a block or more away along the Embarcadero, Broadway, and the Battery Street/Sansome Street couplet. Because there is sufficient physical separation between the project site and transit stops, the proposed project would not conflict with bus operations; therefore, no impacts to bus circulation were identified. As shown on Table 9, all of the screenlines and the majority of corridors would operate below Muni's standard 85 percent capacity utilization with implementation of the proposed project, with the exception of the Fulton/Hayes corridor along the northwest screenline and Third Street corridor along the southeast screenline.

TABLE 9 MUNI DOWNTOWN SCREENLINES: EXISTING PLUS PROJECT CONDITIONS

Screenline/Corridor	Weekday PM Peak Hour (Outbound)						
	Existing Conditions			Existing plus Project Conditions			
	Ridership	Capacity	Utilization	Ridership		Capacity	Utilization
				Added	Total		
Northeast Screenline							
Kearny / Stockton	2,245	3,327	67.5%	2	2,247	3,327	67.6%
Other	683	1,078	63.4%	3	686	1,078	63.6%
Subtotal	*2,928*	*4,405*	*66.5%*	*6*	*2,934*	*4,405*	*66.6%*
Northwest Screenline							
Geary	1,964	2,623	74.9%	5	1,969	2,623	75.1%
California	1,322	1,752	75.4%	2	1,324	1,752	75.6%
Sutter / Clement	425	630	67.5%	1	426	630	67.7%
Fulton / Hayes	**1,184**	**1,323**	**89.5%**	**2**	**1,186**	**1,323**	**89.6%**
Balboa	625	974	64.2%	2	627	974	64.4%
Subtotal	*5,519*	*7,302*	*75.6%*	*12*	*5,532*	*7,302*	*75.8%*
Southeast Screenline							
Third Street	**782**	**793**	**98.6%**	**1**	**783**	**793**	**98.7%**

[77] Screenlines represent a grouping of transit services, usually by a common direction or origin / destination served, reflecting the fact that transit passengers generally have multiple transit options or alternatives available to them on their journey.

Mission	1,407	2,601	54.1%	2	1,409	2,601	54.2%
San Bruno / Bayshore	1,536	2,134	72.0%	2	1,538	2,134	72.1%
Other	1,084	1,675	64.7%	2	1,086	1,675	64.8%
Subtotal	*4,810*	*7,203*	*66.8%*	*7*	*4,816*	*7,203*	*66.9%*
Southwest Screenline							
Subway	4,904	6,164	79.6%	6	4,910	6,164	79.7%
Haight / Noriega	977	1,554	62.9%	2	979	1,554	63.0%
Other	555	700	79.0%	1	556	700	79.4%
Subtotal	*6,435*	*8,418*	*76.5%*	*10*	*6,446*	*8,418*	*76.6%*
Total	*19,693*	*27,328*	*72.1%*	*34*	*19,727*	*27,328*	*72.2%*

Notes: Component values may not sum to total values due to rounding. **Bold** indicates capacity utilization of 85 percent or greater.
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Table 12.

While these two corridors currently operate above 85 percent capacity, the proposed project would contribute two riders or 0.2 percent of overall ridership on the Fulton/Hayes corridor and one rider or 0.1 percent of overall ridership on the Third Street corridor. The increase in transit ridership generated by the proposed project represents less than 5.0 percent of the overall ridership on corridors that currently operate over the 85 percent capacity, which as previously described is the standard applied to determine significance. As a result, the proposed project would result in ***less-than-significant*** impacts to local transit.

As shown on Table 10, all of the screenlines for regional transit would operate below the 100 percent regional transit capacity utilization, with the exception of BART. The proposed project would increase ridership on the regional transit screenlines, but would not directly cause any of them to exceed the 100 percent capacity utilization threshold.

TABLE 10 REGIONAL TRANSIT SCREENLINES – EXISTING PLUS PROJECT CONDITIONS

Screenline / Operator	Weekday PM Peak Hour (Outbound)						
	Existing Conditions			Existing plus Project Conditions			
	Ridership	Capacity	Utilization	Ridership		Capacity	Utilization
				Added	Total		
East Bay							
BART	24,488	22,784	107.5%	17	24,505	22,784	107.6%
AC Transit	2,256	3,926	57.5%	2	2,258	3,926	57.5%
Ferries	805	1,615	49.8%	1	806	1,615	49.9%
Subtotal	*27,549*	*28,325*	*97.3%*	*19*	*27,568*	*28,325*	*97.3%*
North Bay							
Golden Gate Transit	1,384	2,817	49.1%	2	1,386	2,817	49.2%
Ferries	968	1,959	49.4%	2	970	1,959	49.5%

Subtotal	*2,352*	*4,776*	*49.2%*	*4*	*2,356*	*4,776*	*49.3%*
South Bay							
BART	13,500	18,900	71.4%	15	13,515	18,900	71.5%
Caltrain	2,377	3,100	76.7%	1	2,378	3,100	76.7%
SamTrans	141	320	44.1%	0	141	320	44.1%
Subtotal	*16,018*	*22,320*	*71.8%*	*17*	*16,035*	*22,320*	*71.8%*
Total	*45,919*	*55,421*	*82.9%*	*40*	*45,959*	*55,421*	*82.9%*

Notes: Component values may not sum to total values due to rounding. Screenlines and transit providers / services operating at capacity utilization of 100 percent or greater are highlighted in **bold.**
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA,* June 20, 2017, Table 14.

BART service to/from the East Bay currently exceeds the 100 percent capacity utilization threshold and would continue to do so with the proposed project. The proposed project would contribute 0.1 percent to the total ridership on BART service on the East Bay screenline. The increase in transit ridership generated by the proposed project represents less than 5.0 percent of the overall ridership on operators that currently exceed the 100 percent capacity, which is the standard used to determine significance as previously described. As a result, the proposed project would result in ***less-than-significant*** impacts.

Transit-related policies include, but are not limited to: (1) discouragement of commuter automobiles (Planning Code section 101.1, established by Proposition M, the Accountable Planning Initiative); and (2) the City's "Transit First" policy, established in the City's Charter section 16.102. As discussed under section C, Compatibility with Existing Zoning and Plans, the proposed project would not conflict with any of these transit-related policies.

The proposed project would not conflict with transit operations as discussed above and also would not conflict with the transit-related policies established by Proposition M or the City's Transit First Policy. Therefore, impacts to the City's transit network would be considered ***less than significant***.

Pedestrian Facilities

As shown previously on Table 7, the proposed project would generate up to 429 pedestrian trips (137 of which would be walking to/from transit) during a typical weekday PM peak hour. These new pedestrian trips would be spread out over several adjacent sidewalks and crosswalks. Pedestrian activity would be distributed across all four street segments adjacent to the project site, as well as along the two mid-block pedestrian passages proposed by the project. Given the quality of existing sidewalks and crosswalks and existing pedestrian activity levels in the vicinity of the project site, the new pedestrian trips generated by the proposed project could be accommodated on the adjacent facilities and would not result in substantial overcrowding on nearby pedestrian facilities, including sidewalks and crosswalks between project site access points and major destinations or transit stops in the surrounding area (*e.g.*, the Embarcadero

waterfront promenade or the Broadway & the Embarcadero Station for the E Embarcadero and F Market & Wharves historic streetcars).[78]

The proposed project would not create potential collision risks through increased vehicle conflicts or otherwise interfere with pedestrian accessibility to the project site and adjoining areas. Given that the proposed project is replacing automobile-oriented uses (surface parking) served by multiple curb cuts that already generate substantial amounts of vehicle traffic with residential and commercial uses and no accessory parking, pedestrian circulation in sidewalks and crosswalks adjacent to and in the vicinity of the project site is unlikely to be substantially worse than existing conditions. The proposed project reduces curb cuts from an existing five curb cuts to none. However, the proposed project would introduce potential new conflicts associated with the proposed on-street freight loading zone on Front Street and the on-street passenger loading zones along Vallejo Street and Davis Street, particularly drop-off and pick-up activities associated with the childcare facilities. The passenger loading zones are expected to increase curbside activity more than a typical on-street parking space, but any vehicle-pedestrian conflicts would be substantially less than those associated with vehicles using curb cuts to cross the sidewalk to directly enter and exiting the property. Additionally, the width of the sidewalk along Vallejo Street and Davis Street is sufficient for pedestrians to bypass obstructions from loading activities from the childcare facility and senior citizen housing. Therefore, the proposed project's impact to pedestrian circulation and facilities would be ***less than significant***. Although the proposed project is not expected to cause significant pedestrian impacts, the implementation of **Improvement Measure I-TR-2a, Passenger Loading Zone Management,** discussed under Impact TR-2, could improve the pedestrian environment in the project area.

Bicycle Facilities

The proposed project would provide 110 *class 1* bicycle parking spaces for the family housing building and 10 *class 1* bicycle parking spaces for the senior housing building, as well as 20 *class 2* bicycle parking spaces (16 spaces for the family housing building and 4 spaces for the senior housing building) at locations within the sidewalk adjacent to the project site on Vallejo Street, Davis Street, and Broadway. This would meet the requirement of Planning Code section 155.2, which requires a total of 115 *class 1* spaces and 20 *class 2* spaces.

The *San Francisco Bicycle Plan* includes goals and objectives to encourage bicycle use in the city, describes the existing bicycle route network (a series of interconnected streets and pathways on which bicycling is encouraged) and identifies improvements to achieve the established goals and objectives. There are multiple bicycle routes in the vicinity of the project site, the most well-utilized being the Class II facilities along the Embarcadero and the San Francisco Bay Trail along the adjacent shared-use promenade. The Project site is also immediately adjacent to secondary bikeways, including Class III facilities along Broadway and Class II facilities along Front Street. There are no proposed or planned future bikeway improvements along any of the street segments adjacent to the project site. Additional bicycle facilities in the area include the existing Bay Area Bicycle Share with stations less than a block away at the Embarcadero and Vallejo Street, and Broadway and Battery Street.

[78] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20.

Safety concerns for bicyclists generally stem from conflicts with vehicles, including right-turning traffic at intersections and on-street parking movements across bicycle lanes. Vehicles stopped in the bike lane, such as delivery or rideshare vehicles, can also introduce hazards for bicyclists and obstruct circulation. Existing bicycle activity during the weekday PM peak hour at the four intersections bounding the project site is generally on the order of ten bicycles or less on each intersection approach. It is anticipated that a substantial portion of the 70 "other" PM peak hour trips generated by the proposed project would be bicycle trips. While the proposed project would increase the amount of bicycle activity along streets in the vicinity of the Project site, the magnitude of this increase would not be substantial enough to affect overall bicycle circulation or the operations of bikeway facilities. Existing bikeways would have sufficient capacity to handle the incremental increase in bicycle activity generated by the proposed project. The proposed project would demolish existing automobile-oriented uses (surface parking) at the project site, which is served by multiple curb cuts that already generate substantial amounts of vehicle traffic. Given that the proposed project would replace these uses them with active uses without any curb cuts or accessory parking, bicycle circulation along the streets adjacent to and in the vicinity of the project site would likely be similar to, if not substantially better than, existing conditions. The proposed project may create some new conflicts associated with the proposed on-street passenger loading zones along Vallejo Street and Davis Street and freight loading zone on Front Street. Any potential conflicts associated with these zones would not be significantly different from those associated with the existing on-street parking spaces in these locations. While there may be some concentrated queuing during drop-off and pick-up periods at the proposed childcare facility, any potential effects on bicycle circulation would be temporary and dissipate immediately with the conclusion of drop-off and pick-up activities. The proposed project would not increase auto or bicycle traffic to a level that adversely affects existing bicycle facilities in the area; nor would the proposed project create a new hazard or substantial conflict to bicycling. The proposed project would not adversely affect bicycle accessibility to the project site or adjoining areas. Thus, the proposed project's impact to bicycle facilities and circulation would be considered ***less than significant***. No mitigation measures are required.

The implementation of **Improvement Measure I-TR-2a, Passenger Loading Zone Management**, would further minimize any ***less-than-significant*** effects on bicycle circulation as a result of the proposed passenger loading zones.

Impact C-TR-1: The proposed project, in combination of past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to cumulative regional VMT. (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 VMT and induced automobile travel project-level thresholds are based on levels at which new projects are not anticipated to conflict with state and regional long-term greenhouse gas 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 (see 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 5, projected 2040 average daily VMT per capita for residential uses in TAZ 830 is 2.2 miles. This is 86.3 percent below the projected 2040 regional average daily VMT per capita of 16.1.[79] Projected 2040 average daily VMT per employee for retail uses in TAZ 830 is 10.1 miles. This is 30.8 percent below the projected 2040 regional average daily VMT per employee of 14.6.[80] Projected 2040 average daily VMT per employee for childcare uses in TAZ 830 is 6.5 miles. This is 55.5 percent below the projected 2040 regional average daily VMT per employee of 14.6.[81] Given the project site is located in an area where VMT is greater than 15 percent below the projected 2040 regional average, the proposed project's residential, childcare, and retail uses would not result in substantial additional VMT. Therefore, the proposed project's residential, childcare, and retail uses would not combine with cumulative development projects to create or contribute to any substantial cumulative increase in VMT, and impacts would be ***less than significant***.

Impact C-TR-2: The proposed project in combination with past, present, and reasonably foreseeable future projects, would not result in cumulative transportation impacts. (Less than Significant)

Future Changes to Transportation Network

Various changes to the transportation network are expected to take effect by the cumulative horizon year 2040. These are summarized below and a detailed description is provided in the transportation impact study prepared for the project.

- **The Transit Effectiveness Project.** This project was initiated by SFMTA in collaboration with the City Controller's Office and is designed to implement system-wide changes to Muni service to streamline operations, adapt to changes in travel patterns, and improve reliability and passenger experience.
- **The Embarcadero Enhancement Project.** The SFMTA is leading a joint effort with the Port of San Francisco, the San Francisco Planning Department, and SFPW to study potential enhancements to the Embarcadero to increase safety for all users, support economic vitality, and improve connectivity and accessibility. The centerpiece of the proposal involves a new bikeway along the Embarcadero to better separate bicycle traffic from both automobile traffic and pedestrian traffic, minimizing vehicle–bicycle and bicycle–pedestrian conflicts and reducing safety hazards for bicyclists and pedestrians.
- **Historic Streetcar Extension to Fort Mason**. The National Park Service (specifically, the Golden Gate National Recreational Area and the San Francisco Maritime National Historic Park), working together with SFMTA and the Federal Transit Administration, is leading planning efforts for a proposed extension of historic streetcar service to Fort Mason. The project would

[79] (16.1 miles regional average daily VMT per capita – 2.2 miles TAZ 830 average daily VMT per capita) / 16.1 miles regional average daily VMT per capita = 86.33%

[80] (14.6 miles regional average daily VMT per capita – 10.1 miles TAZ 830 average daily VMT per capita) / 14.6 miles regional average daily VMT per capita = 30.82%

[81] (14.6 miles regional average daily VMT per capita – 6.5 miles TAZ 830 average daily VMT per capita) / 14.6 miles regional average daily VMT per capita = 55.47%

extend the E Embarcadero and/or F Market & Wharves from their current northern terminus at Beach & Jones Station (Jones Street/Beach Street) west to Aquatic Park (via Beach Street), Ghirardelli Square, and Fort Mason Center (via rehabilitation of the disused Fort Mason Tunnel of the former San Francisco Belt Railroad).

None of these proposed changes, however, would substantially affect traffic circulation in the vicinity of the project site.

The cumulative projects are listed in Table 2 and mapped on Figure 17 in section B.2, Cumulative Projects. As shown the majority the identified cumulative projects are small-site developments and many would only involve minor modifications to existing buildings or the renovation/reuse of existing buildings for other uses. The remainder of the projects would involve replacement of existing buildings and active uses, and would not involve development of vacant lots with no existing uses.

As discussed above, the proposed project does not propose design features that would present traffic safety hazards or create new sources of substantial conflict with existing plus planned traffic circulation. Likewise, none of the various land use and transportation network changes would involve design features that would present traffic safety hazards or create new sources of substantial conflict with existing and projected traffic circulation in the immediate vicinity of the project site. Because of the proximity between the project and the proposed development on Seawall Lots 323/324, however, a focused discussion of the potential cumulative effects associated with these two projects is provided below.

Vehicular Circulation

Neither the proposed project nor the Seawall Lots 323/324 development would include on-site parking, but there are multiple public parking facilities in the surrounding vicinity (as previously described), and both projects would include passenger loading zones (along Vallejo Street and Davis Street for the proposed project and along Broadway for the Seawall Lots 323/324 development). The Seawall Lots 323/324 development would also provide a valet program at the proposed passenger loading zone along Broadway capable of accommodating up to 50 vehicles at an off-site location.

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. While the shared dead-end segment of Davis Street north of Broadway (and the connecting segment of Vallejo Street east of Front Street) would be adjacent to both sites, this street segment primarily functions as a low-volume collector roadway. There would generally be adequate space for vehicle traffic to safely bypass any temporary disruptions at the proposed passenger loading zones for the project (along the west side of Davis Street and south side of Vallejo Street) or the proposed commercial loading zone and off-street freight loading dock for the Seawall Lots 323/324 development (along the east side of Davis Street).

Furthermore, any potential effects on traffic safety and circulation associated with proposed passenger and commercial loading zones would not be substantially different from those associated with the

existing on-street parking spaces in these locations or on-street parking elsewhere in the study area. Due to its size, the proposed commercial loading zone associated with the Seawall Lots 323/324 development could potentially accommodate larger trucks that may require slightly more time to move into and out of the zone. Likewise, truck maneuvers reversing into or pulling out of the off-street freight dock at the Seawall Lots 323/324 development could result in temporary blockage of through traffic along Davis Street. However, these effects would be temporary and minor, dissipating quickly once the truck has cleared the travel lanes, and would not constitute substantial traffic hazards.

Neither of the two projects would conflict with traffic changes planned or proposed in the immediate vicinity of either site. Depending on the design option selected for implementation, the Embarcadero Enhancement Project could result in minor changes to lane geometry/configuration and signal timing/phasing. However, neither the proposed project nor the Seawall Lots 323/324 development are proposing any physical changes to the nearby segments of the Embarcadero, and the improvements proposed under the Embarcadero Enhancement Project would primarily be designed to improve bicycle safety and circulation, and would not constitute a substantial traffic safety hazard.

Both projects would propose streetscape changes including sidewalk widening and bulb-outs, but these features are primarily designed to enhance the pedestrian realm and improve pedestrian safety and walkability, and would have a negligible effect on traffic safety or circulation.

Given these considerations, the project would not combine with cumulative development projects to create or contribute to a cumulative transportation or circulation impact and cumulative impacts would be ***less than significant.*** **Improvement Measure I-TR-2a: Passenger Loading Zone Management,** would further minimize any less-than-significant effects on traffic conditions as a result of the project's proposed passenger loading zones.

Freight and Passenger Loading

None of the transportation changes above would substantially affect freight or passenger loading accommodations or activity in the immediate vicinity of the project site. Depending on the design option selected for implementation, the Embarcadero Enhancement Project could result in the removal or reconfiguration of some existing on-street parking spaces within the geographical extent of the proposed bikeway improvements. However, none of the existing on-street parking spaces along the west side of the Embarcadero fronting the Seawall Lots 323/ 324 site are designated for use as commercial or passenger loading zones.

None of the cumulative projects would involve uses generating an unusual amount of freight loading/service vehicle activity. In particular, uses proposed by the cumulative projects would include office, museum, hotel, and residential uses, which would not be substantially different from the mix of uses currently seen in the area and in many other neighborhoods in the Greater Downtown area. Furthermore, almost all of the identified projects in the development pipeline are small-site developments and many would only involve minor modifications to existing buildings or the renovation/reuse of existing buildings for other uses. The remainder of the projects would involve replacement of existing buildings and active uses, and would not involve development of vacant lots with no existing uses.

While several of the foreseeable development projects involve large hotels or visitor attractions, which could generate passenger loading activity, these projects would generally be expected to provide some specific accommodation for commercial and passenger loading or make use of existing commercial and passenger loading accommodations. The Seawall Lots 323/324 development, for example, would establish new commercial and passenger loading zones as described above (*e.g.*, valet program and off-street freight loading).

As discussed above, the proposed project would not generate a loading demand in excess of available and proposed on- or off-street accommodations such that substantial impacts to traffic, transit, bicycle, or pedestrian circulation could occur. Furthermore, project-generated freight loading/service vehicle activities, including those at the proposed on-street commercial loading zone, would result in less-than-significant impacts to traffic, transit, bicycle, and pedestrian circulation. Similarly, project-generated passenger loading activities would result in less-than-significant impacts to traffic, transit, bicycle, and pedestrian circulation. Because of the proximity between the proposed project and the proposed development on Seawall Lots 323/324, however, a focused discussion of the potential cumulative effects associated with these two projects is provided below.

The two projects combined would include on-street passenger and commercial loading zones and an off-street freight loading dock. However, both projects are anticipated to generate loading demands during the weekday PM peak hour that could be accommodated within the proposed passenger loading zones for the project (along the west side of Davis Street and south side of Vallejo Street) or the proposed commercial loading zone and off-street freight loading dock for the Seawall Lots 323/324 development (along the east side of Davis Street). In addition, given the expected volume of vehicle, transit, bicycle, and pedestrian activity and the physical separation between these proposed features, substantial conflicts between the two sites or with vehicle, transit, bicycle, and pedestrian circulation from future development projects are not expected.

Due to its size, the proposed commercial loading zone associated with the Seawall Lots 323/ 324 development could potentially accommodate larger trucks that may require slightly more time to move into and out of the zone. Likewise, truck maneuvers reversing into or pulling out of the off-street freight dock at the Seawall Lots 323/324 development could result in temporary blockage of vehicle, bicycle, and pedestrian circulation along Davis Street. While the shared dead-end segment of Davis Street north of Broadway (and the connecting segment of Vallejo Street east of Front Street) would be adjacent to both sites, this street segment primarily functions as a low-volume collector roadway. There would generally be adequate space for vehicle and bicycle traffic to safely bypass any temporary disruptions at the proposed passenger and commercial loading zones described above. These effects would be temporary and minor, dissipating quickly once the truck has cleared the travel lanes, and would not constitute substantial traffic, bicycle, or pedestrian safety hazards. In addition, there would be sufficient sidewalk width along these site frontages to allow pedestrians to easily bypass any obstructions created by passenger or commercial loading activities at the proposed on-street zones. As previously discussed, only transit services immediately adjacent to either site would be located along the Embarcadero and would be unaffected by freight or passenger loading activities associated with either site.

Furthermore, while the proposed project would include a proposed passenger loading zone along Davis Street, this zone would be located on the opposite side of Davis Street from the Seawall Lots 323/324

development. The Seawall Lots 323/324 development would include a passenger loading zone along Broadway, separate from the commercial loading zone along the east side of Davis Street or the proposed project's passenger loading zone along the west side of Davis Street. Therefore, there would be sufficient physical separation between any simultaneous commercial and passenger loading activities at either site such that substantial conflicts between the two sites or with existing plus planned vehicle, transit, bicycle, and pedestrian circulation are not expected. Given these considerations, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact related to freight and passenger loading activities and impacts would be ***less than significant.***

Construction

Project-related construction activities would result in less-than-significant impacts to traffic, transit, bicycle, and pedestrian circulation. There are only a few foreseeable projects in the vicinity of the project site, and none of the identified projects—with the exception of the Seawall Lots 323/324 development—would be located immediately adjacent to the project site. Construction timelines for the proposed project, the Seawall Lots 323/324 development, and the other land use or transportation projects are dependent on project approval and entitlement, securement of financing/funding sources, and other factors, and cannot be known with certainty at this time. Construction of the proposed project is expected to take approximately 19 months and commence in August 2018, while construction of the Seawall Lots 323/324 development is anticipated to take approximately 22 months, beginning as early as winter 2018.

In general, however, construction related to other projects would be governed by the same provisions governing construction of the proposed project. Any temporary traffic and transportation changes would be coordinated through the SFMTA Interdepartmental Staff Committee on Traffic and Transportation and require a public meeting. Construction activities would be required to comply with *Regulations for Working in San Francisco Streets* (Blue Book), a manual published by the SFMTA for City agencies, utility crews, private contractors, and others doing work in San Francisco streets, and reimbursement would be provided to SFMTA for installation and removal of temporary striping and signage changes required during construction.

Construction trucks would be required to use designated freight traffic routes to access both sites, which would include major freeways (I-80 and I-280) and major arterials (Broadway, Embarcadero, Howard Street, Folsom Street, Harrison Street, Bryant Street, and King Street). The potential effects of construction truck traffic would generally be larger with overlap with construction at Seawall Lot 323/324 than without overlap, but would still not be frequent or substantial enough to constitute a significant impact given existing plus planned traffic levels and traffic generated by existing development in the area. Given the proximity to high-quality local and regional transit service, construction workers would be encouraged to access the area by transit or other sustainable modes, and no special travel arrangements would be necessary. Construction workers driving to or from the area would be expected to make their own parking arrangements. Additionally, although no construction impacts were identified for the proposed project, **Improvement Measure I-TR-2b, Construction Traffic Management**, has been identified to further minimize the less-than-significant impacts of project-related construction activities. Given these considerations, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact related to construction activities and impacts would be ***less than significant*** and no mitigation measures are warranted.

Emergency Access

None of the cumulative land use and transportation projects identified would substantially affect emergency vehicle access in the vicinity of the project site. Vehicle traffic levels on the surrounding roadway network would likely increase by the cumulative horizon year (2040), which could result in an increase in response times for emergency vehicles traveling through the area. In general, however, non-emergency vehicles must yield to emergency vehicles, as required by California Vehicle Code section 21806, and emergency vehicles would have the option of using the transit-exclusive median along the Embarcadero to bypass any traffic congestion, if necessary. Additionally, none of the streets along major routes for emergency vehicles and none of the four streets fronting the project site (including the dead-end segment of Davis Street that connects to a segment of Vallejo Street and is shared by both the proposed project and the Seawall Lots 323/324 development) are unusually narrow or have features that make negotiating turns difficult for large emergency vehicles such as ladder trucks. Neither the proposed project nor Seawall Lots 323/324 proposes any modifications to the roadway network, nor is located in the immediate vicinity of any existing uses or facilities that generate unusually large amounts of emergency vehicle activity, such that activities generated at either site could result in potential disruptions to emergency vehicle response times. Given these considerations, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impacts to emergency vehicle access and impacts would be ***less than significant***.

Transit

The analysis of cumulative transit utilization considers foreseeable changes in local and regional transit service in the future, such as Muni service changes due to the Transit Effectiveness Project (now Muni Forward) and the anticipated growth in ridership due to future development. Analysis of transit impacts across the Muni and regional screenlines was conducted to determine the extent to which an increase in transit trips associated with the proposed project would affect local and regional transit lines under 2040 cumulative conditions.

As shown on Table 11, the Northwest screenline; the California, Sutter/Clement, and Fulton/Hayes corridors in the Northwest screenline; and the Mission and San Bruno/Bayshore corridors in the Southeast screenlines would operate above Muni's established capacity utilization threshold (85 percent) by 2040. The proposed project would contribute 0.1 percent or less of the transit trips on these sub-corridors and the entire screenline. Thus, the proposed project's contribution to the overall ridership on corridors that would operate over the 85 percent capacity under 2040 conditions would be less than 5.0 percent.

TABLE 11 MUNI DOWNTOWN SCREENLINES: CUMULATIVE 2040 CONDITIONS

Screenline/Corridor	Cumulative Conditions: Weekday PM Peak Hour (Outbound)				
	Ridership		Capacity	Utilization	Proposed Project Contribution
	Added	Total			
Northeast Screenline					
Kearny / Stockton	2	6,295	8,329	75.6%	
Other	3	1,229	2,065	59.5%	
Subtotal	*6*	*7,524*	*10,394*	*72.4%*	
Northwest Screenline					
Geary	5	2,996	3,621	82.7%	
California	**2**	**1,766**	**2,021**	**87.4%**	**0.1%**
Sutter / Clement	**1**	**749**	**756**	**99.1%**	**0.1%**
Fulton / Hayes	**2**	**1,762**	**1,878**	**93.8%**	**0.1%**
Balboa	2	776	974	79.7%	
Subtotal	***12***	***8,049***	***9,250***	***87.0%***	***0.1%***
Southeast Screenline					
Third	1	2,300	5,712	40.3%	
Mission	**2**	**2,673**	**3,008**	**88.9%**	**0.1%**
San Bruno / Bayshore	**2**	**1,817**	**2,134**	**85.1%**	**0.1%**
Other	2	1,582	1,927	82.1%	
Subtotal	*7*	*8,372*	*12,781*	*65.5%*	
Southwest Screenline					
Subway	6	5,692	6,804	83.7%	
Haight / Noriega	2	1,265	1,596	79.3%	
Other	1	380	840	45.2%	
Subtotal	*10*	*7,337*	*9,240*	*79.4%*	
Total	*34*	*31,282*	*41,665*	*75.1%*	

Notes: Component values may not sum to total values due to rounding. **Bold** indicates capacity utilization of 85 percent or greater.
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Table 22.

As shown on Table 12, under 2040 conditions the, regional screenlines would operate below the 100 percent capacity utilization standard, with the exception of BART. However, the increase in regional transit trips generated by the proposed project would not measurably contribute to the BART regional screenline. Thus, the proposed project's contribution to the overall ridership on corridors that would operate over the 100 percent capacity under 2040 conditions would be less than 5.0 percent.

TABLE 12 REGIONAL TRANSIT SCREENLINES: CUMULATIVE 2040 CONDITIONS

	Cumulative Conditions – Weekday PM Peak Hour (Outbound)				
	Ridership				
Screenline/Corridor	Added	Total	Capacity	Utilization	Contribution
East Bay					
BART	**14**	**36,000**	**32,100**	**112.1%**	0.0%
AC Transit	3	7,000	12,000	58.3%	
Ferries	2	5,319	5,940	89.5%	
Subtotal	*19*	*48,319*	*50,040*	*96.6%*	
North Bay					
Golden Gate Transit Bus	2	2,070	2,817	73.5%	
Ferries	2	1,619	1,959	82.6%	
Subtotal	*4*	*3,689*	*4,776*	*77.2%*	
South Bay					
BART	15	20,000	28,808	69.4%	
Caltrain	1	2,529	3,600	70.3%	
SamTrans	0	150	320	46.9%	
Ferries	0	59	200	29.5%	
Subtotal	*16*	*22,738*	*32,928*	*69.1%*	
Total	**40**	**74,746**	**87,744**	**85.2%**	

Notes: Component values may not sum to total values due to rounding. **Bold** indicates capacity utilization of 85 percent or greater.
Source: AECOM, *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20, 2017, Table 23.

Therefore, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative transit impact and impacts would be ***less than significant***.

Bicycles and Pedestrians

No new sources of major conflict between vehicles and bicyclists and pedestrians are expected given the existing setting and nearby contributing cumulative projects. In particular, neither the proposed project nor the Seawall Lots 323/324 development, which is adjacent to the project site, would include on-site parking, and a sizeable portion of the automobile traffic associated with both sites would be distributed through the surrounding neighborhood to and from nearby on- and off-street parking facilities. Both sites would demolish existing automobile-oriented uses (surface parking) that already generate substantial amounts of vehicle traffic and replace them with active uses, while simultaneously reducing the number of curb cuts along site frontages. Therefore, conditions for bicyclists along street segments fronting either site would not be substantially worse than existing conditions.

The two projects combined would include on-street passenger and commercial loading zones and an off-street freight loading dock, but given the expected volume of vehicle and bicycle activity and the physical separation between these proposed features, potential conflicts between the two sites or with existing plus projected bicycle circulation and pedestrian activity would not constitute a substantial safety hazard for bicyclists and pedestrians. While the shared dead-end segment of Davis Street north of Broadway (and the connecting segment of Vallejo Street east of Front Street) would be adjacent to both sites, this street segment primarily functions as a low-volume collector roadway. There would generally be adequate space for bicyclists and pedestrians to safely bypass any temporary disruptions at the proposed passenger loading zones for the proposed project (along the west side of Davis Street and south side of Vallejo Street) or the proposed commercial loading zone and off-street freight loading dock for the Seawall Lots 323/324 development (along the east side of Davis Street).

Any potential effects on bicycle and pedestrian safety and circulation associated with the proposed passenger and commercial loading zones would not be substantially different from those associated with the existing on-street parking spaces in these locations or on-street parking elsewhere in the study area. Due to its size, the proposed commercial loading zone associated with the Seawall Lots 323/324 development could potentially accommodate larger trucks that may require slightly more time to move into and out of the zone. Likewise, truck maneuvers reversing into or pulling out of the off-street freight dock at the Seawall Lots 323/324 development could result in temporary blockage of through traffic along Davis Street. However, these effects would be temporary and minor, dissipating quickly once the truck has cleared the travel lanes, and would not constitute substantial safety hazards for bicyclists and pedestrians.

Neither the proposed project or the Seawall Lots 323-324 development would conflict with any proposed or planned improvements to bikeway or pedestrian facilities, and the only identified bikeway improvements in the immediate vicinity of either project site would be those related to the Embarcadero Enhancement Project. However, neither project is proposing any physical changes to the nearby segments of the Embarcadero, and the level of additional vehicle and bicycle activity along the Embarcadero associated with the two projects is unlikely to substantially affect the overall safety or integrity of any of the potential bikeway design options being considered. Both projects would implement streetscape changes including sidewalk widening and bulb-outs that would enhance the pedestrian realm and improve pedestrian safety and walkability, further reducing any potential less-than-significant effects described above.

Given these considerations, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact to bicycle and pedestrian conditions and impacts would be ***less than significant***. **Improvement Measure I-TR-2, Passenger Loading Zone Management,** would further minimize any less-than-significant effects on bicycle and pedestrian conditions as a result of the proposed project's proposed passenger loading zones.

In summary, cumulative impacts related to transportation and circulation would be ***less than significant***.

E.5 NOISE

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
NOISE— **Would the project:**					
a) 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?	☐	☐	☒	☐	☐
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	☐
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 2 miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒
g) Be substantially affected by existing noise levels?	☐	☐	☐	☒	☐

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, Questions 5e and 5f are not applicable to the proposed project.

CSDA Design Group conducted a two-part noise analysis for the proposed project that is presented in an Environmental Noise Study and a Project-Generated Noise Study. The analysis methods and results of these noise reports have been incorporated into this initial study and are included in the project case file.[82] Noise impacts as they relate to traffic and construction activities also relied on data provided in the

[82] CSDA Design Group, 2017. *88 Broadway/735 Davis, San Francisco, Environmental Noise Study*. March 24, and CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6.

transportation impact study prepared by AECOM[83] and the preliminary geotechnical reports prepared by ENGEO Incorporated,[84] respectively.

Noise and Vibration Overview

Noise

Noise is a category of sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Receptors that are particularly sensitive to noise include, but are not limited to, residences, hospitals, schools, and elderly housing facilities. Other land uses such as office space and commercial uses may still be affected by high-levels of noise; however, high levels of noise are not typically detrimental to the normal daytime operations associated with these land use types. Sound is mechanical energy (vibration) transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor for characterizing the loudness of an ambient (existing) sound level. A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called "sound level"), which is measured in dB.

Although the dB scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by humans. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dBA and referred to as A-weighted decibels. Equivalent Sound Level (L_{eq}) is the equivalent steady-state sound level that, in a stated period of time, would contain the same acoustical energy. The 1-hour A-weighted equivalent sound level (L_{eq} 1h) is the energy average of A-weighted sound levels occurring during a 1-hour period. The maximum sound level (L_{max}) is the maximum sound level measured during a given measurement period.

In typical noisy environments, changes in noise of 1 to 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.

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. However, no pile driving is proposed under this project.

[83] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA,* June 20.

[84] ENGEO Incorporated, 2017. *88 Broadway Family Housing San Francisco, California Geotechnical Exploration,* June 22; ENGEO Incorporated, 2017. *735 Davis Street Senior Housing San Francisco, California Geotechnical Exploration*, June 22.

These surface waves can be felt as groundborne vibration. 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 will decrease with increasing distance from the vibration source.

Noise and Vibration Regulations

The proposed project would be required to comply with noise regulations during both the ongoing operation of the project and during the temporary construction phase as set forth in the San Francisco Noise Ordinance (Article 29 of the Police Code), and other noise standards as described below.

Operational Noise Regulations

San Francisco Noise Ordinance Limits

Mechanical equipment associated with residential uses is subject to Police Code section 2909(a) of the San Francisco Noise Ordinance, which establishes a noise limit from mechanical equipment sources, such as those from heating, ventilation, and air conditioning equipment, commonly referred to as "HVAC" systems, and testing emergency back-up diesel generators.[85] Mechanical building equipment cannot raise the ambient noise level for off-site sensitive receptors at the property line in excess of 5 dBA.

There are currently no standards in the San Francisco Noise Ordinance (Article 29 of the Police Code) that deal specifically with noise from outdoor play areas or rooftop terraces and community gardens. However, for the purpose of analyzing noise in these areas under CEQA, the Planning Department uses the noise limits provided in Police Code section 2909(b) of the San Francisco Noise Ordinance. Accordingly, the noise generated by activities at proposed childcare facility playground and rooftop terrace, deck, and community garden areas, should not result in noise level of 8 dBA in excess of the existing ambient noise levels at the property line, which is consistent with the property plane limits for commercial properties in established in Police Code section 2909 of the San Francisco Noise Ordinance.

Police Code section 2909(d)) of the San Francisco Noise Ordinance also includes noise level limits for fixed residential interior noise sources. Fixed residential interior noise sources cannot exceed 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. or 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. as measured inside any sleeping or living room in any dwelling unit located on residential property, with windows open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

Noise Compatibility Standards

The Environmental Protection Element of the General Plan contains Land Use Compatibility Guidelines for Community Noise. These Land Use Compatibility Guidelines, which are similar to State guidelines promulgated by the Governor's Office of Planning and Research, indicate maximum acceptable noise

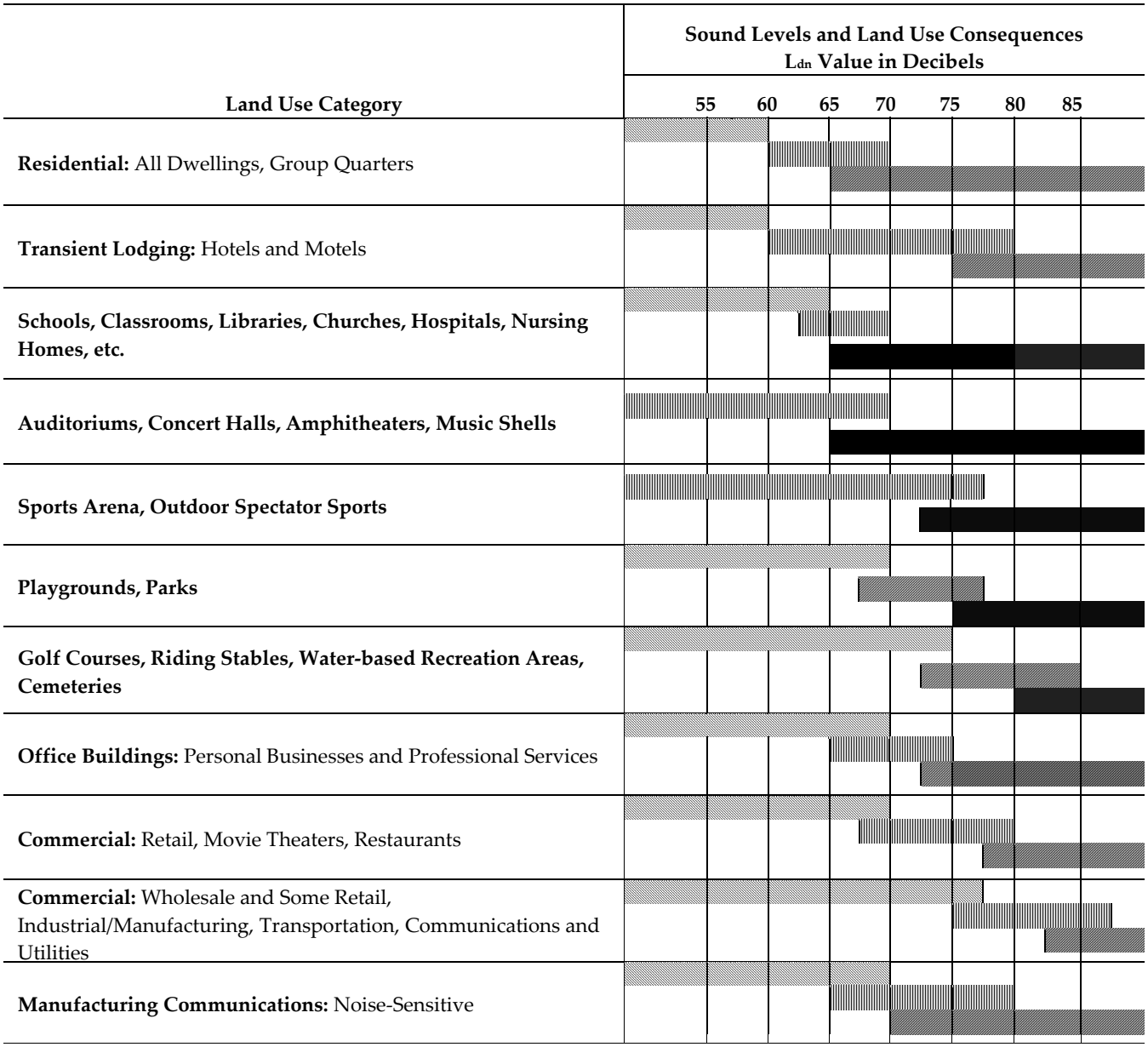
[85] Note that the property line noise limits apply to emergency generator testing, but not to the operation of emergency generators during power outages or other emergency situations.

levels for various newly developed land uses. The proposed uses for this project correspond to the "residential" and "playground/parks" land use categories in the Land Use Compatibility Guidelines, recreated below, in Table 13.[86] For a residential land use, the maximum "satisfactory, with no special insulation requirements" exterior noise levels are approximately 60 dBA (L_{dn}).[87] Where exterior noise levels exceed 60 dBA (L_{dn}) for a new residential building, it is generally recommended that a detailed analysis of noise reduction requirements be conducted prior to 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}). 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 prior to final review and approval of the project, and that the needed noise insulation features be included in the project design.

[86] *San Francisco General Plan.* Environmental Protection Element, Land Use Compatibility Chart for Community Noise. Available at: http://generalplan.sfplanning.org/I6_Environmental_Protection.htm#ENV_TRA_9_1, accessed on March 28, 2017.

[87] The DNL or L_{dn} is the 24-hour, energy-averaged level (using the hourly L_{eq} noise levels) with a 10 dB penalty applied to noise levels between 10:00 p.m. to 7:00 a.m. L_{eq} is the level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time period of interest.

TABLE 13 GENERAL PLAN LAND USE COMPATIBILITY CHART FOR COMMUNITY NOISE



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 Regulations

Additional regulations include the California Building Code, California Code of Regulations, Title 24, Part 2, section 1207.4, which mandates that an interior noise level attributed to exterior sources shall not exceed 45 dBA L_{dn} for any habitable room in a multi-family building and the California Green Building Standards Code (CALGreen), which establishes noise criteria for commercial spaces, including the childcare space and community room. Per CALGreen section 5.50, for sites with noise levels above 65 dBA, interior noise levels must be no greater than 50 dBA L_{eq} during the noisiest hour of operation.

Construction Noise Regulations

San Francisco Noise Ordinance

Construction noise is regulated by the Police Code section 2907 of the San Francisco Noise Ordinance, which requires that noise levels from individual pieces of construction equipment, other than impact tools (*e.g.*, jackhammers, hoe rams, impact wrenches), not exceed 80 dBA at a distance of 100 feet from the source. Impact tools must have manufacturer-recommended and City-approved mufflers for both intake and exhaust. Police Code section 2907 of the San Francisco Noise Ordinance exempts typical impact-driven pile installation methods – with appropriate permissions from the San Francisco Department of Building Inspection – from this noise level limitation.

Police Code section 2908 of the San Francisco Noise Ordinance prohibits construction work between 8:00 p.m. and 7:00 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 Public Works or the Director of Building Inspection.

Construction Noise from Pile Driving

The FTA standards for noise from pile driving and impact equipment used during construction are 90 dBA during the day and 80 dBA during the nighttime for sensitive receptors (*e.g.,* residential), and 100 dBA at any time for non-sensitive receptors (*e.g.,* commercial). No night construction or pile driving is proposed under this project.

Construction Vibration

Construction vibration impacts are assessed based on FTA standards for vibration. For occupant annoyance from construction vibration, an impact is defined as significant if it exceeds 78 vibration decibel level (VdB) during the day at a residential receiver, which is described as being "barely felt" or if it exceeds 84 VdB for commercial/office land uses, which is described as a "felt vibration".[88]

[88] Federal Transit Administration, May 2006. *Transit Noise and Vibration Impact Assessment*, Chapter 8, Table 8-3, Interpretation of Vibration Criteria for Detailed Analysis.

The above standards inform the analysis of construction-related effects of a project and the significance of an impact also takes into consideration the duration and severity of noise levels and vibration effects exceeding the above criteria.

Existing Conditions

Existing Noise in the Project Vicinity

Ambient noise levels in the project vicinity are typical of noise levels found in San Francisco. The traffic flows along the roadways that surround the project site (Vallejo Street, Davis Street, Broadway, and Front Street) are the primary sources of noise at the project site. Secondarily, traffic (both vehicular and rail) along the Embarcadero also contribute to the noise environment. General city noise including residential and commercial operations, people talking, and/or property maintenance may also influence the existing noise environment at the site.

To quantify the existing ambient noise levels (composite noise from all sources in the area) at the site and the project vicinity, four long-term continuous (48 hour) noise measurements were conducted from 3:30 p.m. on Wednesday, January 4 through 3:00 p.m. on Friday, January 6, 2017.

During this same time period one short-term (10-minute) measurement was conducted at 4:15 p.m. on January 4, 2017. Figure 18 shows the location of the long-term (LT) and short-term (ST) ambient noise measurement locations.

The results of the January 2017 ambient noise survey, included in Table 14 on the following page, shows existing day-night average sound (L_{dn}) at each noise measurement location. The L_{dn} was calculated using measured hourly noise levels. Table 14 also shows the lowest and highest L_{eq} and the highest and lowest noise level that was exceeded 90 percent of the time (L_{90}) at each noise measurement location. As shown on Table 14, the existing ambient noise levels on Davis Street and Front Street is 68 dBA, while Broadway and Vallejo Street are higher at 72 dBA and 70 dBA, respectively.

Noise and Vibration Receptors in the Project Vicinity

The project site is in close proximity to various sensitive and non-sensitive noise receptors that would receive noise from operation and construction of the proposed project. There are noise-sensitive) residential uses to the north, northwest, west, southwest, and south of the project site. To the east lie various non-sensitive commercial and industrial uses adjacent to the San Francisco Bay. Non-sensitive noise receptors (office uses) at 777 Davis Street to the east of the project site and 60 Broadway to the south of the project site are as close as 5 to 20 feet from the nearest proposed building locations.

TABLE 14 RESULTS OF EXISTING AMBIENT NOISE MONITOR MEASUREMENTS IN THE PROJECT VICINITY

		Lowest Noise Level			Highest Noise Level	
Location	L_{dn} (Average), dBA[a]	Hourly L_{eq}, dBA[b]	Hourly L_{90}, dBA[c]	Hourly L_{90}, dBA (7 am to 10 pm)[d]	Hourly L_{eq}, dBA	Hourly L_{90}, dBA
Davis Street (LT-1)	68	55	47	53	66	58
Broadway (LT-2)	72	58	46	55	73	61
Front Street (LT-4/ST-1)	68	53	45	51	70	68
Vallejo Street (LT-4)	70	55	52	56	67	61

Notes:

a. L_{dn}: The average day-night sound level with a 10 decibel (dB) applied to noise occurring during the nighttime hours (10:00 p.m .to 7:00 a.m.) to account for the increased sensitivity of people during sleeping hours. A 10 dB increase in sound level is perceived by people to be twice as loud.
dBA: The A-weighted decibel refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies.

b. L_{eq}: The equivalent continuous sound level that would contain the same sound energy as the sound level over the 48-hour measured period.

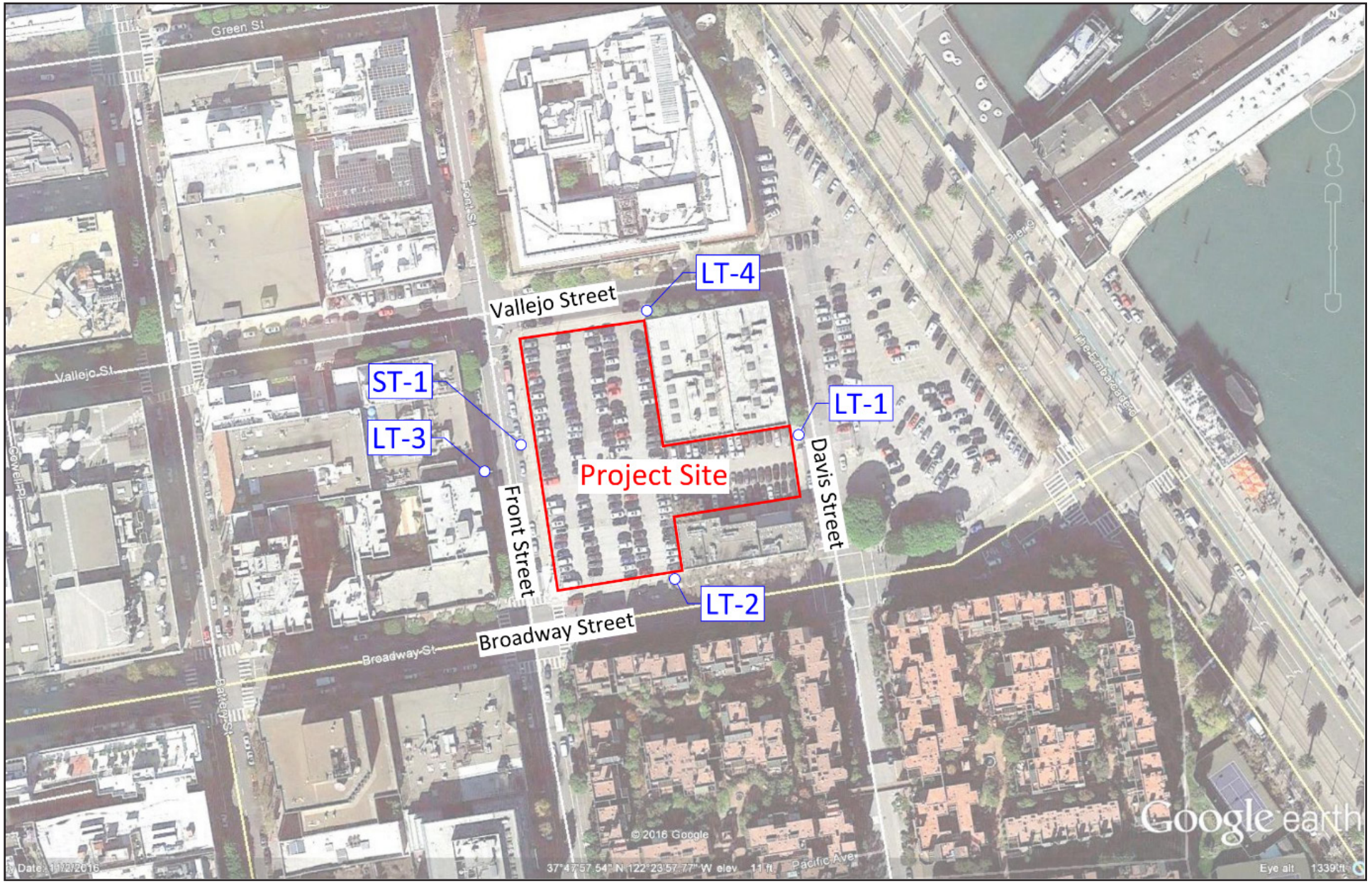
c. L_{90}: The sound level that was equaled or exceeded 90 percent of the time during the measured period. Per the of the San Francisco Noise Ordinance (Police Code Article 29) the ambient noise level should be established because short-term, noisy events (*e.g.,* sirens) are excluded. Increases of 5 dBA over the lowest L_{90} noise level within a 48-hour period is the metric that is used to determine the significance of ambient noise increase for the mechanical equipment in the impact discussions below.

d. Increases of 8 dBA over the lowest L_{90} between 7:00 a.m. to 10:00 p.m. over is the metric used to determine the significance of ambient noise increase for the proposed outdoor use areas in the impact discussion below.

Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 4.

As shown in Figure 19, the closest noise-sensitive land uses that would receive noise caused by the operation and construction of the proposed project are the residential buildings at 825 Front Street (approximately 70 feet to the west of the project site) and 75 Broadway (approximately 85 feet to the south of the project site). These sensitive receptors (SR) are shown on Figure 2 and denoted as SR-1 and SR-2.

There are four locations with structures that would be sensitive to the effects of vibration from large construction equipment (*e.g.,* bulldozer and loaded trucks). These four locations include the two noise-sensitive receptors discussed above. These structures are located at 753 Davis Street, 75 Broadway, 825 Front Street, and 60 Broadway. These sensitive construction vibration (CV) locations are shown on Figure 20 and denoted as locations CV-1 through CV-4. These CV locations include the commercial buildings at the northeast and southeast corners of the project site (locations CV-1 and CV-2), the residences south of the project site (location CV-3), and the residences to the west (location CV-4). Locations CV-1 and CV-2 are 2-story structures of masonry construction and appear to be in good condition. Location CV-3 is a mixed-use building built in the 1980s that is steel construction clad with brick veneer. The building has commercial space on the bottom and residential on the top two floors (3rd and 4th floors). Location CV-4 is framed construction (likely wood frame). Because locations CV-1, CV-2, and CV-4 are considered to be historic resources, potential damage to these historic buildings caused by construction vibration is considered a cultural resource impact under CEQA. Therefore, vibration-related impacts to these buildings with respect to physical damage to an adjacent historic resources is also addressed under Impact CR-2 in section C.3, Cultural Resources.



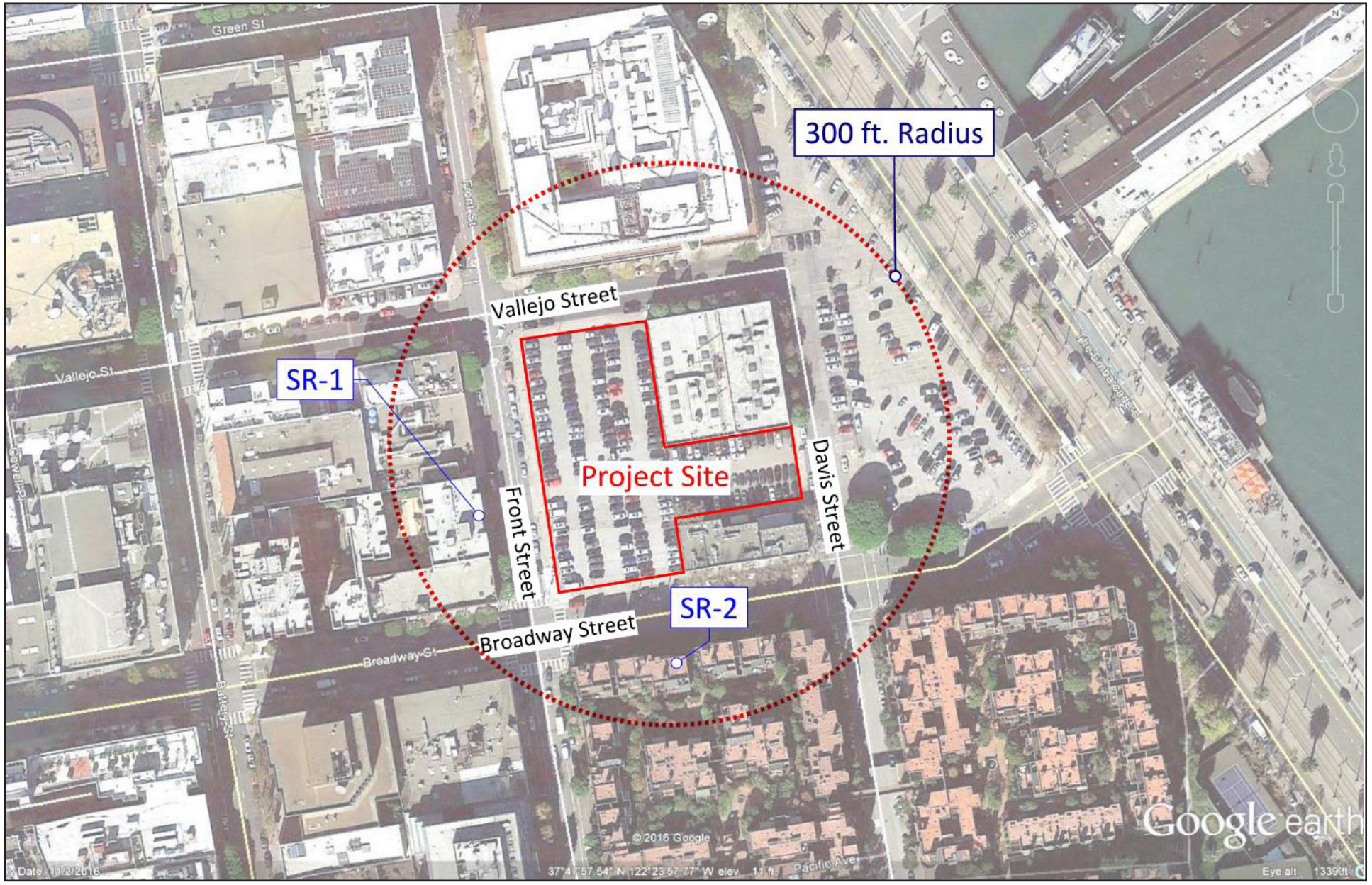
Source: City of San Francisco, 2017; CSDA Design Group, June 23, 2017; PlaceWorks, 2018.

88 BROADWAY & 735 DAVIS STREET PROJECT INITIAL STUDY

Case No. 2016-007850ENV

FIGURE 18

Long Term (LT) and Short Term (ST) Measurement Locations



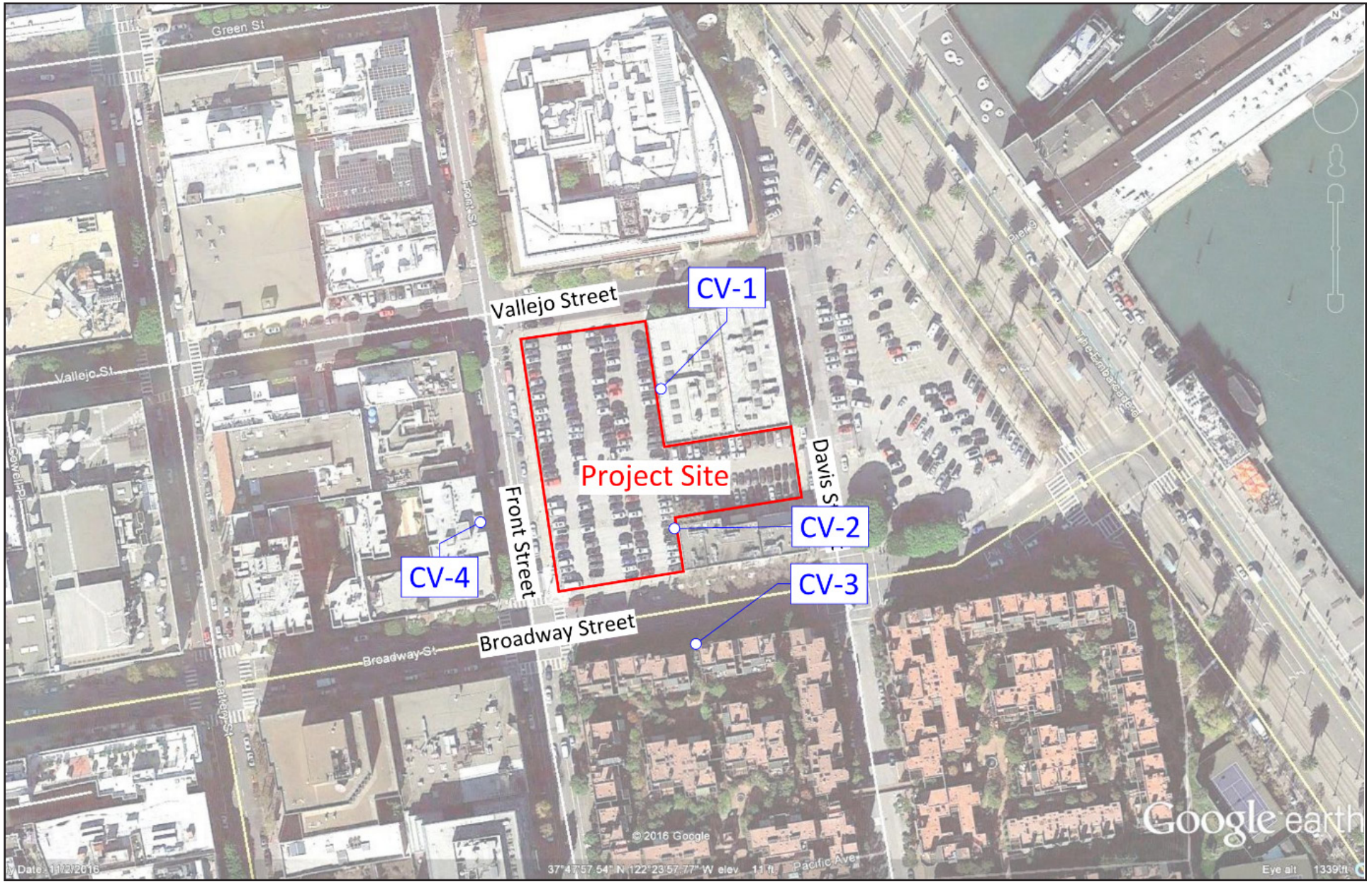
Source: City of San Francisco, 2017; CSDA Design Group, June 23, 2017; PlaceWorks, 2018.

88 BROADWAY & 735 DAVIS STREET PROJECT INITIAL STUDY

Case No. 2016-007850ENV

FIGURE 19

Sensitive Receptor (SR) Locations



Source: City of San Francisco, 2017; CSDA Design Group, June 23, 2017; PlaceWorks, 2018.

Sensitive Construction Vibration (CV) Receptor Locations

Impact NO-1: The proposed project would 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 to nearby sensitive noise receptors from operation of the proposed project. In the *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)* case decided in 2015 (herein referred to as *CBIA v. BAAQMD*)[89] the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact 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 above related to substantial permanent increase in ambient noise levels and exposure of people to noise levels in excess of standards specified in the City's 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 significantly exacerbates 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 implementation of the proposed project would exacerbate existing or future noise and vibration levels above the thresholds described in the Noise and Vibration Regulations subsection above.

Because the mechanical equipment would operate over a 24-hour period, the standard of significance for mechanical equipment is 5 dBA over the lowest L_{90} existing ambient noise levels taken over the 48-hour period. The proposed outdoor use areas are not anticipated to generate sound over a 24-hour period; therefore, the standard of significance applied to this use is 8 dBA over the lowest L_{90} ambient noise levels taken between 7:00 am to 10:00 pm. Although the City does not have quantitative criteria for project-generated traffic noise, the following criteria is often applied by the Planning Department. In general, traffic noise increases of less than L_{dn} 3 dBA are barely perceptible to people, while a L_{dn} 5 dBA increase 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 13 above, for sensitive noise receptors any noise increase greater than L_{dn} 3 dBA is considered a significant noise impact. Table 15 shows these standards of significance applied to the impact discussion below.

[89] *California Building Industry Association v. Bay Area Air Quality Management District*, December 17, 2015, Case No. S213478. Available at: http://www.courts.ca.gov/opinions/documents/S213478.PDF.

TABLE 15 MECHANICAL EQUIPMENT, OUTDOOR-USE AREAS, AND ROADWAY NOISE STANDARDS OF SIGNIFICANCE

	Mechanical Equipment Standard		Outdoor Use Area Standard		Roadway Noise Standard	
Location	Existing Hourly L_{90}, dBA	Existing +5 dBA Criteria	Existing Hourly L_{90}, dBA (7 am to 10 pm)	Existing + 8 dBA Criteria	Existing L_{dn} (Average), dBA[a]	Existing + 3 dBA Criteria
Davis Street (LT-1)	47	52	53	61	68	71
Broadway (LT-2)	46	51	55	63	72	75
Front Street (LT-4/ST-1)	45	50	51	59	68	71
Vallejo Street (LT-4)	52	57	56	64	70	73

Notes: dBA: The A-weighted decibel refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies. For a point of reference, a 10 dB increase in sound level is perceived by people to be twice as loud.; L_{90}: The sound level that was equaled or exceeded 90 percent of the time during the measured period of time. Per the San Francisco Noise Ordinance (Police Code Article 29) the ambient noise level should be established because short-term, noisy events (*e.g.,* sirens) are excluded.

a. L_{dn}: The average day-night sound level with a 10 decibel (dB) applied to noise occurring during the nighttime hours (10:00 p.m .to 7:00 a.m.) to account for the increased sensitivity of people during sleeping hours.

Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 4.

Mechanical Equipment Noise

As described above, Police Code section 2909(a) of the San Francisco Noise Ordinance establishes a noise limit for the proposed project's rooftop mechanical equipment (e.g., HVAC systems, emergency back-up generators) at the property line of off-site receptors. These noise limits are based on the quietest existing L_{90} noise level (see Table 14) plus 5 dBA. Based upon the existing ambient noise levels at the project site shown in Table 15, noise from the proposed project's mechanical equipment should not exceed 52 dBA at the Davis Street property line, 51 dBA at the Broadway property line, 50 dBA at the Front Street property line, and 57 dBA at the Vallejo Street property line. In addition, Police Code section 2909(d) of the San Francisco Noise Ordinance specifies a separate fixed-source noise limit for off-site residential interiors of 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. or 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. The nearest sensitive receptor to the proposed project's mechanical equipment is located at 825 Front Street (see Figure 20 above).

It is expected that rooftop HVAC equipment and emergency generators for the proposed project would be similar to such equipment being used at the existing buildings surrounding the project site and would generate typical noise levels for standard HVAC systems and emergency generators that are suitable for the project's proposed services and operations. However, while the mechanical equipment design for the proposed project is not yet complete, it is anticipated that the project would construct standard noise reduction elements (e.g. screening walls, parapet barriers) to screen the projects HVAC equipment that would meet Police Code section 2909(a) of the San Francisco Noise Ordinance fixed source noise requirements. In order to comply with the San Francisco Noise Ordinance, the proposed project's HVAC

equipment would need to meet specific sound power levels (PWL)[90] and sound pressure levels (SPL)[91]. The following performance values are based upon a rooftop HVAC unit height of 5 feet while conservatively incorporating minimum shielding provided by the building edge (and not including more typical enclosure or parapet shielding):

- Davis Street: PWL 94 dBA or SPL 73 dBA at a distance of 10 feet
- Broadway: PWL 93 dBA or SPL 72 dBA at a distance of 10 feet
- Front Street: PWL 92 dBA or SPL 71 dBA at a distance of 10 feet
- Vallejo Street: PWL 99 dBA or SPL 78 dBA at a distance of 10 feet

As shown in Table 16, implementation of these performance values would ensure that the project's HVAC system equipment is sufficiently rated to attain property line noise limits in compliance with Police Code section 2909(a) of the San Francisco Noise Ordinance, once the location and specifications of the required mechanical equipment are selected.

TABLE 16 ROOFTOP HEATING, VENTILATION, AND AIR CONDITIONING EQUIPMENT NOISE LEVEL AT PROPERTY LINE

Property Line	Maximum Equipment Sound Power Level (dBA)	Maximum Equipment Sound Level at 10 feet	Meets Noise Limit (Ambient + 5 dBA)[a]
Davis Street	94	73	52
Broadway Street	93	72	51
Front Street	92	71	50
Vallejo Street	99	78	57

Notes:
a. Police Code section 2909(a) of the San Francisco Noise Ordinance establishes a noise limit for the proposed project's rooftop mechanical equipment at the property line. These noise limits are based on the quietest existing L_{90} noise level (shown in Table 13 of this section) plus 5 dBA.
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 12.

In order to comply with the San Francisco Noise Ordinance, the proposed project's emergency generators would need to meet the following performance standards:

- The generators shall be screened on all four sides.
- The screening materials shall be equal in height to the generator.
- The generator shall be located at least 30 feet from the nearest property line.
- The generator shall have a maximum noise level of 81 dBA at 21 feet from the nearest property line.

[90] PWL is the common industry abbreviation for Sound Power Level.
[91] SPL is the common industry abbreviation for Sound Pressure Level.

TABLE 17 PROJECT-GENERATED ROOFTOP MECHANICAL EQUIPMENT NOISE LEVEL AT INTERIOR OF CLOSEST OFF-SITE RESIDENTIAL NOISE RECEPTOR

Receiver Location		Rooftop Equipment Noise Level at Residence (dBA)	Building Facade Noise Reduction (dBA)	Calculated Interior Noise Level (dBA)	Criterion (dBA)	Below Criterion?
825 Front Street	Rooftop HVAC	55	15[a]	40	≤45[b]	Yes
825 Front Street	Rooftop HVAC + Emergency Generator	64	15[a]	49	≤55[b]	Yes

Notes:
a. The 825 Front Street building's façade typically reduces noise by 15 dBA with windows open.
b. Section 2909(d) of the San Francisco Noise Ordinance specifies a fixed-source noise limit for residential interiors of 45 dBA between the hours of 10:00 p.m. to 7:00 a.m.
c. Per section 2909(d) criterion is 55 dBA for HVAC + emergency generator scenario, as generators will only be tested during the daytime hours.
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 13.

As shown in Table 17, with the industry standard 15 dBA noise reduction provided by a typical building's façade, the proposed project's rooftop mechanical equipment design is sufficient to attain interior noise levels at off-site sensitive noise receptors at 825 Front Street in compliance with Police Code section 2909(d) of the San Francisco Noise Ordinance, once the location and specifications of the required mechanical equipment is available.

The proposed project would be required to comply with the San Francisco Noise Ordinance. With the noise reduction provided by the building façade of the nearest sensitive receptor (825 Front Street) the proposed project would achieve the noise thresholds set by Police Code sections 2909(a) and 2909(d) of the San Francisco Noise Ordinance and performance standards described above. Therefore, noise impacts from the project's mechanical equipment would be ***less than significant***.

Outdoor Play Area, Courtyard, and Roof Deck/Terrace Noise

As described above, the San Francisco Noise Ordinance (Article 29 of the Police Code) does not establish a noise limit from activities in school/daycare play yards, courtyard, and rooftop open space areas at the property line. However, the Planning Department uses the noise limits provided in Police Code section 2909(b) of the San Francisco Noise Ordinance to analyze impacts from these types of uses. These noise limits are based on the quietest existing L_{90} noise level between the hours of 7:00 am and 10:00 p.m. (previously shown on Table 14) plus 8 dBA, as required by the Police Code section 2909(b) of the San Francisco Noise Ordinance for primarily residential buildings. Based upon the existing ambient noise levels at the project site shown previously in Table 14, noise from the proposed project's outdoor play area and rooftop open spaces should not exceed 59 dBA at the Front Street property line, 61 dBA at the Davis Street property line, 64 dBA at the Vallejo Street property line, and 63 dBA at the Broadway property line in order to meet the requirement of the Police Code section 2909(b) of the San Francisco

Noise Ordinance. There are no noise criteria to the buildings closest to the project's outdoor play area, courtyard, and rooftop open spaces, 753 Davis Street and 60 Broadway, as these are commercial buildings and not considered noise-sensitive uses for the analysis of noise impacts from these outdoor spaces. The expected noise level generated by future occupants using open space areas planned at the project site, including play areas for the childcare center, a courtyard (for the senior housing portion), and rooftop gathering areas on both buildings, has been calculated at the project site property lines. The location of these various open spaces is shown in Figure 16 in section A, Project Description above. As shown on Figure 16, the family building would have a community garden and a rooftop terrace, which would have the capacity for up to 20 and 40 occupants, respectively.

The childcare play area was assumed to be used during the hours of operation of the childcare center between 7:00 a.m. and 6:00 p.m., and the other outdoor spaces were assumed to be in use between the hours of 7:00 a.m. and 10:00 p.m. The calculation of project-generated property line noise incorporated the existing buildings around the project site, proposed project buildings, and noise reflected off of both existing and proposed project buildings. Table 18 summarizes the results of the calculations at the property lines for off-site sensitive noise receptors.

TABLE 18 PROJECT-GENERATED PROPERTY LINE NOISE LEVELS FROM OUTDOOR USE AREAS

Property Line	Noise Level from Occupants at Outdoor Use Spaces, dBA	Criterion, +8 dB Over Ambient L_{90}, dBA	Complies?
Front Street	46	59	Y
Broadway	41	63	Y
Vallejo Street	<55	64	Y
Davis Street	<55	61	Y

Notes:
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 14 and Figure 7.

As shown in Table 18, noise from the outdoor use areas would not exceed the Police Code section 2909(b) of the San Francisco Noise Ordinance limit of 8 dBA above the existing ambient L_{90} 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 previously stated, 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 a 3 dBA above the existing L_{dn} ambient noise levels. As shown in Table 19, since the roadways adjacent to the project site currently experience high traffic volumes, the additional daily vehicle trips on these roadways would be expected to be marginal and would not double traffic volumes. Table 19 summarizes the results of the traffic noise calculations.

TABLE 19 PROJECT-GENERATED TRAFFIC NOISE CALCULATIONS

Street	Existing PM Peak Hour Traffic Volumes[a]	Existing L_{dn} (Average), dBA[b]	Project-Generated Traffic, Peak Hour Vehicles[a]	Project-Generated Traffic L_{dn}, dBA	Existing + Project L_{dn}, dBA	Increase, dBA	> 3 dBA
Davis Street	219	68	111	53	68	0	N
Broadway	1,024	72	36	48	72	0	N
Front Street	330	68	96	53	68	0	N
Vallejo Street	186	70	119	54	70	0	N

Notes:
a. Project generated PM peak hour traffic trips from Table 9 of Traffic Impact Study (TIS) multiplied by the trip apportionment percentages used in the TIS as follows: 15% of trips will occur on Broadway; 47% of trips will occur on Davis Street; 50% of trips will occur on Vallejo Street; and 40% of trips will occur on Front Street.
b. The L_{dn} is the average ambient level calculated using measured hourly noise levels over a 48-hour period. Traffic noise increases of less than L_{dn} 3 dBA over the average ambient noise level are considered significant.
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 5.

As is shown in Table 19, project-generated traffic is not expected to increase overall noise levels in the project's vicinity. Therefore, permanent noise increases due to project-related traffic would be ***less than significant*** and no mitigation measures are required.

Impact NO-2: During construction, the proposed project would 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)

Analysis under this criterion addresses potential noise and vibration impacts to 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 and pile drilling. Noise impacts would also result from construction trucks arriving to and departing from the site, which would be an intermittent source of construction noise. Construction activities associated with the project would include demolition of existing pavement, grading, installation of utilities, landscaping, and erection of the buildings. Equipment typically used in these activities includes bulldozers, excavators, graders, backhoes, concrete trucks, loaders, pile drillers, and heavy-duty trucks. As shown above in Figure 19, the closest noise-sensitive land uses that would receive noise caused by the construction of the proposed project are the residences at 75 Broadway (approximately 85 feet to the south of the project site) and residences at 825 Front Street (approximately 70 feet to the west of the project site). Demolition, excavation, and building construction would cause a temporary increase in noise levels within the project vicinity. Construction equipment would generate noise and vibrations to nearby properties that could be considered an annoyance by occupants and potentially cause damage to historic architectural structures. Impacts to historic architectural resources is discussed in Impact CR-2 in section C.3, Cultural Resources.

The proposed project would include excavation of approximately 4,000 cubic yards of material to a maximum depth of approximately 4 feet below grade to accommodate building foundations and between 70 to 100 feet below grade to accommodate the required piles.[92] According to the project sponsor, the construction period would occur over an approximately 19-month period with both buildings being constructed concurrently. The construction of the family building (the larger building) would occur over the full 19-month period and construction of the senior building (the smaller building) would take place over the first 16 months. Construction of the two buildings, includes the following: demolition (1 month), shoring and excavation (1 month), foundation (1 to 3 months), building construction (10 to 12 months), and installation of facades (3 to 4 months). Construction noise levels would fluctuate depending on the construction phase, equipment type and duration of use, the distance between the noise source(s) and the affected receptor(s), and the presence (or absence) of barriers. Impacts would generally be limited to demolition and the periods during which new foundations and exterior structural and façade elements would be constructed. Interior construction noise would be substantially reduced by exterior walls. However, there would be times when noise could interfere with indoor activities in nearby residences and other businesses near the project site.

During the foundation phase (1 to 3 months), a deep foundation system with pile and grade beams would be installed. The project sponsor proposes to use drilled piles, which are installed by drilling a hole in the soil rather than impact driven piles. Tubex or Giken drilled piles, or similar drilled piles consisting of a steel pipe casing attached to a drill tip, would be installed in bedrock and filled with concrete. Bedrock varies from 50 to 80 feet below the ground surface, and piles would be installed to these depths plus the required embedment (10 to 20 feet), for a maximum depth of 90 to 100 feet below ground surface.[93]

The family building (88 Broadway) would require 123 piles plus an allowance for an additional three piles, for a total of approximately 126 piles. The senior building (735 Davis Street) would require 47 piles plus an additional for two piles, for a total of approximately 49 piles. Collectively, construction of the entire project site would require installation of approximately 175 piles.

Table 20 (on the following page) shows typical noise levels associated with the types of construction-related machinery planned for this project, as well as the calculated construction noise level at the closest commercial and residential noise receptors (*i.e.,* 753 Davis Street at 10 feet away and 825 Front Street at 70 feet away).

As stated above, construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the Police Code). Police Code section 2907 of the San Francisco Noise Ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a

[92] ENGEO Incorporated, 2017. *88 Broadway Family Housing San Francisco, California Geotechnical Exploration,* June 22; ENGEO Incorporated, 2017. *735 Davis Street Senior Housing San Francisco, California Geotechnical Exploration*, June 22.

[93] ENGEO Incorporated, 2017. *88 Broadway Family Housing San Francisco, California Geotechnical Exploration,* June 22; ENGEO Incorporated, 2017. *735 Davis Street Senior Housing San Francisco, California Geotechnical Exploration*, June 22.

distance of 100 feet. Section 2908 of the Noise Ordinance prohibits construction work between 8:00 p.m. and 7:00 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 Public Works or the Director of Building Inspection. The proposed project would be required to comply with regulations set forth in Police Code section 2907 of the San Francisco Noise Ordinance. As shown in Table 20, noise generated by the planned construction equipment would comply with Police Code section 2907 of the San Francisco Noise Ordinance limits at a distance of 100 feet from the source would meet these standards. Accordingly, noise impacts in this respect are considered ***less than significant*** and no mitigation is required.

TABLE 20 NOISE LEVELS FROM PROPOSED CONSTRUCTION EQUIPMENT

Equipment	Noise Level at 100 feet (dBA)	Complies with 80 dBA criterion?[a]
Air Compressor	74	Y
Backhoe	74	Y
Concrete Mixer	79	Y
Concrete Pump Truck	75	Y
Crane	79	Y
Dozer	79	Y
Dump Truck	70	Y
Excavator	75	Y
Forklift[b]	69	Y
Generator	76	Y
Grader	79	Y
Paver	79	Y
Roller	79	Y
Shotcrete Pump Truck[c]	75	Y
Water Truck[d]	79	Y
Giken Drilled Piler[e]	52	Y
Tubex Drilled Piler[e]	75	Y

Notes: n/a = not applicable; Noise levels measured with a "slow" (1 second) time constant.
a. San Francisco Noise Ordinance (Article 29 of the Police Code) requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source.
b. Forklift noise levels assumed to be equivalent to pickup truck.
c. Shotcrete pump truck noise levels assumed to be equivalent to concrete pump truck.
d. Water truck noise level assumed equivalent to vacuum excavator truck, which is conservative; actual water truck noise level is likely to be lower.
e. Giken drilled piler installation equipment could be used; however, impact significance conclusions are based on the noisier Tubex drilled piler installation equipment (*e.g.,* Tubex Drilled Pile). These types of pile installation equipment are not considered impact tools and do not cause vibration.
Sources: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 7.

Impact-Tool Construction Noise

Installation of piles can cause substantial noise, especially if impact equipment, such as pile drivers, is used to install the piles. However, as shown in Table 20, the use of impact equipment would not be used during project construction. The type of pile installation equipment that would be used would rely on "drilling" the piles and not "driving" the piles, and as such are not considered impact tools. The noise study prepared for the project considered two types of pile drilling equipment: Giken Drilled Piler and Tubex Drilled Piler (see Table 20). The use of the Giken drilled piler would be 55 dBA at the closest sensitive receptor and 72 dBA at the closest non-sensitive receptor. The Tubex drilled piler would be 78 dBA at the closest sensitive receptor and 95 dBA at the closest non-sensitive receptor. Although neither are considered impact causing equipment, the use of either type of drilled pile installation equipment would meet the Noise Ordinance (Article 29 of the Police Code) noise level criteria of 80 dBA at a distance of 100 feet from the source. Accordingly, there would be a ***less-than-significant*** impact from the use of impact tools and no mitigation measures are required.

The nearest noise-sensitive uses would experience temporary and intermittent noise associated with demolition and construction activities (including pile drilling) and from construction trucks traveling to and from the project site. As identified in the transportation impact study prepared for the project, daily truck trips during construction of the project would include approximately 55 truck trips during grading, 15 truck trips during building construction, 10 truck trips during architectural coatings, and 10 truck trips during paving over the course of 19 months.[94] Therefore, the construction noise effects are considered temporary and intermittent, and would result in a ***less-than-significant*** noise impact. **Improvement Measure I-NO-2, Construction Noise Reduction**, would further reduce this less-than-significant impact from construction.

Improvement Measure I-NO-2: Construction Noise Reduction

The project sponsor will incorporate the following practices into the construction contract agreement documents to be implemented by the construction contractor during the entire construction phase of the proposed project:

- Conduct noise monitoring at the beginning of major construction phases (*e.g.*, demolition, excavation) to determine the need and the effectiveness of noise-attenuation measures. The project sponsor and contractor will apply as many mitigating features as needed to reduce noise from the simultaneous operation of multiple pieces of construction equipment to meet the noise criteria of 90 dBA during the day at sensitive (residential) receptors and 100 dBA at any time for non-sensitive (commercial) receptors, and should not exceed 10 dBA above the ambient noise conditions at either sensitive or non-sensitive receptors at any time. Mitigating features could include, but are not limited to plywood barriers, suspended construction blankets, or other screening devices to break line of sight to noise-sensitive receivers.
- At least 90 days prior to the start of construction activities, all offsite businesses and residents within 300 feet of the project site will be notified of the planned construction activities. The

[94] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20. Table 19, Estimate of Construction Activity by Construction Phase, page 55.

notification will include a brief description of the project, the activities that would occur, the hours when construction would occur, and the construction period's overall duration. The notification should include the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.

- The project sponsor and contractors will prepare a Construction Noise and Vibration Control Plan. The details of the Construction Noise and Vibration Control Plan, including those details listed herein, will be included as part of the permit application drawing set and as part of the construction drawing set.
- At least 10 days prior to the start of construction activities, a sign will be posted at the entrance(s) to the job site, clearly visible to the public, which includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she will investigate, take appropriate corrective action, and report the action to the City.
- During the entire active construction period, equipment and trucks used for project construction will utilize the best available noise control techniques (*e.g.*, improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible.
- During the entire active construction period, stationary noise sources will be located as far from sensitive receptors as possible, and they will be muffled and enclosed within temporary sheds, or insulation barriers or other measures will be incorporated to the extent feasible.
- During the entire active construction period, "quiet" air compressors and other stationary noise sources will be used where such technology exists.
- During the entire active construction period, noisy operations will be combined so that they occur in the same time period as the total noise level produced would not be significantly greater than the level produced if the operations were performed separately (and the noise would be of shorter duration).
- Signs will be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment will be turned off if not in use for more than 5 minutes.
- During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells will be for safety warning purposes only. The construction manager will use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters.

Construction Vibration Impacts

Construction equipment used at the project site would result in construction vibration as shown in Table 21. While the proposed project would require the installation of piles for the deep foundation system, impact-driven piles that create groundborne vibration would not be used. The project sponsor plans to use drilled piles to install the foundation system. Table 21 shows the reference vibration level (L_v) in

vibration decibel (VdB) and peak particle velocities (PPV) from the proposed construction equipment that would cause groundborne vibration.

TABLE 21 TYPICAL CONSTRUCTION VIBRATION LEVELS

Equipment		PPV at 25 feet (inches/second)	Approximate L_v at 25 feet (VdB)	Approximate L_v at 50 feet (VdB)	Approximate L_v at 100 feet (VdB)
Clam shovel drop		0.202	94	85	76
Hydromill (slurry wall)	in soil	0.008	66	57	48
	in rock	0.017	75	66	57
Vibratory Roller		0.210	94	85	76
Hoe Ram		0.089	87	78	69
Large Bulldozer		0.089	87	78	69
Caisson Drilling		0.089	87	78	69
Loaded Trucks		0.076	86	77	68
Jackhammer		0.035	79	70	61
Small Bulldozer		0.003	58	49	40
Giken Drilled Piler		0.024	76	67	57
Tubex Drilled Piler		0.050	82	73	64

Notes: L_v = vibration level; PPV = Peak Particle Velocity; Vdb = vibration decibel level
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 9.

As previously described and shown on Figure 20, there are four structures that would be sensitive to the effects of construction vibration (CV). While each of the CV locations are sensitive to vibration annoyance for residential and commercial uses and architectural damage, the buildings at locations CV-1, CV-2, and CV-4 are also historic resources. Therefore, any architectural damage to these three locations as a result of vibration from construction equipment could also result in an historical architectural resource impact under CEQA. As shown previously on Table 3 in section E.3, Cultural Resources, the FTA establishes an architectural-damage vibration limit of 0.2 PPV for non-engineered timber and masonry buildings, 0.3 PPV for engineered concrete and masonry (no plaster) buildings, and 0.5 PPV for reinforced concrete, steel, or timber for architectural damage. See Impact CR-2 in section E.3, Cultural Resources for a discussion on impacts related to architectural damage from construction vibration.

As described above in the Noise and Vibration Regulations section, the FTA defines an occupant-annoyance vibration impact as significant if it exceeds 78 vibration decibel level (VdB) during the day at a sensitive (residential) receiver or if it exceeds 84 VdB for non-sensitive (commercial/office) land uses. Table 22 below shows the anticipated construction vibration levels from construction activities, based on the distance between the location of construction activity and the receiver (*i.e.*, CV-1, CV-2, CV-3, and CV-4).

TABLE 22 CALCULATED CONSTRUCTION VIBRATION LEVELS FOR OCCUPANT ANNOYANCE AT ADJACENT RECEIVERS

Receiver	Equipment	Average Distance to Construction Activity[a] (feet)	Calculated Avg. Vibration Level, VdB (re: 10^{-6} in/sec)	Criteria, VdB (re: 10^{-6} in/sec)	Below VdB criteria?
CV-1: Commercial 753 Davis Street[c]	Large Bulldozer	50	78	84	Y
	Loaded Trucks	50	77		Y
CV-2: Commercial 60 Broadway[c]	Large Bulldozer	50	78	84	Y
	Loaded Trucks	50	77		Y
CV-3: Residential 75 Broadway	Large Bulldozer	200	60	78	Y
	Loaded Trucks	200	59		Y
CV-4: Residential 825 Front Street	Large Bulldozer	180	61	78	Y
	Loaded Trucks	180	60		Y

Notes:
a. For occupant annoyance, distance estimates are from center of site as annoyance is calculated on a long-term basis (*i.e.,* for the entire duration of pile driving, rather than just when it occurs closest to a receiver).
Source: CSDA Design Group, 2017. *88 Broadway/735 Davis, SF – Project-Generated Noise Study*. September 6. Table 10.

Occupant-Annoyance Vibration Impacts to Off-site Residential Buildings

The closest residential vibration-sensitive receiver's locations are the residents of 75 Broadway and 825 Front Street (CV-3 and CV-4). The building at 75 Broadway is a steel building clad in brick veneer building, and is therefore subject to the 0.5 PPV standard for architectural damage. The building at 825 Front Street is framed construction (likely wood frame) and is therefore subject to 0.2 PPV standard for architectural damage. Since vibration intensive activities would occur during the planned hours of construction that are consistent with the San Francisco Noise Ordinance (7:00 a.m. to 8:00 p.m.), the residential land uses would be subject to the FTA daytime-residential annoyance criterion of 78 VdB. As shown in Table 22, the proposed project would not exceed the occupant-annoyance vibration criteria at 75 Broadway and 825 Front Street. Therefore, impacts to the residents of these residential buildings would be ***less than significant***.

Occupant-Annoyance Vibration Impacts to Off-site Commercial Buildings

The closest commercial vibration-sensitive receivers are occupants of 753 Davis Street and 60 Broadway (locations CV-1 and CV-2). The building at 753 Davis Street and 60 Broadway are of masonry construction and are therefore subject to the 0.3 PPV standard for architectural damage. These locations are subject to the 84 Vdb for commercial occupant annoyance. As shown in Table 22, the proposed project would not exceed the occupant-annoyance vibration criteria at 753 Davis Street and 60 Broadway. Therefore, impacts to the occupants of these commercial buildings would be ***less than significant***.

Impact C-NO-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to 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 2 and mapped on Figure 17 in section B.2, Cumulative Projects, reasonably foreseeable projects within a 0.25-mile radius of the project site includes new residential, museum, hotel, and theater development as well as space for community, retail, and office uses.

Operational Noise

Localized traffic noise would increase in conjunction with foreseeable residential and commercial growth in the project vicinity. As noted, vehicle traffic is the dominant source of noise in the project vicinity. Related projects would be expected to add additional vehicular trips, increasing the level of ambient noise potentially to a cumulatively significant level. As shown in Table 20 under Impact NO-1, there would be a minimal increase in the ambient noise levels along all surrounding roadways under the existing plus project conditions. Therefore, the project would not result in a substantial increase in traffic noise levels relative to existing conditions. In addition, because the proposed project would not raise noise levels along surrounding roadways, even if the proposed project in combination past, present, and reasonably foreseeable projects resulted in cumulative vehicle traffic noise in the vicinity reaching a significant level, the project-related contribution to traffic noise under cumulative conditions would not be considerable because it would represent a minor proportion of the overall traffic volume in the site vicinity and traffic noise from the project would not be perceptible. As such, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact to roadway noise impacts.

The proposed project would include new fixed noise sources that would produce operational noise on the project site. Similar new fixed noise sources would produce noise for projects within 0.25-mile radius of the project site. This could result in a permanent increase in ambient noise above levels existing without the projects. However, operation of all mechanical equipment would be subject to Police Code section 2909 of the San Francisco Noise Ordinance. Reasonably foreseeable projects would also be required to comply with the San Francisco Noise Ordinance (Article 29 of the Police Code), and therefore, would not exceed limits for fixed noise sources set forth in San Francisco Noise Ordinance (Article 29 of the Police Code). Therefore, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative long-term noise impact from fixed noise sources. Based on the foregoing, cumulative operational noise impacts would be ***less than significant.***

Construction Noise & Vibration

Construction activities associated with other projects in the vicinity of the project site would occur on a temporary and intermittent basis, similar to the proposed project. Like the proposed project, all projects would be required to comply with the San Francisco Noise Ordinance (Police Code section 2909) requirements as described above. Project construction noise and vibration would be temporary, intermittent and localized, limited to a few hundred feet from the project site. Construction noise would attenuate due to distance and the presence of barriers, such as buildings and structures. As shown on

Figure 17 in section B.2, Cumulative Projects, there are two development projects planned in the project vicinity that are close enough (within 500 feet) to have the potential to result in cumulative construction noise contributions, depending on approval and scheduling, including Seawall Lots 323/324 and 940 Battery Street. The 940 Battery Street project site is separated from the proposed project by multiple buildings that would provide shielding of construction noise and would be unlikely to noticeably combine with project construction noise at the nearest receptor locations, even if they were to be constructed simultaneously. However, both projects would be required to comply with the San Francisco Noise Ordinance Police Code Section 2909 regarding construction noise levels. In light of the above, the proposed project would not combine with cumulative development projects to create or contribute to cumulative noise and vibration impacts, and therefore, impacts are ***less than significant***. Implementation of **Improvement Measure I-NO-2, Construction Noise Reduction** would further reduce the proposed project's less-than-significant contribution to cumulative construction noise impacts by establishing noise and vibration reduction performance standards.

E.6 AIR QUALITY

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
AIR QUALITY— **Would the project:**					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	☐
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)?	☐	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	☐

OVERVIEW

The BAAQMD 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. The 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, the BAAQMD 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. The federal and State Clean Air Acts require plans to be developed for areas that do not meet air quality standards, generally. The Bay Area's current Clean Air Plan, titled *2017 Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area* (2017 Clean Air Plan), serves as an update to the Bay Area 2010 Clean Air Plan and continues in providing the framework for SFBAAB to achieve attainment of the California and National 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 to local communities by 20 percent by 2020. Furthermore, the 2017 Clean Air Plan also 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: [95]

- 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.
- 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 State Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), 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 SFBAAB is designated as either in attainment[96] or unclassified for most criteria pollutants with the exception of ozone, $PM_{2.5}$, and PM_{10}, for which these pollutants are designated as non-attainment for either the State or federal standards. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions

[95] Bay Area Air Quality Management District. 2017, April 19. *Final 2017 Clean Air Plan, Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area*. Available at: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/plans-under-development.

[96] "Attainment" status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. "Non-attainment" 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.

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.[97]

Land use projects may contribute to regional criteria air pollutants during the construction and operational phases of a project. Table 23 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 23 CRITERIA AIR POLLUTANT SIGNIFICANCE THRESHOLDS

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./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: BAAQMD, Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance, October 2009.

Ozone Precursors

As discussed previously, the SFBAAB is currently designated as non-attainment 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 (NOx). 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, are based on the State and federal Clean Air Act's emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD 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 NOx, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).[98] 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 result in ROG and NOx emissions as a result of increases in vehicle trips, architectural coating and

[97] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, page 2-1.

[98] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report*, California Environmental Quality Act Thresholds of Significance, October 2009, page 17.

construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result 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 NOx emissions. Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

Particulate Matter (PM_{10} and $PM_{2.5}$)[99]

The BAAQMD has not established an offset limit for $PM_{2.5}$. However, the emissions limit in the federal New Source Review (NSR) for stationary sources in nonattainment areas is an appropriate significance threshold. For PM_{10} and $PM_{2.5}$, the emissions limit under NSR is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels below which a source is not expected to have an impact on air quality.[100] Similar to ozone precursor thresholds identified above, 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. Therefore, the above thresholds can be applied to the construction and operational phases of a land use project. Again, because construction activities are temporary in nature, 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 the application of best management practices at construction sites significantly control fugitive dust[101] and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.[102] The BAAQMD has identified a number of best management practices to control fugitive dust emissions from construction activities.[103] The City's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) requires a number of measures to control fugitive dust and the best management practices employed in compliance with the City's Construction Dust Control Ordinance is an effective strategy for controlling construction-related fugitive dust.

Other Criteria Pollutants

Regional concentrations of CO in the Bay Area have not exceeded the State standards in the past 11 years and SO_2 concentrations have never exceeded the standards. The primary source of CO emissions from

[99] PM_{10} 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.

[100] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 16.

[101] Western Regional Air Partnership (WRAP). 2006. *WRAP Fugitive Dust Handbook*. September 7, 2006. Available at: http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf, accessed on February 16, 2012.

[102] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significan*ce, October 2009, page 27.

[103] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017.

development projects is vehicle traffic. Construction-related SO_2 emissions represent a negligible portion of the total basin-wide emissions and construction-related CO emissions represent less than five percent of the Bay Area total basin-wide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO_2. Furthermore, the BAAQMD has demonstrated, based on modeling, that to exceed the California ambient air quality standard of 9.0 ppm (8-hour average) or 20.0 ppm (1-hour average) for CO, project traffic in addition to existing traffic would need 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 SO_2 emissions that could result from a development projects, development projects would not result in a cumulatively considerable net increase in CO or SO_2, and 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 (*i.e.,* of long-duration) and acute (*i.e.,* severe but short-term) adverse effects to 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 risk 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 but are regulated by the BAAQMD 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.[104]

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 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 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 residents would be exposed to air pollution 24 hours per day, 350 days per year, for 30 years. Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

[104] In general, a health risk assessment is required if the Bay Area Air Quality Management District 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.

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.[105] In addition to $PM_{2.5}$, diesel particulate matter (DPM) is also of concern. The California Air Resources Board (ARB) identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.[106] 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 areas of San Francisco most adversely affected by sources of TACs, San Francisco 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 within San Francisco. Areas with poor air quality, termed the "Air Pollutant Exposure Zone," were identified based on health-protective criteria that considers estimated cancer risk, exposures to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations. Each of the Air Pollutant Exposure Zone criteria is discussed below.

Excess Cancer Risk

The Air Pollutant Exposure Zone includes all areas where excess cancer risk from known sources exceeds 100 per one million persons. This criterion is based on United States Environmental Protection Agency (USEPA) guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale level.[107] As described by the BAAQMD, the USEPA considers a cancer risk of 100 per one million persons to be within the "acceptable" range of cancer risk. Furthermore, in the 1989 preamble to the benzene *National Emissions Standards for Hazardous Air Pollutants* (NESHAP) rulemaking,[108] the USEPA 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 (*i.e.*, 100 per one million persons) 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 persons 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.[109]

[105] *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.

[106] California Air Resources Board, Fact Sheet, *The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines*, October 1998.

[107] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

[108] 54 Federal Register 38044, September 14, 1989.

[109] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

Fine Particulate Matter

In April 2011, the USEPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*, "Particulate Matter Policy Assessment." In this document, USEPA staff concludes that the then current federal annual $PM_{2.5}$ standard of 15 $\mu g/m^3$ should be revised to a level within the range of 13 to 11 $\mu g/m^3$, with evidence strongly supporting a standard within the range of 12 to 11 $\mu g/m^3$. The Air Pollutant Exposure Zone for San Francisco is based on the health protective $PM_{2.5}$ standard of 11 $\mu g/m^3$, as supported by the USEPA's Particulate Matter Policy Assessment, although lowered to 10 $\mu g/m^3$ 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 and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses in close proximity to freeways 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,[110] lots that are within 500 feet of freeways are included in the Air Pollutant Exposure Zone.

Health Vulnerable Locations

Based on the 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 one million persons exposed, and/or (2) PM2.5 concentrations in excess of 9 $\mu g/m^3$.[111]

The above citywide health risk modeling was also used as the basis in 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) (Article 38). The purpose of 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 sensitive use development within the Air Pollutant Exposure Zone. In addition, projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas already adversely affected by poor air quality. The project site is not located within the Air Pollutant Exposure Zone.[112]

[110] California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective.* April 2005. Available at: http://www.arb.ca.gov/ch/landuse.htm, accessed on April 7, 2017.

[111] 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, Amendment to Health Code Article 38.

[112] San Francisco Planning Department. San Francisco Property Information Map, Version 3.4.4 Map. 2016. Available at: http://propertymap.sfplanning.org/?dept=planning, accessed on September 29, 2016.

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 addresses construction-related air quality impacts resulting from the proposed project. The proposed project would require construction activities for the approximate 19-month construction period. For the purposes of the environmental analysis, it is assumed the project construction would take place starting at the beginning of August 2018 and be completed by March 2020 (approximately 413 workdays).

Impact AQ-1: Proposed project construction activities would generate fugitive dust and criteria air pollutants, 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 activities (short-term) typically result in emissions of ozone precursors and particulate matter (PM_{10} and $PM_{2.5}$) in the form of dust (fugitive dust) and exhaust (*e.g.*, vehicle tailpipe emissions). Emissions of ozone precursors and PM are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROGs are also emitted from activities that involve painting, other types of architectural coatings, or asphalt paving. The proposed project would involve the demolition of two existing surface parking lots and the construction of two new 65-foot-tall (up to 75 feet with roof top appurtenances), 6-story mixed-use residential buildings with up to 178 affordable dwelling units (125 family units and 53 senior units). The buildings would include approximately 6,400 square feet of commercial space and an approximately 4,300-square-foot childcare facility for public use. During the project's approximately 19-month construction period, construction activities would have the potential to result in emissions of ozone precursors and PM, as discussed below.

Fugitive Dust

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown 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 have impacts on human health throughout the country. California has found that particulate matter exposure can cause health effects at lower levels than national standards. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure. According to the ARB, reducing particulate matter $PM_{2.5}$ concentrations to State and federal standards of 12 μg/m3 in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.[113]

[113] 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.

Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Demolition, excavation, grading, and other construction activities can cause wind-blown dust that adds particulate matter to the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to 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) with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work to protect the health of the general public and of onsite workers, minimize public nuisance complaints, and to avoid orders to stop work by the DBI.

The Ordinance requires that all site preparation work, demolition, or other construction activities within 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 specified dust control measures whether or not the activity requires a permit from DBI.

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 mph. 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 seven 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 millimeters (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques. City and County of 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 (SFPUC). Non-potable water must be used for soil compaction and dust control activities during project construction and demolition. The 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 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. DBI would not issue a building permit without written notification from the Director of Public Health that the project sponsor has an approved site-specific Dust Control Plan.

The site-specific Dust Control Plan required by the Dust Control Ordinance would require the project sponsor to: submit of 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 securing 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 mph; 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. Compliance with the regulations and procedures set forth by the San Francisco Dust Control Ordinance would ensure that potential dust-related air quality impacts would be reduced to a less-than-significant level.

Criteria Air Pollutants

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. A quantitative analysis of the proposed project's construction emissions was conducted using the California Emissions Estimator Model (CalEEMod), Version 2016.3.1. The model was developed, including default data (*e.g.*, emission factors, meteorology, etc.), in collaboration with California air districts' staff. Default assumptions were used where project-specific information was unknown.

The proposed project would demolish two existing surface parking lots and generate approximately 365 tons of asphalt demolition debris and 4,000 cubic yards of soil export. Construction on the 1.12-acre site is estimated to take approximately 19 months. To determine potential construction-related air quality impacts, the average daily criteria air pollutants emissions generated by the proposed project-related construction activities are compared to the significance thresholds in Table 24. Average daily emissions are based on the annual construction emissions divided by the total number of active construction days.

TABLE 24 CONSTRUCTION-RELATED CRITERIA AIR POLLUTANT EMISSIONS ESTIMATES

	Criteria Air Pollutants (tons/year)[a]			
Year	**ROG**	**NO_x**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$[b]**
2018	<1	1	<1	<1
2019	<1	2	<1	<1
2020	1	<1	<1	<1
Total	**2**	**4**	**<1**	**<1**
	Criteria Air Pollutants (average lbs/day)[a]			
Average Daily Emissions[c]	8	19	1	1
Significance Threshold	54	54	82	54
Exceeds Average Daily Threshold	**No**	**No**	**No**	**No**

Note: Emissions may not total to 100 percent due to rounding.
a. Construction information is based on the preliminary information provided by the project sponsor. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast Air Quality Management District of construction equipment and phasing for comparable projects.
b. Includes implementation of best management practices for fugitive dust control required by BAAQMD as mitigation, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, and replacing ground cover.
c. Average daily emissions are based on the total construction emissions divided by the total number of active construction days. The total number of construction days is estimated to be 413.
Source: CalEEMod 2016.3.1.

As shown in Table 24, criteria air pollutant emissions from construction equipment exhaust would not exceed the average daily thresholds and impacts from project-related construction activities on regional air quality would be ***less than significant***. No mitigation measures are necessary.

Impact AQ-2: Proposed project construction activities would not generate toxic air contaminants, including diesel particulate matter, that may expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)

The nearest sensitive off-site receptors to the project site are the residents at 825 Front Street and 75 Broadway. Other nearby off-site sensitive receptors include the residences farther to the west at 810 Battery Street and the residences at 733 Front Street and at the Gateway Apartments to the south.

As previously stated, the project site is not within an Air Pollutant Exposure Zone, as mapped and defined by Health Code Article 38. With regard to construction emissions, off-road equipment (which

includes construction-related equipment) is a large contributor to DPM emissions in California, although since 2007, the ARB has found the emissions to be substantially lower than previously expected.[114] Newer and more refined emission inventories have substantially lowered the estimates of DPM emissions from off-road equipment such that off-road equipment is now considered the sixth largest source of DPM emissions in California.[115] For example, revised PM emission estimates for the year 2010, which DPM is a major component of total PM, have decreased by 83 percent from previous 2010 emissions estimates for the SFBAAB.[116]

Additionally, a number of federal and State regulations are requiring cleaner off-road equipment. Specifically, both the USEPA 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 are required to produce new engines with advanced emission-control technologies. Although the full benefits of these regulations would not be realized for several years, the USEPA estimates that by implementing the federal Tier 4 emission standards, NOx and PM emissions would be reduced by more than 90 percent.[117]

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 the 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.*"[118]

Therefore, project-level analyses of construction activities have a tendency to produce overestimated assessments of long-term health risks.

[114] 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*, p.1 and p. 13 (Figure 4), October 2010.

[115] 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.

[116] California Air Resources Board, *In-Use Off-Road Equipment, 2011 Inventory Model*, Query. Available at: http://www.arb.ca.gov/msei/categories.htm#inuse_or_category, accessed on April 2, 2012.

[117] United State Environmental Protection Agency, *Clean Air Nonroad Diesel Rule: Fact Sheet*, May 2004.

[118] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, page 8-6.

Although on-road heavy-duty diesel vehicles and off-road equipment would be used during the 19-month construction duration, emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. Furthermore, the proposed project would be subject to California regulations limiting idling to no more than five minutes,[119] which would further reduce nearby sensitive receptor exposure to temporary and variable DPM emissions. Therefore, because the project site is not within the Air Pollutant Exposure Zone and construction activities would be temporary and variable over the 19-month construction period, TAC emissions would result in a ***less-than-significant impact*** to sensitive receptors. No mitigation measures are necessary.

OPERATIONAL AIR QUALITY IMPACTS

Land use projects typically result in emissions of criteria air pollutants and toxic air contaminants primarily from an increase in motor vehicle trips. However, land use projects may also result in criteria air pollutants and toxic air contaminants from combustion of natural gas, landscape maintenance, use of consumer products, and architectural coating. The following discussion addresses operation-related 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)

The 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 all the screening criteria are met by a proposed project, then the lead agency or project sponsor does not need to perform a detailed air quality assessment. BAAQMD's CEQA Air Quality Guidelines identifies screening criteria for operation-related criteria air pollutant emissions for an "apartment, mid-rise" development at 494 dwelling units and a "strip mall" at 99,000 square feet.[120] The proposed project falls substantially below the operational criteria pollutant screening criteria for mid-rise apartment developments (178 dwelling units are proposed compared to the screening criterion of 494 dwelling units) and strip malls (6,436 square feet are proposed compared to the screening criterion of 99,000 square feet). 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, and would result in ***less than significant*** impact with respect to criteria air pollutants. No mitigation measures are necessary.

Additionally, the proposed project would include solar panels and green roofs. New buildings are required to comply with the current Building Energy Efficiency Standards and CALGreen.

[119] California Code of Regulations, Title 13, Division 3, section 2485 (on-road) and section 2449(d)(2) (off-road).

[120] "Strip mall" is used as a proxy to capture the amount of commercial businesses on the first floor. This land use is the closest default land use to the type of commercial uses proposed under the project.

Impact AQ-4: The proposed project would not generate substantial amounts of toxic air contaminants or expose sensitive receptors to substantial air pollutant concentrations. (Less than Significant)

As discussed above, the project site is not within an Air Pollutant Exposure Zone. Residential land uses, such as the proposed project do not use substantial quantities of TACs on-site and typically do not exacerbate existing health risk hazards. However, the proposed project would include a two emergency back-up diesel generators (*i.e.,* a stationary source of TAC emissions) that would require a permit from BAAQMD. Additionally, off-site sensitive receptors are located in close proximity to the project site, including the residents at 825 Front Street and 75 Broadway. Other nearby off-site sensitive receptors include the residences farther to the west at 810 Battery Street and the residences at 733 Front Street and at the Gateway Apartments to the south.

The following evaluates the proposed project's potential to expose sensitive receptors to substantial pollutant concentrations.

Sources of Toxic Air Contaminants

Vehicle Trips

Individual projects result in emissions of toxic air contaminants primarily as a result of an increase in vehicle trips. The BAAQMD considers roads with less 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 would generate new vehicle-trips on the surrounding roadway network, but would also demolish existing automobile-oriented uses (surface parking) that already generate substantial amounts of vehicle traffic and replace them with active uses with no accessory off-street parking. Therefore, the proposed project would not result in vehicle traffic levels on the street segments immediately adjacent to the project site that would be substantially worse than existing conditions. Furthermore, the proposed project's 1,211 daily vehicle trips[121] would be well below the 10,000 vehicle per day level and would be distributed among the local roadway network. Therefore, the proposed project would not generate a substantial amount of TAC emissions from vehicles that could affect nearby sensitive receptors.

On-Site Backup Diesel Generators

The proposed project would include two emergency backup generators. Emergency generators are regulated by the BAAQMD through its New Source Review (Regulation 2, Rule 5) permitting process. The project sponsor would be required to obtain applicable permits to operate the emergency generators from the BAAQMD. Although emergency generators are intended only to be used in periods of power outages, monthly testing of the generator would be required. The BAAQMD limits testing to no more than 50 hours per year. Additionally, as part of the permitting process, the BAAQMD limits the excess

[121] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20. Table 9, Project Travel Demand – New Trips by Mode (Weekday PM Peak Hour), page 35.

cancer risk from any facility to no more than ten per one million population and requires any source that would result in an excess cancer risk greater than one per one million population to install Best Available Control Technology for Toxics (TBACT). Compliance with the BAAQMD permitting process would ensure that project-generated TAC emissions from the proposed generators would not expose sensitive receptors to substantial air pollutant concentrations, and TAC emissions would be less than significant.

Siting Sensitive Receptors

The proposed project would include development of 178 residential units and a childcare facility, which are considered a sensitive land use for the purposes of air quality evaluation. However, as discussed above the project would not generate substantial levels of TACs and would not site sensitive land uses within an Air Pollutant Exposure Zone. Therefore, the proposed project would not expose sensitive receptors to substantial levels of air pollution. While a recent California Supreme Court decisions in C*BIA v. BAAQMD* held that impacts of the environment on a project generally are not within the purview of the CEQA statutes, this finding is nevertheless identified for the purpose of informing decision makers.[122] In light of the above, the proposed project would not generate substantial amounts of TACs or expose sensitive receptors to substantial air pollutant concentrations. Therefore this impact is ***less than significant***. No mitigation measures are necessary.

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 SFBAAB is the 2017 Clean Air Plan. The 2017 Clean Air Plan is a road map that demonstrates how the San Francisco Bay Area would achieve compliance with the State ozone standards as expeditiously as practicable and how the region would 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) attain all State and national air quality standards, (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants, and (3) reduce Bay Area GHG emissions 40 and 80 percent below 1990 levels by 2030 and 2050,

[122] 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. Available at: 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.

respectively.[123] To meet the primary goals, the 2017 Clean Air Plan recommends specific control measures and actions. These control measures are grouped into various sectors such as agriculture, buildings, energy, natural and working lands, stationary source, transportation, waste, and water. The 2017 Clean Air 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 greenhouse gases 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 SFBAAB.

The proposed project's impact with respect to GHGs are discussed below in section E.7, Greenhouse Gas Emissions, which demonstrates that the proposed project would comply with the applicable provisions of the City's GHG Reduction Strategy and therefore not conflict with the 2017 Clean Air Plan.

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 VMT. The proposed project's anticipated 1,211 vehicle trips[124] that would replace the existing on-site automobile-oriented uses (surface parking) that already generate substantial amounts of vehicle traffic and replace them with active uses with no accessory off-street parking, would result in negligible air pollutant emissions. Control measures that are identified in the 2017 Clean Air Plan are implemented by the General Plan and the Planning Code, for example, through the City's Transit First Policy, bicycle parking requirements, and transit impact development fees. Compliance with these requirements would ensure the project includes 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 the meet the 2017 Clean Air 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 consists of construction of two new 65 feet tall, 6-story mixed-use residential buildings with up to 178 affordable dwelling units (125 family units and 53 senior units). The buildings would include approximately 6,400 square feet of commercial space and a 4,300-square-foot childcare facility for public use. The proposed project would be located within 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, would not include off-street vehicle parking, 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, and because the proposed project would be consistent with the applicable air quality

[123] The goal is consistent with the greenhouse gas emissions reduction target of Senate Bill 32 and the reduction goal of Executive Order S-03-05.

[124] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA,* June 20. Table 9, Project Travel Demand – New Trips by Mode (Weekday PM Peak Hour), page 35.

plan that demonstrates how the region would improve ambient air quality and achieve the State and federal ambient air quality standards, the impact would be ***less than significant***. No mitigation measures are necessary.

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 includes up to 178 affordable dwelling units with approximately 6,400 square feet of commercial space and an approximately 4,300-square-foot childcare facility for public use, and would not create a significant source of new odors. Therefore, odor impacts would be ***less than significant***. No mitigation measures are necessary.

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)

The geographic context for an evaluation of cumulative air quality impacts is the SFBAAB, as governed by the BAAQMD. 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 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, because the proposed project's criteria air emissions would not exceed the project-level thresholds for criteria air pollutants (Impact AQ-1 and AQ-3), the proposed project would not result in a cumulatively considerable contribution to regional air quality impacts.

Although the project would add new sensitive land uses and new sources of TACs (*e.g.*, new vehicle trips and two backup generators), the project site is not located within an Air Pollutant Exposure Zone. The project's incremental increase in localized TAC emissions resulting from the project's 1,211 project-generate daily vehicle trips[126] and two backup generators would be minor and would not contribute substantially to cumulative TAC emissions that could affect adjacent or proposed sensitive land uses.

[125] Reconnaissance of project site and environs conducted by PlaceWorks staff of March 1, 2017.

[126] AECOM, 2017. *88 Broadway Transportation Impact Study, San Francisco, CA*, June 20. Table 9, Project Travel Demand – New Trips by Mode (Weekday PM Peak Hour), page 35.

Therefore, cumulative health risk impacts would be considered ***less than significant***. No mitigation measures are necessary.

E.7 GREENHOUSE GAS EMISSIONS

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
GREENHOUSE GAS EMISSIONS— Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐

Greenhouse gas (GHG) 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.

The 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 GHG Reduction Strategy [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 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels,[128] exceeding the year 2020 reduction goals outlined in the BAAQMD's Bay Area 2017 Clean Air

[127] San Francisco Planning Department, Strategies to Address Greenhouse Gas Emissions in San Francisco, 2010. Available at: http://www.sf-planning.org/index.aspx?page=2627.

[128] ICF International, *Technical Review of the 2012 Community-wide GHG Inventory for the City and County of San Francisco*, January 21, 2015. Available at: http://sfenvironment.org/sites/default/files/fliers/files/icf_verificationmemo_2012sfecommunityinventory_2015-01-21.pdf, accessed on March 16, 2015.

Plan, Executive Order (EO) S-3-05, and Assembly Bill (AB) 32 (also known as the Global Warming Solutions Act).[129]

Given that the City' has met the State 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[130], EO B-30-15,[131,132] and Senate Bill (SB) 32[133,134] the City's GHG reduction goals are consistent with EO S-3-05, EO B-30-15, AB 32, SB 32 and the Bay Area 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

[129] Executive Order S-3-05, Assembly Bill 32, and the *Bay Area 2017 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. Available at: 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 ($MTCO_2e$)); by 2020, reduce emissions to 1990 levels (approximately 427 million $MTCO_2e$); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million $MTCO_2e$). 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.

[131] Office of the Governor, Executive Order B-30-15, April 29, 2015. Available at: 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 metric tons of carbon dioxide equivalent [$MTCO_2e$]).

[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] Senate Bill 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 greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

[134] Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

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 operational 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 the intensity of use of the site by demolishing two surface parking lots and developing the site with 178 affordable dwelling units, approximately 6,400 square feet of commercial space, and an approximately 4,300-square-foot childcare facility. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential and commercial 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 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 project's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

The proposed project would not provide any vehicular parking. This combined with compliance with the bicycle parking requirements that promote alternative forms of transportation, would reduce the proposed project's transportation-related emissions. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of alternative 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, Water Conservation and Irrigation ordinances, and Energy Conservation Ordinance, which would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions.[135] Additionally, as previously described, the proposed project would include solar panels and green roofs, which would meet the renewable energy criteria of the Green Building Code, further reducing the 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,

[135] Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump and treat water required for the project.

reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy[136] and reducing the energy required to produce new materials.

The proposed project would plant 18 trees, and compliance with the City's Street Tree Planting requirements would serve to increase carbon sequestration. Although the proposed project would fall short of meeting the street tree requirement, the project would increase the number of street trees from zero to 18 trees. 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).[137] Thus, the proposed project was determined to be consistent with San Francisco's GHG Reduction Strategy.[138]

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 2015[139] when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, AB 32, and the *Bay Area 2017 Clean Air Plan* GHG reduction goals for the year 2020. Other existing regulations, such as those implemented through AB 32, would continue to reduce a 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 EO S-3-05, EO B-30-15, AB 32, SB 32 and the 2017 Clean Air Plan. Therefore, because the proposed projects is consistent with the City's GHG Reduction Strategy, it is also consistent with the GHG reduction goals of EO S-3-05, EO 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. No mitigation measures are necessary.

[136] Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

[137] While not a greenhouse gas, volatile organic compounds (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 VOC emissions would reduce the anticipated local effects of global warming.

[138] San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for 88 Broadway/735 Davis Street Project*, October 11, 2017.

[139] San Francisco Office of the Environment, *San Francisco's Carbon Footprint*, Available at: https://sfenvironment.org/carbon-footprint, accessed September 16, 2017.

E.8 WIND AND SHADOW

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
WIND AND SHADOW— Would the project:					
a) Alter wind in a manner that substantially affects public areas?	☐	☐	☒	☐	☐
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	☐	☐	☒	☐	☐

Impact WS-1: The proposed project would not alter wind in a manner that would substantially affect 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 65 feet (with an additional 10 feet for rooftop appurtenances), the proposed project would be about the same height as existing adjacent or nearby buildings. Given its height, orientation, design, location, and surrounding development context, the proposed 65-foot-tall building (plus 10-foot-tall mechanical equipment and elevator penthouse) has little potential to cause substantial changes to ground-level wind conditions 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***, and no mitigation measures are necessary.

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 was adopted to protect certain public open spaces under the jurisdiction of the San Francisco Recreation and Parks Department (SFRPD) from shadowing by new and altered structures during the period between 1 hour after sunrise and 1 hour before sunset, year round. Planning Code section 295 restricts new shadow upon public open spaces under the jurisdiction of SFRPD by any structure exceeding 40 feet in height, unless the Planning Commission finds that any adverse impact on use of the open space caused by the shadow would be insignificant. In 1989, to implement section 295 and Proposition K, the Planning Commission and Recreation and Park Commission jointly adopted a memorandum (1989 Memorandum) establishing qualitative criteria for evaluating shadow impacts as well as Absolute Cumulative Limits (ACL) for certain parks. ACLs are "shadow" budgets that establish absolute cumulative limits for additional shadows, expressed as a percentage of Theoretically Available Annual Sunlight (TAAS) on a park with no adjacent structures present.

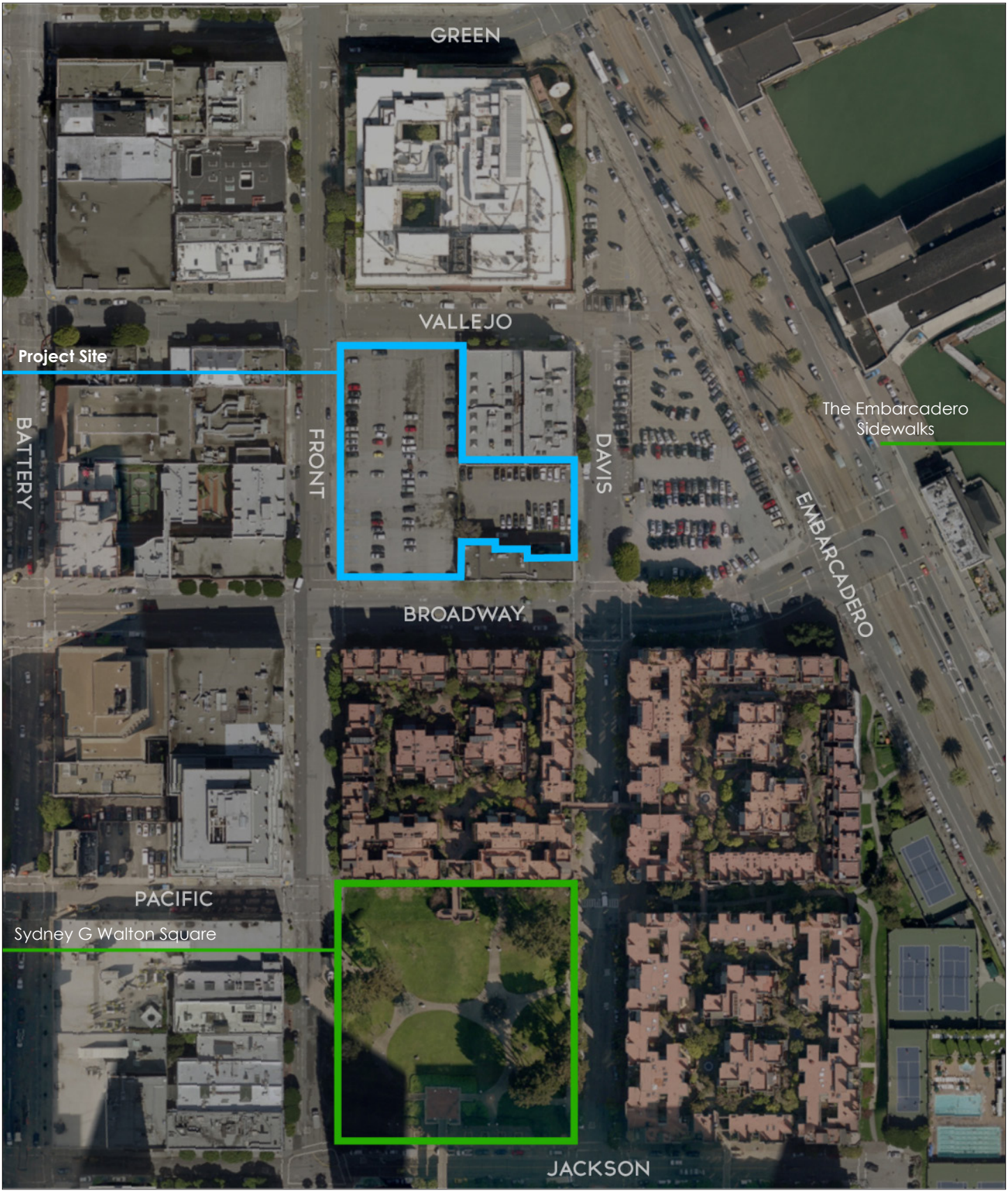
The 1989 Memorandum sets forth qualitative criteria under Planning Code section 295 to determine when a shadow would be significant as well as information on how to quantitatively measure shadow impacts. Qualitatively, shadow impacts are evaluated based on (1) existing shadow profiles, (2) important times of day, (3) important seasons in the year, (4) location of the new shadow, (5) size and duration of new shadows, and (6) public good served by buildings casting a new shadow. Quantitatively, new shadows are to be measured by the additional annual amount of shadow-square foot-hours as a percent of TAAS. Where an ACL has not been adopted for a park, the Planning Commission's decision on whether a structure has an impact on property under the jurisdiction of the Recreation and Park Department is based on a review of qualitative and quantitative factors.

Because the proposed project includes construction of a structure greater than 40 feet in height, a preliminary shadow fan analysis under Planning Code section 295 was required. The preliminary shadow fan prepared by the Planning Department. The preliminary shadow fan indicated that the proposed project would not shade any properties under the jurisdiction of SFRPD including Maritime Plaza, Sue Bierman Park, Justin Herman-Embarcadero Plaza, Portsmouth Square, Washington Square, and Telegraph Hill-Pioneer Park, and thus the proposed project is not subject to the provisions of Planning Code section 295.

However, it was determined that the proposed project has the potential to shade other public recreation and open spaces. Therefore, further shadow analysis was required to evaluate shadow impacts on non-section 295 properties. There are not any privately owned public outdoor spaces in the vicinity of the project site. Therefore, the potentially impacted non-section 295 properties include the Sydney G. Walton Square and the Embarcadero sidewalks shown on Figure 21 and described as follows:

- **Sydney G. Walton Square**: This open space is privately owned and is located approximately 0.1 miles south of the project site and is bounded by mixed use buildings to the north, Front Street to the east, Jackson Street to the south, and Davis Street to the west.
- **The Embarcadero Sidewalks**: These waterfront sidewalks are located along the eastern portion of the Port of San Francisco. The sidewalks are along a 3-mile stretch of the seawall that features piers, sidewalks, restaurants, parks and other attractions.

CADP prepared a shadow analysis to quantify the amount of net new shadow that would be cast by the proposed project on Sydney G. Walton Square and the Embarcadero sidewalks. This report is included in the project case file of this initial study. The shadow analysis shows that the existing shadow at Sydney G. Walton Square is from existing surrounding buildings and that the proposed project would not contribute net new shadow at any time through the year due to both the distance from the proposed project as well as its location directly south of the proposed building.



Source: City of San Francisco, 2017; CADP, June 21, 2017; PlaceWorks, 2018.

For the Embarcadero sidewalks, very minimal shadow impact is expected to occur only during the late evening hours in the Fall months of October to December, and mirrored winter months of December to early March. During these days of impact, the net new shadow never lasts longer than 17 minutes, and only occurs directly before sunset.[140] The new shadow load on the sidewalks would be 448.52 square foot hours. This net new shadow would not be expected to affect the use or enjoyment of the Embarcadero Sidewalk.

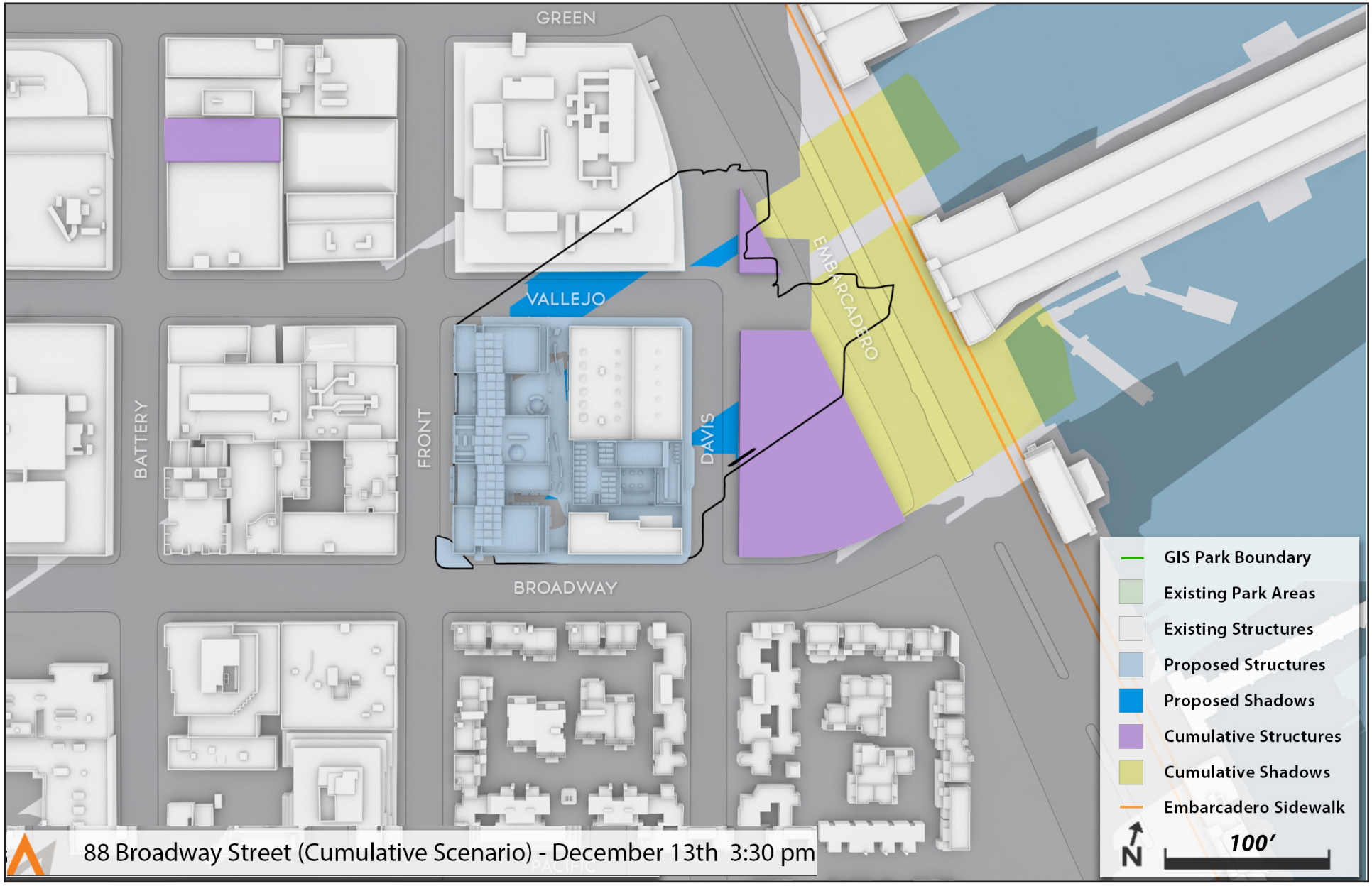
The proposed project would also shadow portions of other nearby streets and sidewalks and private property at times within the project vicinity. Shadows upon streets and sidewalks would not exceed levels commonly expected in urban areas and would be considered a less-than-significant effect under CEQA. Although occupants of nearby properties may regard the increase in shadow as undesirable, the limited increase in shading of private properties, as a result of the proposed project would not be considered a significant impact under CEQA. For the reasons discussed above, shadow impacts would be ***less than significant***. No mitigation measures are necessary.

Impact C-WS-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would not result in cumulative impacts related to wind and shadow. (Less than Significant)

As discussed above, buildings shorter than 85 feet have little potential to cause substantial changes to ground-level wind conditions. Given that the height limit in the project vicinity is 65 feet, none of the nearby cumulative development projects would be tall enough to alter wind in a manner that substantially affects public areas. For these reasons, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative wind impact.

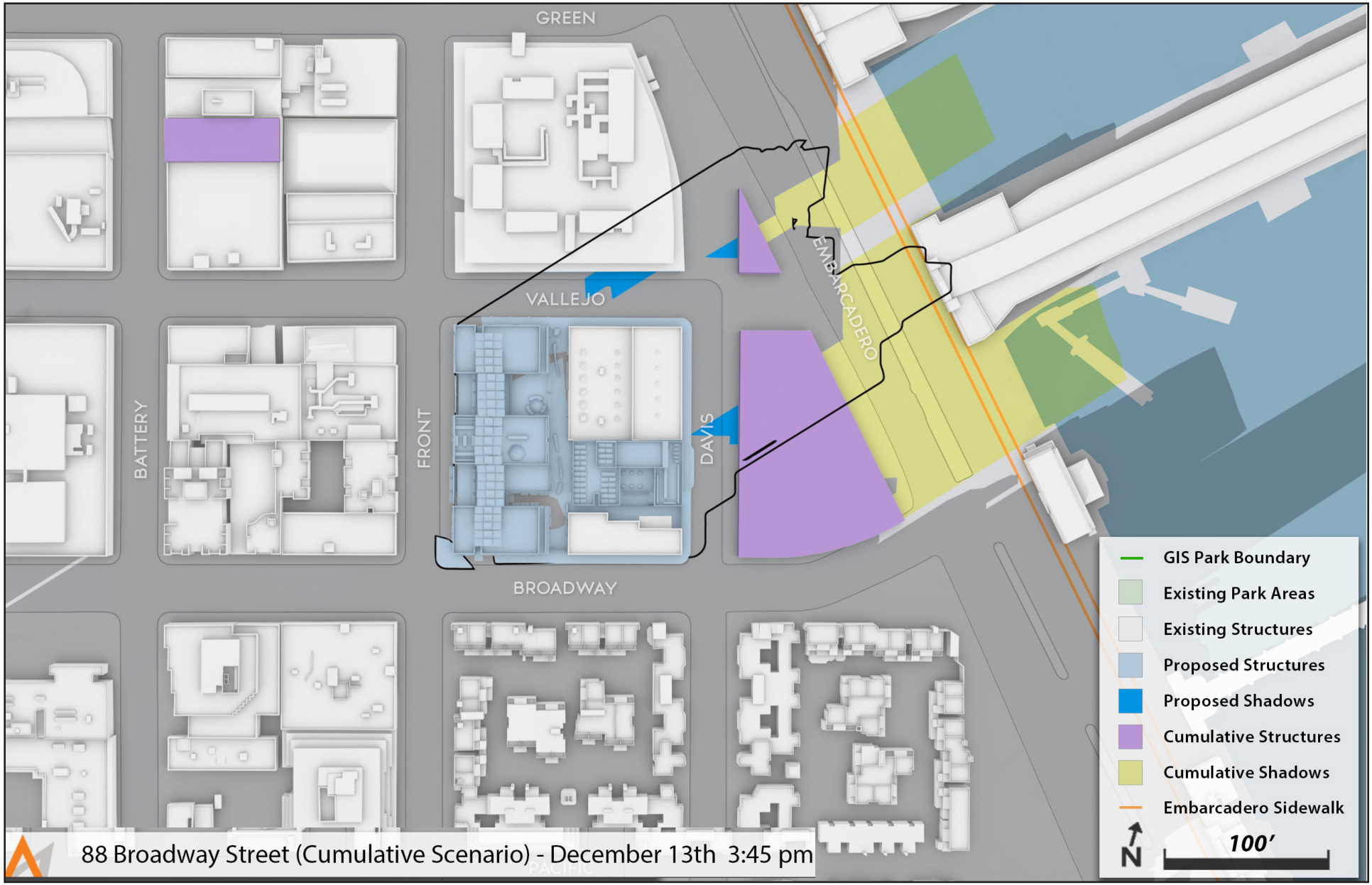
As described above, the proposed project would not cast any net new shadow on any park protected by Planning Code section 295, and would not add net new shadow to Sydney G. Walton Square. Therefore the proposed project has no potential to result in cumulative impacts to section 295 Recreation and Park open spaces or on Sydney G. Walton Square. However, the proposed project would add new shadow to the Embarcadero sidewalks under cumulative conditions. Cumulative shadows are shown on Figures 22 through 24. The adjacent Seawall Lot 323/324 proposed development in the area to the west of the project site could also increase shadows on the Embarcadero sidewalk. Therefore, a cumulative analysis was also prepared to analyze the potential shadow impact on the Embarcadero sidewalk's open space from both proposed developments. Due to the proximity of the Seawall Lot 323/324 project to the east of the proposed project, the new shade from the proposed Seawall Lot 323/324 project would completely subsume any shade generated by the proposed project and new shadow generated by the proposed project would no longer impact the area during the winter months. Accordingly, the proposed project would not combine with cumulative development projects, including the Seawall Lot 323/324 project, to create or contribute to a cumulative shadow impact. Based on the evidence provided above, cumulative effect with respect to shadow impacts would be ***less than significant***. No mitigation measures are necessary.

[140] CADP, 2017. *88 Broadway Shadow Analysis*, March 16.

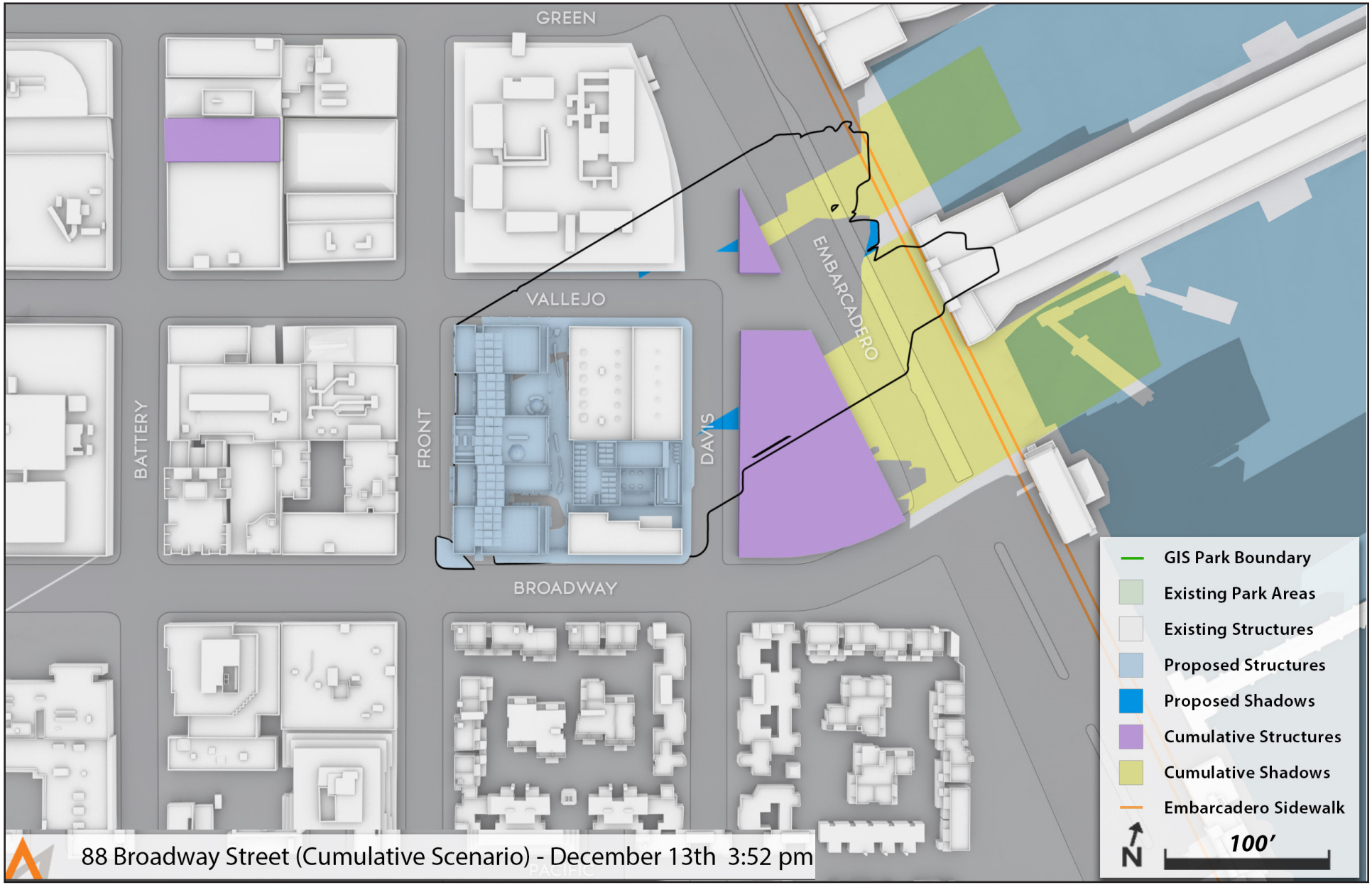


Source: City of San Francisco, 2017; CADP, June 21, 2017; PlaceWorks, 2018.

Shadow Fan of Cumulative Projects at 3:30PM



Source: City of San Francisco, 2017; CADP, June 21, 2017; PlaceWorks, 2018.



Source: City of San Francisco, 2017; CADP, June 21, 2017; PlaceWorks, 2018.

E.9 RECREATION

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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?	☐	☐	☒	☐	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐	☐
c) Physically degrade existing recreational resources?	☐	☐	☒	☐	☐

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 recreation facilities, or require the expansion of recreational facilities the construction of which could affect the environment, or physically degrade existing recreational resources. (Less than significant)

The new residents of the proposed project would be served by the San Francisco Recreation and Parks Department (SFRPD), 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.[141] 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 Recreation and Open Space Element (ROSE) identifies areas throughout the city having 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.[142] Although neighboring areas to the west of the project site, are classified as High Need areas, the proposed project is located within parcels classified as having a lesser need for open space.

There are several recreation and open space facilities managed by the SFRPD near the project site:

[141] *San Francisco General Plan*, Recreation and Open Space Element (ROSE), 2014. Available at: http://www.sf-planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf, April, accessed on January 18, 2017.

[142] San Francisco Planning Department, Recreation and Open Space Element (ROSE), 2014. Available at: http://www.sf-planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf, April, accessed on January 18, 2017.

- **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 miles 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 miles southeast of the project site.
- **Justin Herman-Embarcadero Plaza** (at the intersection of Steuart and Market Streets): An approximately 4.43-acre park containing fountain, winter ice skating rink, reservable picnic areas, and a bocce ball court, located approximately 0.37 miles 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 miles 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 miles northwest of the project site.
- **Telegraph Hill-Pioneer Park** (at Telegraph Hill Boulevard): An approximately 4.89 -acre park containing Coit Tower, located approximately 0.43 miles northwest of the project site.

In addition to the facilities managed by SFRPD, Sydney G. Walton Square is the nearest public open space to the project site that is not owned or managed by SFRPD. The park is located a block away, 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 along the eastern portion of the Port of San Francisco. The sidewalks are along a 3-mile stretch of seawall that features piers, sidewalks, restaurants, parks and other attractions.

The proposed family housing building includes common open space for resident-use only and is comprised of an approximately ~~1,100~~1,250-square-foot terrace on the ~~fifth~~sixth floor, a~~n~~ second approximately ~~1,200~~2,550-square-foot deck on the sixth floor, an approximately ~~3,200~~3,650-square-foot family roof deck, and an approximately 1,400-square-foot family community garden on the roof. The proposed total ~~6,900~~8,850 square feet of common open space would exceed the City's open space requirements by approximately ~~900~~2,850 square feet. The senior housing building includes common open space available to residents only on an approximately 2,100-square-foot senior roof deck and community garden, which would exceed the City's open space requirements by approximately 800 square feet. Other open space areas not credited towards the City's open space requirement include the approximately ~~3,200~~2,270-square-foot playground on the ground floor, the approximately ~~700~~620-square-foot colonnade (for the commercial space) on the ground floor, and the approximately ~~2,000~~1,900-square-foot family courtyard on the second floor of the family housing building, as well as the approximately ~~1,300~~730-square-foot senior courtyard on the ground floor of the senior housing building. The private open space and common open space would provide passive recreational opportunities for residents and their guests. In addition, residents at the project site would be within walking distance to a variety of parks and open space areas listed above, which include Embarcadero Sidewalks, Sydney G. Walton Square, Maritime Plaza, Sue Bierman Park, Justin Herman-Embarcadero Plaza, Portsmouth Square, Washington Square, and Telegraph Hill-Pioneer Park.

Although the proposed project would introduce a new permanent population (approximately 402 residents) to the project site, the number of new residents projected would not be large enough to substantially increase demand for, or use of the previously described neighborhood parks and recreational facilities, or citywide facilities, such as Golden Gate Park, such that substantial physical deterioration would be expected. The permanent residential population at the site and the incremental on-site temporary daytime population that would result from retail uses would not require the construction of new recreational facilities or the expansion of existing facilities.

For the previously described reasons, the proposed project would have a ***less-than-significant*** impact on recreational facilities and resources. No mitigation measures are necessary.

Impact C-RE-1: The proposed project, in combination with other past, present, or reasonably foreseeable projects would result in less-than-significant impacts to recreational resources. (Less than Significant)

Past, present, and reasonably foreseeable future projects located within a 0.25-mile radius of the project site are identified in Table 2 and mapped on Figure 17 in section B.2, Cumulative Projects. As discussed under section E.2, Population and Housing, these projects would add approximately 20 new residents within nine dwelling units in the project vicinity. Overall, these approved and proposed projects, when combined with the proposed project, would add 422 new residents in the project vicinity, which would represent a residential population increase in the vicinity of 6 percent. The proposed retail space and childcare space would add approximately 31 employees to the daytime population. Thus, recreational facility use in the project area would most likely increase with the development of the proposed project, as well as the past, present, and reasonably foreseeable future projects identified in Table 2 and mapped on Figure 17. However, it is not anticipated that this added 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.

Moreover, the added residential population and daytime employee population as a result of development of the proposed and 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 2 and mapped on Figure 17 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 and would partially meet the demand for recreational resources from future residents of those projects. Also, in June 2016, San Francisco voters approved Proposition B, which extends until 2046 a funding set-aside in the City budget for SFRDP and also provides for annual increases through 2026-2027 in General Fund monies provided to SFRPD, meaning that, going forward, SFRPD would have additional funding for programming and park maintenance.[143] For these reasons, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact

[143] Unofficial election results from the San Francisco Registrar of Voters website. Available at: http://www.sfelections.org/results/20160607/, accessed on January 20, 2017.

on recreation resources and impacts would be ***less than significant***. No mitigation measures are necessary.

E.10 UTILITES AND SERVICE SYSTEMS

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
UTILITIES AND SERVICE SYSTEMS— Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	☐	☐	☒	☐	☐
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	☐

The project site is within an urban area that is served by utility service systems, including water, wastewater and storm water collection and treatment, and solid waste collection and disposal. The proposed project would add new daytime and nighttime population to the site that would increase the demand for utilities and service systems on the site. However, as discussed under 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, or 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 east side of the city, including the project site. As described in Impact PH-1 under section E.2, Population and Housing, the proposed project would add 402 new residents and 30 employees to the project site, which would increase the amount of wastewater generated at the project site by approximately 19,576 gallons per capita per day (gpcd).[144] This increase would not be substantial and would represent only a 0.03 percent increase in the Southeast Water Pollution Control Plant's average daily treatment capacity of 60,000,000 gallons per day.[145] In addition, the proposed project would incorporate water-efficient fixtures, as required by Title 24 of the California Code of Regulations and the San Francisco Green Building Ordinance. Specifically, the project must comply with:

- Title 24, Part 11 (2016 CALGreen Code), Residential Mandatory Measures, Division 4.3 Water Efficiency and Conservation; and
- 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 the SFPUC in their projections of water demand (*i.e.,* 2015 Urban Water Management Plan), because widespread adoption can lead to more efficient use of existing capacity.

The proposed project would also meet the wastewater pre-treatment requirements of the SFPUC, as required by the San Francisco Industrial Waste Ordinance to meet Regional Water Quality Control Board (regional board) requirements (see discussion under Impact HYD-1, under section E.14, Hydrology and Water Quality, for additional stormwater management requirements).[146] Although the proposed project would add new residents and employees to the project site, this additional population is not beyond the growth projections included in long range plans. Therefore, the incremental increase in the demand for

[144] The 95 percent of water use (see Impact UT-2) assumed to be discharged to the combined sewer system is consistent with the San Francisco Public Utilities Commission (SPFUC) standard assumption for multi-family residential buildings, "Wastewater Service Charge Appeal" Available at: http://www.sfwater.org/index.aspx?page=132; reviewed February 10, 2017). The SFPUC assumes that non-residential (and single-family residential) uses discharge 90 percent of water used to the combined sewer. The 95 percent figure is used here for a conservative assessment of combined sewer system demand. 20,606 gallons per capita per day (gpcd) x 95 percent = 19,575.7 gpcd. The calculation for the project's water demand is shown in Impact UT-2.

[145] San Francisco Public Utilities Commission, San Francisco's Wastewater Treatment Facilities, June, 2014. Available at: http://sfwater.org/modules/showdocument.aspx?documentid=5801, accessed on February 10, 2017.
17,858 gallons per day / 60,000,000 gallons per day = 0.03%

[146] 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.

wastewater would not require construction of new wastewater treatment facilities or expansion of existing facilities.

The project site is currently covered with 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 or eliminate the existing volume and rate of stormwater runoff discharged from the project site. The proposed project is located on a site that 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 project 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 best management practices to meet the stormwater runoff requirements. First priority best management practices involve reduction in 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 through the use of permeable pavement or a green roof. Second priority best management practices include biotreatment approaches such as the use of flow-through planters or, for large sites, constructed wetlands. Third priority best management practices, only permitted under special circumstances, involve use of 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, cistern, and green roofs that would manage stormwater on-site 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 the SFPUC. The Stormwater Control Plan would also include a maintenance agreement that must be signed by the project sponsor to ensure 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 to the stormwater system would be less than significant.

Overall, while the proposed project would add to sewage flows in the area, it would not cause collection treatment capacity of the sewer system in the city to be exceeded. The proposed project also would not exceed wastewater treatment requirements of the regional board, and would not require the construction of new wastewater/stormwater treatment facilities or expansion of existing ones. Therefore, since 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***. No mitigation measures are necessary.

Impact UT-2: The 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, the proposed project would add residential and retail 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. The SFPUC provides water to both retail and wholesale customers. Approximately two-thirds of the SFPUC's water supply is delivered to wholesale customers, and the remaining one-third is delivered to retail customers. Retail customers include the residents, businesses, and industries located within city limits, referred to as the in-city retail service area. Wholesale customers include other municipalities in California. In 2015, the SFPUC delivered approximately 196 million gallons of water per day (mgd) to its entire water service area (wholesale and retail customers), with an additional 2 mgd in local groundwater and recycled water to retail customers.[147] Of the 196 mgd provided, approximately 65 mgd was delivered to in-city retail customers.

Existing gross (all sectors) per capita water use and residential-only sector per capita water use by in-city retail customers are 77 and 45 gallons per capita per day (gpcd), respectively.[148] Assuming, conservatively, that future project residents and employees use the same amount of water, the proposed project's 402 new residents and 31 employees would use an estimated 20,654 gallons of water per day or 0.0206 mgd.[149] The SFPUC's 2015 *Urban Water Management Plan* (2015 UWMP) uses growth projections of a set of models that rely on household and employment forecasts that were prepared by the Planning Department Land Use Allocation (LUA) 2012. The LUA 2012 forecasts are a City-specific refinement of ABAG's growth forecasts, ABAG *Projections 2013*, which reflect the growth that is assumed in *Plan Bay Area 2040* and Sustainable Communities Strategy Jobs-Housing Connections Scenario.[150] The 2015 UWMP estimates current and planned future supplies will be sufficient to meet future retail demand through 2035 under normal, dry and multiple dry years; however, in 2040 a 1.1 mgd shortfall of water is estimated for the City and County of San Francisco during the second and third year of multiple dry year conditions. Water use and supply reductions would be implemented in a projected shortfall situation through implementation of a drought response plan and a corresponding retail water shortage allocation

[147] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016, p. 4-1. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839

[148] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016, p. 4-2. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839.

[149] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839, page 4-2 and Appendix D. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8838, page 135. The anticipated new residential population of 402 residents plus 31 employees (433 total) multiplied by 45 gpcd yields a total of 19,485 gpcd. 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 UWMP Table 4-1). Therefore, anticipated total gallons per day usage for the proposed project would be 19,485 plus 1,169.1 (6.0 percent of 19,485) equals 20,654.1 gpdc or 0.0206 million gpcd.

[150] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016, p. 4-4. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839

plan.[151] These plans are designed to ensure water demand could be accommodated within anticipated water use and planned supply. The 2015 UWMP estimates a projected water demand of 89.9 mgd for 2040.[152] The population generated by the proposed project would account for 0.02 percent of this projected demand.[153] Therefore, while the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase would not be in excess of amounts expected and provided for in the project area and the increase in demand is not significant compared to the projected demand in 2040.

The proposed project would also 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 within a designated recycled water use area, as defined in the Recycled Water Ordinance 390-91 and 393-94, which requires projects of new construction totaling 40,000 square feet or more to install recycled water systems for all uses authorized by the State of California, including landscape irrigation and toilet and urinal flushing. Pursuant to the Non-potable Water Ordinance (Ordinance 109-15, approved July 2, 2015), projects that are greater than 250,000 square are required to install a recycled water system and to use non-potable water (Rainwater, Graywater, Foundation Drainage, and/or treated Blackwater) for toilet and urinal flushing;[154] however, since the project site is less than 250,000 square feet the project sponsor would not be required to install an onsite non-potable water system. The project sponsor would have to submit a water budget application because it is greater than 40,000 square feet. Since the project contains 500 square feet or more of landscape area through the community open space, street trees, and 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. The project's landscape and irrigation plans shall be reviewed and approved by the SFPUC prior to installation. City and County of 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 SFPUC. Non-potable water must be used for soil compaction and dust control activities during project construction and demolition. The 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.

Furthermore, to ensure the welfare and safety of people and structures in the City and County of San Francisco, the project sponsor will be required to design all applicable water facilities, including potable,

[151] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016, p. 8-3. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839.

[152] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, April 2016, Table 7-4, pages 7-10 and 7-11. Available at: http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839.

[153] 20,606.4 gpd/89.9 mgd = 0.023 percent.

[154] Graywater is wastewater from bathtubs, showers, bathroom sinks, lavatories, clothes washing machines, laundry tubs, and the like. Blackwater is wastewater containing bodily or other biological wastes, such as from toilets, dishwashers, kitchen sinks, and utility sinks.

fire-suppression, and non-potable water systems, to conform to the current SFPUC City Distribution Division and San Francisco Fire Department (SFFD) standards and practices.

In addition, a hydraulic analysis would be required to confirm adequacy of water distribution system for both potable, non-potable and fire use at the time of building permit review. If current distribution system pressures and flows are inadequate, the project sponsor would be responsible for any capital improvements required to meet the proposed project's water demands. Depending upon the size and complexity of the proposed project, the project sponsor may be required to pay for the hydraulic analysis.

Since the proposed project's water demand could be accommodated by the existing and planned supply and conveyance infrastructure, no expansion or construction of new water supply resources or facilities would be required and the proposed project would result in ***less-than-significant*** water supply impacts. No mitigation measures are necessary.

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.[155] 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.[156] 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). Therefore, the proposed project would be served by landfills with sufficient permitted capacity to accommodate its solid waste disposal needs, and would have a ***less-than-significant*** impact related to solid waste disposal. No mitigation measures are necessary.

[155] 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. Available at: http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed on February 10, 2017.

[156] 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. Available at: http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed on February 10, 2017.

Impact UT-4: The 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.[157] 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 zero waste by 2020 target was established.

San Francisco Ordinance No. 27-06 requires a minimum of 65 percent of all construction and demolition debris to 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 the proposed project would have a ***less-than-significant*** impact with respect to solid waste statutes and regulations. No mitigation measures are necessary.

Impact C-UT-1: The proposed project in combination with past, present, and reasonably foreseeable projects would not result in cumulative significant effects related to utilities or service systems. (Less than Significant)

The cumulative development projects in the county-wide service area would incrementally increase demand on citywide utilities, such as water supply, water and wastewater conveyance and treatment facilities, and solid waste services. As noted above, the 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 within the city. Moreover, as discussed in section E.2, Population and Housing, cumulative development projects would not result in a growth in population or employment that is in excess of planned growth for the project vicinity, the city, or the region. Therefore the proposed project, in combination with cumulative development projects, would not result in a cumulative impact on utilities and service systems, and cumulative impacts would be ***less than significant.*** No mitigation measures are necessary.

[157] San Francisco Indicator Project, http://www.sfindicatorproject.org/indicators/view/4, accessed on February 10, 2017.

E.11 PUBLIC SERVICES

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
PUBLIC SERVICES— **Would the project:**					
a) Result in substantial adverse physical impacts associated with the provision of, or the 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 public services such as fire protection, police protection, schools, parks, or other services?	☐	☐	☒	☐	☐

The proposed project's impacts to parks and open spaces are discussed under section E.9, Recreation. Impacts on other public services are discussed below.

Impact PS-1: The proposed project would not result in an increase in 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 governmental facilities. (Less than Significant)

Police Protection

The proposed project 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. The proposed project is located within the Central police district, which is bounded by Fisherman's Wharf to the north, the Embarcadero to the east, Market Street to the south, and the Marina and Polk Gulch along Larkin Street to the west.[158] Police protection is provided by the Central Police Station located at 766 Vallejo Street (between Stockton Street and Powell Street), approximately 0.57 miles west of the project site.[159] 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. The Central Station would be able to provide the necessary police services and crime prevention in the area.[160] Meeting the project's additional service demand would not require the construction of new police facilities that could cause

[158] San Francisco Police Department, City and County of San Francisco Streets and Police Districts, 2015. Available at: http://sanfranciscopolice.org/sites/default/files/Citywide_District_Map.pdf, accessed on January 18, 2017.

[159] San Francisco Police Department, Central Station. Available at: http://sanfranciscopolice.org/central-station, accessed on January 18, 2017.

[160] San Francisco Police Department, 2014 Annual Report, p. 112. Available at: http://sanfranciscopolice.org/annual-reports, accessed on January 18, 2017, page 112.

significant environmental impacts. Hence, the proposed project would have a ***less-than-significant*** impact related to the provision of police services.

Fire Protection

The proposed project would result in more intensive use of the project site than currently exists, and thus, as with police service calls, would likely incrementally increase fire service calls in the project area. The project site receives fire protection services from the San Francisco Fire Department (SFFD). Fire stations located nearby include Station 13, at 530 Sansome Street (at Washington Street, approximately 0.27 miles southwest of the project site), and Station 2, at 1340 Powell Street (at Broadway, approximately 0.59 miles southwest of the project site).161 Although the proposed project would likely increase the number of calls received from the area, the increase in responsibilities would not be substantial in light of existing demand for fire protection services. Furthermore, the proposed project would be required to comply with all applicable building and fire code requirements, which identify specific fire protection systems, including, but not limited to, the provision of State-mandated smoke alarms, fire alarm and sprinkler systems, fire extinguishers, required number and location of egress with appropriate distance separation, and emergency response notification systems. Compliance with all applicable building and fire codes, would further reduce the demand for Fire Department service and oversight. Given that the proposed project would not result in a fire service demand beyond the projected growth for the area or the city, the proposed project would not result in the need for new fire protection facilities, and would have a ***less-than-significant*** impact on the provision of fire protection facilities.

Schools

A decade-long decline in San Francisco Unified School District (SFUSD) enrollment ended in the 2008-2009 school year, and total enrollment in the SFUSD has increased from 55,183 students in 2008-2009 to 60,133 in the 2016-2017 school year.[162] According to a 2015 SFUSD enrollment study, new affordable housing units in San Francisco generate approximately 0.31 public school students per unit.[163] Applying that rate to the proposed project's 125 dwelling units that are designated as family units would result in an enrollment increase in the SFUSD of about 39 students.[164]

[161] San Francisco Fire Department, Fire Station Location Map. Available at: http://sf-fire.org/sites/default/files/FileCenter/Documents/1975-Station%20Location%20Map%20-%20w%20FS51.pdf, accessed on January 18, 2017.

[162] California Department of Education, Educational Demographics Unit, Enrollment by Grade for 2015-16, San Francisco Unified School District, K-12 Public School Enrollment, http://www.ed-data.org/district/San-Francisco/San-Francisco-Unified, accessed on January 18, 2017;California Department of Education, DataQuest searches for San Francisco County in 2008-2009 and 2016-2017. Available at: http://dq.cde.ca.gov/dataquest/content.asp, accessed September 14, 2017.

[163] Lapkoff & Gobalet Demographic Research, Incorporated, *Demographic Analyses and Enrollment Forecasts for the San Francisco Unified School District*, November 23, 2015. Available at: http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf, accessed on January 18, 2017, page 76.

[164] Number of public school students generated is calculated as follows: (0.31 public school students per unit x 125 dwelling units) = 38.8 public school students.

The proposed project is located within the Chin Elementary attendance area.[165] The John Yehall Chin Elementary School, at 350 Broadway (temporary address for 2016-17 school year is 940 Filbert Street, about 0.20 miles west of the project site), Chinese Education Center Elementary School, at 657 Merchant Street (about 0.40 miles southwest of the project site), and Gordon J. Lau Elementary School, at 950 Clay Street (about 0.65 miles southwest of the project site) are the nearest public elementary schools to the project site. The closest middle schools are Francisco Middle School, at 2190 Powell Street (about 0.75 miles northwest of the project site), and Marina Middle School at 3500 Fillmore Street (about 2 miles northwest of the project site). Galileo High School, at 1150 Francisco Street (about 1.37 miles northwest of the project site) is the nearest public high school to the project site. The Civic Center Continuation School, at 727 Golden Gate Avenue (about 1.85 miles southwest of the project site) is the nearest public secondary school to the project site.[166] The proposed project, a mix of commercial and residential uses, would incrementally increase the number of school-aged children that would attend public schools in the city, by a total of about 39 students, as noted above. However, this increase would not exceed the projected student capacities that are expected and provided for by the SFUSD and private schools in the project area. Therefore, implementation of the proposed project would not necessitate the need for new or physically altered schools.

Since the proposed project would not result in a substantially increased demand for school facilities and would not require new or expanded school facilities, the proposed project would have a ***less-than-significant*** impact related to the construction of new or physically altered school facilities.

Other Government Services

The proposed project would incrementally increase demand for governmental services and facilities such as public libraries; however, the proposed project would not be of such a magnitude that the demand could not be accommodated by existing facilities. Therefore, the proposed project would have a less-than-significant impact related to the construction or physical alteration of governmental service facilities.

In summary, the proposed project would have a ***less-than-significant*** impact on all public services; therefore, no mitigation measures are necessary.

[165] San Francisco Unified School District, Elementary Attendance Areas Map, 2010. Available at: http://www.sfusd.edu/en/assets/sfusd-staff/enroll/files/final-elementary-attendance-areas-map.pdf, accessed on January 18, 2017.

[166] San Francisco Unified School District, Schools Map 2016-17, 2016. Available at: http://www.sfusd.edu/en/assets/sfusd-staff/enroll/files/2016-17/2016-17_schools_map.pdf, accessed on January 18, 2017.

Impact C-PS-1: The proposed project, combined with past, present, and reasonably foreseeable future projects in the vicinity, would not result in significant physical impacts on the environment associated with the construction or alteration of public service facilities. (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 in Table 2 and projected population growth in the project area and within the city would increase overall demand for police protection, fire protection, schools, and other government services, such as public libraries. However, this increase would not be considerable since this growth would not exceed growth projections for the area or the region, as discussed under section E.2, Population and Housing, and the San Francisco Police Department, SFFD, the SFUSD, and other agencies have accounted and planned for such growth to continue to provide public services to San Francisco residents. 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. Similarly, the proposed and cumulative projects in the vicinity would increase demand for schools and other government services, such as libraries, but again, this increase would not require the construction of new facilities or the expansion of existing facilities, as cumulative development projects would result in an additional 20 residents (in addition to the proposed project's 422 new residents) in the project vicinity. 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, and this impact would be ***less than significant***. No mitigation measures are necessary.

E.12 BIOLOGICAL RESOURCES

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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?	☐	☐	☐	☐	☒
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?	☐	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	☐
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?	☐	☐	☐	☐	☒

The project site is fully covered with impervious surfaces and is located within a built urban environment. As such, the project site does not provide habitat for any rare or endangered plant or animal species, including on-site or street trees that could provide habitat for birds protected under the Migratory Bird Treaty Act, nor does the project site include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service; therefore, Questions 12a and 12b are not applicable to the proposed project. In addition, the project area does not contain any wetlands as defined by section 404 of the Clean Water Act; therefore Question 12c is not applicable to the proposed project. Moreover, the proposed project does not fall within any local, regional or State habitat conservation plans; therefore, Question 12f is also not applicable to the proposed project.

Impact BI-1: The proposed project 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)

Migrating birds do pass through San Francisco. Nesting birds, their nests, and eggs are fully protected by California Fish and Game Code (sections 3503, 3503.5) and the federal Migratory Bird Treaty Act. Although the proposed project would be subject to the Migratory Bird Treaty Act, the site does not contain habitat supporting migratory birds (*i.e.,* no on-site or street trees). However, 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 within San Francisco. Planning Code, section 139, Standards for Bird-Safe Buildings, establishes building design standards to reduce avian mortality rates associated with bird

strikes.[167] The project site is not located in an Urban Bird Refuge, so the standards concerning location-related hazards are not applicable to the proposed project.[168] The proposed project would be required to comply with the building feature-related hazards standards of section 139 by using bird-safe glazing treatment on 100 percent of any building feature-related hazards such as free-standing glass walls, wind barriers, and balconies.

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 and the impact would be ***less than significant***. No mitigation measures are required.

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 sections 801 et. Seq., requires a permit from Public Works 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. The project site does not include any on-site or streets trees under existing conditions. Therefore, no impact to protected trees would occur and no mitigation measures are required. Public Works Code section 806(d)(2) requires that for every 20 feet of property frontage along each street, one 24-inch box tree be planted, with any remaining fraction of 10 feet or more of frontage requiring an additional tree. A minimum of 18 additional new street trees would be planted along the sidewalks of the proposed project on all four frontages; however, a total of 27 new street trees would be required, in accordance with Public Works Code section 806(d). The proposed project would request a waiver for providing nine fewer trees than required under Public Works Code section 806. To fulfill the requirement, an in-lieu fee shall be paid or alternative landscaping is required in amount comparable to or greater than the number of street trees waived. With the approval of this waiver the proposed project would be in compliance with the City's street tree requirements and impacts would be ***less than significant*** and no mitigation measures are required.

Impact C-BI-1: The proposed project in combination with other past, present or reasonably foreseeable projects would not result in significant impacts to biological resources. (Less than Significant)

The cumulative development projects shown on Table 2 and mapped on Figure 17 in section B.2, Cumulative Projects, would result in an overall intensification of land uses typical of infill development

[167] San Francisco Planning Department, Standards for Bird-Safe Buildings, July 14, 2011. Available at: http://planning.sanfranciscocode.org/1.2/139, accessed on January 18, 2017.

[168] San Francisco Planning Department, Urban Bird Refuge Map. Available at: http://www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Urban_Bird_Refuge_Poster.pdf, accessed on January 18, 2017.

within 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 the 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 the United States Fish and Wildlife Service, including on-site 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, the development of these projects would not have the potential to result in a cumulative impact to these resources.

The cumulative development projects could add a number of tall buildings that could, in the event of a bird-strike collision(s), potentially injure or kill birds. However, as with the proposed project, nearby cumulative development projects would also 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, there would be no cumulative impact on biological resources. Therefore, 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***. No mitigation measures are necessary.

E.13 GEOLOGY AND SOILS

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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.)	☐	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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?	☐	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☒	☐	☐
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?	☐	☐	☐	☐	☒
f) Change substantially the topography or any unique geologic or physical features of the site?	☐	☐	☒	☒	☐
g) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐	☐

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.

As discussed in section E.5, Noise and Vibration, CEQA does not require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except for specified projects or 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 analysis below 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.

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 the Geotechnical Explorations for the 88 Broadway[169] parcel and the 735 Davis Street parcel[170] prepared by ENGEO Incorporated for the project site, unless otherwise noted. The preliminary geotechnical reports

[169] ENGEO Incorporated, 2017. *88 Broadway Family Housing San Francisco, California Geotechnical Exploration*, June 22.

[170] ENGEO Incorporated, 2017. *735 Davis Street Senior Housing San Francisco, California Geotechnical Exploration*, June 22.

relied on available literature, geologic maps, and geotechnical reports pertinent to the site to develop conclusions and recommendations, including performing field exploration consisting of one boring and two cone penetration tests within each of the parcel boundaries.

Based on the collected data, the project site is underlain by 20 to 40 feet of artificial fill (Qaf), consisting of gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. The fill underlying the project is highly variable containing a mix of dredged material excavated from the Bay and rocky material from on land sources. The upper 10 feet of fill predominately consists of sandy soil laden with construction debris. Based site-specific explorations and a review of the previous subsurface information provided, the coarse-grained material varies in density from loose to medium dense, and fine-grained materials are typically stiff to very stiff. The artificial fill material below the groundwater table is potentially liquefiable and the project site is mapped in a California Department of Conservation, 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.[171]

Beneath the fill and encountered in all of borings within the project site is a layer of soft to medium stiff, highly plastic clay, locally known as Young Bay Mud. In some of the exploration locations, the Young Bay Mud contains interbedded layers of fine-grained sand and silt. The Young Bay Mud generally increases in thickness from west to east across the site. Based on the explorations, the thickness of Young Bay Mud ranges from approximately 5 feet to approximately 35 feet across the 88 Broadway parcel and from approximately 25 feet to approximately 50 feet across the 735 Davis Street parcel. Young Bay Mud is highly sensitive to long-term settlement when subjected to new loading from future development. In certain areas of the site, the Young Bay Mud is underlain by alluvial soil consisting of interbedded stiff clay, medium dense to dense sand, silty sand, and gravel layers. Where encountered, the alluvial soil in explorations was no greater than 5 feet in thickness at the project site. The site-specific explorations terminated in Cretaceous-age Franciscan bedrock that included greywacke sandstone, shale and metashale, which has the potential to include fossils. The bedrock encountered was typically moderately to highly weathered with a Rock Quality Index ranging from 0 to 70. The bedrock dips steeply towards the east. The bedrock elevation at the site ranges from approximately 50 to 80 feet below ground surface (bgs). Groundwater was encountered at the project site at depths ranging from approximately 6 to 12 feet bgs. However, because of tidal fluctuations at the project site due to the proximity to the San Francisco Bay, a design water level of elevation 5 feet bgs is recommended.

The proposed project is anticipated to be constructed applying a deep foundation system with pile and grade beams. The proposed project would include excavation of approximately 4,000 cubic yards of material to a maximum depth of approximately 4 feet bgs to accommodate building foundations and between 70 to 100 feet below grade to accommodate the required piles.[172]

[171] California Geological Survey, 2000. Seismic Hazard Zones, City and County of San Francisco, map scale 1:24,000, released November 17.

[172] Bedrock depth varies across the project site and ranges from 50 to 70 feet below the surface at the 88 Broadway location (page 5, *88 Broadway Geotechnical Exploration* dated June 22, 2017) and 70 to 80 feet below the surface at the 735 Davis Street location (page 5, *735 Davis Street Geotechnical Exploration* dated June 22, 2017). As

Impact GE-1: The proposed project would not expose people or structures to potential substantial adverse effects, including i) the rupture of a known earthquake fault, ii) strong seismic ground shaking, iii) seismic-related ground failure, including liquefaction, and iv) landslides. (Less than Significant)

Fault Rupture

With respect to potential rupture of a known earthquake fault, there are no known active faults crossing the project site and the site is not within an Earthquake Fault Special Zone. Therefore, the potential of surface rupture occurring 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 to the west 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 thirty years is 63 percent. Therefore, it is possible that a strong to very strong earthquake would affect the proposed project during its lifetime. 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 (CBC) and therefore would not have the potential to exacerbate seismic related ground shaking. Therefore, the proposed project would have ***no impact*** on strong seismic ground shaking.

Liquefaction and Lateral Spreading

Liquefaction and lateral spreading of soils can occur when ground shaking causes saturated soils to lose strength due to an increase in pore pressure. 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 the San Francisco.[173] CGS provided recommendations for the content of site investigation reports within seismic hazard zones in Special Publication 117A, *Guidelines for Evaluating 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. 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 due to thick layers of artificial fill extending up to 40 feet bgs that may liquefy during strong ground shaking due to a

shown in Table 4.1.1-1 (Estimate of Vertical Capacities) of both geotechnical reports, the embedment into the bedrock ranges from 10 to 20 feet.

[173] California Geological Survey, 2000. Seismic Hazard Zones, City and County of San Francisco, map scale 1:24,000, released November 17.

seismic event on a nearby fault. The preliminary geotechnical reports also determined the lateral displacement would not impact to the foundation of the proposed buildings. As previously discussed, the preliminary geotechnical reports recommended that the proposed project seismic design be in accordance with the provisions of the 2016 CBC and Special Publication 117A. Implementation of these recommendations, as incorporated into and required by the San Francisco Building Code, would ensure that the proposed project would not exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this impact is ***less than significant***.

Landslides

With respect to landslides, based on the General Plan, the project site is relatively level and is not located within a mapped landslide zone.[174] The site is not within a designated earthquake-induced landslide zone as shown on the CGS seismic hazard zone map for the area.

As discussed above, the proposed project would be required to comply with the 2016 CBC, which would ensure that the proposed project would not exacerbate the potential for landslide hazards. This impact is therefore ***less than significant***. Also see impact GE-3 below.

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 entirely covered with impervious surfaces. The proposed project would not substantially change the general topography of the site or any unique geologic or physical features of the project. Therefore, the project would result in ***no impact*** with respect to this criterion.

As previously described, the proposed project would include excavation of approximately 4,000 cubic yards of material to a maximum depth of approximately 4 feet bgs to accommodate building foundations and between 70 to 100 feet below grade to accommodate the required piles. Local regulatory requirements seek to prevent significant erosion during construction. For example, the City requires that a Construction Site Runoff Control Permit be obtained from the SFPUC before land-disturbing activities begin.[175] One of the permit requirements is the development and implementation of an Erosion and Sediment Control Plan (ESCP). The ESCP is a site-specific plan that details the use, location and emplacement of sediment and erosion control devices. Among other things, it must include: the location and perimeter of the project site; the location of nearby storm drains and/or catch basins; existing and proposed roadways and drainage patterns within the project site; and a drawing or diagram of the sediment and erosion control devices to be used onsite. In light of these regulatory safeguards, the impacts of project implementation as they relate to substantial soil erosion and the loss of topsoil would

[174] *San Francisco General Plan*, Community Safety Element, Map 4. Available at http://www.sf-planning.org/ftp/General_Plan/Community_Safety_Element_2012.pdf, accessed June 22, 2017.

[175] San Francisco Public Utilities Commission, 2017, Construction Site Runoff Control Program, http://sfwater.org/index.aspx?page=235, accessed on February 7, 2017.

be ***less than significant***. Also see section E.14, Hydrology and Water Quality, for additional discussion on erosion impacts as they relate to water quality.

Impact GE-3: The proposed project site would not be 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 does not include hills or cut slopes likely to be subject to landslide; however, as discussed under Impact GE-1, the project site is within a state designated seismic hazard zone for liquefaction. The geotechnical reports conducted at the site includes recommendations for protecting steel piles in corrosive soils, deep foundation systems, driven pile installation, including impacts of pile installation on offsite facilities. Recommendations for floor slab, underslab utilities, exterior flatwork and retaining walls, as well as earthwork recommendations for demolition and site preparation, and excavation shoring and underpinning, use of appropriate fill, surface drainage, and stormwater infiltration and bioretention areas, are also included in the reports.

The proposed project would be constructed applying a deep foundation system with pile and grade beams between 70 to 100 feet below grade to accommodate the required piles.[176] The final design of the foundation system would be included in a design-level geotechnical investigation that is based on the site-specific data in accordance with San Francisco Building Code requirements. According to the collected data in the geotechnical reports, the bedrock on the project site is capable of supporting a deep foundation that could accommodate loading demand from the proposed buildings in accordance with industry and building code requirements. The geotechnical reports identify that 16-inch-diameter and 18-inch-diameter driven steel pipe piles or displacement auger-cast piles can be considered to support the proposed buildings. However, the ability to achieve embedment into bedrock is dependent on the contractor's equipment and technique.

The California Seismic Hazards Mapping Act of 1990 (SHMA), Public Resources Code 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. Public Resources Code section 2697 requires that prior to approval of a project within a seismic hazard zone, cities and counties shall require 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, California Code of Regulations 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. The CGS Special Publication 117A provides considerations to address earthquake hazards.

[176] Bedrock depth varies across the project site and ranges from 50 to 70 feet below the surface at the 88 Broadway location (page 5, 88 Broadway Geotechnical Exploration dated June 22, 2017) and 70 to 80 feet below the surface at the 735 Davis Street location (page 5, 735 Davis Street Geotechnical Exploration dated June 22, 2017). As shown in Table 4.1.1-1 (Estimate of Vertical Capacities) of both geotechnical reports, the embedment into the bedrock ranges from 10 to 20 feet.

Pursuant to the SHMA, San Francisco 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, the DBI requires that appropriate measures, if any, are incorporated into the development plans and made conditions of the building permit. The DBI would review the design-level geotechnical report to ensure that the potential settlement and subsidence impacts of excavation and dewatering are appropriately addressed 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.

Adherence to *San Francisco Building Code* requirements would ensure that the project sponsor adequately 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***. No mitigation measures are required.

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, most notably when nearby surface soils change from saturated to a low-moisture content condition, and back again. The site-specific geotechnical reports for the project site and the soil testing of the fill material indicated a plasticity index of 8, indicative of a low expansion potential. Nonetheless, due to the San Francisco Building Code requirement for analysis and measures to address the potential for soil expansion impacts as part of the design-level geotechnical investigation prepared for the proposed project, potential impacts related to expansive soils would be ***less than significant***. No mitigation measures are necessary.

Impact GE-5: The proposed project would not result in damage to, or destruction of, an as-yet unknown 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 as well as the geological formations that contain them are also considered a paleontological resource. Together, they represent a limited, non-renewable scientific and educational resource. Project construction would involve excavation to depths of approximately 4 feet bgs to accommodate building foundations and between 70 to 100 feet bgs to accommodate the required piles.[177]

[177] Bedrock depth varies across the project site and ranges from 50 to 70 feet below the surface at the 88 Broadway location (page 5, *88 Broadway Geotechnical Exploration* dated June 22, 2017) and 70 to 80 feet below the surface at the 735 Davis Street location (page 5, *735 Davis Street Geotechnical Exploration* dated June 22, 2017). As shown in Table 4.1.1-1 (Estimate of Vertical Capacities) of both geotechnical reports, the embedment into the bedrock ranges from 10 to 20 feet.

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 will not be present. Lithological units that may be fossiliferous include sedimentary formations. Artificial fills do not contain paleontological resources.

As previously described, the project site is underlain by 20 to 40 feet of artificial fill (Qaf), consisting of gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. Beneath the fill and encountered in all of the borings within the project site is a layer of soft to medium stiff, highly plastic clay, locally known as Young Bay Mud. The Young Bay Mud ranges from approximately 5 feet to approximately 50 feet bgs across the project site. The site-specific explorations terminated in Cretaceous-age Franciscan bedrock that ranges from approximately 50 to 80 feet bgs.

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 sediments that underlies the project site may be fossiliferous. However, the proposed project does not include substantial grading or ground disturbance at these levels. Accordingly impacts to paleontological resources during ground-disturbing activities would be ***less than significant***.

Impact C-GE-1: The proposed project, in combination with other past, present or reasonably foreseeable projects, would not result in cumulative impacts related to geology, seismicity, or soils. (Less than Significant)

Geology and soils impacts are generally site-specific and localized. 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 to ensure maximum feasible seismic safety and minimize geologic impacts. Site-specific mitigation measures would also be implemented as site conditions warrant to reduce any 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 2 and mapped on Figure 17 in section B.2, 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 ensure that the effects from nearby cumulative projects would not be significant. Therefore, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact related to geology and soils and cumulative impacts would be ***less than significant***, and no mitigation measures are necessary.

E.14 HYDROLOGY AND WATER QUALITY

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
HYDROLOGY AND WATER QUALITY— Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	☐
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)?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐	☐
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?	☐	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐	☒

The project site is not located 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.[178] Therefore, Questions 14g and 14h are not applicable. The proposed project is located approximately 400 feet from the San Francisco Bay, and is not within a tsunami inundation zone.[179] 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 outside of the tsunami inundation zone, the site would also not be subject to seiches. The site is not within a dam inundation zone or subject to flooding from levee failure.[180] In addition, the project site would not be subject to mudflows because the proposed project is not located near any landslide-prone areas.[181] Thus, Questions 14i and 14j are not applicable.

Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. (Less than Significant)

The project site is located within the 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 (SEWPCP) for treatment. The City currently holds a National Pollutant Discharge Elimination System (NPDES) Permit (regional board Order No. R2-2013-0029) that covers the SEWPCP, the North Point Wet Weather Facility, and all of the Bayside wet-weather facilities, including combined sewer discharge (CSD) structures located along the bayside waterfront from Marina Green to Candlestick Park.[182] Captured wastewater and stormwater flows in the combined sewer system are directed first to the SEWPCP 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 CSDs constructed throughout the city and receive the equivalent of primary treatment prior to discharge into San Francisco Bay.

New development projects must also comply with Article 4.2 of the San Francisco Public Works Code, section 147, 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

[178] Federal Emergency Management Agency (FEMA), 2015. Preliminary Flood Insurance Rate Map 06029801117A, November 12. Available at: https://hazards.fema.gov/femaportal/prelimdownload/, accessed on January 31, 2017.

[179] California Emergency Management Agency (CalEMA), 2009. 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.

[180] San Francisco Planning Department, 2012. Map 06 – Potential Inundation Areas Due to Reservoir Failure, Community Safety Element of the General Plan of the City and County of San Francisco, October.

[181] San Francisco Planning Department, 2012. Map 04 – Seismic Hazard Zones (Landslide Zones), Community Safety Element of the General Plan of the City and County of San Francisco, October.

[182] San Francisco Bay Regional Water Quality Control Board, 2013. NPDES Permit No. CA0037664, Order No. R2-2013-0029 for City and County of San Francisco Southeast Water Pollution Control Plant, North Point Wet Weather Facility, Bayside Wet Weather Facilities and Wastewater Collection System.

and separate sewer systems and to protect and enhance the water quality of the receiving water. The 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 containing sediments and other pollutants from the site, which could drain into the combined sewer and stormwater system. Stormwater runoff from temporary on-site use and storage of vehicles, fuels, wastes, and building materials could also carry pollutants into the SEWPCP or receiving water if improperly handled. Construction-related stormwater discharges to the combined sewer system would be 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, 146. 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 implement and maintain best management practices to minimize surface runoff, erosion, and sedimentation. The application for the permit must also include an Erosion and Sediment Control Plan, which contains a vicinity map, site survey, existing and proposed topography, area drainage, proposed construction sequencing, proposed drainage channels, erosion and sediment controls, dewatering controls, if applicable, sampling, monitoring, and reporting schedules, and any other information deemed necessary by the 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 the SFPUC. The SFPUC may also conduct periodic inspections of the site to ensure compliance with the Erosion and Sediment Control Plan. The project sponsor must notify the SFPUC at least two days prior to the start of construction, when the erosion and sediment control measures have been installed, and upon completion of final grading. The 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 best management practices during construction activities and the fact that site runoff would be treated pursuant to the City's NPDES permit prior to discharge to receiving waters would render construction impacts to water quality 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.

Water quality in 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. Since more than 50 percent of the project site is covered with existing impervious surfaces, the 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 best management practices that may be implemented for mixed use projects include rainwater harvesting, vegetated roofs, permeable paving, and bio-retention 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.

To minimize water quality impacts, the proposed project would also be required to prepare a Stormwater Control Plan (SCP) for review and approval by the SFPUC. The SCP would contain detailed descriptions of site design, source control, and stormwater treatment best management practices as well as a post-construction operations and maintenance (O&M) plan. A maintenance agreement is also required to be signed by the project sponsor to ensure that the stormwater controls are maintained in perpetuity. With implementation of the low impact design and best management practice features, preparation of the SCP, and compliance with San Francisco and State regulatory requirements for water quality standards, the operational phase of the proposed project would not result in significant water quality impacts.

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 SCP for post-construction activities, and the implementation of low impact design and best management practice features. Additionally, through the development review process, the City would ensure 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 NPDES permit prior to discharge to receiving waters. Therefore, impacts related to water quality from development of the proposed project would be ***less than significant***. No mitigation measures are required.

Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. (Less than Significant)

The project site is currently entirely covered with impervious surfaces greatly limiting the amount of surface that water could infiltrate to the groundwater. The proposed project would not result in an increase in impervious surface. Therefore, the proposed project would not cause a deficit in aquifer volume or lowering of the groundwater table.

Groundwater could potentially be encountered during project construction (pile drilling) as groundwater was previously observed at a depth of 10 to 12 feet below ground surface (bgs) in 2003.[183] If construction dewatering is required, the proposed project would need to obtain a Batch Wastewater Discharge Permit (BWDP) from the SFPUC prior to any dewatering activities.

Groundwater encountered during pile drilling activities would be subject to the requirements of Article 4.1 of the Public Works Code, Industrial Waste, requiring that groundwater meet specified water quality standards before it may be discharged into the sewer system. The BWDP would contain appropriate discharge standards and may also require the installation of meters to measure the volume of discharge. These measures would ensure protection of water quality during construction of the proposed project. Also, the proposed project would be subject to the Maher Ordinance to address the potential for soil and/or groundwater contamination. Based on the results of a Phase I Environmental Site Assessment (ESA), groundwater sampling and analysis and potential site remediation may be required to ensure that extracted water during construction dewatering meets the water quality standards for discharge to the combined sewer system. Although construction dewatering could result in a temporary impact on the shallow groundwater aquifer, this aquifer is not used for potable water supply.

In addition, the proposed project does not propose to extract any underlying groundwater supplies. The SFPUC does not currently extract groundwater for potable water use and San Francisco water customers are supplied with surface water from the regional water system (RWS). The SFRPD does operate and maintain groundwater wells for irrigation and other non-potable uses but this is a very small percentage of the water demand within the City. In addition, the 2015 UWMP indicates that there is sufficient water to meet the demand for existing and future customers during normal, single-dry, and multiple-dry years through the year 2040.[184] Therefore, groundwater resources would not be substantially depleted, and the proposed project would not otherwise substantially interfere with groundwater recharge. Thus, the impacts to groundwater from development of the proposed project would be ***less than significant***. No mitigation measures are required.

Impact HY-3: The proposed project would not 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 substantial erosion, siltation, or flooding on- or off-site. (Less than Significant)

The project site is currently covered with impervious surfaces (*i.e.,* surface parking lots) and does not contain any streams or water courses. Therefore, the proposed project would not alter the course of a stream or river or substantially alter the existing drainage pattern of the project site or area. Construction activities have the potential to result in erosion and transportation of soil particles off site through excavation and grading activities. However, as discussed previously in Impact HY-1, the project sponsor would be required to develop and implement an Erosion and Sediment Control Plan to minimize the

[183] Treadwell and Rollo, 2003. *Geotechnical Investigation Embarcadero Hotel, San Francisco,* May 6.

[184] San Francisco Public Utilities Commission, 2016. *2015 Urban Water Management Plan for the City and County of San Francisco*, June.

potential for on- or off- site erosion or siltation, thus reducing impacts from construction related-activities to a less-than-significant level. Under the proposed project, stormwater would be routed to the City's combined sewer system in accordance with the Stormwater Management Requirements and Design Guidelines. This would require stormwater flows to be reduced by up to 25 percent as compared to existing conditions. In addition, the proposed project would implement site design, source control, and stormwater treatment measures as specified in the SCP. Therefore, there would not be an increase in the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. In summary, flooding impacts related to erosion, siltation, and surface runoff would be ***less than significant*** through compliance with the City's regulatory requirements. No mitigation measures are required.

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 housing 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 of 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 all 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). Compliance with these guidelines requires a specified quantity of stormwater generated by the proposed project to be managed on-site, 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 the existing storm drainage system capacity and impacts would be less than significant.

The project site is located in an area previously part of San Francisco Bay and filled with material of unknown origin in the 1860s.[185] 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 there can be backups or flooding near these streets and sewers.[186] Additionally, the proposed project is located in an area identified as being prone to flooding hazards as a result of the underlying fill.[187] The proposed project would be referred to SFPUC at the beginning of the building permit process to determine whether the proposed project would result in ground-level flooding during storms. If SFPUC determines the proposed project would result in ground-level flooding, the side sewer connection permits would be required to be reviewed and approved by SFPUC at the beginning of the review process for all permit applications submitted to the Planning Department or the Department of Building Inspection. The project sponsor must then comply

[185] Treadwell and Rollo, 2003. *Geotechnical Investigation Embarcadero Hotel,* San Francisco, May 6, 2003.

[186] San Francisco Planning Department, 2007. *Planning Director Bulletin No. 4: Review of Projects in Areas Prone to Flooding,* April 2007. Available at: http://www.sf-planning.org/ftp/files/publications_reports/DB_04_Flood_Zones.pdf, accessed on February 1, 2017.

[187] San Francisco Planning Department, 2007. *Planning Director Bulletin No. 4: Review of Projects in Areas Prone to Flooding,* April 2007. Available at: http://www.sf-planning.org/ftp/files/publications_reports/DB_04_Flood_Zones.pdf, accessed on February 1, 2017.

with SFPUC requirements for projects in flood-prone areas. Such requirements may include provision of a pump station for sewage flow, raised elevation of entryways, special sidewalk construction, and deep gutters.[188]

With the implementation of site design, source control, treatment control low impact design and best management practice features, and 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 all local wastewater discharge, stormwater runoff, and water quality requirements, pursuant to the effluent discharge standards of the City's NPDES permit for the SEWPCP. Therefore, the proposed project 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, and impacts would be ***less than significant***. No mitigation measures are required.

Impact C-HY-1: The proposed project, in combination with other past, present, or reasonably foreseeable projects, would result in less-than-significant cumulative impacts 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 seiche, tsunami, and/or mudflow hazards. Therefore, the project would not have the potential to contribute to cumulative impacts related to these topics. As stated above, the proposed project would result in less-than-significant impacts related to water quality, groundwater levels, alteration of drainage patterns, and the capacity of the 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 within the city, including the development of an Erosion and Sediment Control Plan for construction activities and a SCP for post-construction operation. Since all 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, no substantial adverse cumulative effects with respect to drainage patterns, water quality, stormwater runoff, or stormwater capacity of the combined sewer system would occur.

In addition, San Francisco's very limited current use of groundwater would preclude any significant adverse cumulative effects to groundwater levels, and the latest UWMP states that there are sufficient water supplies to meet demand for existing and future projects through the year 2040. Cumulative impacts are not anticipated since 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***.

[188] San Francisco Planning Department, 2007. *Planning Director Bulletin No. 4: Review of Projects in Areas Prone to Flooding,* April 2007. Available at: http://www.sf-planning.org/ftp/files/publications_reports/DB_04_Flood_Zones.pdf, accessed on February 1, 2017.

E.15 HAZARDS AND HAZARDOUS MATERIALS

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school?	☐	☐	☒	☐	☐
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?	☐	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	☐	☐	☒	☐	☐

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, Questions 15e and 15f are not applicable.

Baseline Environmental Consulting and ENGEO Incorporated prepared Phase I ESAs that assessed the potential for adverse environmental impacts from the proposed project related to the contemporary and historical practices on the project site and the surrounding area.[189]

[189] ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment 88 Broadway, San Francisco, California APN 0140-007*. February 13; and ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment, 735 Davis Street, San Francisco, California APN 0140-008*. February 13; Baseline Environmental Consulting, 1998. Phase I Environmental Site

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)

The proposed project requires demolition of the parking lots and excavation of soil down to 4 feet below grade for building foundations (and between 70 to 100 feet below grade to accommodate the required piles) and could result in 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 prior to 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, Divison 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."[190] 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 proposed project would likely result in the use of common types of hazardous materials typically associated with retail and residential uses, such as cleaning products, disinfectants, and solvents. These products are typically labeled to inform users of their potential risks and to instruct them in appropriate handling and disposal 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 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 (Caltrans). 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***.

Assessment, Sea Wall Lots, 322-1, 323, 324, and City-Owned Parcel Broadway Site Development Project, San Francisco, California, October.

[190] City of San Francisco, *San Francisco Health Code*, Article 22: Hazardous Waste Management, Sec. 1203. Implementation and Enforcement of Hazardous Waste Control Act. Available at: 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 September 14, 2017.

Impact HZ-2: The proposed project is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and would not create 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)

The proposed project site is not on a list of identified hazardous material sites pursuant to Government Code 65962.5, as determined by the database searches compiled for the Phase I ESA reports, which includes databases maintained by the USEPA, Department of Toxic Substance Control (DTSC), and the State Water Resources Control Board (SWRCB). According to the SWRCB's GeoTracker online database, no sites that give any indication of significant environmental impacts are present within the proposed project boundaries. Sites previously identified as Leaking Underground Storage Tank (LUST) 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 (regional board or DTSC or San Francisco Department of Public Health [SFDPH]).

Phase I Environmental Site Assessments

The proposed project site is located in an area of San Francisco governed by Article 22A of the San Francisco Health Code, also known as the Maher Ordinance, which is administered and overseen by the SFDPH.[191] The project would disturb more than 50 cubic yards of soil through the proposed grading and pile drilling and as a result is subject to the Maher Ordinance. The Maher Ordinance requires the preparation of a Phase I ESA by a qualified professional in accordance with the requirements of Health Code section 22A.6 (Site History). 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 analysis reveals the presence of hazardous substances in excess of state or federal standards, the project sponsor is required to submit a site mitigation plan (SMP) to the SFDPH or other appropriate state or federal agency (or agencies), and to remediate any site contamination in accordance with an approved SMP prior to the issuance of any building permit.

In compliance with the Maher Ordinance, the project sponsor has submitted a Maher Application to SFDPH[192] and an updated Phase I ESA[193] 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

[191] San Francisco Planning Department, "Expanded Maher Area" Map, March 2015. Available at: http://www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Maher%20Map.pdf, accessed on September 29, 2016.

[192] The project applicant submitted the Maher Application to the San Francisco Department of Public Health of in accordance with *San Francisco Health Code* Article 22A on May 17, 2017 and received the letter of compliance on July 27, 2017.

[193] ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment 88 Broadway, San Francisco, California APN 0140-007*. February 13; and ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment, 735 Davis Street, San Francisco, California APN 0140-008*. February 13.

associated with the storage of hazardous materials at the project site were observed during a site reconnaissance for the Phase I ESAs. A summary of the findings from the Phase I ESAs that have been prepared for the project site is as follows:

1998 Phase I ESA

On October 21, 1998, Baseline Environmental Consulting published a Phase I ESA (1998 ESA).[194] The 1998 ESA assessed four parcels, two of which comprise the project site – Block 140, Lot 007 (88 Broadway) and 008 (735 Davis Street). The 1998 ESA noted that laboratory testing by others of a sample of fill, collected on an adjacent parcel, found total lead that exceeded the California and federal hazardous waste standards. Given that the project is used for vehicle parking, it was noted that releases of automotive fluids from parked vehicles have the potential to affect subsurface conditions at the site. The potential contaminants of concern within these fluids were total petroleum hydrocarbons and heavy metals. Additionally, the 1998 ESA referenced previous studies that included soil and groundwater sampling. Laboratory testing of soil samples collected near the seawall in 1990, as part of the Embarcadero Roadway Project, indicated hazardous lead concentrations that exceeded the Total Threshold Limit Concentration (TTLC) of 1,000 mg/kg. Additional testing of soil samples in 1993 also found elevated concentrations of lead. The 1998 ESA investigation concluded:

- The project site was part of San Francisco Bay until at least 1853. Between 1853 and 1884, the site was filled with material of unknown origin. One sample of fill, collected adjacent to the site for the Embarcadero Roadway Project, contained total lead at a concentration exceeding California and federal hazardous waste standards.
- The project site is currently used for vehicle parking. Releases of automotive fluids from parked vehicles have the potential to have affected subsurface conditions at the project site. Potential contaminants of concern in automotive fluids include petroleum hydrocarbons and heavy metals.
- Historical land uses with the potential to affect subsurface conditions at the project site include a wood and coal yard, a blacksmith shop, railyards, carriage painting shop, a gasoline service station, and automobile parking. Potential contaminants of concern associated with these land uses include metals, poly-nuclear aromatic hydrocarbons, petroleum hydrocarbons, VOCs, and unknown hazardous materials that could potentially have been released during loading/unloading operations at the former railyards.
- Twenty-five sites within 0.25-mile of the project site are listed on regulatory agency databases associated with the use, storage, disposal, or release of hazardous materials. One site, within 0.25-mile of and hydraulically up gradient of the project site, has reported a release of gasoline that may have the potential to affect subsurface conditions at the project site.

Based on a review of the 1998 ESA, all of the conclusions then applicable to the four parcels subject to the evaluation, are also applicable to the two parcels that comprise the project site.

[194] Baseline Environmental Consulting, 1998. *Phase I Environmental Site Assessment, Sea Wall Lots, 322-1, 323, 324, and City-Owned Parcel Broadway Site Development Project, San Francisco, California*, October.

2017 Phase 1 ESA

ENGEO Incorporated conducted a Phase I ESA on February 13, 2017 for the 88 Broadway parcel, which is the location of the proposed family housing building.[195] As described below, the records review identified documentation of soil and possible groundwater impairments associated with the use of the project site. A review of regulatory databases maintained by county, State, and federal agencies found no documentation of hazardous materials violations or discharge on the project site. A review of regulatory agency records and available databases did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would be expected to impact the project site. Based on the findings of the ENGEO Incorporated Phase I ESA for the 88 Broadway parcel, the following recognized environmental conditions were identified for the project site.

- The project site was utilized for industrial processes beginning in the late 1880s that include a railyard, copper shop, and tank factory. It is possible that poly-nuclear aromatic hydrocarbons, petroleum hydrocarbons and metals may remain in the soil and groundwater from this past use.
- The project site was part of the San Francisco Bay prior to 1853 before being filled with material of unknown origin to achieve the current site grade. The project site, underlain by artificial fill is mapped within the limits of the Maher Ordinance program, and thus requires oversight by the SFDPH.
- Between approximately 1956 and 1999, a gasoline service station operated on the southeastern portion of the project site. It is possible that the soil and groundwater were impacted by petroleum hydrocarbons, solvents and metals from the former service station use.
- The project site has been used for railcar and/or vehicle parking since at least 1913. Releases of automotive fluids containing petroleum hydrocarbons and metals from parked vehicles may have affected the near-surface soil.

Based on the findings of this assessment, ENGEO Incorporated recommends an environmental site characterization to investigate, in conformance with the Maher Ordinance program, the potential soil and groundwater impacts that have resulted from earlier industrial and commercial uses associated with the railyard, gasoline service station, and surface parking.

ENGEO Incorporated conducted a Phase I ESA on February 13, 2017 for the 735 Davis Street parcel, which is the location of the proposed senior housing building.[196] As described below, the records review identified documentation of soil and possible groundwater impairments associated with the use of the property. A review of regulatory databases maintained by county, State, and federal agencies found no documentation of hazardous materials violations or discharge on the project site. A review of regulatory agency records and available databases did not identify contaminated facilities within the appropriate ASTM search distances that would be expected to impact the project site. The project site, underlain by artificial fill with an unknown origin, is mapped within the limits of the City's Maher Ordinance program, and thus requires oversight by the SFDPH. Previous reports indicated soil in the vicinity of the

[195] ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment 88 Broadway, San Francisco, California APN 0140-007*. February 13.

[196] ENGEO Incorporated, 2017. *Phase I Environmental Site Assessment, 735 Davis Street, San Francisco, California APN 0140-008*. February 13.

site contained elevated concentrations of lead that exceed California and federal hazardous waste standards. Past use of the project site includes railyards, a carriage painting shop, a gasoline service station and additional industrial/commercial uses. Based on the findings of the ENGEO Incorporated Phase I ESA for 735 Davis Street parcel, the following recognized environmental conditions were identified for the Property.

- The western portion of the site was used for industrial processes in the late 1800s that include a rail yard, carriage painting and copper shops. It is possible that poly-nuclear aromatic hydrocarbons, petroleum hydrocarbons and metals may remain in the soil and groundwater from this past use.
- Between about 1956 and 1999, a gasoline service station operated in the southeast portion of the project site. It is possible that the soil and groundwater were impacted by petroleum hydrocarbons and metals from the former service station use.
- The project site has been used for vehicle parking since at least 1956. Releases of automotive fluids containing petroleum hydrocarbons and metals from parked vehicles may have affected the near-surface soil.

Based on the findings of this assessment, ENGEO Incorporated recommends an environmental site characterization to investigate, in conformance with the Maher Ordinance program, the potential soil and groundwater impacts that have resulted from earlier industrial and commercial uses associated with the rail yard, gasoline service station, and surface parking.

Lead Exposure

The proposed project would result in demolition of the parking lots, excavation for building foundations (approximately 4 feet below grade and between 70 to 100 feet below grade to accommodate the required piles),[197] and subsequent construction of the proposed project buildings. Demolition, excavation and construction activities would follow all appropriate standards and regulations for hazardous materials, including the California Health and Safety Code. Demolition of the parking lots and excavation of underlying soil, also would be subject to the Division of Occupational Safety and Health (CalOSHA) Lead in Construction Standard (8 California Code of Regulations 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. CalOSHA would require 24-hour notification if more than 100 square feet of materials containing lead would be disturbed. Implementation of procedures required by 3426 of the San Francisco Building Code and the Lead in Construction Standard would ensure that potential impacts of demolition or excavation with lead-contaminated asphalt or soil would not be significant.

[197] Bedrock depth varies across the project site and ranges from 50 to 70 feet below the surface at the 88 Broadway location (page 5, *88 Broadway Geotechnical Exploration* dated June 22, 2017) and 70 to 80 feet below the surface at the 735 Davis Street location (page 5, *735 Davis Street Geotechnical Exploration* dated June 22, 2017). As shown in Table 4.1.1-1 (Estimate of Vertical Capacities) of both geotechnical reports, the embedment into the bedrock ranges from 10 to 20 feet.

In summary, the removal of potentially contaminated asphalt from the parking lots and the potential contaminants in soil from historical uses could pose health concerns for construction workers and future residents if not properly assessed, handled and/or disposed. As discussed above, the project sponsor would be required to remediate any groundwater or soil contamination in accordance with an approved SMP prior to issuance of any building permit pursuant to the Maher Ordinance.

Based on mandatory compliance with existing regulatory requirements, the information and conclusions from the Phase I ESAs, and adherence to the Maher Ordinance, the proposed project would result in a ***less than significant*** impact to 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 located within 0.25-mile of the project site: John Yehall Chin Elementary School, a SFUSD school at 350 Broadway Avenue, about 0.20 miles west of the project site. The temporary address for the 2016-17 school year for this school is 940 Filbert Street.

As noted above, 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 during, or prior to, demolition of the parking lots and excavation for building foundations and prior to project 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 the nearest school. Thus, the proposed project would have a ***less-than-significant*** impact related to hazardous emissions or the handling of hazardous materials within 0.25-mile of a school.

Impact HZ-4: The proposed project would not expose people or structures to a significant risk of loss, injury or death involving fires, nor interfere with the implementation of an emergency response plan. (Less than Significant)

San Francisco ensures fire safety primarily through provisions of the Building and Fire Codes. Final building plans are reviewed by the SFFD (as well as the DBI), to ensure 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***, and no mitigation measures are necessary.

Impact C-HZ-1: The proposed project would not result in significant cumulative effects related to 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, and cumulative impacts would be ***less than significant***.

E.16 MINERAL AND ENERGY RESOURCES

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	☐	☐	☒	☐	☐

The project site is designated by the California Division of Mines and Geology as Mineral Resource Zone Four (MRZ-4) under the Surface Mining and Reclamation Act of 1975.[198] The MRZ-4 designation indicates that the site does not belong to any other MRZ and does not have any significant mineral deposits. Because of this, 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 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 add residential, retail, and commercial uses to the project site, but the proposed project would be in an established part of San Francisco where existing infrastructure would

[198] California Division of Mines and Geology. Open File Report 96-03 and Special Report 146 Parts I and II.

supply the proposed project's utility and transit services. As a new development, the proposed project is subject to building standards such as the Title 24 of the California Code of Regulations and the *San Francisco Green Building Code*. Title 24 regulates the energy consumption of residential and nonresidential buildings and their fuel use of ventilation, heating, cooling, and lighting. The *San Francisco Green Building Code* requires new buildings to meet conservation standards, including water efficiency, energy efficiency, and features that promote alternative modes of transportation. Documentation for compliance to these regulations would be submitted with the building permit application and would be enforced by the DBI. Additionally, the proposed project is in a low VMT area (see section E.4, Transportation and Circulation) and thus would not generate substantial VMT that would result in the use of large amounts of fuel. The proposed project's compliance with Title 24 and the San Francisco Green Building Code regulations would ensure that fuel, water, or energy would not be used in a wasteful manner and therefore result in a ***less-than-significant*** impact. No mitigation measures are necessary.

Impact C-ME-1: The proposed project, in combination with other past, present or reasonably foreseeable projects, would not result in a cumulative impact on mineral and energy resources. (Less than Significant)

As described above, all of San Francisco is within MRZ-4 meaning that no known minerals exist in the project site or in the vicinity; therefore, no cumulative impacts would occur with respect to mineral resources. All land use development projects in San Francisco, including the projects listed in Table 2 and mapped on Figure 17 in section B.2, Cumulative Projects, would be required to comply with the DBI's Title 24 and the *San Francisco Green Building Code,* which require developments to minimize the use of fuel, water, or energy. Installing energy efficient appliances and water efficient fixtures 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, there are statewide efforts to increase power supply such as the California Energy Commission's Renewable Energy Program to help increase total renewable electricity production statewide[199] and to encourage energy conservation through implementation of regulations such as CALGreen. As such, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact on fuel, water, and energy resources, and cumulative impacts would be ***less than significant***. No mitigation measures are necessary.

[199] California Energy Commission, California Renewable Energy Overview and Programs. Available at: http://www.energy.ca.gov/renewables/, accessed April 7, 2017.

E.17 AGRICULTURAL AND FORESTRY RESOURCES

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
AGRICULTURE AND FOREST 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 Dept. of Conservation as an optional 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 the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; 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?	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?	☐	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒

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 non-agricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts.[200] No land in San Francisco is designated as forest land or timberland by the *California Public Resource 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.

[200] San Francisco is identified as "Urban and Built-Up Land" on the California Department of Conservation Important Farmland in California Map, 2012. Available at: www.consrv.ca.gov, accessed on January 12, 2017.

E.18 MANDATORY FINDINGS OF SIGNIFICANCE

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
MANDATORY FINDINGS OF SIGNIFICANCE— Would the project:					
a) 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?	☐	☒	☐	☐	☐
b) Have impacts that would be 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.)	☐	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	☐

As discussed in the previous sections (E.1 through E.17), impacts as a result 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 noise, which would be mitigated through implementation of mitigation measures, as described in the following paragraphs. Section F, Mitigation Measures and Improvement Measures identified 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 and exceeding the construction vibration standards for architectural damage from the use of large bulldozers resulting in potentially significant impacts to historic buildings. In addition, the proposed project could disturb human remains. Implementation of **Mitigation Measures M-CR-2, Vibration Monitoring Program for Adjacent Historical Resources, M-CR-3, Archeological Testing, M-CR-4, Inadvertent Discovery of Human Remains, M-CR-5, 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. 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 or 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.

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. The project sponsor has agreed to implement the mitigation measures and all improvement measures described below.

2. MITIGATION MEASURES

Mitigation Measure M-CR-2: Vibration Monitoring Program for Adjacent Historical Resources

The project sponsor shall retain the services of a qualified structural engineer and preservation architect that meet the Secretary of the Interior's Historic Preservation Professional Qualification Standards to conduct a Pre-Construction Assessment of the adjacent historical resources at 753 Davis Street and 60 Broadway prior to any ground-disturbing activity. The Pre-Construction Assessment shall be prepared to establish a baseline, and shall contain written and/or photographic descriptions of the existing condition of the visible exteriors of the adjacent buildings. The structural engineer and/or preservation architect shall also develop and the project sponsor shall prepare and implement a Vibration Management and Monitoring Plan to protect the adjacent historical resources against damage caused by vibration or differential settlement caused by vibration during project construction activities. In this plan, the maximum vibration level not to be exceeded at each building shall be determined by the structural engineer and/or preservation architect for the project. The Vibration Management and Monitoring Plan shall document the criteria used in establishing the maximum vibration level for the project. The Vibration Management and Monitoring Plan shall include vibration monitoring and regular periodic inspections at the project site by the structural engineer and/or historic preservation consultant throughout the duration of the major structural project activities to ensure that vibration levels do not exceed the established standard. The Pre-Construction Assessment and Vibration Management and Monitoring Plan shall be submitted to the Planning Department Preservation staff prior to issuance of any construction permits. Should damage to 753 Davis Street or 60 Broadway be observed, construction shall be halted and alternative techniques put in practice, to the extent feasible, and/or repairs shall be completed as part of project construction. A final report on the vibration monitoring of 753 Davis Street and 60 Broadway shall be submitted to Planning Department Preservation staff prior to the issuance of a Certificate of Occupancy for the project.

Mitigation Measure M-CR-3: Archeological Testing

The project sponsor shall retain the services of an archeological consultant from the rotational Department Qualified Archeological Consultants List (QACL) 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 QACL. 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 four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four 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 section 15064.5(a) and (c).

Consultation with Descendant Communities. On discovery of an archeological site[201] associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative[202] 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 (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.

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

[201] The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

[202] 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.

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 re-designed so as 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 (AMP) 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 AMP reasonably prior to any project-related soils disturbing activities commencing. 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, site remediation, etc., 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 area according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with 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 artefactual/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/construction activities and equipment until the deposit is evaluated. 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. If required based on the results of the ATP, an 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.

If required, 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 on-site/off-site 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.

Final Archeological Resources Report. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) 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 FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR 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-4: Inadvertent Discovery of Human Remains

The treatment of human remains and of associated or unassociated funerary objects discovered during any soils 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 the Environmental Review Officer (ERO), and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Public Resources Code section 5097.98). The archeological consultant, project sponsor, ERO, and MLD shall have up to but not beyond six days of discovery to make all reasonable efforts to develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any associated items (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 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.

Mitigation Measure M-CR-5: Tribal Cultural Resources Interpretive Program

If the Environmental Review Officer (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 (TCR) and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned so as 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 TCR 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, artifacts displays and interpretation, and educational panels or other informational displays.

3. IMPROVEMENT MEASURES

Improvement Measure I-TR-2a: Passenger Loading Zone Management

The project sponsor should ensure that project-generated passenger loading activities along Vallejo Street and Davis Street are accommodated within the confines of the loading zones. Specifically, the project sponsor should monitor passenger loading activities at the proposed zones to ensure that such activities are in compliance with the following requirements:

- That double parking, queuing, or other project-generated activities do not result in intrusions into the adjacent travel lane or obstruction of the adjacent sidewalk. Any project-generated vehicle conducting, or attempting to conduct, passenger pick-up or drop-off activities should not occupy the adjacent travel lane such that free-flow traffic circulation is inhibited, and associated passengers and pedestrian activity should not occupy the adjacent sidewalk such that free-flow pedestrian circulation is inhibited.
- That vehicles conducting passenger loading activities are not stopped in the passenger loading zone for an extended period of time. In this context, an "extended period of time" shall be defined as more than 5 consecutive minutes at any time during other time periods. Passenger loading would occur on Vallejo Street and Davis Street adjacent to the proposed daycare and proposed mid-block passageway respectively.

Should passenger loading activities at the proposed on-street passenger loading zones not be in compliance with the above requirements, the Project Sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or deployment of staff to direct passenger loading activities; use of off-site parking facilities or shared parking with nearby uses; travel demand management strategies such as additional bicycle parking; and / or limiting hours of access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the Planning Department.

If the Planning Director, or his or her designee, suspects that Project-generated passenger loading activities in the proposed passenger loading zones are not in compliance with the above requirements, the Planning Department should notify the property owner in writing. The property owner, or his or her designated agent (such as building management), should hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant should submit a report to the Planning Department documenting conditions. Upon review of the report, the Planning Department should determine whether or not Project-generated passenger loading activities are in compliance with the above requirements, and should notify the property owner of the determination in writing.

If the Planning Department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner or his or her designated agent should have 90 days from the date of the written determination to carry out abatement measures. If after 90 days the Planning Department determines that the property owner or his or designated agent has been unsuccessful at ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure

compliance. These restrictions should be determined by the Planning Department in coordination with SFMTA, as deemed appropriate based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner or his or her designated agent should be responsible for relaying these restrictions to building tenants to ensure compliance.

Improvement Measure I-TR-2b: Construction Traffic Management

The project sponsor should implement measures to minimize the effects of project-related construction activities on traffic, transit, bicycle, and pedestrian circulation. Potential measures could include (but are not limited to) the following:

- Limit hours of construction-related traffic, including, but not limited to, truck movements, to avoid the weekday AM and PM peak hours (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) (or other times, if approved by San Francisco Municipal Transportation Agency).
- Construction contractor(s) for the project should coordinate construction activities with other construction activities that may take place concurrently in the vicinity of the Project site. Potential measures could include establishing regular coordination protocols (*e.g.,* a weekly liaison meeting between general contractors to discuss upcoming activities and resolve conflicts); offsetting schedules (*e.g.,* scheduling materials deliveries, concrete pours, crane assembly/ disassembly, and other major activities at different hours or on different days to avoid direct overlap); shared travel and/or parking solutions for construction workers (*e.g.,* helping establish an informal vanpool/carpool program); and other measures.

  The project sponsor should require that the construction contractor(s) for the project encourage workers to take transit, rideshare, bicycle, or walk when traveling to and from the construction site.

Improvement Measure I-NO-2: Construction Noise Reduction

The project sponsor will incorporate the following practices into the construction contract agreement documents to be implemented by the construction contractor during the entire construction phase of the proposed project:

- Conduct noise monitoring at the beginning of major construction phases (*e.g.,* demolition, excavation) to determine the need and the effectiveness of noise-attenuation measures. The project sponsor and contractor will apply as many mitigating features as needed to reduce noise from the simultaneous operation of multiple pieces of construction equipment to meet the noise criteria of 90 dBA during the day at sensitive (residential) receptors and 100 dBA at any time for non-sensitive (commercial) receptors, and should not exceed 10 dBA above the ambient noise conditions at either sensitive or non-sensitive receptors at any time. Mitigating features could include, but are not limited to plywood barriers, suspended construction blankets, or other screening devices to break line of sight to noise-sensitive receivers.
- At least 90 days prior to the start of construction activities, all offsite businesses and residents within 300 feet of the project site will be notified of the planned construction activities. The notification will include a brief description of the project, the activities that would occur, the hours when construction would occur, and the construction period's overall duration. The

notification should include the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.

- The project sponsor and contractors will prepare a Construction Noise and Vibration Control Plan. The details of the Construction Noise and Vibration Control Plan, including those details listed herein, will be included as part of the permit application drawing set and as part of the construction drawing set.
- At least 10 days prior to the start of construction activities, a sign will be posted at the entrance(s) to the job site, clearly visible to the public, which includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she will investigate, take appropriate corrective action, and report the action to the City.
- During the entire active construction period, equipment and trucks used for project construction will utilize the best available noise control techniques (*e.g.,* improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible.
- During the entire active construction period, stationary noise sources will be located as far from sensitive receptors as possible, and they will be muffled and enclosed within temporary sheds, or insulation barriers or other measures will be incorporated to the extent feasible.
- During the entire active construction period, "quiet" air compressors and other stationary noise sources will be used where such technology exists.
- During the entire active construction period, noisy operations will be combined so that they occur in the same time period as the total noise level produced would not be significantly greater than the level produced if the operations were performed separately (and the noise would be of shorter duration).
- Signs will be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment will be turned off if not in use for more than 5 minutes.
- During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells will be for safety warning purposes only. The construction manager will use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters.

G. Public Notice and Comment

G.1 NEIGHBORHOOD NOTICE COMMENTS

On February 8, 2017, 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. Comments received addressed the following:

- Compatibility with the scale, texture and materials of the Northeast Waterfront Landmark District in which it is located, the Waterfront Special Use District No. 3, Article 10 of the Planning Code and consistency with preservation policies in the General Plan.
- Conformity to adjacent urban design, "fitting in" with existing buildings.
- Activation of the street level with ground-floor retail uses and by maintaining wide sidewalks.
- Increased demand on transit service in the Northeast Waterfront.
- The air quality effect from vehicles in the
- Concern about the air quality effects from vehicles parked in an on-site parking garage on the project site, should the project proposed on-site vehicle parking.
- Concerns about the cumulative effects of the proposed project with other proposed projects in the project site vicinity.

The comments that directly relate to a physical impact on the environment were directly addressed in section E.3, Cultural Resources, (historic resources) and, section E.4, Transportation and Circulation, (transit demand). Note, the proposed project no longer includes a parking garage.

G.2 PMND PUBLIC REVIEW COMMENTS AND APPEAL

On October 25, 2017, the Planning Department mailed a Notice of Availability of and Intent to Adopt a Mitigated Negative Declaration to owners of properties within 300 feet of the project site, adjacent occupants, and neighborhood groups. During the 33-day PMND comment period from October 25, 2017 to November 27, 2017, the Planning Department received one comment letter regarding the PMND from Telegraph Hill Dwellers dated November 27, 2017. The comments received related to physical environmental effects addressed the following:

- The proposed project's compatibility with the General Plan objective of the stepping down of buildings toward the waterfront, with regards to the proposed building's height, mass and scale. (see LU-2, page 56, for this impact analysis)
- The proposed project's compatibility with the Northeast Waterfront Historic District, with regards to the proposed building's height, mass and scale. (see CR-1, page 63, for this impact analysis)
- Concerns about the cumulative effects of the proposed project when combined with the proposed Seawall Lots 323/324 (proposed theater and hotel development)[203] with respect to the

[203] Seawall Lots 323/324, Case No. 2015-016326ENV, is undergoing separate environmental review.

compatibility of the combined projects with the Northeast Waterfront Landmark District. (see C-LU-1, page 57, and C-CR-1, page 73, for an analysis of these impacts.)

Other comments that directly relate to a physical impact on the environment were directly addressed in section C, Compatibility with Existing Zoning and Plans; section E.1, Land Use and Land Use Planning; and section E.3, Cultural Resources, (historic resources). Policies addressed in the comment letter that were not explicitly discussed in the PMND were added to section C, Compatibility with Existing Zoning and Plans, of this FMND. However, the addition of these policies does not change the less-than-significant determination discussed in LU-2, CR-1 and C-CR-1.

Additionally, in response to the to the Notice of Availability, Marc Bruno, with the St. Vincent de Paul Conference at Saints Peter and Paul Church, filed an appeal of the PMND on November 27, 2017. The appellant raised concerns regarding the following:

- Cumulative transportation impacts due to the loss of the existing 180 parking spaces on the project site and development of the proposed project at 88 Broadway and 735 Davis Street and other cumulative projects at Seawall Lot 323 and 324[204] and 940 Battery Street.[205]

- A significant impact related to an increase in vehicle miles traveled due to the loss of the existing 180 parking spaces on the project site.

- Cumulative transportation impacts due to taxi and transportation network company trips that would be generated by the proposed project and the cumulative projects in the vicinity of the projects site.

- Cumulative impacts due to the development of five projects within a 0.25-mile radius of the project site, and the Central Subway, Better Market Street, and Geary Bus Rapid Transit transportation network changes.

These concerns were evaluated and responded to in an appeal response. The Planning Department's responses to the appellant's concerns do not change the less-than-significant impact findings of the PMND concerning the topic of transportation and circulation, noise, and air quality or the determination in the PMND that impacts on cultural resources would be less than significant with mitigation.

[204] Planning Department Case No. 2015-016326ENV
[205] Planning Department Case No. 2015-001033ENV

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.

3/9/18
Date

Lisa Gibson
Environmental Review Officer
for
John Rahaim
Director of Planning

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