

REUBEN, JUNIUS & ROSE, LLP

September 1, 2023

Delivered Via Email and Messenger (bos.legislation@sfgov.org)

Aaron Peskin, President
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102

Re: 939 Lombard Street (0072/021)
BOS File No. 230886 – Appeal of CEQA Categorical Exemption
Our File No.: 5125.10

Dear President Peskin and Supervisors:

Our office represents Enda Keane, the owner of the property located at 939 Lombard Street (the “**Property**”). Mr. Keane (the “**Project Sponsor**” or “**Sponsor**”) proposes to construct a new single-family home in place of an aging carport at the front of the Property (the “**Project**”). The new house would share the lot with the existing single-family home at the rear of the lot, which was renovated in 2019 and is tenant-occupied.

The issue before you is whether a Class 1 and Class 3 categorical exemption (the “**CatEx**”), issued by the Planning Department (the “**Department**”) on April 19, 2023, is supported by substantial evidence.¹ The CatEx was appealed by the owner of the neighboring property at 953 Lombard Street (the “**Appellant**”). The Appellant has not offered any substantial evidence to challenge the Department’s determination that warrants overturning the Categorical Exemption, and it is clear that the Appellant’s goal is to protect his private view by opposing any future development on the Property.

The appeal request should be denied, and the CatEx upheld for the following reasons:

- **Appellant has not provided any evidence in support of his CEQA claims.** The Appellant has not provided any new information regarding CEQA issues. Rather, the appeal brief consists of generalized statements and opinions about neighborhood character

¹ CEQA Guidelines Section 15384(b): “Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.”

and unsubstantiated claims about Project impacts related to geotech, noise, shadow, dust, fumes, traffic, and habitat loss.

- **Aesthetics are not a CEQA issue.** The issues raised in the Appellant's brief, such as neighborhood character and aesthetics, are not CEQA issues to be considered under this appeal. The Planning Commission considered the question of neighborhood character and the Project's consistency with the Residential Design Guidelines at the Discretionary Review Hearing and determined that it complies with the Planning Code, the General Plan, and the Residential Design Guidelines.
- **The Project Sponsor has been responsive to the community and has incorporated significant massing concessions.** Throughout this process, the Project Sponsor has been communicative and open to working with the community and adjacent neighbors. In response to neighborhood concerns regarding privacy and the potential for shadows on the school yard, he incorporated a five-foot setback along the length of the fourth floor, removed the rooftop stair and elevator and penthouses, and converted east-facing usable decks to living roofs (in response to concerns about privacy facing the schoolyard).
- **Appellant's stated goal is to block any future development of the Property.** The real issue of the Appellant's appeal is that he does not want any development on this lot, as he repeatedly states in his brief. This is not a CEQA concern but rather one related to Appellant's desire to protect his views of the Bay—which are not protected by CEQA or the Planning Code. The Planning Commission has determined that the Project is appropriate and that it will not have any significant impacts to the neighborhood, either under City policies or CEQA.
- **Yick Wo Elementary School has not filed an appeal.** While much of Appellant's letter focuses on the alleged impacts the Project would have on the adjacent Yick Wo Elementary School, the school has not filed an appeal and has voiced no formal objection to the Project—nor is Appellant an official representative of the school.

The Department correctly determined that the Project is exempt from environmental review and that no unusual circumstances would make the Project ineligible for a categorical exemption. The Appellant has not provided any substantial evidence to support his assertions about the potential environmental impacts of the Project. A categorical exemption cannot be overturned simply because a hostile neighbor opines that environmental impacts would occur—those opinions must be supported by evidence. The appeal should be denied, and the CatEx upheld.

A. Project Description

The Property is located on the south side of Lombard between Jones and Leavenworth. The Appellant resides in the adjacent property directly to the west:



The subject lot measures 137.5 feet deep by 27.5 feet wide and is improved with a single-family residence located at the rear of the property, and a 512 square-foot one-story carport structure at the front property line. The Project Sponsor purchased the property in 2018 and completed a renovation of the house at the rear of the lot in August 2019. After living in that house for several years, he moved out and leased it to the current tenant.

In July 2021, the Project Sponsor filed a permit to demolish the one-story carport structure and construct a new four-story, four-bedroom, 4,828 square foot home (3,778 square feet of habitable space), with two ground level parking spaces. The Project would provide a Code-compliant rear yard (equal to 25% the depth of the lot, or 34 feet) between the new home and the existing house at the rear of the Property (*see* Project Plans attached as **Exhibit A**). At 40 feet in height, the project complies with the 40-X Height/Bulk limit and is consistent with the massing of other buildings on the block.

B. The Project Qualifies for a Class 1 & Class 3 Categorical Exemption

The Project qualifies for a Class 1 (existing facilities) and Class 3 (new construction or conversion of small structure) exemption. A Class 1 exemption applies to a project that consists of work to an existing facility, including the demolition and removal of individual small structures such as “accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.” (CEQA Guidelines § 15301(l)(4).) A Class 3 exemption applies to a project that consists of the construction of new, small structures. (CEQA Guidelines § 15303.) A Class 3 exemption is available for the construction of a “new single-family residence, or second dwelling unit in a residential zone,” or a “duplex, or similar multi-family residential structure” containing no more than six dwelling units. (CEQA Guidelines §§ 15303(a) and (b).)

Here, the Project calls for the demolition of the one-story carport structure at the front of the Property and the construction of a new single-family home that would share the lot with the existing home at the rear of the Property within the RM-1 district (Residential, Mixed, Low-Density). Therefore, the Property is eligible for Class 1 and Class 3 categorical exemptions.

C. Standard for Review of Categorical Exemptions

Certain categories of projects are exempt from environmental review under CEQA because they generally do not have significant effects to the environment. Where a project is exempt, no further environmental evaluation is required unless there is a reasonable possibility of significant environmental effects due to unusual circumstances. (CEQA Guidelines §§15300 and 15300.2(c).)

In order to prove that unusual circumstances defeat a categorical exemption, a challenger must demonstrate two things: (1) that there are unusual circumstances that distinguish a project from others in the exempt class, and (2) that there is a fair argument that a project will have significant environmental impacts due to those unusual circumstances. We consider the second question only if substantial evidence does not support the Department's determination that no unusual circumstances apply to the Project. (*Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086.)

In order to overturn the Project's exemption, Appellant would need to identify substantial evidence in support of a fair argument that there is a reasonable possibility that the Project will have a significant environmental impact due to unusual circumstances. (*Respect Life S. San Francisco v. City of S. San Francisco* (2017) 15 Cal. App. 5th 449, 459.)

The CEQA Guidelines define substantial evidence as "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts." (CEQA Guidelines § 15384.) "Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous or otherwise not credible *shall not constitute substantial evidence*." (CEQA Guidelines § 15064(f)(5), *emphasis added*.) The Appellant has not provided any substantial evidence in support of his claims.

Appellant's appeal letter consists of generalized statements about neighborhood character and scale of buildings, which are not CEQA issues. The letter also asserts that the Project would result in impacts related to geotech, construction, wildlife habitat, noise, shadow, and gas emissions, but Appellant has not provided any factual data or expert opinions detailing what the impacts would be. Nowhere in the document does the Appellant provide statements by a qualified experts and nowhere does he present new "facts" about shadow, noise, or geotech issues that were not already provided by the Project Sponsor to the Department for their review of the Project. Appellant's unsubstantiated opinion does not amount to substantial evidence in support of a fair argument that that unusual circumstances could cause the Project to result in significant environmental impacts.

D. The Issues Raised do Not Amount to a Showing of Unusual Circumstances that would Preclude a Categorical Exemption.

There is nothing unusual about the construction of a new house in a residential zoning district and appellant has not demonstrated that unusual circumstances are present, i.e. that “the circumstances of a particular project differ from the general circumstances of the projects covered by a particular categorical exemption.” (*Wollmer v. City of Berkeley* (2011) 193 Cal. App. 4th 1329, 1350.)

Below are responses to issues raised in the Appellant’s appeal letter:

1. Shared Retaining Wall will Not Pose a Potential Hazard to the Adjacent School and Project will Not Create a Danger of Landslides, Mudslides, or Flooding.

The Appellant alleges that the retaining wall along the eastern side of the Property will “pose a potential hazard to the safety and stability of the school building and grounds” and that the “Project poses a serious risk of damage from earthquakes, landslides, mudslides, or mudflows.” (Appeal Letter, pgs. 1-2 and 3.) There are no other statements or facts presented explaining how the Project’s retention of the existing retaining wall be a hazard or how else the Project might result in geological hazard impacts under CEQA.

Shared retaining walls are a common feature in San Francisco, where homes are often constructed on steep slopes. The City’s robust permitting and inspection requirements will ensure that the Project meets strict seismic requirements and does not compromise the integrity of the existing slope.

A geotechnical report prepared for the Project on October 8, 2022 (Geotech Report prepared by Allen Gruen, attached at **Exhibit B**) concluded that the Property is suitable for the planned developments and provides recommendations for ensuring that construction of the Project does not undermine the adjacent properties, including the school.

More specifically, the Project would extend drilled piers deep below the bottom of the retaining wall—to 15 feet below the bottom of the neighboring foundation. The weight of the new building will be supported by these piers below the adjacent retaining wall and any potential horizontal load (i.e. surcharge) would occur well below the bottom of the retaining wall. Further, these new piers will act as shear keys for the soil behind the retaining wall—which means that by adding the new piers, the Project will actually reduce the load from the existing retaining wall.

The Appellant has failed to present substantial evidence as to how construction of the Project would impact the retaining wall or pose any geological risk to Yick Wo Elementary School.

2. The Project will Not Cause Construction Impacts that Amount to a Significant Environmental Impact.

The Appellant states that the construction of the Project “would generate noise, dust, traffic, and other disturbances” that would disrupt the adjacent neighbors, including the students at Yick Wo Elementary School. (Appeal Letter, pg. 2.) The Appellant also states that the construction will be disruptive to the students who “play [at the school] regularly” and that construction vehicles will cause “safety risks and traffic delays for parents picking up their children from school.” (Appeal Letter, pg. 5.)

Construction near schools is common and much larger projects in denser neighborhoods and near or adjacent to schools are successfully constructed without resulting in substantial disruption. Stringent permitting regulations and requirements related to the coordination of construction activities with various City agencies ensure the minimum feasible level of disruption to circulation on public rights-of-way and public safety. And while very large projects are often evaluated under CEQA for potential temporary construction impacts related to traffic, noise, and air quality, there is nothing unusual about the proposed single-family home Project that would preclude issuance of a categorical exemption and require that level of project-specific environmental analysis as to construction impacts.

In this case, construction is expected to take approximately 9-12 months total, with the structure being erected and exterior finished in about 14 weeks. The Project Sponsor is committed to ensuring that construction is minimally disruptive to the adjacent neighbors, including Yick Wo Elementary School.

Regarding noise, the Sponsor recently completed the project at the rear of the lot (the renovation of the existing house) without receiving any noise complaints from the school community. In a handful of instances, the school requested that the construction team limit noise to account for special school events. The Sponsor respected those requests each time they were made, and noise was never an issue during the construction of that project. We expect the same to be true for this Project.

There are also well-established best practices for managing dust during construction—typically some combination of water and barrier measures—and the construction team will use these measures as appropriate in order to minimize dust from construction.

In an urban environment, it is expected that there will be construction occurring periodically and there is nothing unusual about construction near a school. The Project’s construction will not cause the school to close and will not affect the use the outdoor area.

The Appellant has failed to present substantial evidence showing how unusual circumstances could result in significant environmental impacts related to temporary construction on the Property.

3. The Project will Not Result in a Loss of Animal Habitat.

The Appellant argues that the Project “would destroy many trees and greenery that provide habitat for wildlife, and aesthetic value for the neighborhood.” (Appeal Letter, pg. 2.) More specifically, the letter asserts that the “loss of green space” would “displace local wildlife such as racoons and coyotes.”

The Project would remove five of seven existing trees on the property, none of which are landmark or significant trees, as defined in Public Works Code Sections 810 and 810A. An existing street tree on Lombard Street would be maintained. There is nothing unusual about removing non-designated trees from private property in advance of a construction project. Appellant has not provided any evidence supporting his contention that there is something unique about the trees on site or indicating that they serve as habitat for endangered species.

Appellant has not presented any evidence showing that removal of five existing rear yard trees would result in a loss of habitat or otherwise result in a significant CEQA impact.

4. The Project will Not Result in Significant Shadow Impacts.

The Appellant states that the Project will “cast a giant shadow on the surrounding area due to its height of about 47 feet,” and that the shadow will “result in a loss of green space, fresh air, and natural light for students.” (Appeal Letter, pg. 5.) The school yard at Yick Wo Elementary extends approximately 137 feet in length along Lombard Street downhill from the Project site. The Project will not cast any shadow on the school building and will not result in any loss of fresh air or light for the school building.

At a proposed height of 40 height, the Project is not subject to a shadow study under the Planning Department’s CEQA guidelines—which require a shadow application and shadow analysis for the construction of new buildings above 40 feet in height that would cast new shadows on properties under the jurisdiction of the Recreation and Parks Department. There are no Section 295 protected parks or sites within the vicinity, and Yick Wo Elementary School is not a part of the Shared Schoolyards Program²—i.e., the school is not a public open space.

Nonetheless, the Project completed a high-level shadow analysis in response to neighbor questions about potential shadow impacts. That analysis shows that the Project would add incremental shadow to the northwest corner of the schoolyard during the late afternoon. Due to the slope of the block and pattern of existing upslope development, the entire school blacktop is almost completely shaded by 4pm throughout the year. No shadow cast by the Project would reach the playground at the northeastern corner of the school property.

² See Shared Schoolyard Map, *available at* <https://www.google.com/maps/d/u/0/viewer?mid=16qAOR1PyBZHUTcRzOmS1yr1sRc7ainw&ll=37.77152592293714%2C-122.41604135166352&z=13> (accessed August 31, 2023).

The incremental additional shadow that would be cast by the Project would not substantially and adversely affect the use and enjoyment of a publicly accessible open space and does not amount to a significant impact that would preclude the Project from a categorical exemption.

E. Non-CEQA Issues.

The majority of the Appellant's appeal letter focuses on issues that are not CEQA-related. Issues such as compatibility with the neighborhood, building scale, overall character and livability of the neighborhood, are not issues that are under CEQA consideration. These are not CEQA issues.

That said, the Project is consistent with the mixed pattern of development in the vicinity. The Property, and all the nearby properties, are subject to a 40-foot height limit. Appellant's adjacent property is also 40-feet tall and includes a rooftop penthouse. Further, the proposed scale of the Project matches the massing of Appellant's property next door and is appropriate for the range of 3-4 story buildings in the vicinity, including several large single-family and 2-home lots on the opposite block across Lombard.

The Planning Commission considered the question of neighborhood character and the Project's consistency with the Residential Design Guidelines at the Discretionary Review Hearing on June 29. The Commission determined that there are no extraordinary or exceptional circumstances in the case of this Project, and that it complies with the Planning Code, the General Plan, and the Residential Design Guidelines. (See Discretionary Review Action DRA-829 (July 31, 2023); attached at **Exhibit C**.)

The Appellant failed in convincing the Planning Commission that the Project is incompatible with the neighborhood and he is now trying to argue the same case under the guise of CEQA. But his unsubstantiated CEQA claims do not justify his stated goal of preventing anything from being constructed on this lot: "I urge you to carefully reconsider granting the CEQA exemption for this residential project. It is crucial to quash this permit. I am afraid this lot is not suitable for anything . . ." (Appeal Letter, pg. 3.)

F. Conclusion

Based on the above, the appeal should be denied and the CatEx upheld. The Department correctly concluded that the Project is eligible for a categorical exemption and that there are no unusual circumstances that would result in a significant environmental impact.

The construction of a single-family residential building on an existing residential lot is exactly the type of small-scale project that a Class 1 and 3 categorical exemption is intended to cover.

The legal standard applied to a challenge of a categorical exemption is whether: (1) there are unusual circumstances that distinguish a project from others in the exempt class, and (2) whether there is a fair argument that a project will have significant environmental impacts due to those unusual circumstances. The Appellant has not shown that the Planning Department's exemption determination is not supported by substantial evidence, nor has he provided substantial evidence showing that any unusual circumstances could result in a significant environmental impact.

Accordingly, we respectfully request that the Board of Supervisors uphold the Project's CatEx.

Very truly yours,

REUBEN, JUNIUS & ROSE, LLP

A handwritten signature in dark ink, appearing to read 'Tara', followed by a long horizontal flourish.

Tara Sullivan

Enclosures

cc: Supervisor Chan
Supervisor Dorsey
Supervisor Engardio
Supervisor Mandelman
Supervisor Melgar
Supervisor Preston
Supervisor Ronen
Supervisor Safai
Supervisor Stefani
Supervisor Walton
Angela Calvillo, Clerk of the Board
Don Lewis, San Francisco Planning Department
Enda Keane, Property Owner
Curtis Hollenbeck, Architect

LIST OF EXHIBITS

Exhibit A	Final Project Plans
Exhibit B	Geotech Report
Exhibit C	Discretionary Review Action Memo

EXHIBIT A
Project Plans

ADJ ALUM ARCH ASPH	ADJUSTABLE ALUMINUM ARCHITECTURE ASPHALT	(N) NIC # OR	NOT IN CONTRACT NUMBER
BD	BOARD	O/	OVER
BDLG	BUILDING	OC	ON CENTER
BLK	BLOCK	OD	OUTER DIAMETER
BLKG	BLOCKING	OFCl	OWNER FURNISHED,
BM	BEAM		CONTRACTOR
B.O.	BOTTOM OF		INSTALLED
B.U.	BUILT-UP	OFOI	OWNER FURNISHED, OWNER INSTALLED
		OPNG	OPENING
CLG	CEILING		
CLR	CLEAR	PL	PLATE
CNTL	CONTROL	PLYWD	PLYWOOD
CONC	CONCRETE	PT	PRESSURE TREATED
CONT	CONTINUOUS		POINT
CTR	CENTER		
		R	RADIUS
DBL	DOUBLE	RA	RETURN AIR
DF	DOUGLAS FIR	RWDW	REDWOOD
DIM	DIMENSION	REF	REFERENCE
DN	DOWN	REG	REGISTER
DP	DOUBLE POLE	REQ	REQUIRED
DS	DOWNSPOUT	RET	RETURN
DWG	DRAWING	RM	ROOM
		S	SOUTH
(E)	EXISTING	SA	SUPPLY AIR
E	EAST	SAD	SEE ARCHITECTURAL
EAC	EACH		DRAWING
ELEC	ELECTRICAL	SED	SEE ELECTRICAL
ELEV	ELEVATION		DRAWING
EQ	EQUAL	SF	SUBFLOOR
EXP	EXPOSED	SHT	SHEET
EXT	EXTERIOR	SHTG	SEATHING
		SKD	SEE KITCHEN
			DRAWING
FDN	FOUNDATION	SLD	SEE LIGHTING
FF	FINISH FLOOR		DRAWING
FIN	FINISH	SMD	SEE MECHANICAL
FL	FLOOR		DRAWING
FOC	FACE OF CONCRETE	SP	SINGLE POLE
FOF	FACE OF FINISH	SPD	SEE PLUMBING
FOS	FACE OF STUD		DRAWING
FOP	FACE OF PLYWOOD	SQ	SQUARE
FURN	FURNACE	SS	SINGLE SHELF
		SSD	SEE STRUCTURAL
			DRAWING
GA	GAUGE	STD	STANDARD
GALV	GALVANIZED		
GND	GROUND	T	TEMPERED
GYP BD	GYPSUM BOARD	T&G	TONGUE AND GROOVE
		TO	TOP OF
HB	HOSE BIB	TOFF	TOP OF FINISH FLR
HC	HOLLOW CORE		TOP OF PLATE
HR	HEADER	TOS	TOP OF SLAB
HR STL	HOT-ROLLED STEEL	TOW	TOP OF WALL
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	TP	TOILET PAPER HOLDER
	HOT WATER HEATER	TR	TOWEL RACK
		TYP	TYPICAL
ICPV	INTEGRAL COLOR		
	PLASTER VENEER	UON	UNLESS OTHERWISE NOTED
INSUL	INSULATION		
INT	INTERIOR	VERT	VERTICAL
		VIF	VERIFY IN FIELD
LAM	LAMINATE		
LT	LIGHT	W	WEST
		W/	WITH
MANUF	MANUFACTURER	WO	WITHOUT
MAX	MAXIMUM	WC	WATER CLOSET
MC	MEDICINE CHEST	WD	WOOD
MECH	MECHANICAL	WIND	WINDOW
MEMB	MEMBRANE	WP	WATERPROOF
MIN	MINIMUM		
MTL	METAL		

	TYPICAL (N) PARTITION
	TYPICAL (N) NOT-RATED WALL
	1-HR RATED WALL
	2-HR RATED WALL
	(E) WALL REMOVED
	LINE OVERHEAD OR HIDDEN LINE
	CENTER LINE
	PROPERTY LINE
	DIMENSION TO FACE OF STUD
	ALL DIMENSIONS ARE TO FACE OF STUD U.O.N.
	DIMENSION TO CENTERLINE
	WINDOW SYMBOL
	DOOR SYMBOL
	DETAIL MARKER
	ELEVATION MARKER
	REVISION MARKER
	DATUM POINT

NOTE: SEE PROPOSED PLANS + ELEVATIONS FOR ADDITIONAL MASS REDUCTIONS AT ELEVATIONS. 3-D RENDERING HAS NOT BEEN UPDATED YET (4TH FLOOR ALONG EAST ELEVATION CUT BACK 5' FOR LENGTH OF BUILDING)



OWNER	TITLE 24
BYRNES SPECIAL WORKS LLC, MGR. ENDA KEANE, 939 LOMBARD ST, SAN FRANCISCO, CA 94133	ENERGYSOFT 1025 5TH ST NOVATO, CA 94945
415.828.4981 endapkeane@gmail.com	415.897.6400 ph
	SOILS ENGINEER
ARCHITECT	H. ALLEN GRUEN GEOTECHNICAL ENGINEER
CURTIS HOLLENBECK 575 COLUMBUS AVENUE, #2 SAN FRANCISCO, CA 94133	360 GRAND AVE, #262 OAKLAND, CA 94610
415.544.9883 ph matteryard@yahoo.com	510.839.0765 ph
	PRESERVATIONIST
STRUCTURAL ENGINEER	TIM KELLEY CONSULTING, LLC HISTORICAL RESOURCES
DOUBLE D ENGINEERING 71 OTIS STREET SAN FRANCISCO CA 94107	2912 DIAMOND STREET #330 SAN FRANCISCO, CA 94131
415.225.1948 PH mark@doubleengineering.com	415.337.5824 TIM@TIMKELLEYCONSULTING.COM

PROJECT SITE:
939 LOMBARD ST
SAN FRANCISCO, CA 94133

JONES

GREENWICH

LEAVENWORTH

LOMBARD ST

CHESTNUT

NORTH

EXISTING AREA CALCULATIONS REAR HOUSE (NO CHANGE)		
(E) FLR '1'	HABITABLE	1,280 SQ.FT.
(E) FLR '2'	HABITABLE	1,170 SQ.FT.
(E) FLR '3'	HABITABLE	394 SQ.FT.
TOTAL HABITABLE		2,844 SQ.FT.
TOTAL GROSS		2,844 SQ.FT.

EXISTING CARPORT (TO BE DEMOLISHED) 512 SQ.FT.

PROPOSED AREA CALCULATIONS NEW HOUSE (AT FRONT OF LOT)

FLR '1'	NON HABITABLE HABITABLE NON-H PASSAGE	782 SQ.FT. 239 SQ.FT. 288 SQ.FT.
FLR '2'	HABITABLE	1,250 SQ.FT.
FLR '3'	HABITABLE GREEN ROOF FRONT BALCONY	1,242 SQ.FT. 60 SQ.FT. (EXCLUDE) 22 SQ.FT. (EXCLUDE)
FLR '4'	HABITABLE GREEN ROOF EXT STAIR TO RF	1,047 SQ.FT. 180 SQ.FT. (EXCLUDE) 36 SQ.FT. (EXCLUDE)
ROOF DECK ABV FLR '4'	ROOF DECK EXT STAIR TO RF	289 SQ.FT. (EXCLUDE) 83 SQ.FT. (EXCLUDE)
TOTAL NON-HABITABLE		1,050 SQ.FT.
TOTAL HABITABLE		3,778 SQ.FT.
TOTAL GROSS		4,828 SQ.FT.

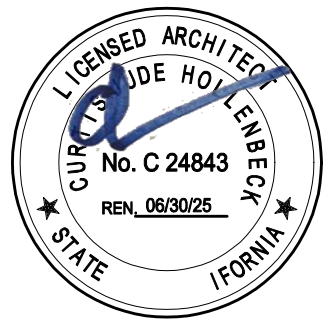
PROJECT ADDRESS	939 LOMBARD ST SAN FRANCISCO CA, CA 94133
BLACK / LOT	0072 / 021
LOT SIZE	27'-6" X 137'-6" : 3,781.25 SQ.FT.
ZONING DISTRICT	RM-1
HEIGHT/BULK LIMITS	40-X
(E) OCCUPANCY	R-3, SINGLE FAMILY RESIDENCE
PROPOSED OCCUPANCY	R-3, SINGLE FAMILY RESIDENCE
(E) TYPE OF CONSTRUCTION (REAR HOUSE)	TYPE 5 B
PROPOSED TYPE OF CONST (NEW HOUSE FRONT OF LOT)	TYPE 5 B
FRONT SETBACK	AVERAGING
REAR SETBACK	45%
(E) PARKING	(2)
PROPOSED PARKING	(2)
(E) BICYCLE	(0)
PROPOSED BICYCLE	(2)
(E) STORIES (REAR HOUSE)	3-STORIES
PROPOSED STORIES (NEW HOUSE FRONT OF LOT)	4-STORIES
APPLICABLE CODES	2019 California Building, Mechanical, Electrical and Fire Code w/ San Francisco Amendments 2019 California Electrical Code 2019 California Energy Code + All other state and local ordinances and regulations
DEFERRED RESIDENT: NEW RESIDENCE AT FRONT OF LOT TO BE FULLY FIRE SPRINKLERED PER NFPA 13R	
DEMO APPLICATION #2021-0709-4044 BUILDING PERMIT APPLICATION #2021-0709-4046-S 2021-00726PRJ	
PROJECT DESCRIPTION CONSTRUCT NEW 4-STORY, SINGLE FAMILY HOME @ FRONT OF SITE.	

DEFERRED APPROVAL: FIRE SPRINKLERS THROUGHOUT IN ACCORDANCE WITH NFPA 13R

ARCHITECTURAL

A0.1	COVER SHEET
A0.2	GENERAL NOTES / SYMBOLS
EC1.1	(E) SITE PLAN
EC1.2	(E) SITE DEMOLITION PLAN + SOIL ECACAVATIONS + TREE PROTECTION
EC2.1	(E) FLOOR '1', FLOOR '2' AND FLOOR '3' PLANS (REAR HOUSE)
EC2.2	(E) CARPORT PLAN AND EXTERIOR ELEVATIONS
EC2.3	(E) CARPORT DEMOLITION PLAN AND EXTERIOR ELEVATIONS / DEMOLITION
EC4.1	(E) EXTERIOR ELEVATIONS (REAR HOUSE)
EC4.2	(E) FRONT ELEVATION (NORTH)
EC4.3	(E) REAR ELEVATION (SOUTH)
EC4.4	(E) SIDE ELEVATION (EAST)
EC4.5	(E) SIDE ELEVATION (WEST)
EC5.1	(E) BUILDING/SITE SECTION
A1.1	PROPOSED SITE PLAN
A2.2	PROPOSED FLR '1' & FLR '2' PLANS
A2.2	PROPOSED FLR '3' & FLR '4' PLANS
A2.3	PROPOSED ROOF PLAN
A4.1	PROPOSED FRONT ELEVATION (NORTH)
A4.2	PROPOSED REAR ELEVATION (SOUTH)
A4.3	PROPOSED SIDE ELEVATION (EAST)
A4.4	PROPOSED SIDE ELEVATION (WEST)
A5.1	PROPOSED BUILDING/SITE SECTION

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@yahoo.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title

COVER SHEET

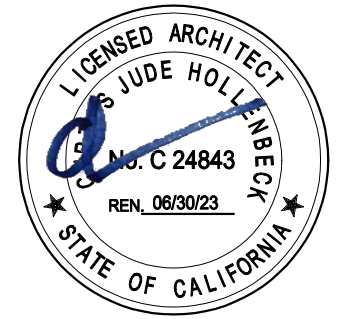
By CH

Date _____

Scale NA

Drawing No.

A0.1



02/ /23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP

Revisions

FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title

(E)
SITE / ROOF
PLAN

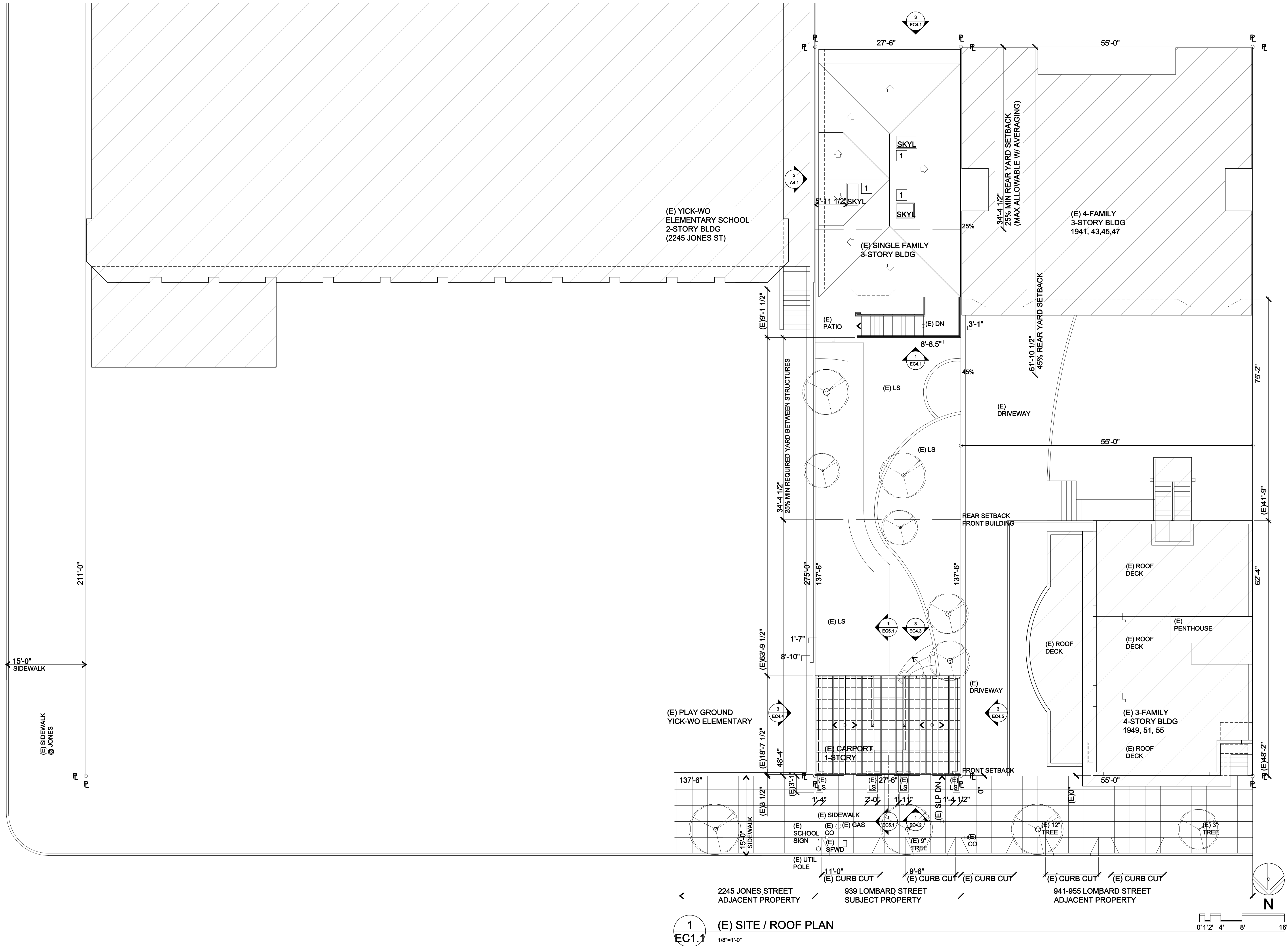
By CH

Date

Scale AS NOTED

Drawing No.

EC1.1



SHEET NOTES

- 1
- STIPLE LINES INDICATE PORTION OF EXISTING STRUCTURE TO BE DEMOLISHED.
- 2
- SEE EC1.2 FOR SOIL EXCAVATION CALCULATIONS
- 3
- FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO OWNER/ARCHITECT/ENGINEER.

SOIL EXCAVATION CALCS

- 1
- 11'-0" x 18'-9" x 2'-0" = 412 / 27 = 15.3 YARDS
- 2
- 4'-6" x 29'-5" x 2'-0" = 264.7 / 27 = 9.8 YARDS
- 3
- 8'-9" x 29'-5" x 2'-0" x .5 = 257.4 / 27 = 9.5 YARDS
- 4
- 2'-9" x 4'-0" x 1'-6" = 16.5 / 27 = .6 YARDS

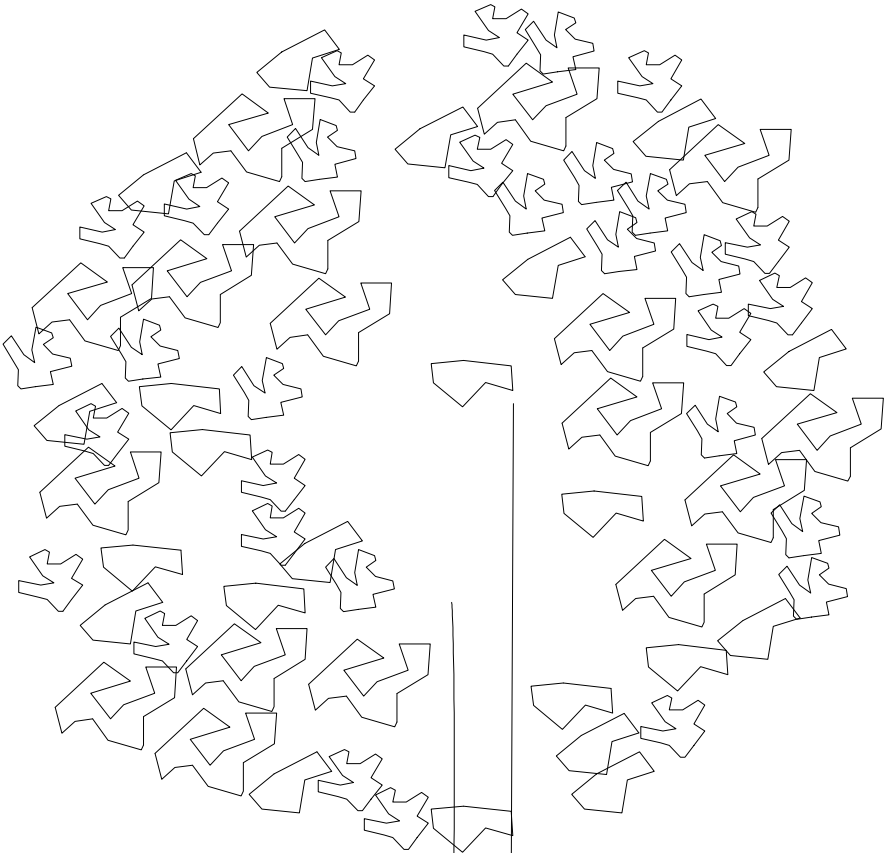
TOTAL EXCAVATION: 35.2 YARDS

SOIL FILL CALCS

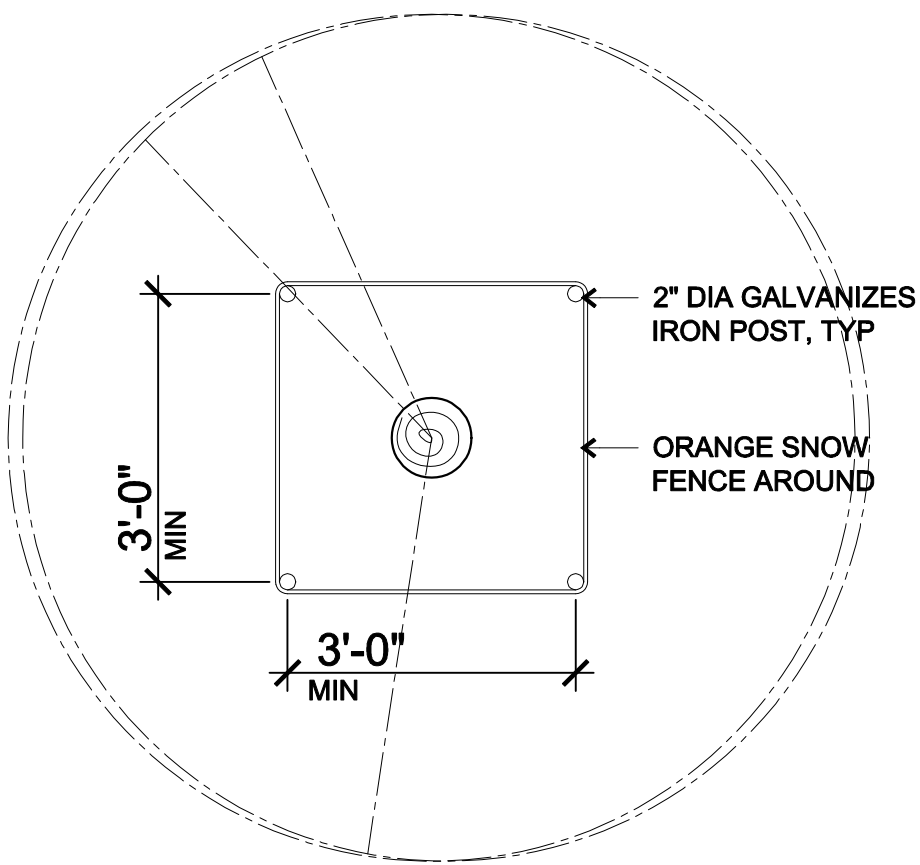
- 5
- 5'-7" x 29'-5" x 9" = 123.1 / 27 = 4.5 YARDS
- 6
- 11'-8" x 29'-5" x 9" x .5 = 128.7 / 27 = 4.8 YARDS
- 7
- 5'-8" x 29'-5" x 6" = 83.4 / 27 = 3.1 YARDS

TOTAL EXCAVATION: 12.4 YARDS

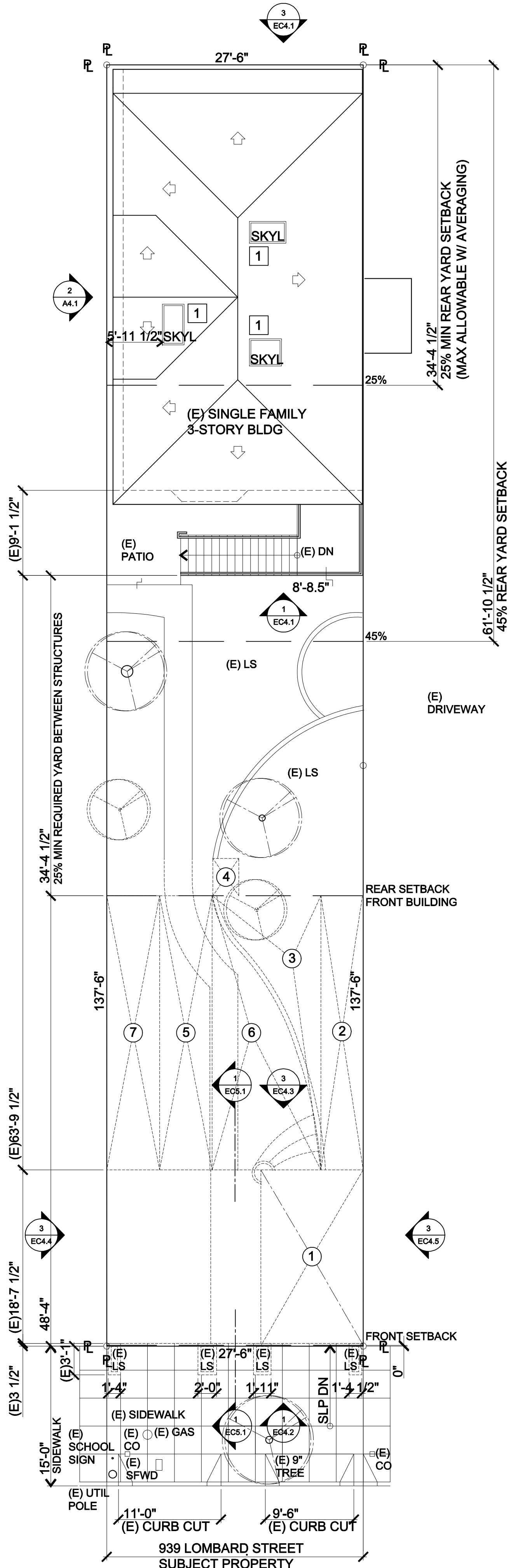
TOTAL EXCAVATION (35.2 YARDS) + FILL (12.4 YARDS) = 47.6 YARDS



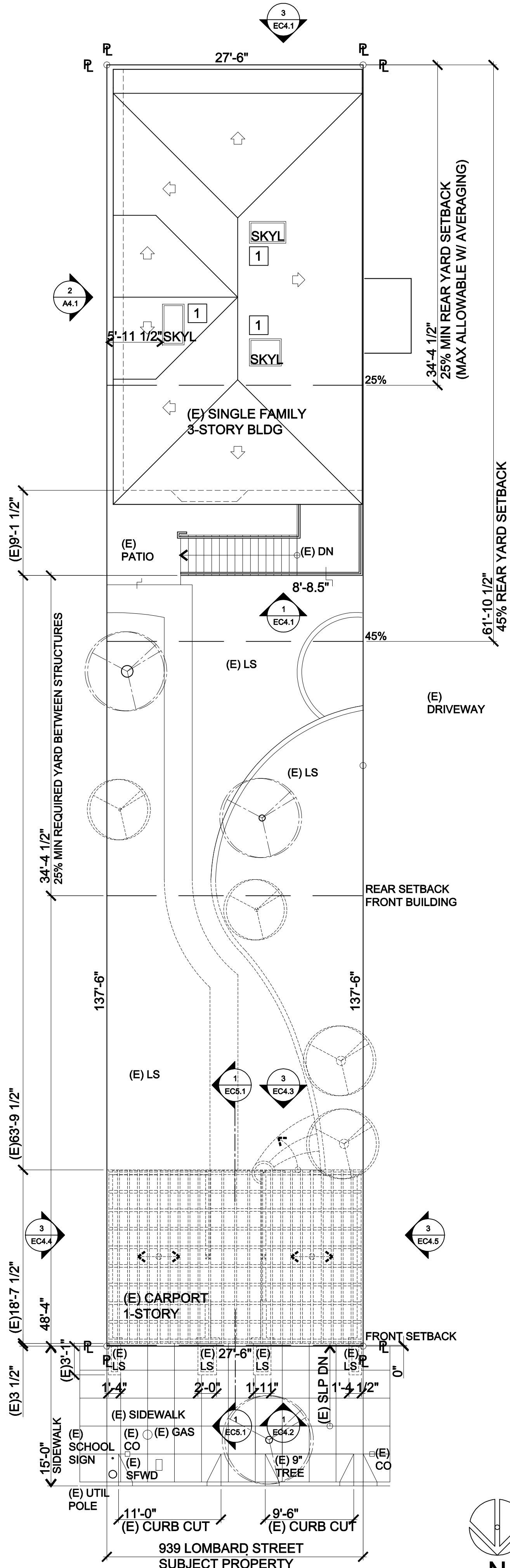
4 (E) STREET TREE PROTECTION
EC1.2 1/2"=1'-0"



3 (E) STREET TREE PROTECTION
EC1.2 1/2"=1'-0"

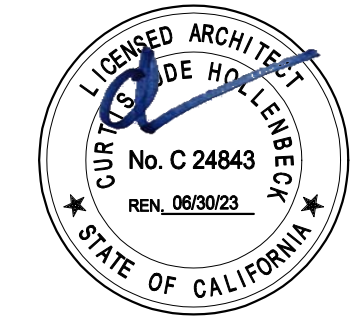


1 (E) SITE EXCAVATION PLAN
EC1.2 1/8"=1'-0"



1 (E) SITE / ROOF DEMOLITION PLAN
EC1.2 1/8"=1'-0"

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

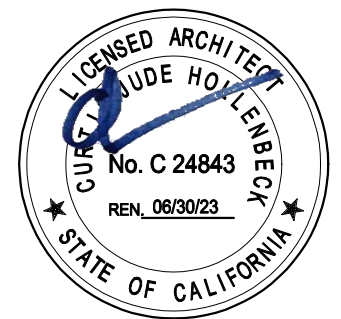
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

(E) SITE / ROOF DEMOLITION PLAN + SOIL EXCAVATION

By CH
Date
Scale AS NOTED
Drawing No.

EC1.2



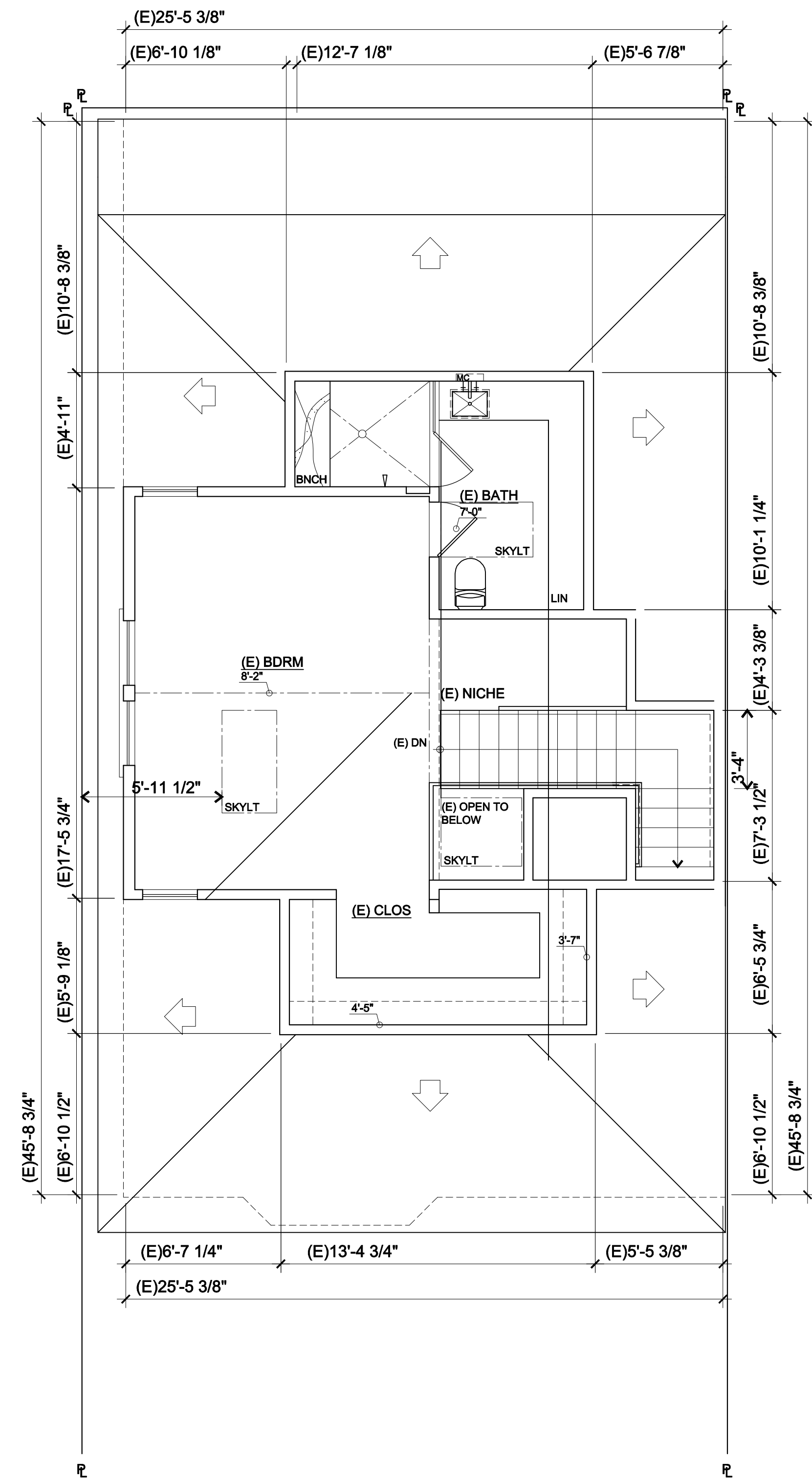
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

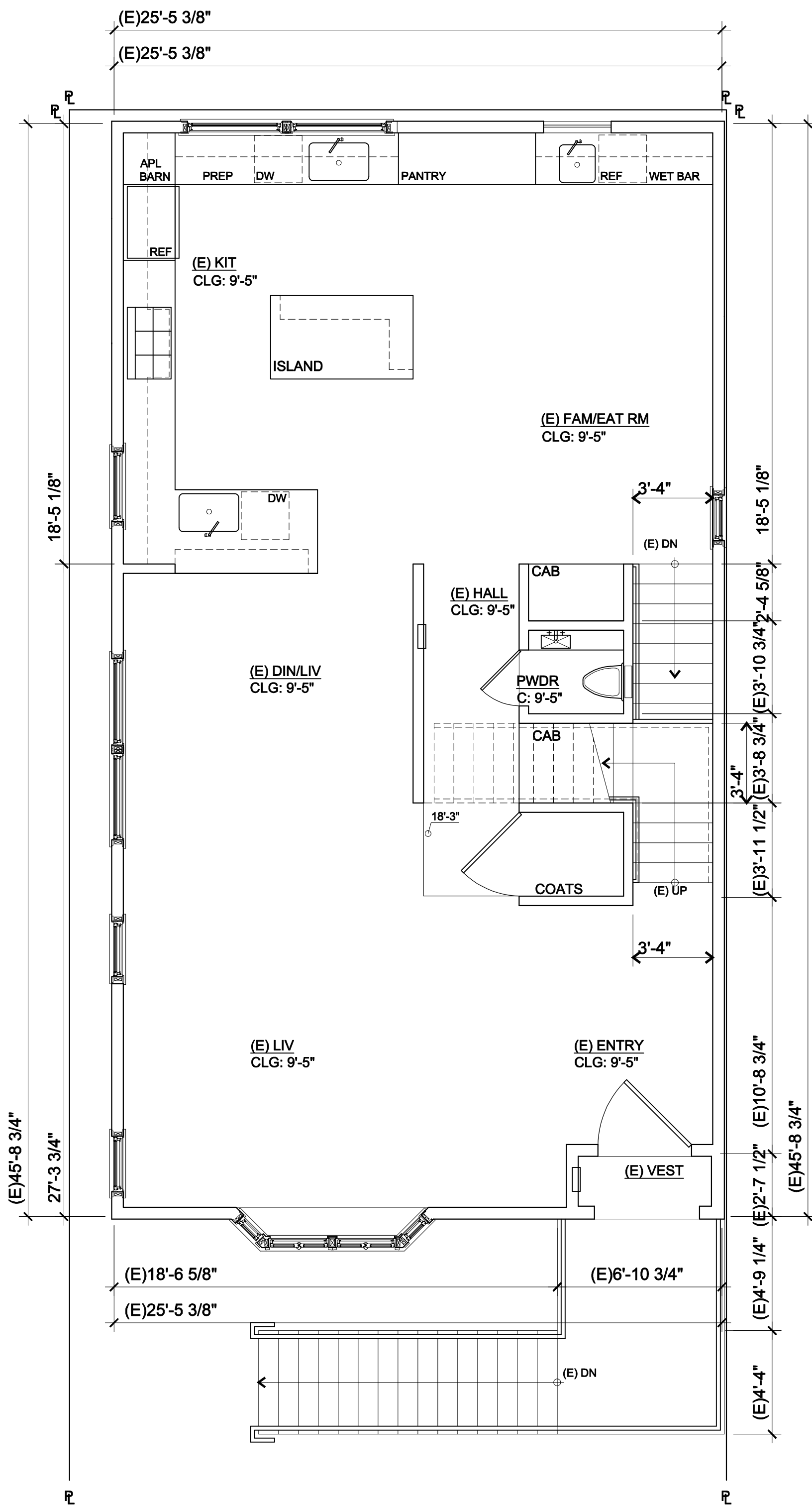
Drawing Title
(E) FLR '1',
FLR '2' &
FLR '3' PLANS

By CH
Date
Scale AS NOTED
Drawing No.

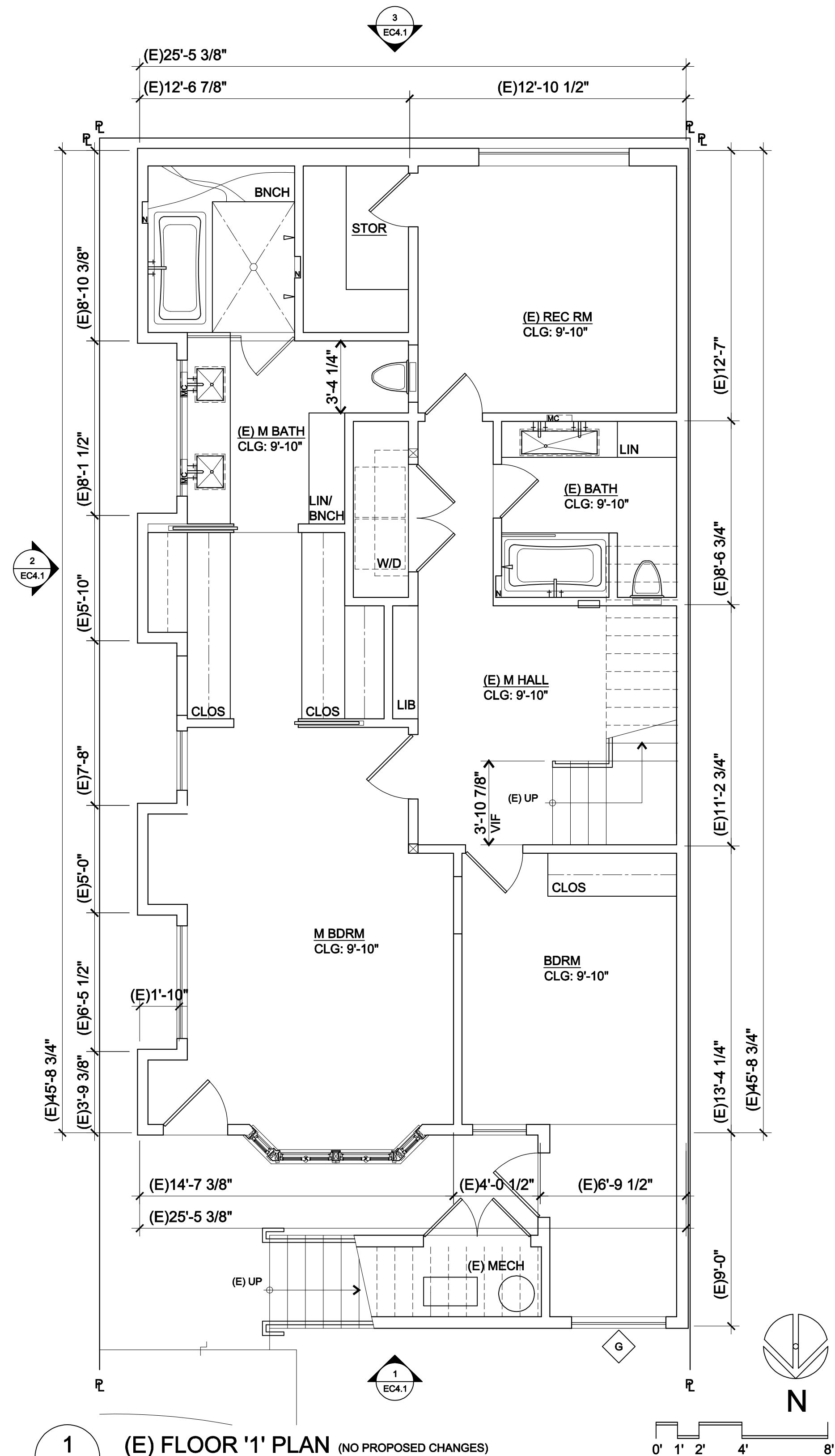
EC2.1



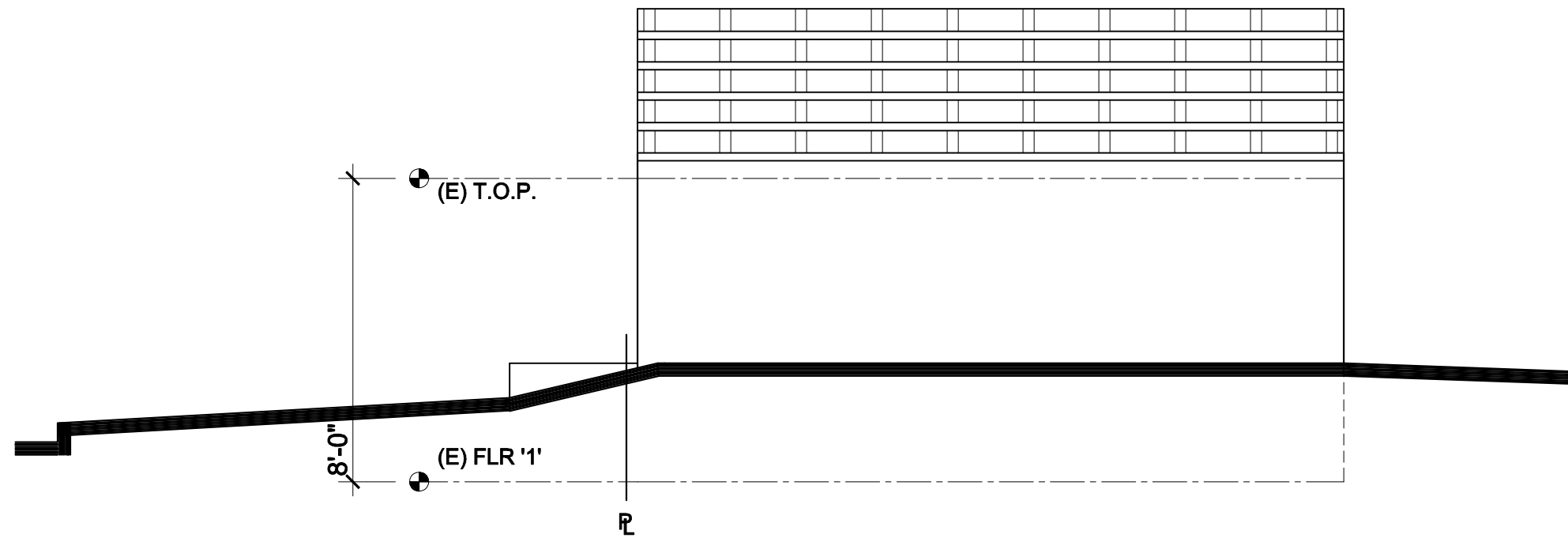
3 (E) FLOOR '3' PLAN (NO PROPOSED CHANGES)
EC2.1 1/4"=1'-0"



2 (E) FLOOR '2' PLAN (NO PROPOSED CHANGES)
EC2.1 1/4"=1'-0"



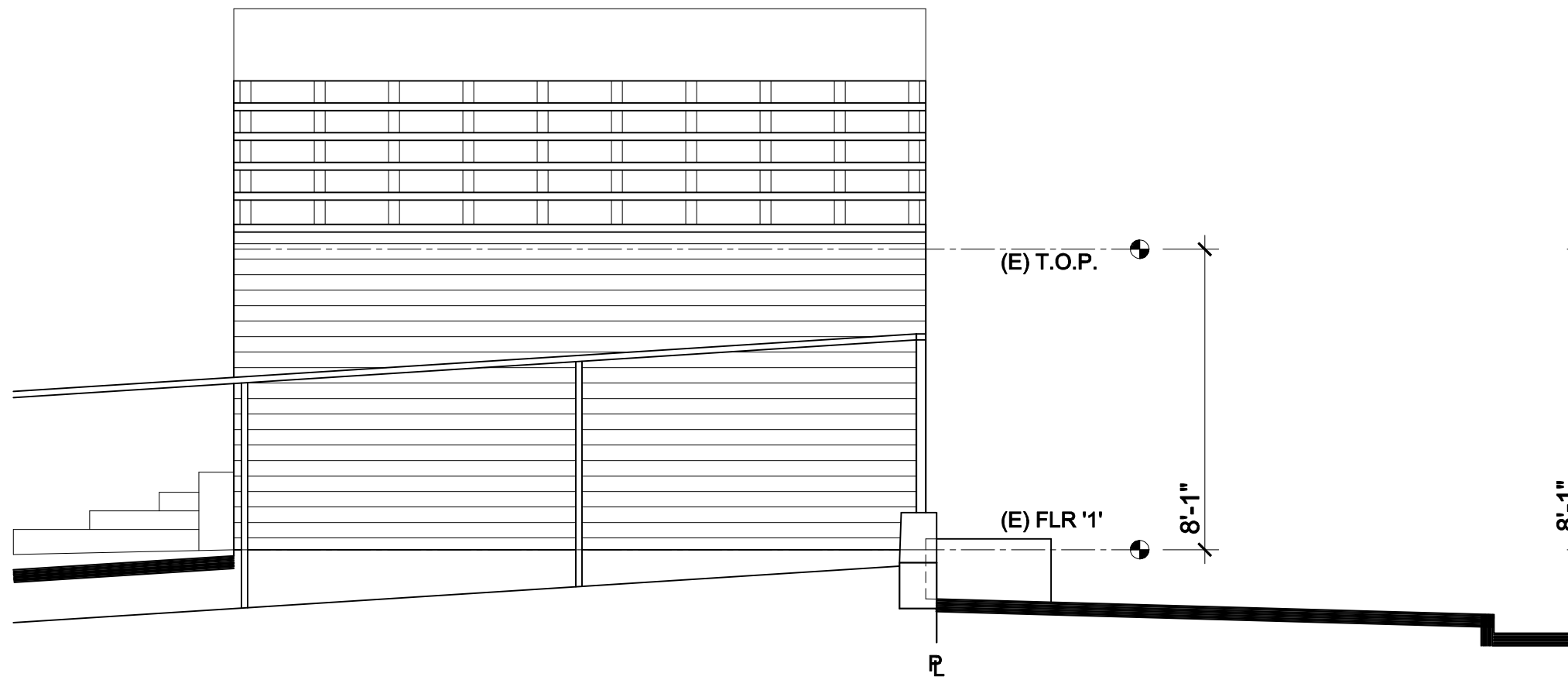
1 (E) FLOOR '1' PLAN (NO PROPOSED CHANGES)
EC2.1 1/4"=1'-0"



6
EC2.2

(E) REAR ELEV (WEST)

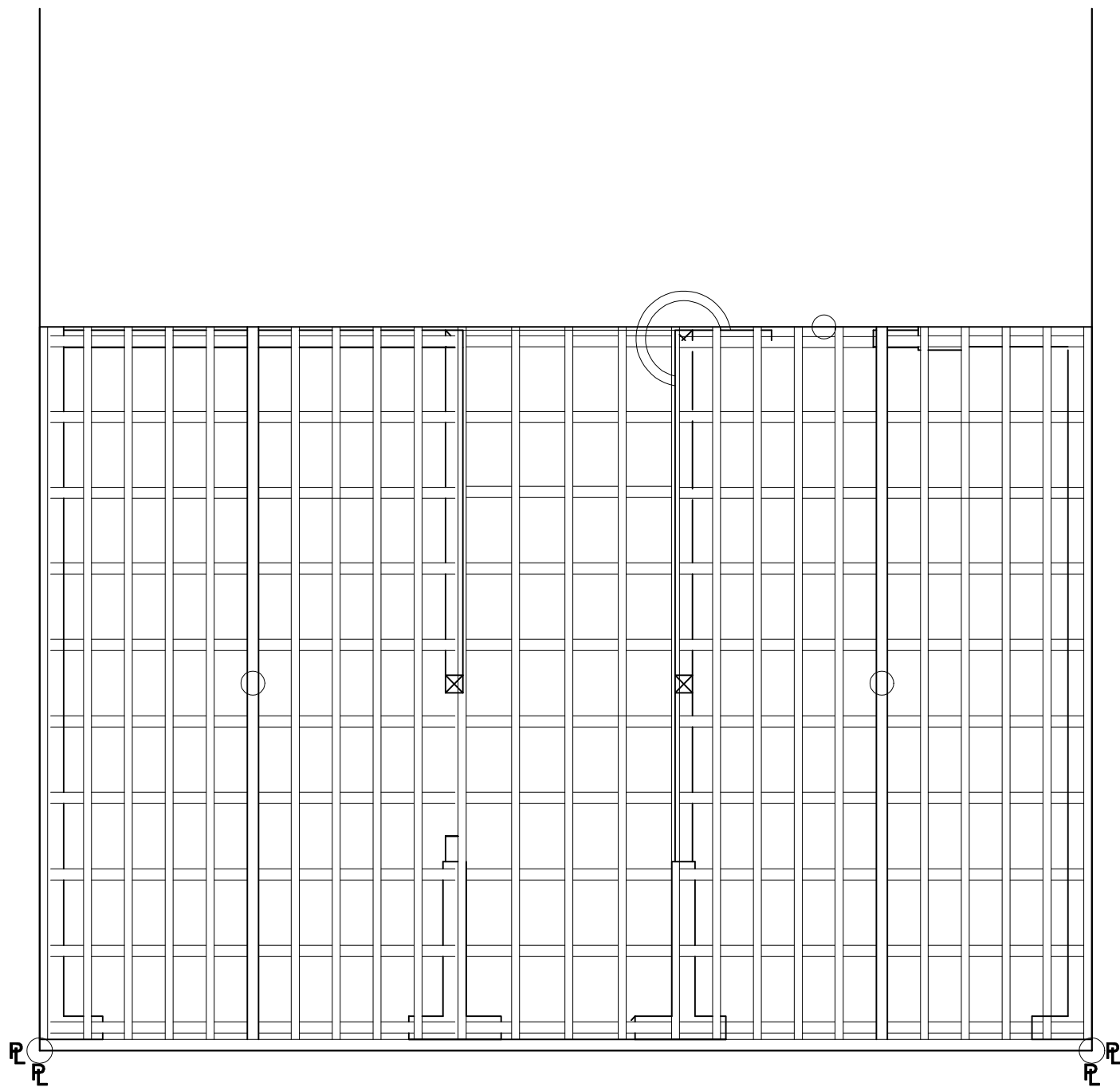
1/4"=1'-0"



5
EC2.2

(E) SIDE ELEV (EAST)

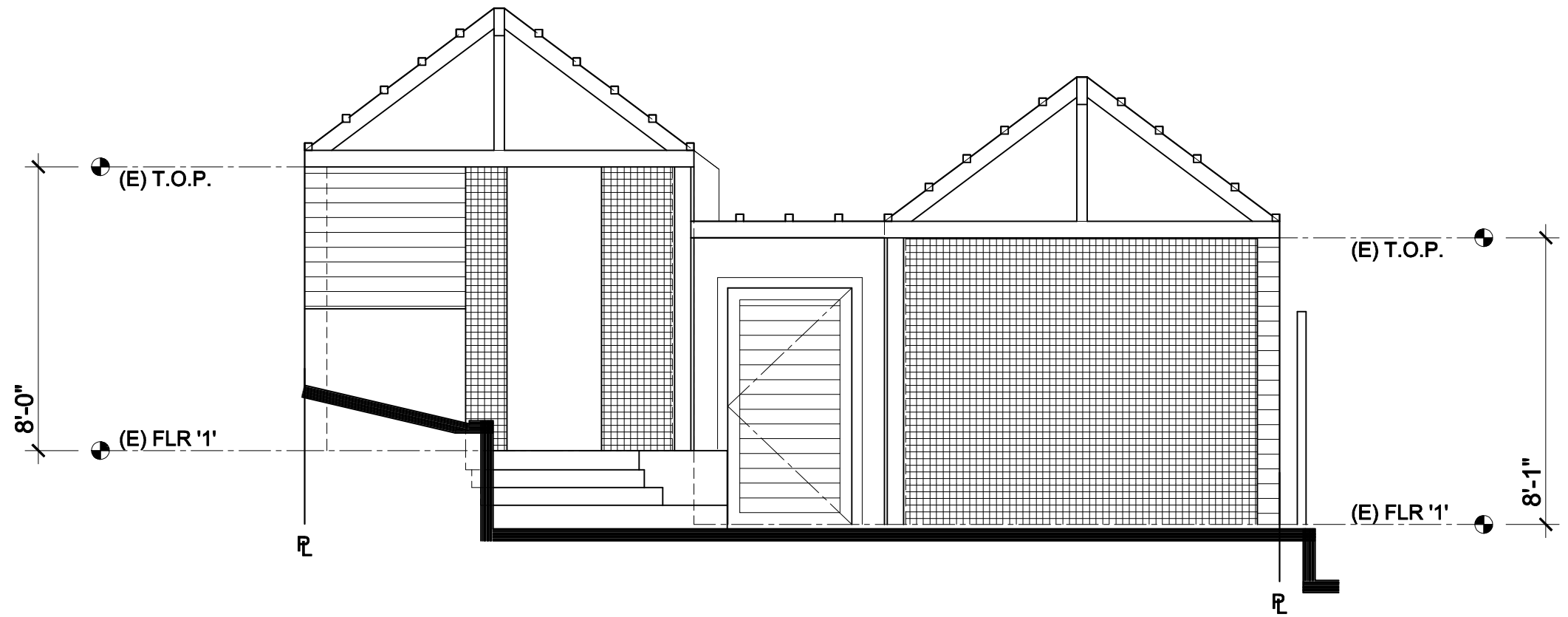
1/4"=1'-0"



2
EC2.2

(E) CARPORT ROOF PLAN

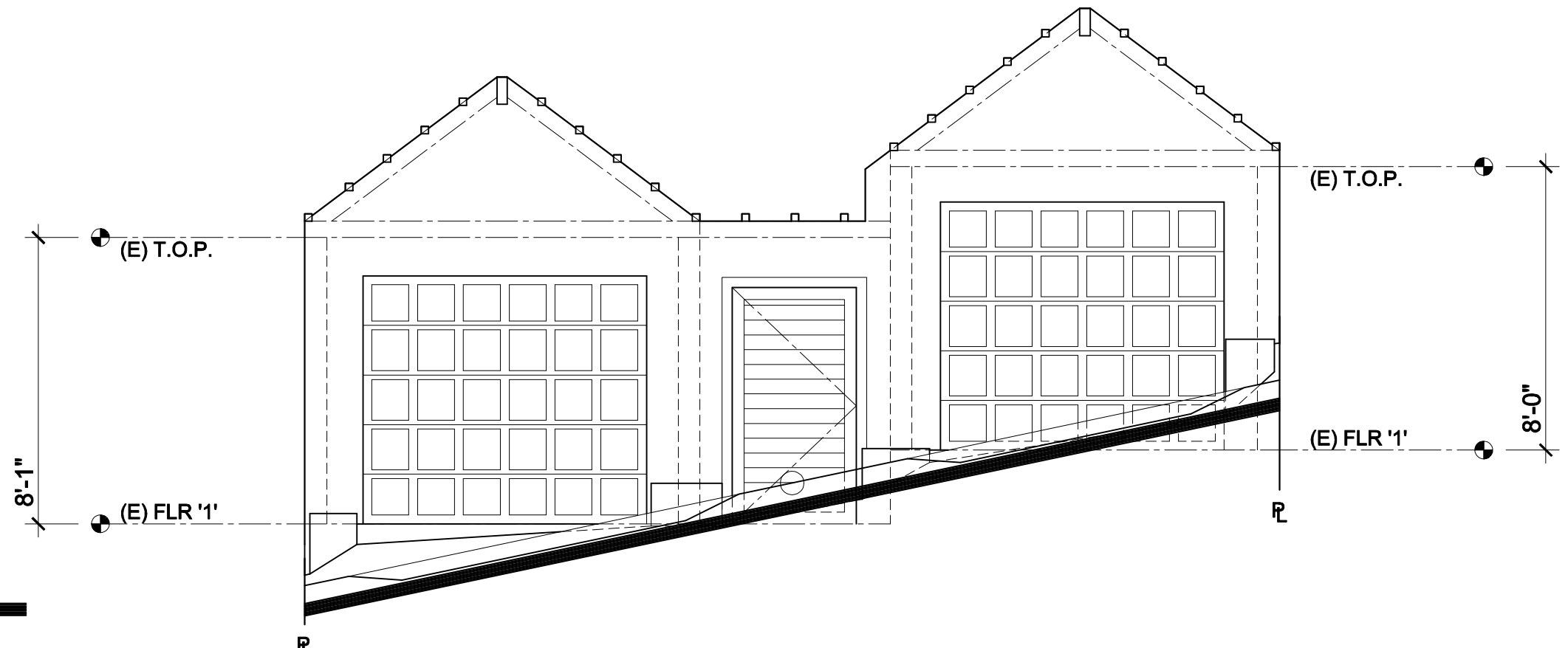
1/4"=1'-0"



4
EC2.2

(E) REAR ELEV (SOUTH)

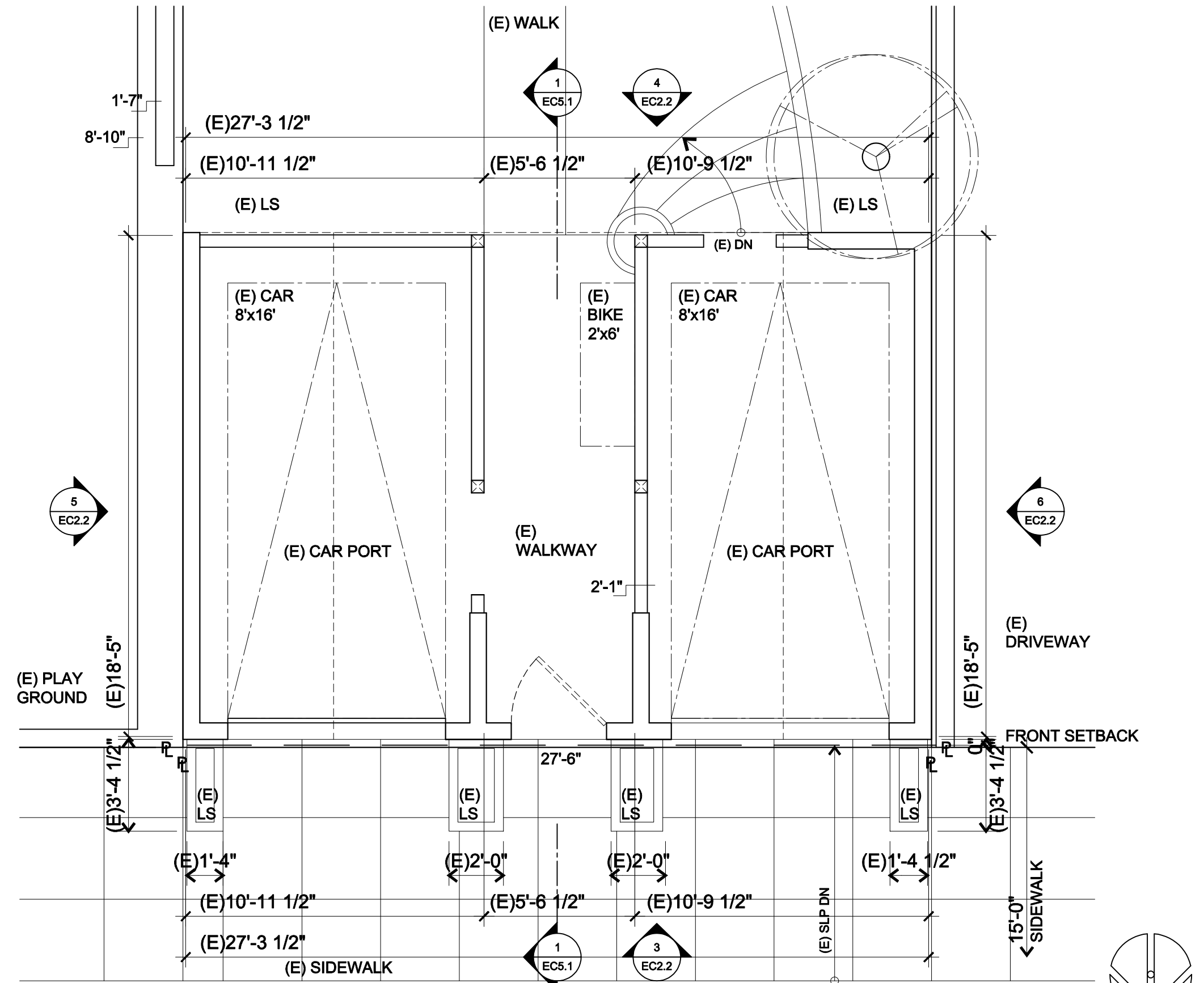
1/4"=1'-0"



3
EC2.2

(E) FRONT ELEV (NORTH)

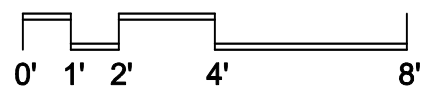
1/4"=1'-0"



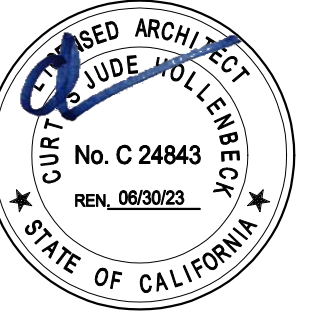
1
EC2.2

(E) CARPORT PLAN

1/4"=1'-0"



Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

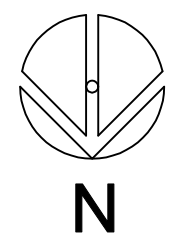
939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
(E) CARPORT
PLAN +
ELEVATIONS

By CH
Date
Scale AS NOTED
Drawing No.

EC2.2

1	STIPLE LINES INDICATE PORTION OF EXISTING STRUCTURE TO BE DEMOLISHED.
2	SEE EC1.2 FOR SOIL EXCAVATION CALCULATIONS



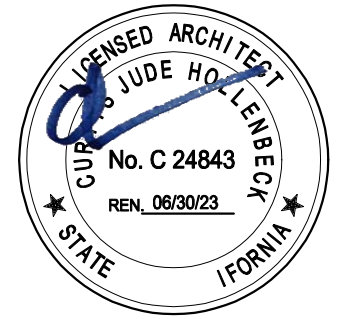
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

Drawing Title

E) CARPORT
PLAN +
ELEVATIONS
DEMOLITION

By CH
Date
Scale AS NOTED
Drawing No.

EC2.3



07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

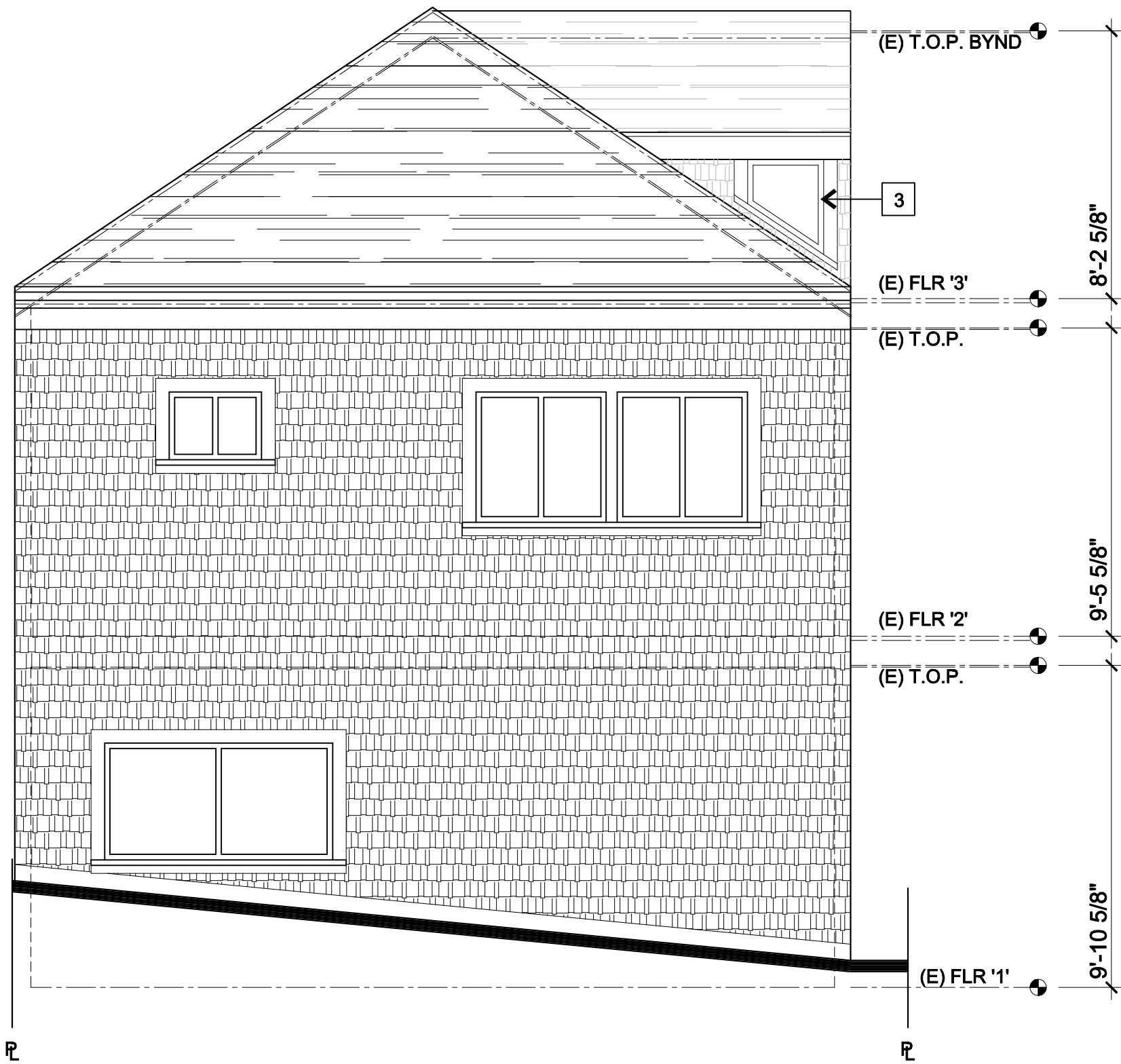
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
(E) EXTERIOR
ELEVATIONS

By CH
Date
Scale AS NOTED
Drawing No.

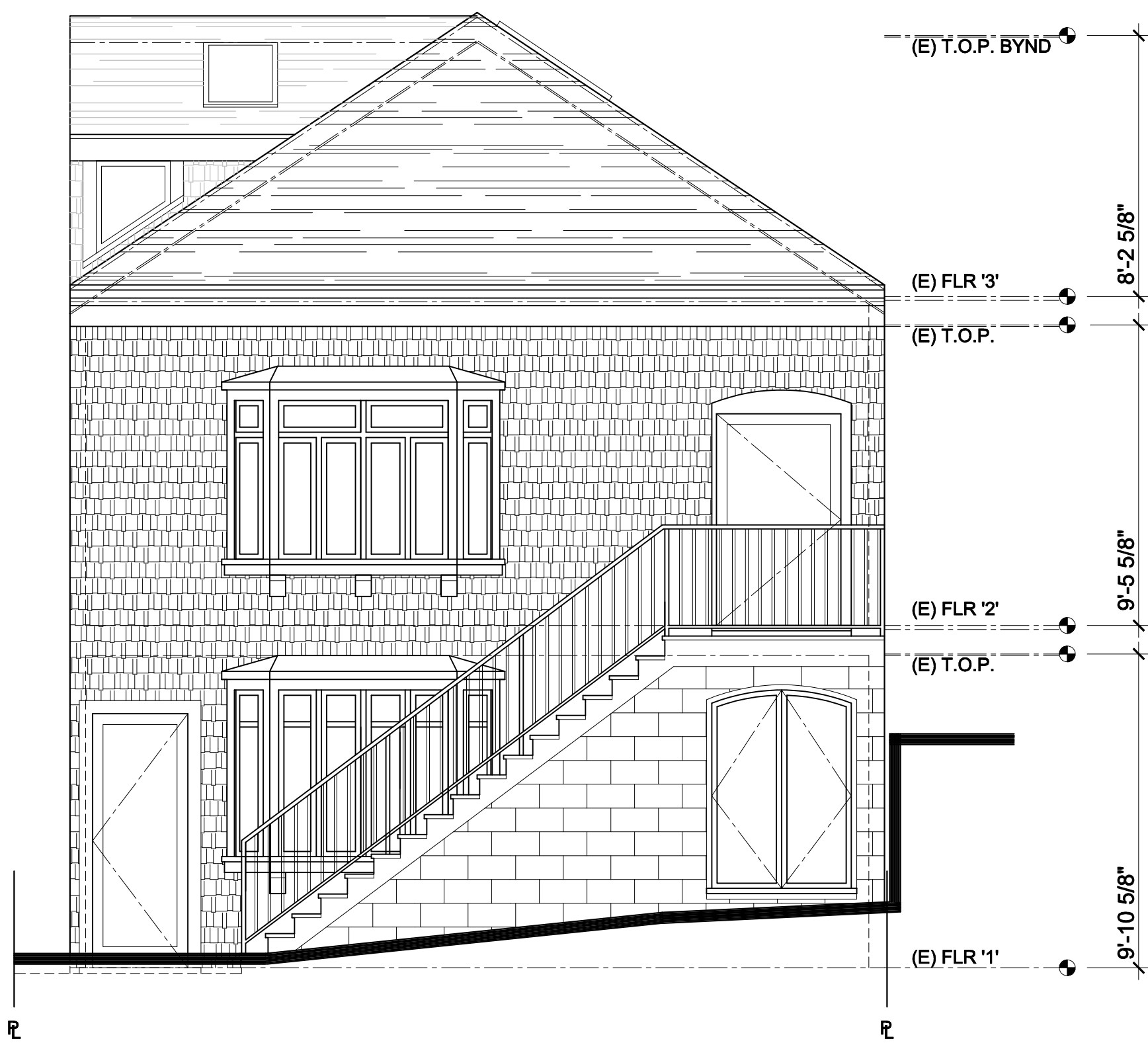
EC4.1



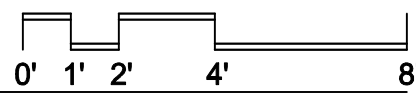
3 (E) REAR ELEVATION (SOUTH) (NO PROPOSED CHANGES)
EC4.1 1/4"=1'-0"



2 (E) SIDE ELEVATION (EAST) (NO PROPOSED CHANGES)
EC4.1 1/4"=1'-0"

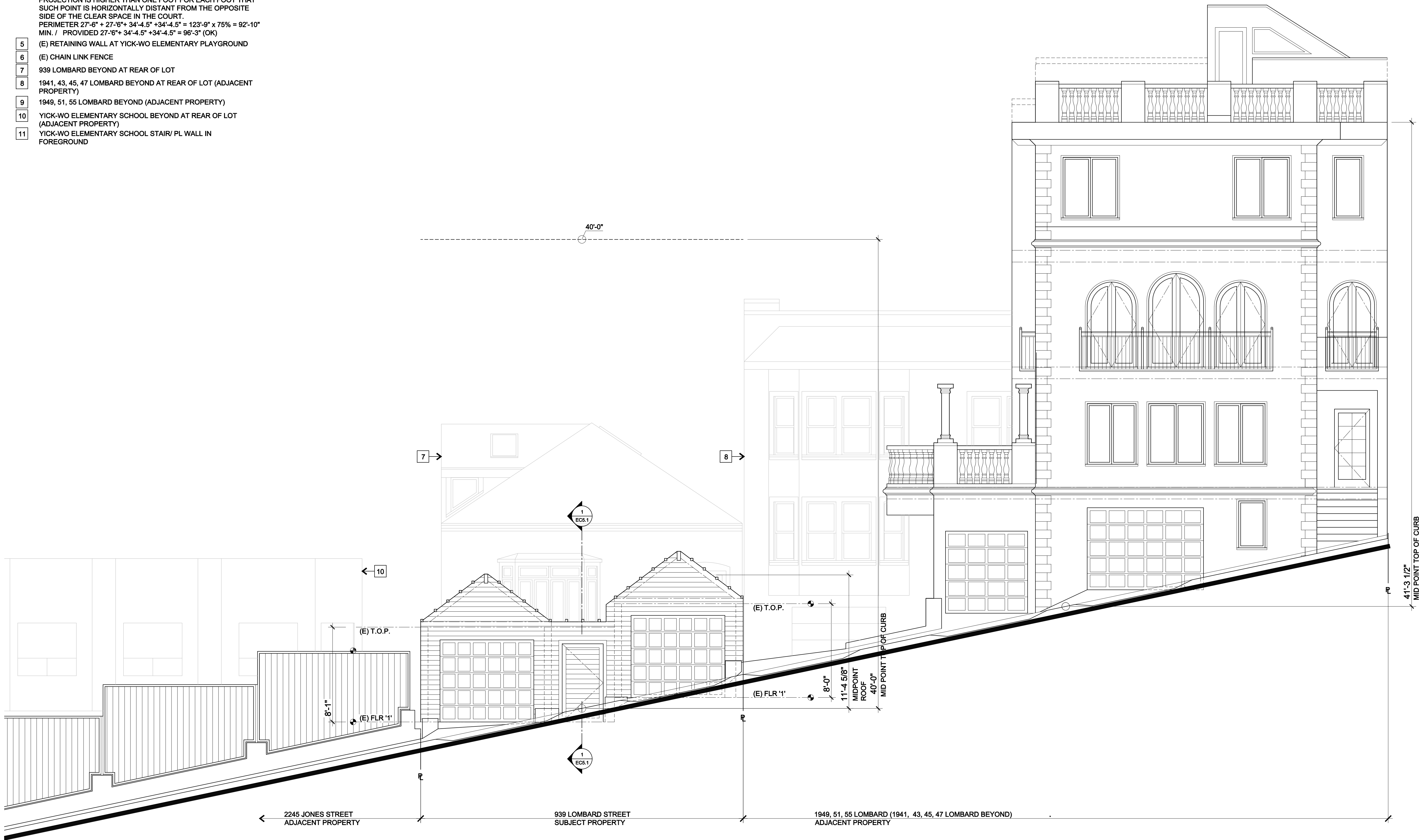


1 (E) FRONT ELEVATION (NORTH) (NO PROPOSED CHANGES)
EC4.1 1/4"=1'-0"

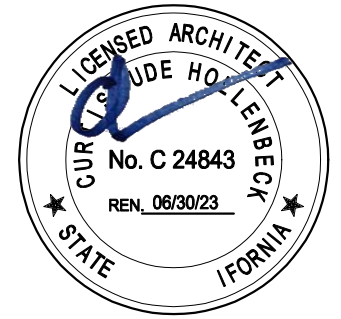


SHEET NOTES

- 1
- FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO OWNER/ARCHITECT/ENGINEER.
- 2
- DASHED LINE INDICATES ADJACENT BUILDING IN FOREGROUND
- 3
- DASHED LINE INDICATES ADJACENT BUILDING OPENINGS IN FOREGROUND (RED COLOR LINE TYPE)
- 4
- MEETS REQUIREMENT OF 135(g)(2) 'USE OF INNER COURT... THE HEIGHT OF OF WALLS AND PROJECTIONS ABOVE THE COURT ON AT LEAST THREE SIDES (OR 75% OF PERIMETER, WHICH EVER IS GREATER) SUCH THAT NO POINT ON ANY SUCH WALL OR PROJECTION IS HIGHER THAN ONE FOOT FOR EACH FOOT THAT SUCH POINT IS HORIZONTALLY DISTANT FROM THE OPPOSITE SIDE OF THE CLEAR SPACE IN THE COURT.
PERIMETER: 27'-6" + 27'-6" + 34'-4.5" + 34'-4.5" = 123'-9" x 75% = 92'-10" MIN. / PROVIDED 27'-6" + 34'-4.5" + 34'-4.5" = 96'-3" (OK)
- 5
- (E) RETAINING WALL AT YICK-WO ELEMENTARY PLAYGROUND
- 6
- (E) CHAIN LINK FENCE
- 7
- 939 LOMBARD BEYOND AT REAR OF LOT
- 8
- 1941, 43, 45, 47 LOMBARD BEYOND AT REAR OF LOT (ADJACENT PROPERTY)
- 9
- 1949, 51, 55 LOMBARD BEYOND (ADJACENT PROPERTY)
- 10
- YICK-WO ELEMENTARY SCHOOL BEYOND AT REAR OF LOT (ADJACENT PROPERTY)
- 11
- YICK-WO ELEMENTARY SCHOOL STAIR/ PL WALL IN FOREGROUND



Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP

Revisions

FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title

(E) FRONT ELEVATION (NORTH)

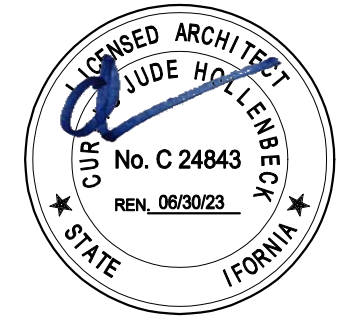
By CH
Date
Scale AS NOTED
Drawing No.

EC4.2

SHEET NOTES

SEE EC4.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

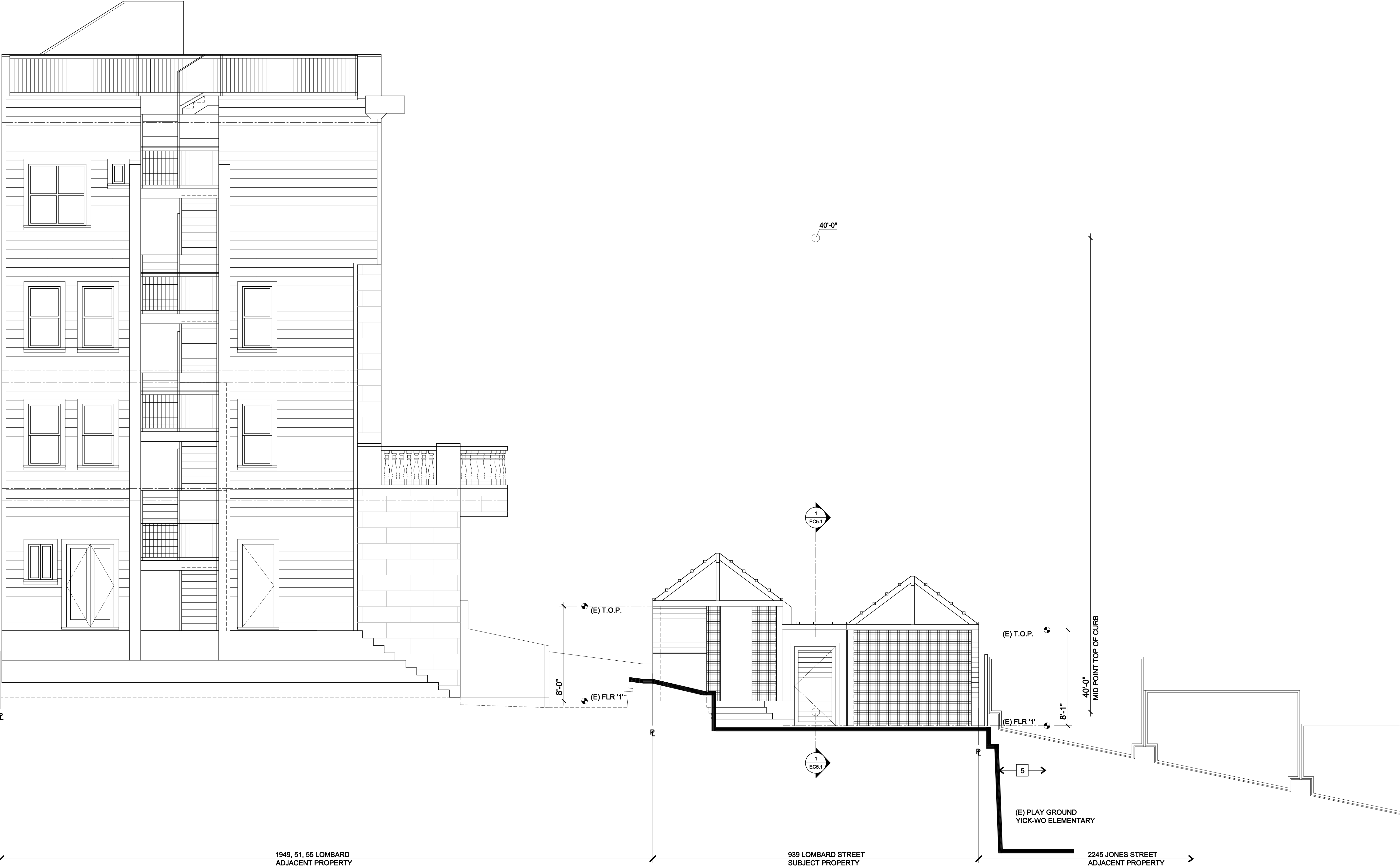
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREPARNCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
(E) REAR
ELEVATION
(SOUTH)

By CH
Date
Scale AS NOTED
Drawing No.

EC4.3

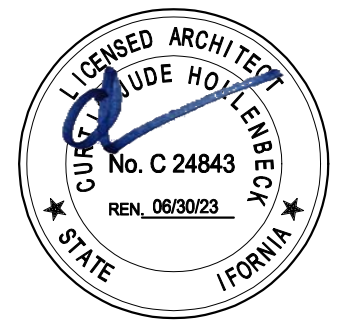


1 (E) REAR ELEVATION (SOUTH)
EC4.3 1/4"=1'-0"

SHEET NOTES

SEE EC4.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

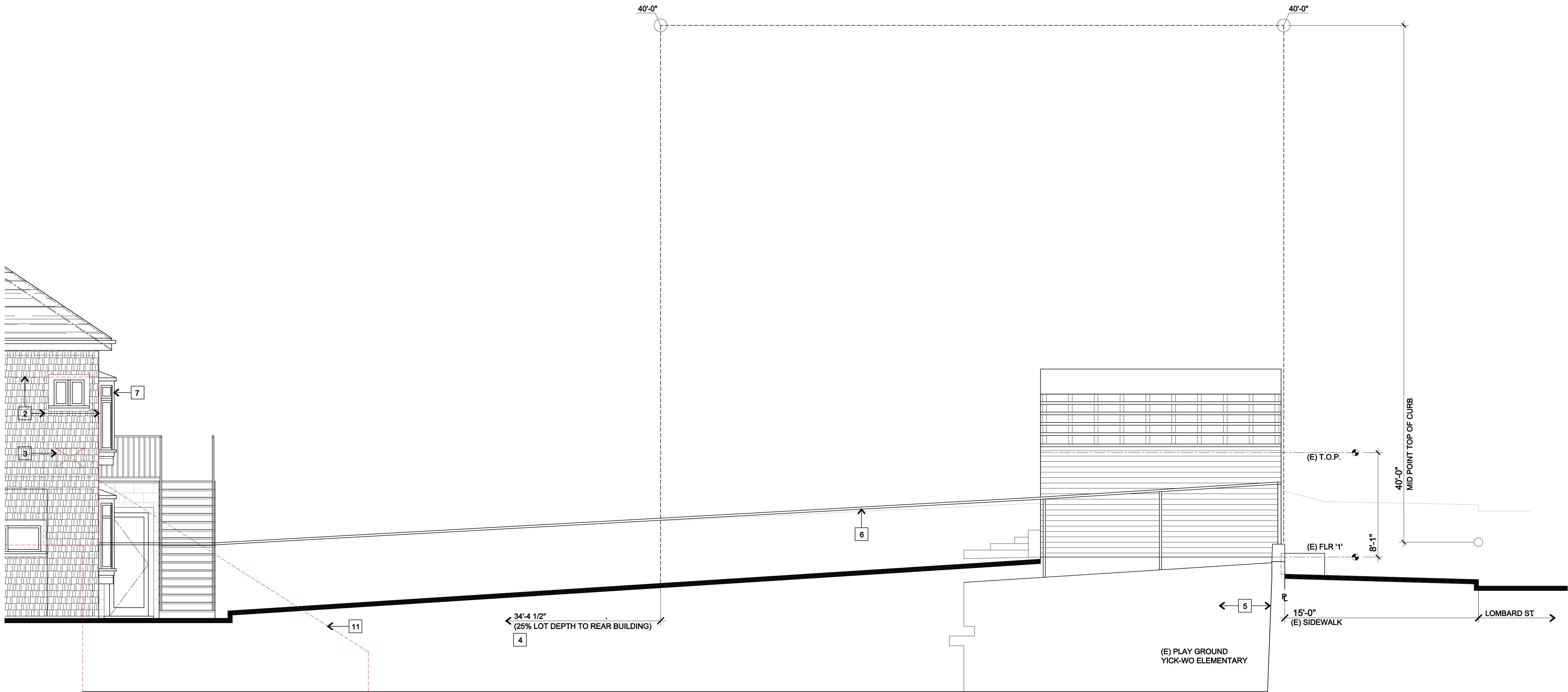
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREPARNCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

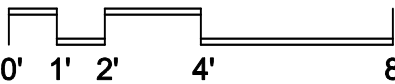
(E) SIDE
ELEVATION
(EAST)

By CH
Date
Scale AS NOTED
Drawing No.

EC4.4



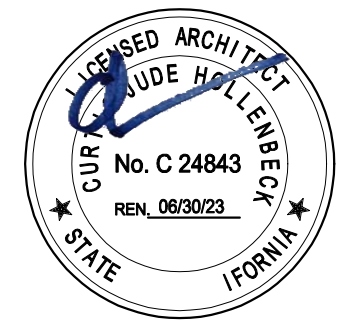
1 (E) SIDE ELEVATION (EAST)
EC4.4 1/4"=1'-0"



SHEET NOTES

SEE EC4.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

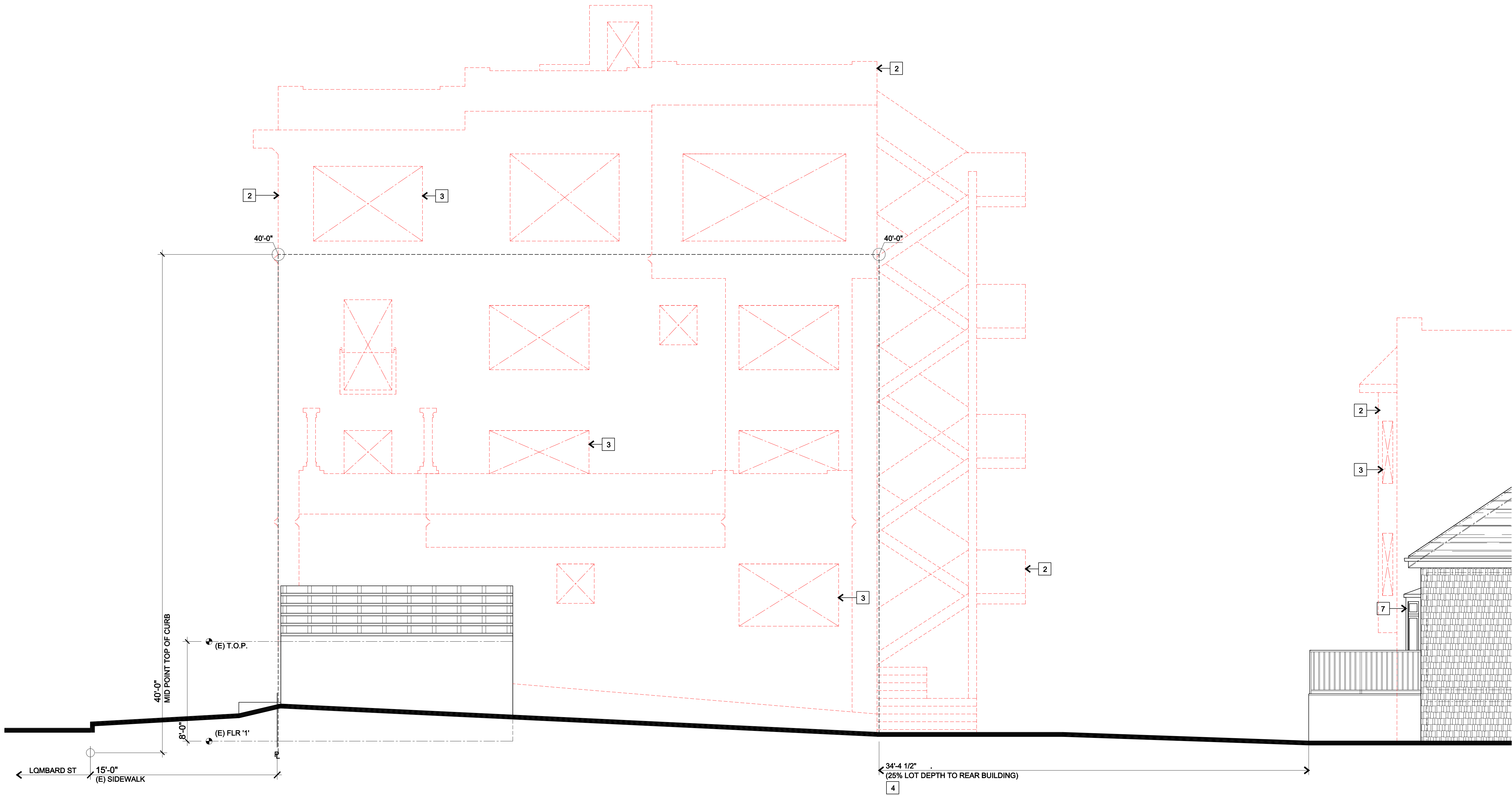
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREPARNCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

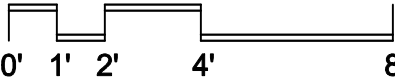
Drawing Title
(E) SIDE
ELEVATION
(WEST)

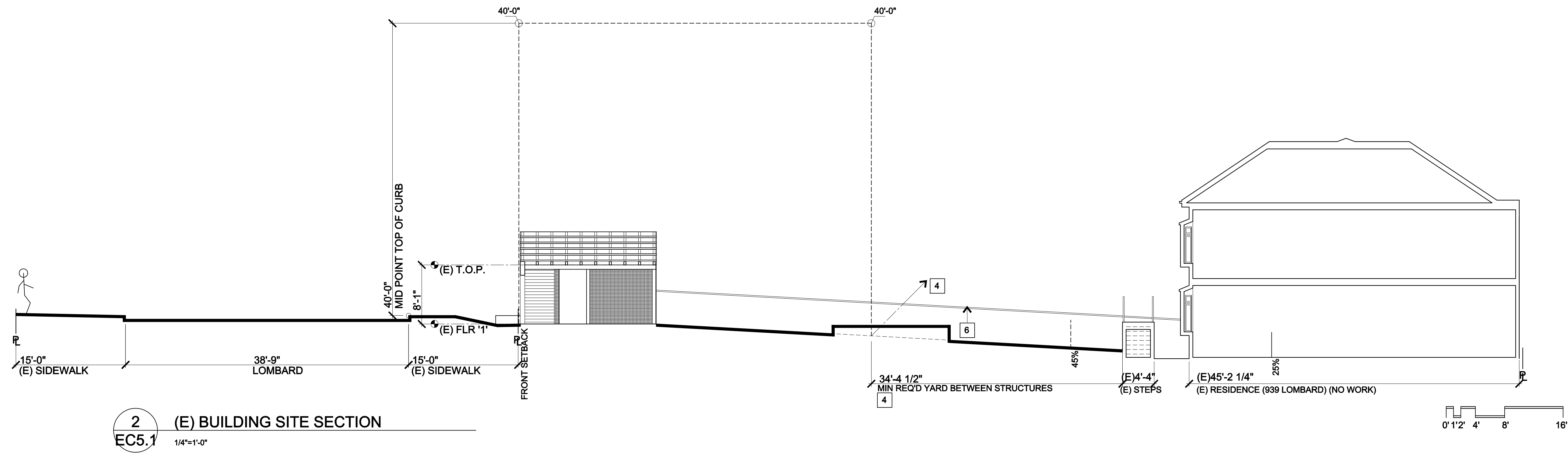
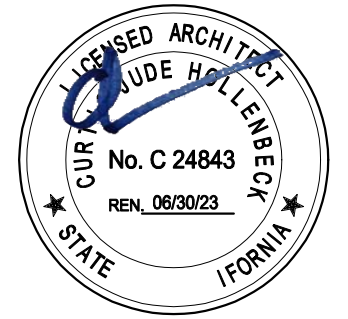
By CH
Date
Scale AS NOTED
Drawing No.

EC4.5



1
EC4.5 (E) SIDE ELEVATION (WEST)
1/4"=1'-0"





2 (E) BUILDING SITE SECTION
EC5.1 1/4"=1'-0"

SHEET NOTES

SEE EC4.2 FOR KEYED SHEET NOTES

07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

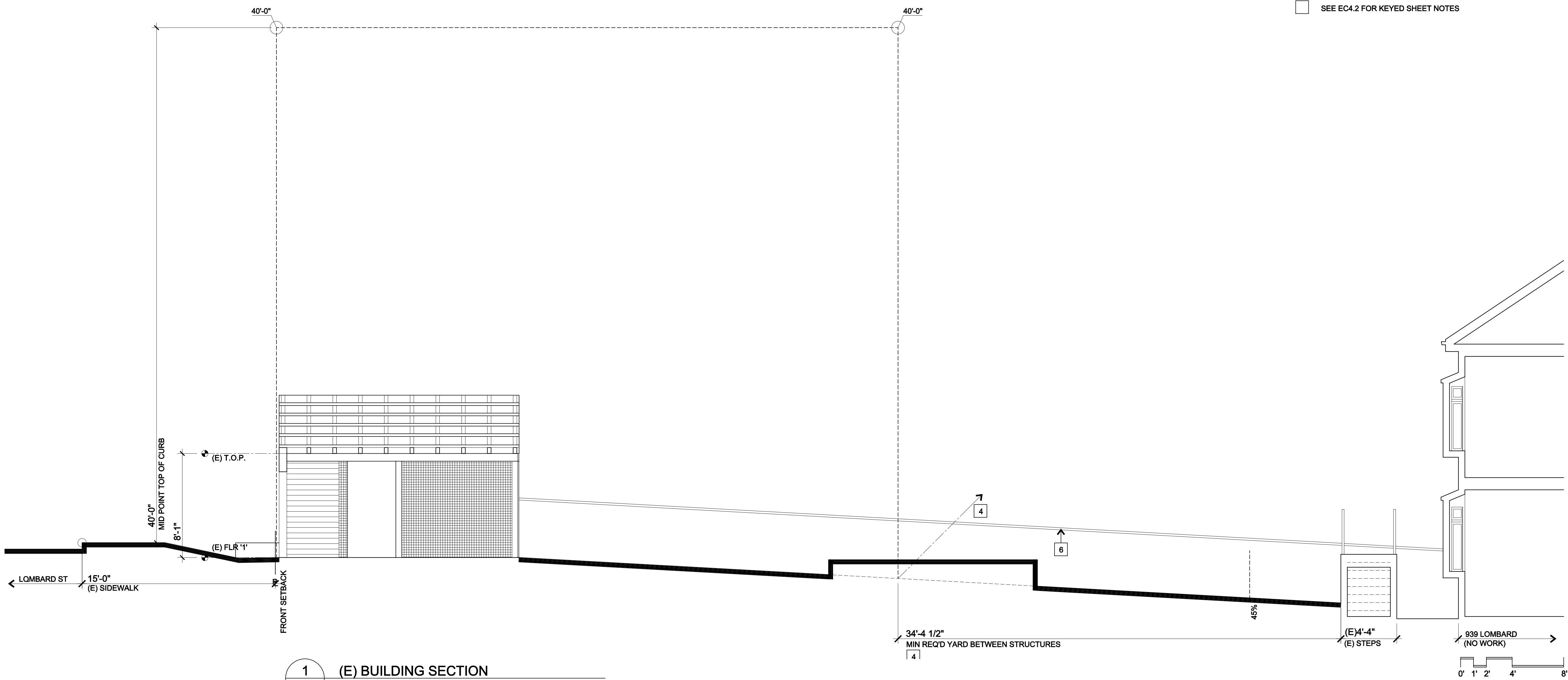
FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

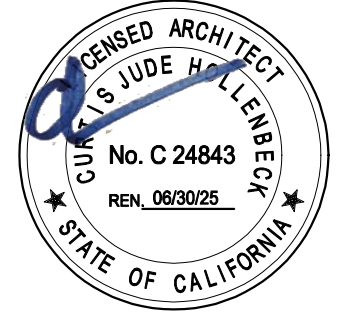
Drawing Title
(E) BUILDING/
SITE SECTION

By CH
Date
Scale AS NOTED
Drawing No.

EC5.1



1 (E) BUILDING SECTION
EC5.1 1/4"=1'-0"



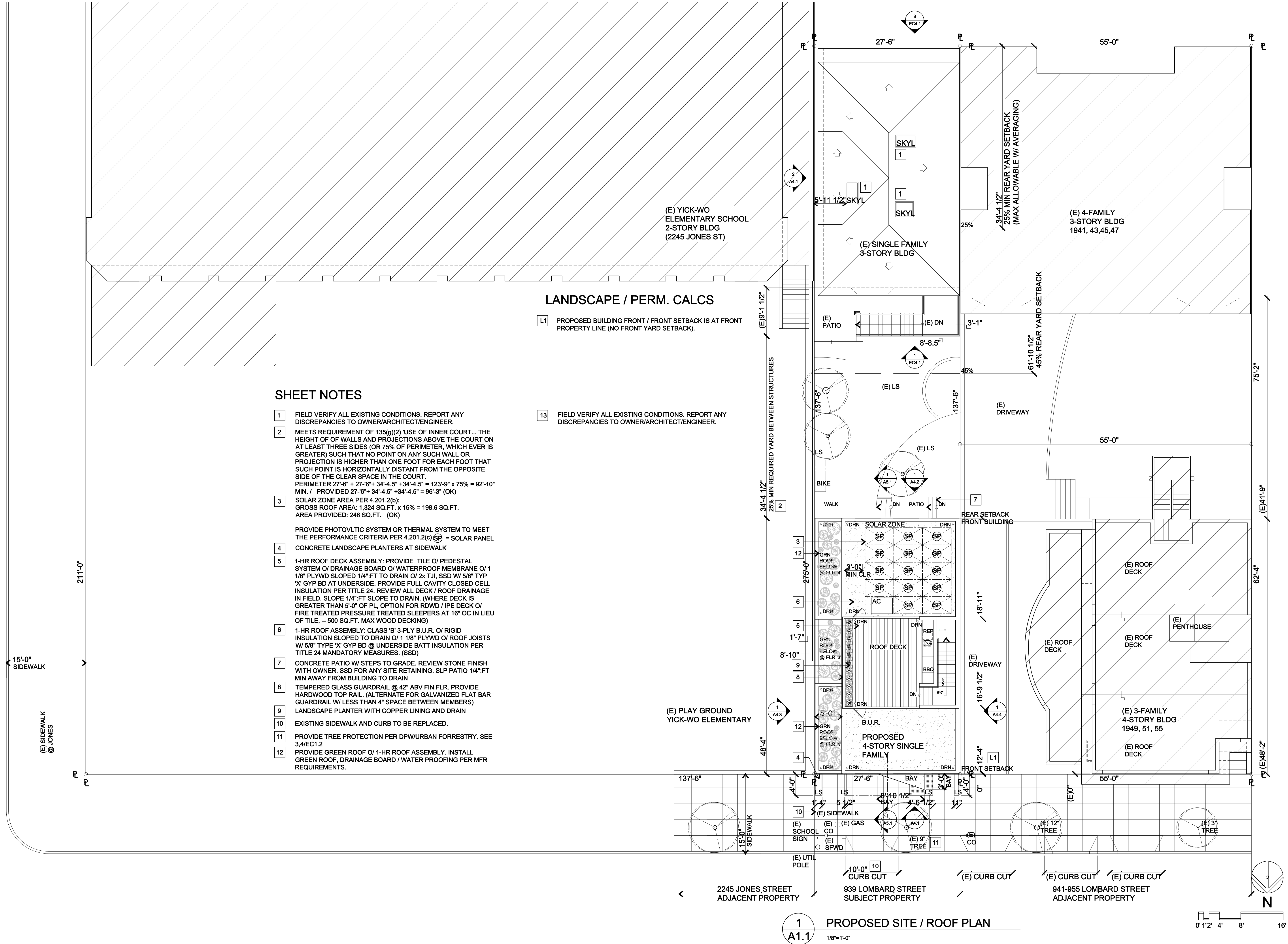
05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
PROPOSED
SITE / ROOF
PLAN

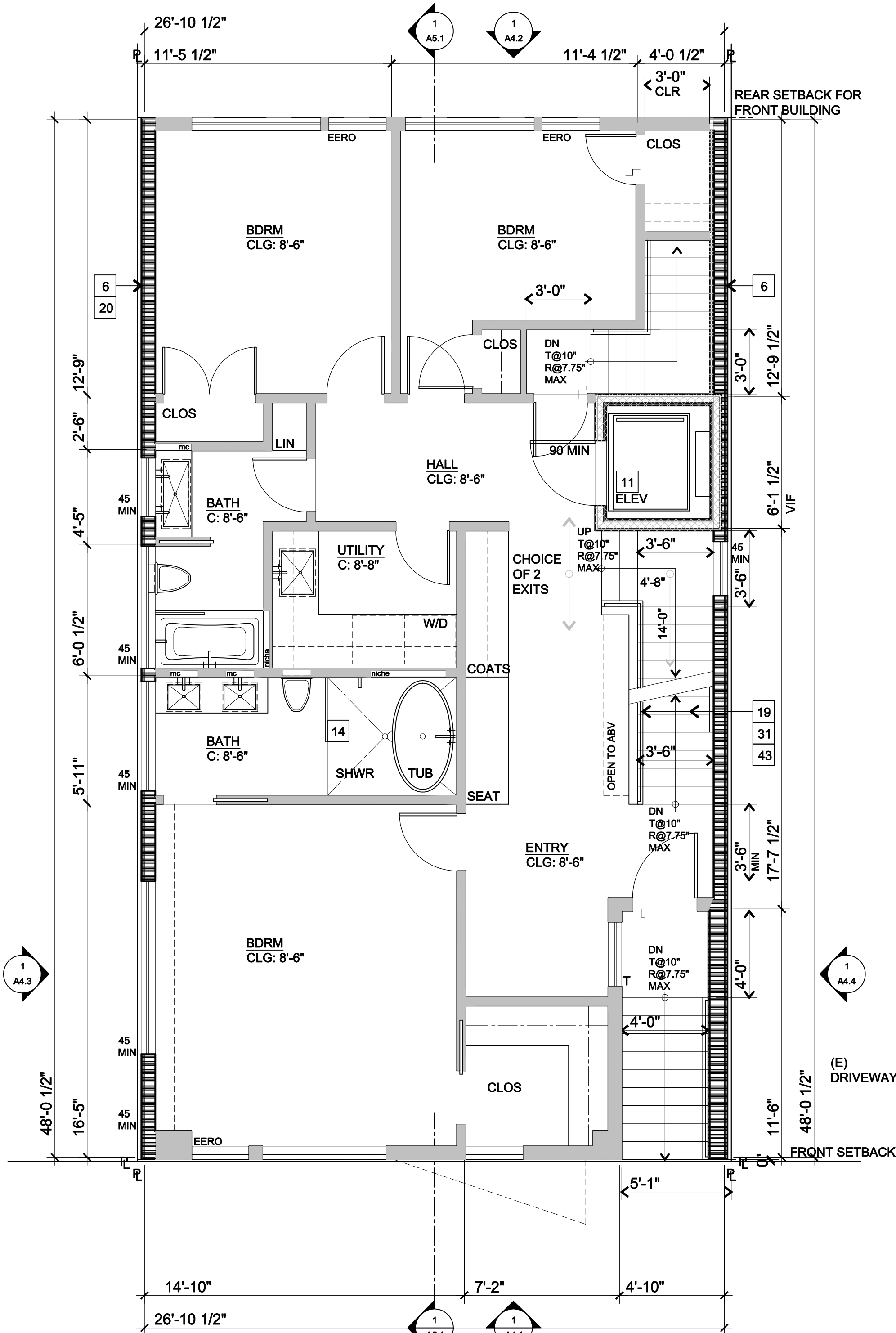
By CH
Date
Scale AS NOTED
Drawing No.

A1.1

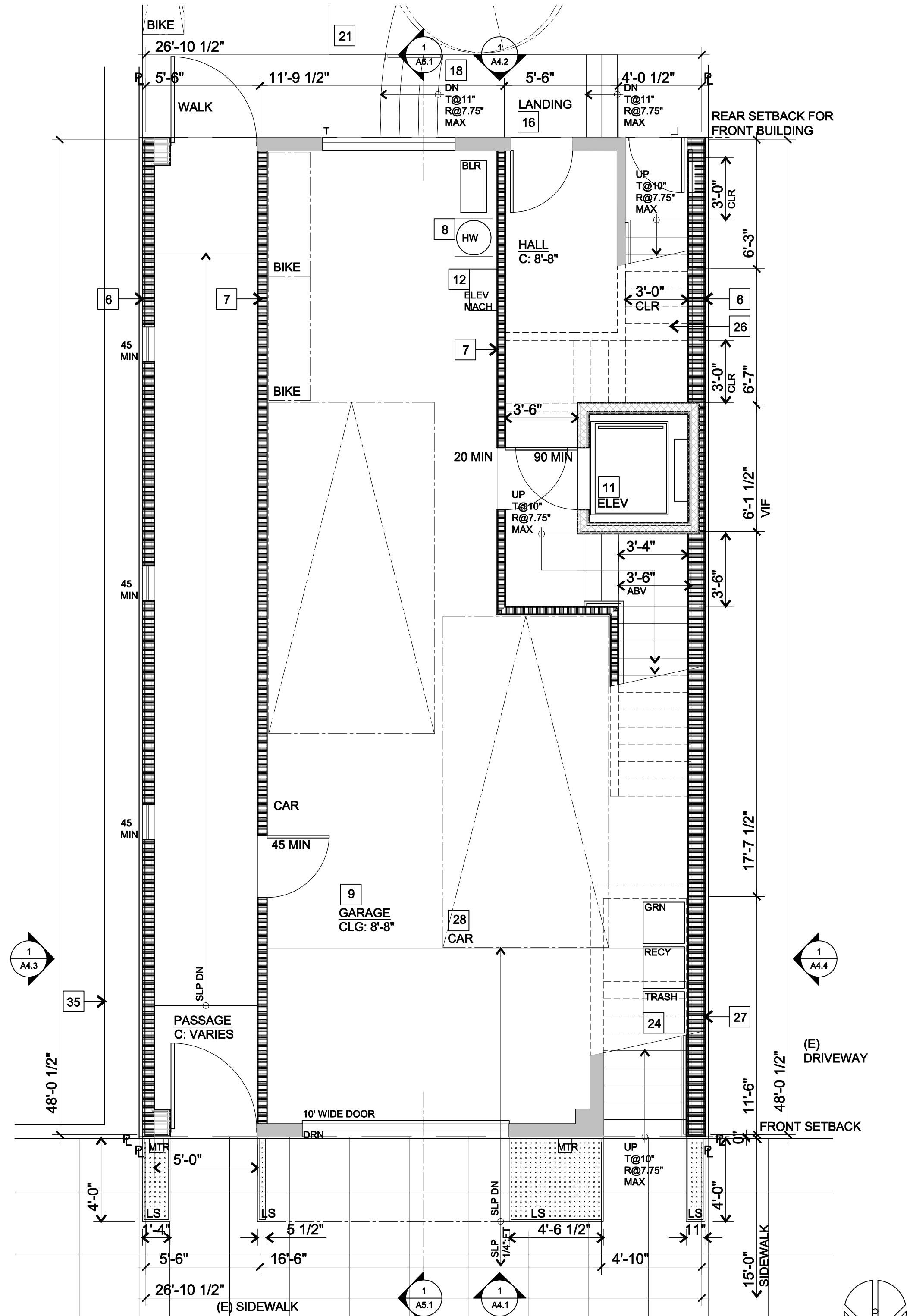


SHEET NOTES
(SEE A2.2 FOR CONTINUED NOTES)

- 1 FIELD VERIFY ALL (E) CONDITIONS. REPORT ANY DISCREPANCIES OR STRUCTURAL DEFICIENCIES TO ARCHITECT / ENGINEER
- 2 MODIFY (E) PL FENCE W/ REDWOOD FENCE @ REAR YARD AS NEC AT ADDITION. VIF W/ OWNER
- 3 PROVIDE BATT INSULATION AT BATHROOM WALLS. DISCUSS PROVIDING RUBBER ACOUSTIMAT ON WALLS FOR GREATER SOUND ISOLATION.
- 4 REVIEW ALL FINISH SPECIFICATION W/ OWNER, TYP (WOOD FLOORS, PLASTER WALLS AND CEILINGS)
- 5 GLAZING IN ANY PORTION OF A BUILDING WALL, WHERE THE BOTTOM OF THE GLAZING IS LESS THAN 60" ABOVE A STANDING SURFACE AND DRAIN INLET SHALL BE TEMPERED SAFETY GLAZING.
- 6 1-HR PROPERTY LINE WALL + WALLS WITHIN/PARALLEL 5'-0" OF PROPERTY LINE. CEMENT PLASTER O/ PAPER BACKED MTL LATH (SEE ELEVATIONS FOR LOCATION FOR PURA NFC SIDING) STRUCTURAL PYWD O/ 5/8" TYPE 'X' GYP BD O/ 2x STUDS @ 16" OC W/ 5/8" TYPE 'X' GYP BD @ INTERIOR SIDE. PROVIDE BATT INSULATION IN WALL PER TITLE 24 MANDATORY MEASURES.
- 7 1-HR WALL BETWEEN GARAGE / PASSAGE AND HABITABLE SPACE. PROVIDE 5/8" TYPE 'X' GYP BD O/ 2x STUDS @ 16" OC. REVIEW W/ OWNER OPTION TO PROVIDE 8" CONC CURB DOWELED INTO CONCRETE SLAB AT BOTTOM OF WALL. PROVIDE BATT INSULATION PER TITLE 24 MANDATORY MEASURES.
- 8 PROVIDE PLATFORM @ 18" ABV FIN FLR. PROVIDE SEISMIC STRAPS TO WATER HEATER.
- 9 1-HR ASSEMBLY BETWEEN GARAGE AND UNIT ABOVE AND BASEMENT: 3/4" HARDWD FLR O/ 3/4" PLY SUBFLR O/ 2x CLG JOISTS W/ 5/8" TYPE 'X' GYP BD AT CEILING. DISCUSS SOUND ISOLATION ISSUES WITH OWNER. OPTION TO PROVIDE SECOND LAYER SHEET ROCK WITH RESILIENT CHANNELS AND ACOUSTIC CAULKING. SSD
- 10 1-HR ROOF ASSEMBLY: CLASS 'B' 3-PLY B.U.R. O/ RIGID INSULATION SLOPED TO DRAIN O/ 1 1/8" PLYWD O/ ROOF JOISTS W/ 5/8" TYPE 'X' GYP BD @ UNDERSIDE FULL CLOSED CELL INSULATION PER TITLE 24 MANDATORY MEASURES. (SSD)
- 11 2-HR ELEVATOR SHAFT ASSEMBLY W/ 90 MINUTE DOOR. (2) LAYERS 5/8" TYPE 'X' GYP BD EACH SIDE O/ 2x STUDS @ 16" OC. PROVIDE PLYWOOD PER STRUCT ENGINEER. PROVIDE 1/2" CHANNELS AND GLASS BATT INSULATION PER DETAIL _A7.1 (PROVIDE 90 MINUTE DOOR W/ CLOSURE)
- 12 CONTRACTOR TO VIF W/ ELEVATOR MANUFACTURER ALL ELEVATOR AND ELEVATOR MACHINE ROOM REQUIREMENTS DETAILS, CLEARANCES, ETC AS NEC.
- 13 STONE/TILE FLOOR AT BATHROOM, VIF SPECIFICATION W/ OWNER.
- 14 PROVIDE 3/8" TEMPERED GLASS SHOWER ENCLOSURE W/ OUTSWING TEMPERED GLASS DOOR. DISCUSS FULL HEIGHT SIDE PANEL.
- 15 TOILETS MUST BE LOW-FLOW TYPE AND LOCATED IN A SPACE NOT LESS THAN 30" IN WIDTH AND HAVE A CLEAR SPACE OF NOT LESS THAN 24" IN FRONT
- 16 SLP PATIO 14'-4" FT MIN AWAY FROM BUILDING TO DRAIN
- 17 CONCRETE PATIO SSD FOR REQ SCORING/EXPANSION JOINTS. REVIEW STONE FINISH WITH OWNER. SSD FOR ANY SITE RETAINING.
- 18 CONCRETE STEPS ON GRADE. DISCUSS OPT FOR STONE CLADDING. SSD
- 19 PROVIDE 1 1/2" DIA HANDRAIL @ 36" ABV STAIR NOSE. RETURN ENDS TO WALL.
- 20 DISCUSS PROVIDING RUBBER ACCOUSTIMATTE AT WALLS: WHERE GREATER SOUND ISOLATION DESIRED. INSTALL PER MFR REQ'S
- 21 PROVIDE AREA DRAINS IN PATIO / YARD / LANDSCAPING. REVIEW IN FIELD W/ OWNER.
- 22 (N) ALUMINUM CLAD WOOD DOOR(S). SEE DOOR SCHEDULE SHEET A8.1
- 23 (N) ALUMINUM CLAD WINDOWS, SEE A8.1
- 24 PROVIDE ADEQUATE SPACE AND EQUAL ACCESS FOR STORAGE, COLLECTION AND LOADING OF COMPOSTABLE, RECYCLABLE AND LANDFILL MATERIALS
- 25 SOLID GUARDRAIL @ 42" ABV FIN FLR
- 26 PROVIDE 5/8" TYPE 'X' GYP BD AT UNDERSIDE OF ENCLOSED STAIRS (WALLS AND CLG)
- 27 SSD FOR FOUNDATION / SLAB / RETAINING WALL DRAINAGE. PROVIDE CONTINUOUS DRAINS, WATER PROOFING / MEMBRANE AT RETAINING AND PROPERTY LINE FOUNDATIONS. INSTALL PER MANUFACTURER'S RECOMMENDATION. PROVIDE PERFORATED DRAIN AT UNDER SLAB AT INTERIOR EDGE OF FOOTING, SSD
- 28 PROVIDE SHORT AND LONG TERM PARKING TO MEET REQUIREMENTS OF SF PLANNING CODE SEC. 155.1-2
- 29 PROVIDE SHOP DRAWINGS FOR ALL CABINETS, CLOSETS, CUSTOM FABRICATIONS FOR OWNER TO REVIEW / APPROVE. LOCATE ALL ELECTRICAL OUTLETS / SWITCHES ON CASEWORK ELEVATIONS FOR REVIEW / ALIGNMENT
- 30 WALL & FLOOR < 19% MOISTURE CONTENT BEFORE ENCLOSURE
- 31 3/4 HARDWOOD TREADS AND RISERS O/ STRUCTURAL PLYWD O/ 2x STRINGERS @ 16" OC, W/ 5/8" TYPE 'X' GYP BD AT UNDERSIDE, SSD. DISCUSS RUBBER ACCOUSTIMATTE TO DAMPEN SOUND
- 32 SEAL AROUND PIPE, CABLE, CONDUIT, AND OTHER OPENINGS IN EXTERIOR WALLS WITH CEMENT MORTAR OF DBI-APPROVED SIMILAR METHOD
- 33 USE PRODUCTS THAT COMPLY WITH THE EMISSION LIMIT REQUIREMENTS OF 4.504.2.1-5, 5.504.4.1-6 FOR ADHESIVES, SEALANTS, PAINTS, COATINGS, CARPET SYSTEMS INCLUDING CUSHIONS AND ADHESIVES, RESILIENT FLOORING (80% OF AREA), AND COMPOSITE WOOD PRODUCTS
- 34 MEET FLUSH/FLOW REQUIREMENTS FOR: TOILETS (1.28GPF): SHOWER HEADS (2.0GPM): LAVATORIES (1.2GPM, 0.5GPM PUBLIC/Common); KITCHEN FAUCETS (1.8GPM). RESIDENTIAL MAJOR IMPROVEMENT PROJECTS MUST UPGRADE ALL NON-COMPLIANT FIXTURES PER SF HOUSING CODE SEC. 12A10
- 35 VIF W/ ENGINEER IN FIELD ADJACENT NEIGHBORING PROPERTIES/ SCHOOL PLAYGROUND / RETAINING TO DETERMINE REQUIREMENTS FOR NEW / FOUNDATIONS
- 36 VELUX ALUMINUM SOLAR POWERED SKYLT

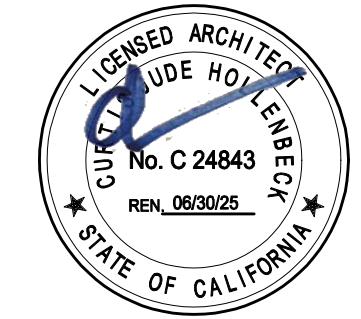


2
A2.1
PROPOSED FLR '2' PLAN
1/4"=1'-0"



1
A2.1
PROPOSED FLR '1' PLAN
1/4"=1'-0"

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

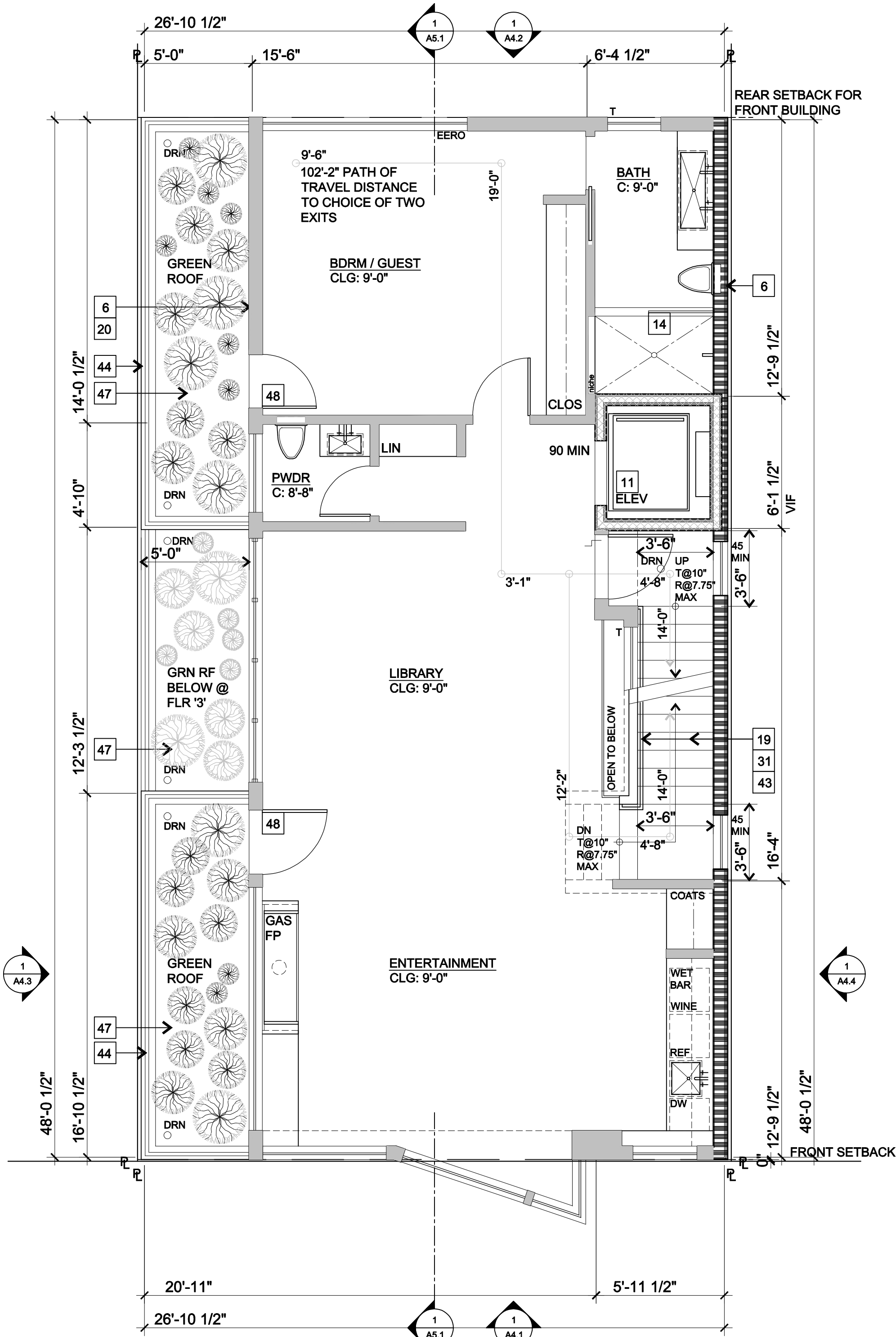
Drawing Title
PROPOSED
FLR '1' +
FLR '2' PLANS

By CH
Date
Scale AS NOTED
Drawing No.

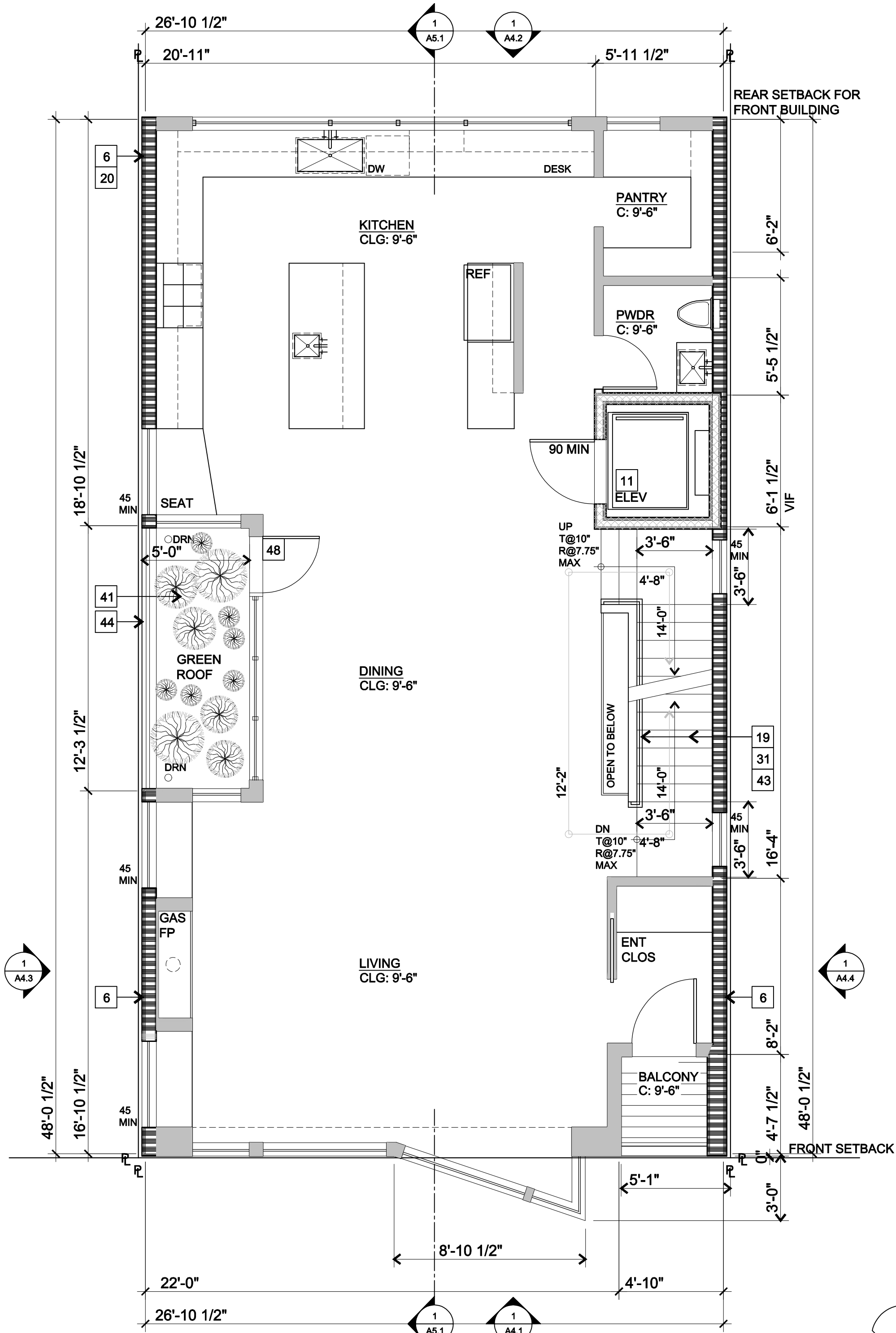
A2.1

SHEET NOTES CONTINUED
(SEE A2.1 FOR ADDITIONAL NOTES)

- 37 1-HR ROOF DECK ASSEMBLY: PROVIDE RDWD DECK O/ FIRE TREATED PRESSURE TREATED SLEEPERS AT 16" OC IN O/ DRAINAGE BOARD O/ WATERPROOF MEMBRANE O/ 1 1/8" PLYWD SLOPED 1/4"-FT TO DRAIN O/ 2x TJI, SSD W/ 5/8" TYP 'X' GYP BD AT UNDERSIDE. PROVIDE FULL CAVITY CLOSED CELL INSULATION PER TITLE 24. REVIEW ALL DECK / ROOF DRAINAGE IN FIELD. SLOPE 1/4"-FT SLOPE TO DRAIN. (REVIEW OPTION FOR IPE OR TILE O/ PEDESTAL SYSTEM INLIEU OF RDWD)
- 38 SOLAR ZONE AREA PER 4.201.2(b): GROSS ROOF AREA: 1,324 SQ.FT. x 15% = 198.6 SQ.FT. AREA PROVIDED: 246 SQ.FT. (OK)
- 39 PROVIDE PHOTOVOLTAIC SYSTEM OR THERMAL SYSTEM TO MEET THE PERFORMANCE CRITERIA PER 4.201.2(c) (SP) = SOLAR PANEL
- 40 HARDWOOD FLR (REVIEW ENGINEERED HARDWD) O/ PLYWD / PT 2x FLAT O/ BLDG PAPER O/ CONCRETE SLAB. PROVIDE RADIANT HEATING. REVIEW ASSEMBLY IN FIELD WITH MANUFACTURERS REQUIREMENTS.
- 41 1-HR ROOF DECK ASSEMBLY: PROVIDE TILE O/ PEDESTAL SYSTEM O/ DRAINAGE BOARD O/ WATERPROOF MEMBRANE O/ 1 1/8" PLYWD SLOPED 1/4"-FT TO DRAIN O/ 2x TJI, SSD W/ 5/8" TYP 'X' GYP BD AT UNDERSIDE. PROVIDE FULL CAVITY CLOSED CELL INSULATION PER TITLE 24. REVIEW ALL DECK / ROOF DRAINAGE IN FIELD. SLOPE 1/4"-FT SLOPE TO DRAIN. (REVIEW OPTION FOR IPE OR ALT)
- 42 TEMPERED GLASS GUARDRAIL @ 42" ABV FIN FLR. PROVIDE HARDWOOD TOP RAIL. (ALTERNATE FOR GALVANIZED FLAT BAR GUARDRAIL W/ LESS THAN 4" SPACE BETWEEN MEMBERS)
- 43 GALVANIZED FLAT BAR GUARDRAIL W/ LESS THAN 4" SPACE BETWEEN MEMBERS. PROVIDE IPE TOP RAIL W/ GALV PLATE LET IN. OWNER OPTION FOR TEMPERED GLASS GUARDRAIL SYSTEM @ STAIR
- 44 GALVANIZED FLAT BAR GUARDRAIL W/ LESS THAN 4" SPACE BETWEEN MEMBERS. (ALTERNATE FOR TEMPERED GLASS GUARDRAIL)
- 45 REVIEW SOUND ISOLATORS AT AIR CONDITIONING EQUIPMENT. SYSTEM TO BE DESIGN BUILD. SEE T-24
- 46 PROVIDE 1-HR GUARDWALL AT BBQ WITHIN 5'-0" OF PL. CEMENT PLASTER O/ PAPER BACKED MTL LATH STRUCTURAL PYWD O/ 5/8" TYPE 'X' GYP BD O/ 2x STUDS @ 16" OC (EACH SIDE) (WHERE NOT PROTECTED BY 1-HR PL WALL)
- 47 PROVIDE GREEN ROOF O/ 1-HR ROOF ASSEMBLY. INSTALL GREEN ROOF, DRAINAGE BOARD / WATER PROOFING PER MFR REQUIREMENTS.
- 48 PROVIDE DOOR ACCES TO GREEN ROOF MAINTENANCE. SEE DOOR SCHEDULE, A8.1
- 49 LANDSCAPE PLANTER WITH COPPER LINING AND DRAIN

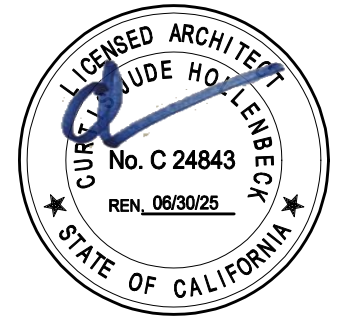


2 PROPOSED FLR '4' PLAN
A2.2 1/4"=1'-0"



1 PROPOSED FLR '3' PLAN
A2.2 1/4"=1'-0"

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
PROPOSED
FLR '3' +
FLR '4' PLANS

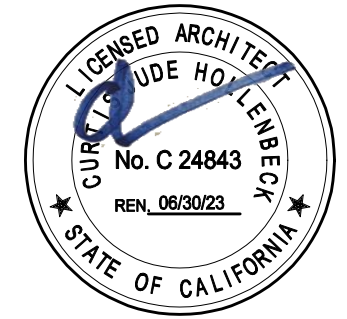
By CH
Date
Scale AS NOTED
Drawing No.

A2.2

SHEET NOTES

SEE A2.1 & A2.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

FIELD VERIFY ALL
EXISTING CONDITIONS.
REPORT ANY
DESCREANCIES TO
ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title

PROPOSED
ROOF PLAN

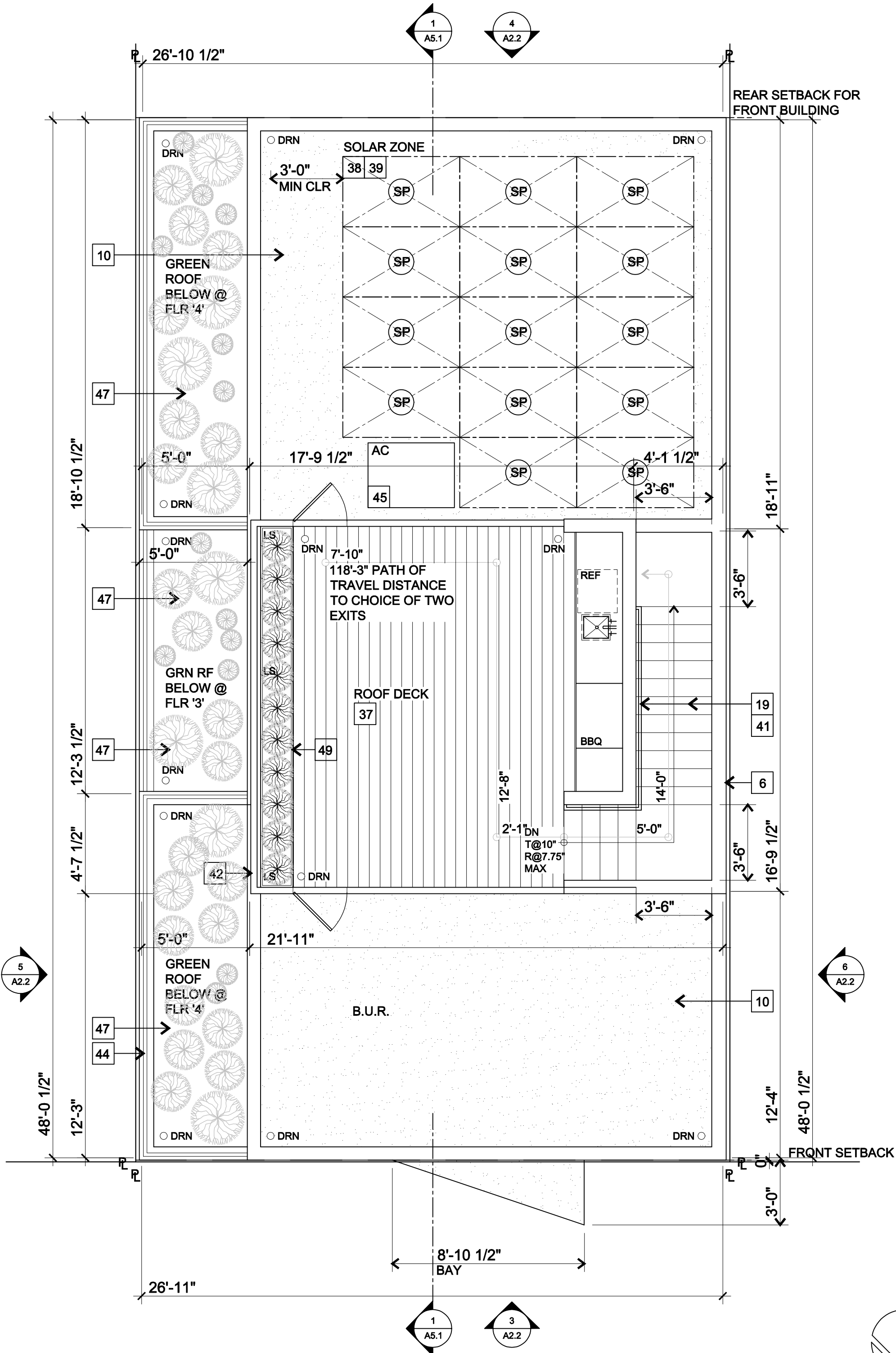
By CH

Date

Scale AS NOTED

Drawing No.

A2.3

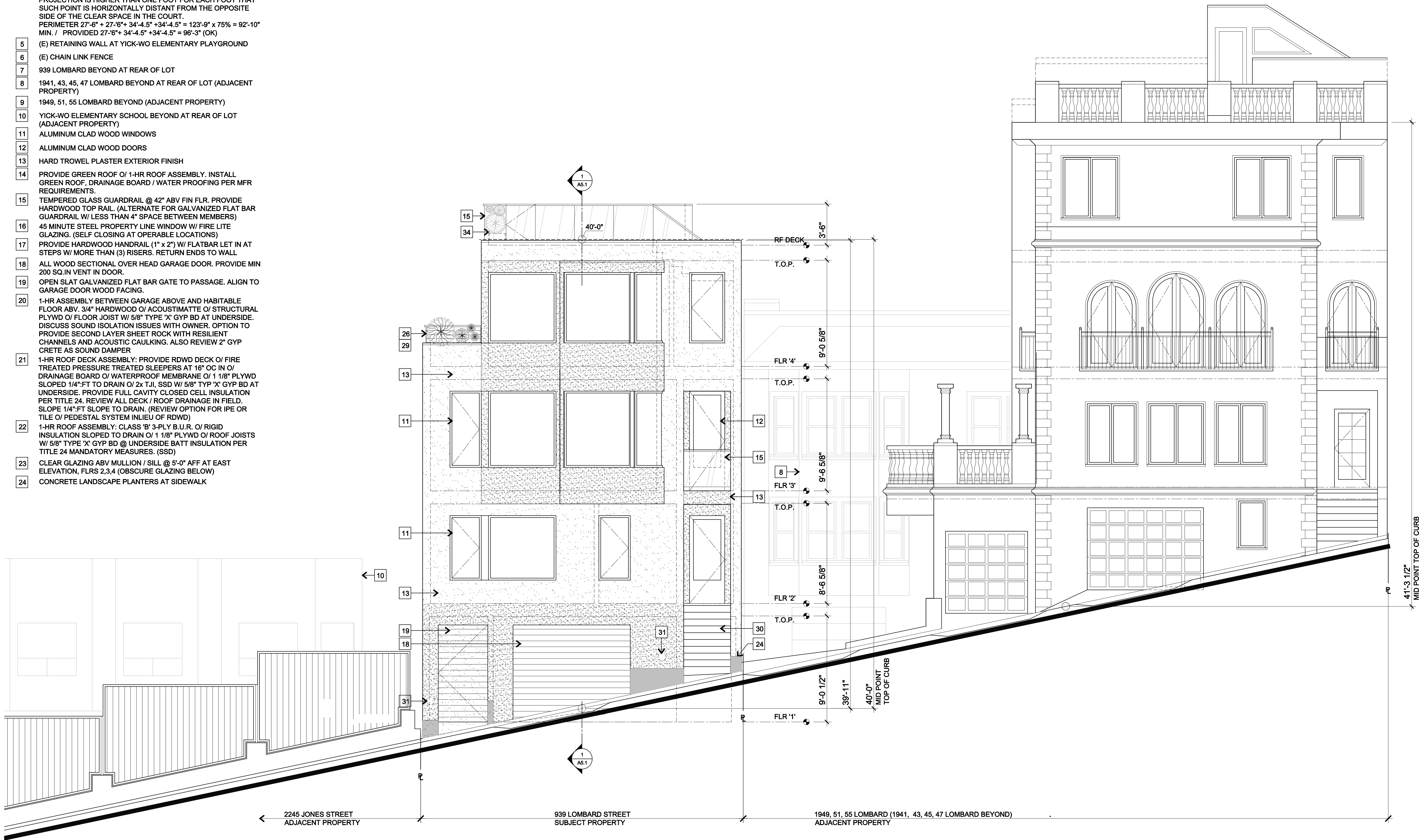


1
A2.3
PROPOSED ROOF PLAN
1/4"=1'-0"

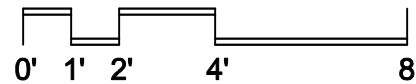
SHEET NOTES

(SHEET NOTES CONTINUED ON A4.2)

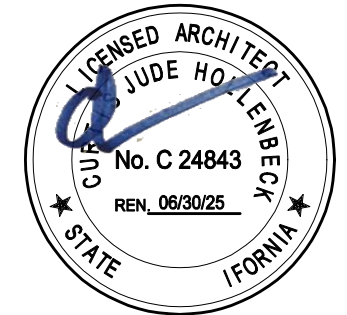
- 1
- FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO OWNER/ARCHITECT/ENGINEER.
- 2
- DASHED LINE INDICATES ADJACENT BUILDING IN FOREGROUND
- 3
- DASHED LINE INDICATES ADJACENT BUILDING OPENINGS IN FOREGROUND
- 4
- MEETS REQUIREMENT OF 135(g)(2) 'USE OF INNER COURT... THE HEIGHT OF OF WALLS AND PROJECTIONS ABOVE THE COURT ON AT LEAST THREE SIDES (OR 75% OF PERIMETER, WHICH EVER IS GREATER) SUCH THAT NO POINT ON ANY SUCH WALL OR PROJECTION IS HIGHER THAN ONE FOOT FOR EACH FOOT THAT SUCH POINT IS HORIZONTALLY DISTANT FROM THE OPPOSITE SIDE OF THE CLEAR SPACE IN THE COURT.
PERIMETER 27'-6" + 27'-6" + 34'-4.5" + 34'-4.5" = 123'-9" x 75% = 92'-10" MIN. / PROVIDED 27'-6" + 34'-4.5" + 34'-4.5" = 96'-3" (OK)
- 5
- (E) RETAINING WALL AT YICK-WO ELEMENTARY PLAYGROUND
- 6
- (E) CHAIN LINK FENCE
- 7
- 939 LOMBARD BEYOND AT REAR OF LOT
- 8
- 1941, 43, 45, 47 LOMBARD BEYOND AT REAR OF LOT (ADJACENT PROPERTY)
- 9
- 1949, 51, 55 LOMBARD BEYOND (ADJACENT PROPERTY)
- 10
- YICK-WO ELEMENTARY SCHOOL BEYOND AT REAR OF LOT (ADJACENT PROPERTY)
- 11
- ALUMINUM CLAD WOOD WINDOWS
- 12
- ALUMINUM CLAD WOOD DOORS
- 13
- HARD TROWEL PLASTER EXTERIOR FINISH
- 14
- PROVIDE GREEN ROOF O/ 1-HR ROOF ASSEMBLY. INSTALL GREEN ROOF, DRAINAGE BOARD / WATER PROOFING PER MFR REQUIREMENTS.
- 15
- TEMPERED GLASS GUARDRAIL @ 42" ABV FIN FLR. PROVIDE HARDWOOD TOP RAIL. (ALTERNATE FOR GALVANIZED FLAT BAR GUARDRAIL W/ LESS THAN 4" SPACE BETWEEN MEMBERS)
- 16
- 45 MINUTE STEEL PROPERTY LINE WINDOW W/ FIRE LITE GLAZING. (SELF CLOSING AT OPERABLE LOCATIONS)
- 17
- PROVIDE HARDWOOD HANDRAIL (1" x 2") W/ FLATBAR LET IN AT STEPS W/ MORE THAN (3) RISERS. RETURN ENDS TO WALL
- 18
- ALL WOOD SECTIONAL OVER HEAD GARAGE DOOR. PROVIDE MIN 200 SQ.IN VENT IN DOOR.
- 19
- OPEN SLAT GALVANIZED FLAT BAR GATE TO PASSAGE. ALIGN TO GARAGE DOOR WOOD FACING.
- 20
- 1-HR ASSEMBLY BETWEEN GARAGE ABOVE AND HABITABLE FLOOR ABV. 3/4" HARDWOOD O/ ACOUSTIMATTE O/ STRUCTURAL PLYWD O/ FLOOR JOIST W/ 5/8" TYPE 'X' GYP BD AT UNDERSIDE. DISCUSS SOUND ISOLATION ISSUES WITH OWNER. OPTION TO PROVIDE SECOND LAYER SHEET ROCK WITH RESILIENT CHANNELS AND ACOUSTIC CAULKING. ALSO REVIEW 2" GYP CRETE AS SOUND DAMPER
- 21
- 1-HR ROOF DECK ASSEMBLY: PROVIDE RDWD DECK O/ FIRE TREATED PRESSURE TREATED SLEEPERS AT 16" OC IN O/ DRAINAGE BOARD O/ WATERPROOF MEMBRANE O/ 1 1/8" PLYWD SLOPED 1/4"-FT TO DRAIN O/ 2x TJI, SSD W/ 5/8" TYP 'X' GYP BD AT UNDERSIDE. PROVIDE FULL CAVITY CLOSED CELL INSULATION PER TITLE 24. REVIEW ALL DECK / ROOF DRAINAGE IN FIELD. SLOPE 1/4"-FT SLOPE TO DRAIN. (REVIEW OPTION FOR IPE OR TILE O/ PEDESTAL SYSTEM INLIEU OF RDWD)
- 22
- 1-HR ROOF ASSEMBLY: CLASS 'B' 3-PLY B.U.R. O/ RIGID INSULATION SLOPED TO DRAIN O/ 1 1/8" PLYWD O/ ROOF JOISTS W/ 5/8" TYPE 'X' GYP BD @ UNDERSIDE BATT INSULATION PER TITLE 24 MANDATORY MEASURES. (SSD)
- 23
- CLEAR GLAZING ABV MULLION / SILL @ 5'-0" AFF AT EAST ELEVATION, FLRS 2,3,4 (OBSCURE GLAZING BELOW)
- 24
- CONCRETE LANDSCAPE PLANTERS AT SIDEWALK



1
A4.2
PROPOSED FRONT ELEVATION (NORTH)
1/4"=1'-0"



Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
PROPOSED
FRONT
ELEVATION
(NORTH)

By CH
Date
Scale AS NOTED
Drawing No.

A4.1

SHEET NOTES

(SHEET NOTES CONTINUED ON A4.1)

- 25

CONCRETE PATIO W/ STEPS TO GRADE. REVIEW STONE FINISH WITH OWNER. SSD FOR ANY SITE RETAINING. SLP PATIO 1/4":FT MIN AWAY FROM BUILDING TO DRAIN
- 26

GALVANIZED FLAT BAR GUARDRAIL W/ LESS THAN 4" SPACE BETWEEN MEMBERS. PROVIDE IPE TOP RAIL W/ GALV PLATE LET IN (ALTERNATE OK FOR TEMPERED GLASS GUARD)
- 27

SOLAR ZONE / SOLAR PANELS
- 28

BAY IN FORGROUND
- 29

GREEN ROOF BYND O/ 1-HR ROOF ASSEMBLY. INSTALL GREEN ROOF, DRAINAGE BOARD / WATER PROOFING PER MFR REQUIREMENTS.
- 30

STONE / TERAZZO STEPS
- 31

METER LOCATIONS TO BE CONFIRMED W/ PG&E
- 32

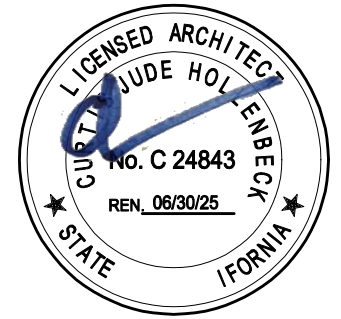
YICK-WO ELEMENTARY SCHOOL STAIR/ PL WALL IN FOREGROUND
- 33

PROVIDE ALUMINUM CLAD WD DOOR ACCES TO GREEN ROOF MAINTENANCE. SEE DOOR SCHEDULE, A8.1
- 34

LANDSCAPE PLANTER WITH COPPER LINING AND DRAIN
- 35

PURA NFC SIDING (NATURAL FIBER CORE) CERTIFIED BY PEFC STANDARD. REVIEW COLOR SPCE W/ OWNER IN FIELD

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	

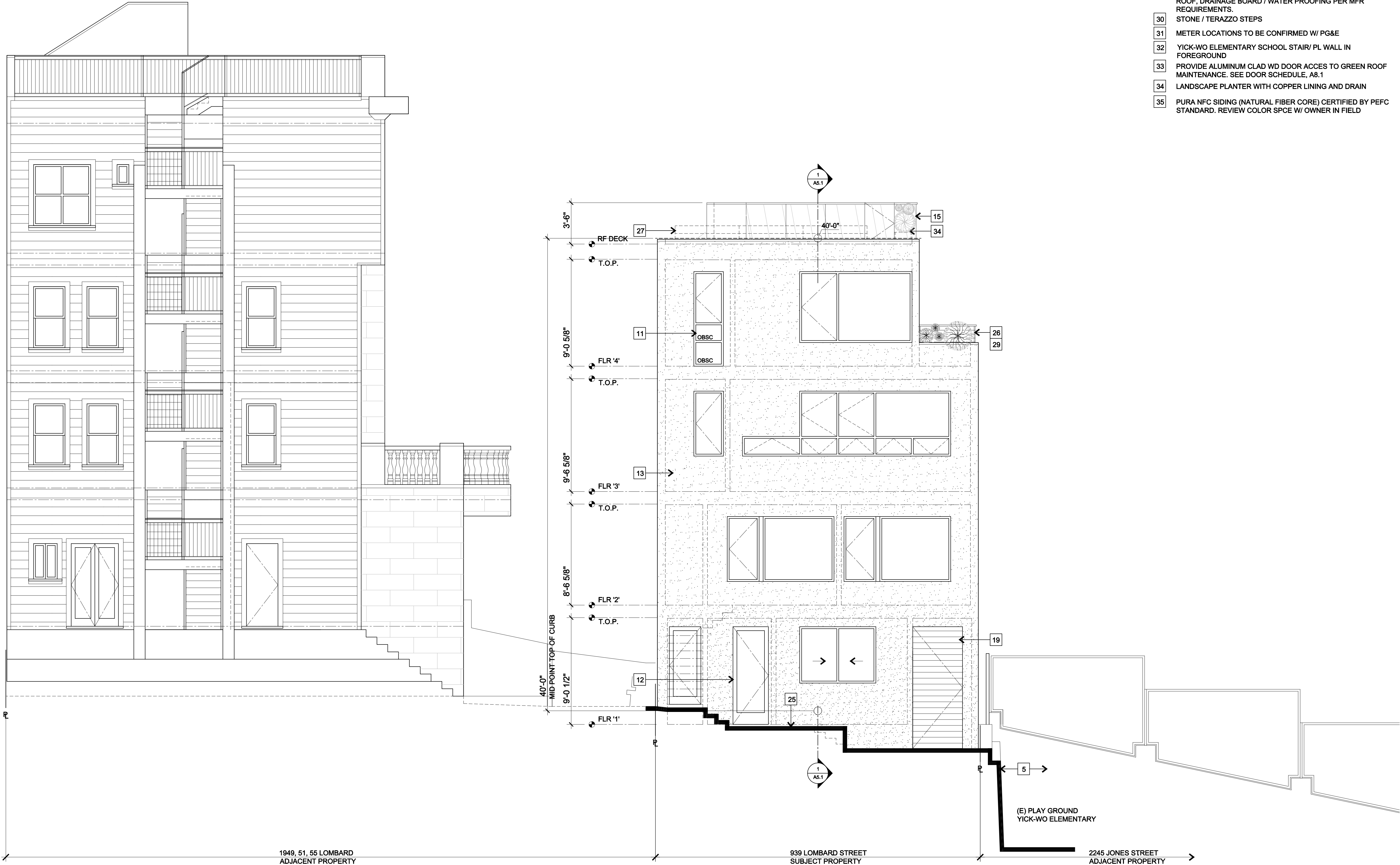
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

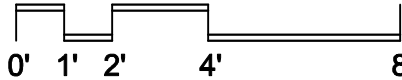
PROPOSED
REAR
ELEVATION
(SOUTH)

By CH
Date
Scale AS NOTED
Drawing No.

A4.2



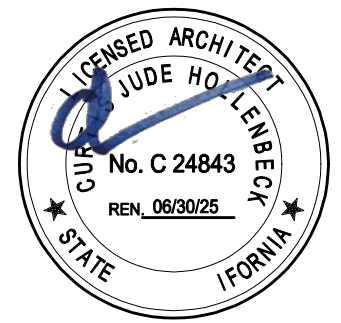
1
A4.2
PROPOSED REAR ELEVATION (SOUTH)
1/4"=1'-0"



SHEET NOTES

SEE A4.1 & A4.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



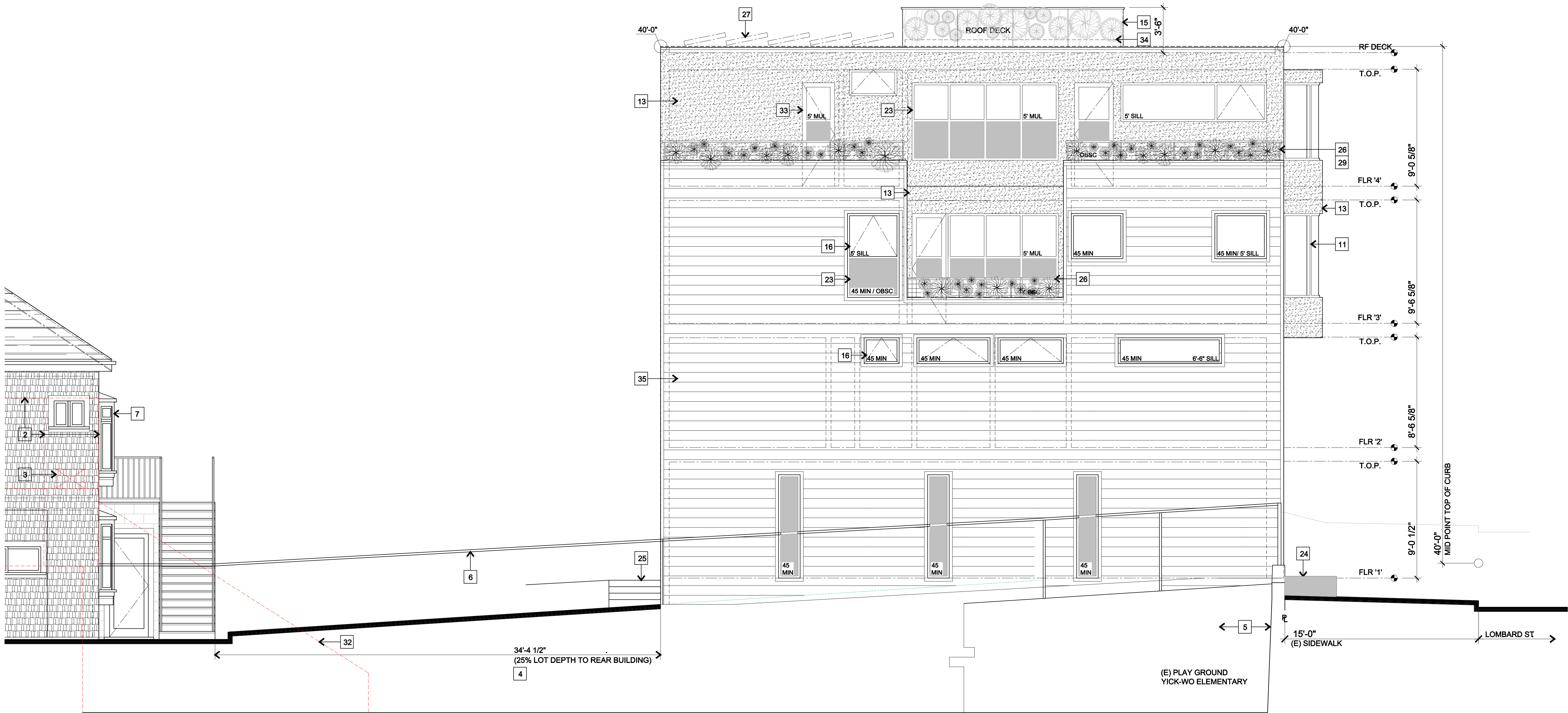
05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

PROPOSED SIDE
SIDE
ELEVATION
(EAST)

By CH
Date
Scale AS NOTED
Drawing No.

A4.3

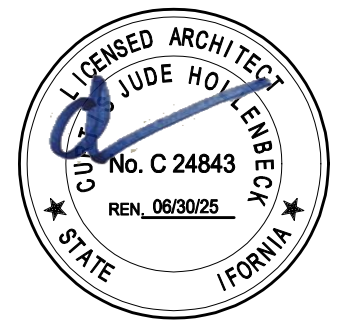


1
A4.3
PROPOSED SIDE ELEVATION (EAST)
1/4"=1'-0"

SHEET NOTES

SEE A4.1 & A4.2 FOR KEYED SHEET NOTES

Curtis Hollenbeck
Architect
575 Columbus Ave, #2
San Francisco, CA 94133
p: 415.544.9883
matteryard@msn.com



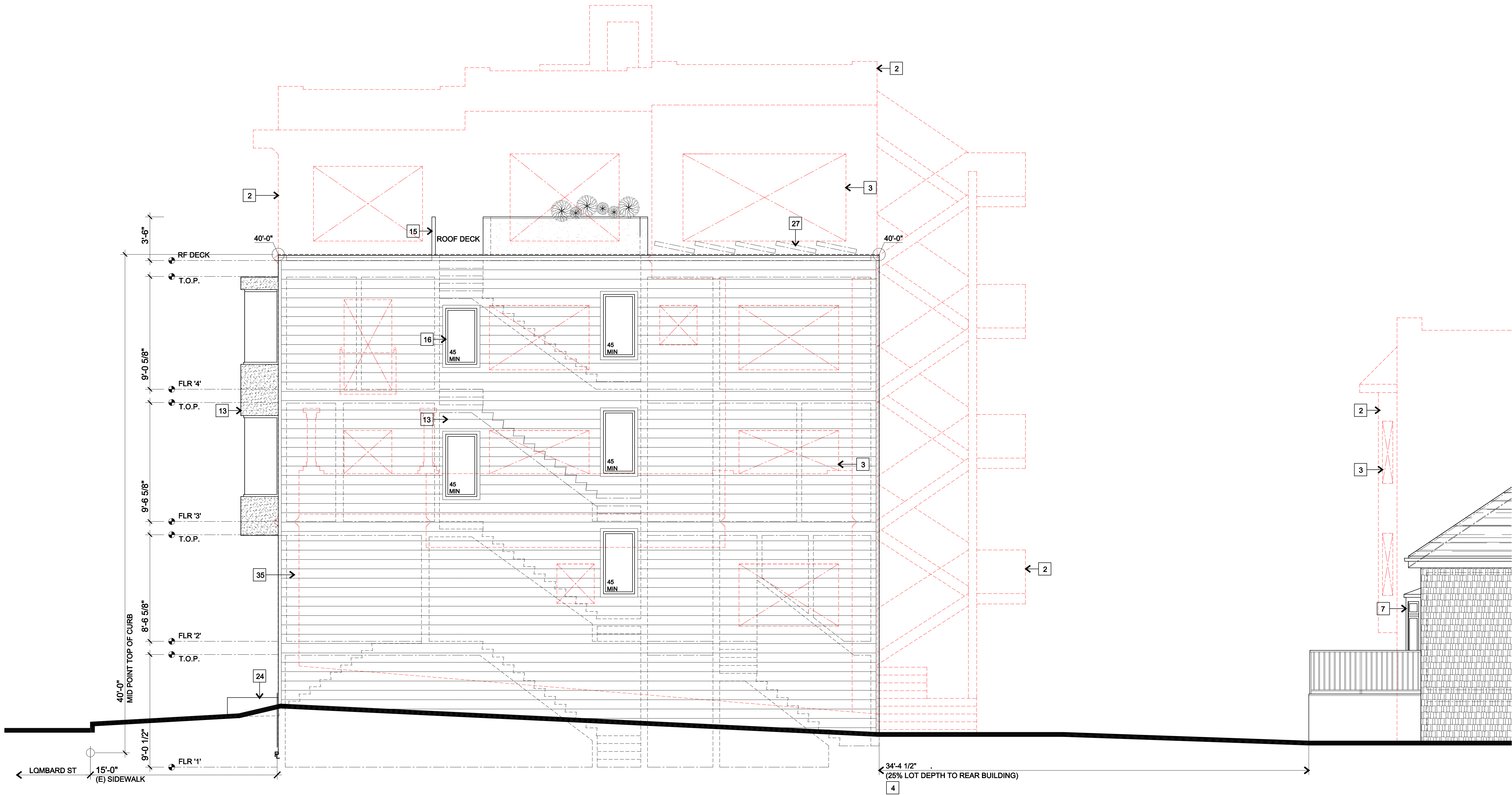
05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DESCREPARNCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

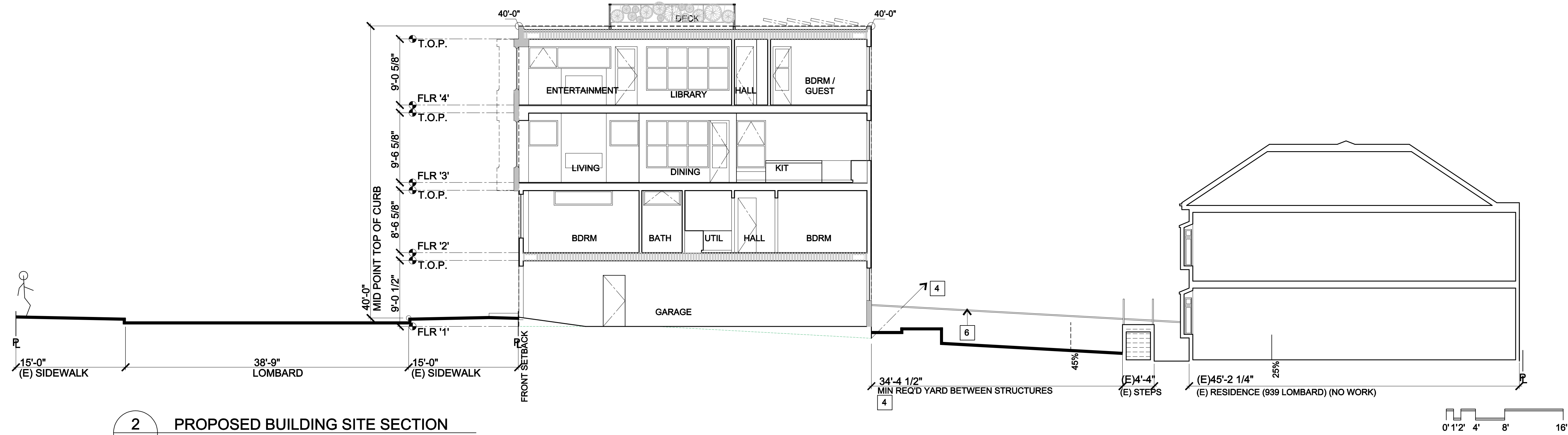
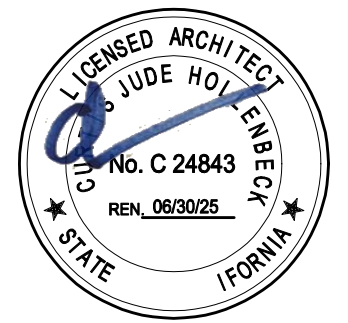
Drawing Title
PROPOSED
SIDE
ELEVATION
(WEST)

By CH
Date
Scale AS NOTED
Drawing No.

A4.4



1
A4.4
PROPOSED SIDE ELEVATION (WEST)
1/4"=1'-0"



2 PROPOSED BUILDING SITE SECTION
A5.1 1/4"=1'-0"

SHEET NOTES
SEE A4.1 & A4.2 FOR KEYED SHEET NOTES

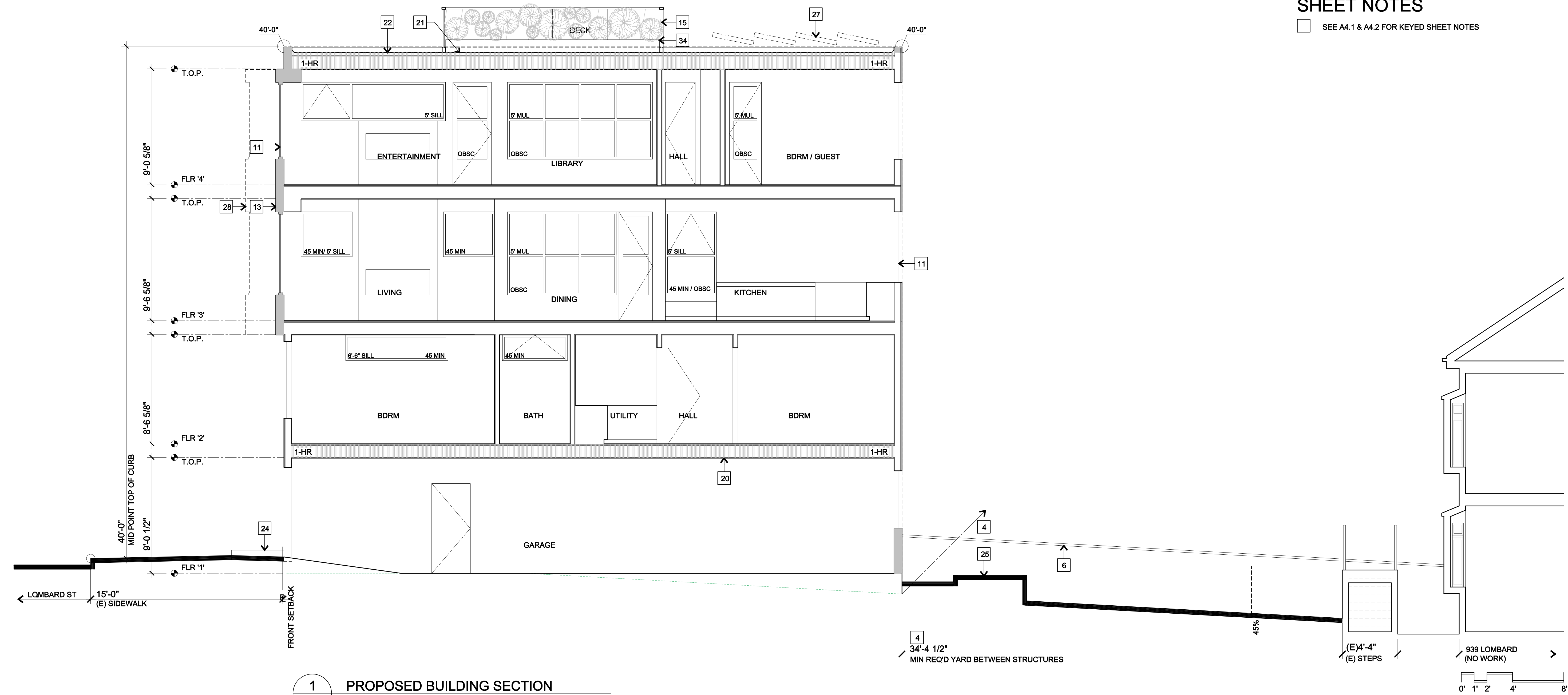
05/30/23	N. SP COM REV
02/01/23	PC1 COMM
07/09/21	SITE PERMIT
07/02/21	N PRE-APP
Revisions	
FIELD VERIFY ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES TO ARCHITECT.	

939 LOMBARD ST
SAN FRANCISCO, CALIFORNIA
LOT 021 / BLOCK 0072

Drawing Title
PROPOSED BUILDING / SITE SECTION

By CH
Date
Scale AS NOTED
Drawing No.

A5.1



1 PROPOSED BUILDING SECTION
A5.1 1/4"=1'-0"

EXHIBIT B
Geotech Report

**REPORT
GEOTECHNICAL INVESTIGATION
Planned Improvements At
939 Lombard Street
San Francisco, California**

Prepared for:

Mr. Enda Keane
C/o: Byrne's Special Works LLC
51 Bernard Street
San Francisco, CA 94133

Prepared by:

H. Allen Gruen
Geotechnical Engineer
360 Grand Avenue, # 262
Oakland, California 94610
(510) 455-0321

Project Number: 22-5132



H. Allen Gruen

H. Allen Gruen, C.E., G.E.
Registered Geotechnical Engineer No. 2147

October 8, 2022

TABLE OF CONTENTS

INTRODUCTION	1
PURPOSE	1
SCOPE	1
PROPOSED IMPROVEMENTS.....	1
FINDINGS.....	2
SITE DESCRIPTION	2
GEOLOGIC CONDITIONS	2
EARTH MATERIALS.....	2
GROUNDWATER.....	2
CONCLUSIONS.....	3
GENERAL	3
FOUNDATION SUPPORT	3
EXCAVATION OF BEDROCK.....	3
TEMPORARY SLOPES AND UNDERMINING OF EXISTING STRUCTURES.....	3
GEOLOGIC HAZARDS	4
<i>Faulting.....</i>	<i>4</i>
<i>Earthquake Shaking.....</i>	<i>4</i>
<i>Liquefaction.....</i>	<i>4</i>
<i>Lateral Spreading.....</i>	<i>5</i>
<i>Densification.....</i>	<i>5</i>
<i>Landsliding.....</i>	<i>5</i>
RECOMMENDATIONS	6
SITE PREPARATION AND GRADING	6
<i>General</i>	<i>6</i>
<i>Clearing.....</i>	<i>6</i>
<i>Excavation of Bedrock.....</i>	<i>6</i>
<i>Overexcavation.....</i>	<i>7</i>
<i>Subgrade Preparation</i>	<i>7</i>
<i>Material for Fill.....</i>	<i>7</i>
<i>Compaction of Fill.....</i>	<i>7</i>
<i>Underpinning.....</i>	<i>7</i>
<i>Temporary Slopes</i>	<i>8</i>
<i>Finished Slopes.....</i>	<i>8</i>
SEISMIC DESIGN	8
FOUNDATIONS	8
<i>General</i>	<i>8</i>
<i>Spread Footings.....</i>	<i>9</i>
<i>Drilled Piers</i>	<i>9</i>

TABLE OF CONTENTS, CONTINUED

<i>Mat Foundation</i>	10
RETAINING WALLS	11
SLAB-ON-GRADE FLOORS.....	13
SITE DRAINAGE	13
SUPPLEMENTAL SERVICES	14
LIMITATIONS	14
APPENDIX A	A-1
LIST OF PLATES	A-1
APPENDIX B	B-1
LIST OF REFERENCES	B-1
APPENDIX C	C-1
FIELD EXPLORATION	C-1
APPENDIX D	D-1
DISTRIBUTION.....	D-1

INTRODUCTION

Purpose

A geotechnical investigation has been completed for the proposed improvements at 939 Lombard Street in San Francisco, California. The purposes of this study have been to gather information on the nature, distribution, and characteristics of the earth materials at the site, assess geologic hazards, and to provide geotechnical design criteria for the planned improvements.

Scope

The scope of my services was outlined in the Proposal and Professional Service Agreement dated September 7, 2022. My investigation included a reconnaissance of the site and surrounding vicinity; sampling and logging one test boring to practical drilling refusal at a maximum depth of 6-½ feet below the ground surface; a review of published geotechnical and geologic data pertinent to the project area; geotechnical interpretation and engineering analyses; and preparation of this report.

This report contains the results of my investigation, including findings regarding site, soil, geologic, and groundwater conditions; conclusions pertaining to geotechnical considerations such as weak soils, settlement, and construction considerations; conclusions regarding exposure to geologic hazards, including faulting, ground shaking, liquefaction, lateral spreading, and slope stability; and geotechnical recommendations for design of the proposed project including site preparation and grading, foundations, retaining walls, slabs on grade, and geotechnical drainage.

Pertinent exhibits appear in Appendix A. The location of the test boring is depicted relative to site features on Plate 1, Boring Location Map. The log of the test boring is displayed on Plate 2. Explanations of the symbols and other codes used on the log are presented on Plate 3, Soil Classification Chart and Key to Test Data. Bedrock is described in accordance with the engineering geology rock terms presented on Plate 4.

References consulted during the course of this investigation are listed in Appendix B. Details regarding the field exploration program appear in Appendix C.

Proposed Improvements

It is my understanding that the project will consist of the design and construction of a 4-story, single family house at the front portion of the lot. No other project details are known at this time.

FINDINGS

Site Description

The subject site is located south of Lombard Street between Jones and Leavenworth Streets, in San Francisco, California. At the time of my investigation, the subject site was occupied by a residential structure with appurtenant flatwork and yard areas.

Geologic Conditions

The site is within the Coast Ranges Geomorphic Province, which includes the San Francisco Bay and the northwest-trending mountains that parallel the coast of California. Tectonic forces resulting in extensive folding and faulting of the area formed these features. The oldest rocks in the area include sedimentary, volcanic, and metamorphic rocks of the Franciscan Complex. This unit is Jurassic to Cretaceous in age and forms the basement rocks in the region.

Locally, the site lies within the USGS San Francisco North Quadrangle. Schlocker (1958) has mapped the area of the site as being underlain by thick-bedded massive graywacke sandstone inter-bedded with thin layers of shale and fine-grained sandstone.

Earth Materials

My boring at the subject site encountered medium dense to very dense, clayey sand with gravel to the maximum depth explored of 6-½ feet. The earth materials below 4-feet appeared to be similar to conglomerate bedrock.

Groundwater

Free groundwater was not encountered in the boring drilled at the subject site to the maximum depth explored of 6-½ feet. It is my opinion that the free groundwater table will be below the planned site excavations. I anticipate that the depth to the free water table will vary with time and that zones of seepage may be encountered near the ground surface following rain or irrigation upslope of the subject site.

CONCLUSIONS

General

On the basis of my investigation and literature review, I conclude that the site is suitable for support of the planned improvements. The primary geotechnical concerns are founding improvements in competent earth materials, excavation of bedrock, support of temporary slopes and adjacent improvements, and seismic shaking and related effects during earthquakes. These items are addressed below.

Foundation Support

It is my opinion that the planned improvements may be supported on a conventional spread footing foundation bearing in competent earth materials. If the spread footings would cover a substantial portion of the building area, a mat foundation may be used as an alternative to reduce forming and steel bending costs. The Structural Engineer may also choose to use drilled piers to support improvements, or for shoring and underpinning, if required. Detailed foundation design criteria are presented later in this report.

I estimate that improvements supported on foundations designed and constructed in accordance with my recommendations will experience post-construction total settlements from static loading of less than 1 inch with differential settlements of less than ½ inch over a 50-foot span.

Excavation of Bedrock

Bedrock was encountered in the boring at the subject site at a depth of about 4 feet. The upper portion of the bedrock is fractured and will generally excavate with conventional equipment. During the excavation operations, additional effort may be required to remove some of the bedrock materials underlying the site, particularly in the lower portions of the excavations. Since the bedrock may locally be massive, localized hoe-ram work and/or hand work with jackhammers may be necessary to break down massive blocks and large boulders.

Temporary Slopes and Undermining of Existing Structures

Temporary slopes will be necessary during the planned site excavations. In order to safely develop the site, temporary slopes will need to be laid back in conformance with OSHA standards at safe inclinations, or temporary shoring will have to be installed. The contractor may choose to excavate test pits to evaluate site earth materials and the need for temporary shoring.

If excavations undermine or remove support from the existing or adjacent structures, it may be necessary to underpin those structures. Care should be taken to provide adequate shoring or underpinning to support the affected improvements as a result of the loss of support.

Temporary slopes and support of structures during construction are the responsibility of the contractor. H. Allen Gruen, Geotechnical Engineer is available to provide geotechnical consultation regarding stability of excavations and support of improvements.

Geologic Hazards

Faulting

The property does not lie within an Alquist-Priolo Earthquake Fault Zone as defined by the California Division of Mines and Geology. The closest mapped active fault in the vicinity of the site is the San Andreas Fault, located about 9 miles southwest of the site (CDMG, 1998). No active faults are shown crossing the site on reviewed published maps, nor did I observe evidence of active faulting during my investigation. Therefore I conclude that the potential risk for damage to improvements at the site due to surface rupture from faults to be low.

Earthquake Shaking

Earthquake shaking results from the sudden release of seismic energy during displacement along a fault. During an earthquake, the intensity of ground shaking at a particular location will depend on a number of factors including the earthquake magnitude, the distance to the zone of energy release, and local geologic conditions. I expect that the site will be exposed to strong earthquake shaking during the life of the improvements. The recommendations contained in the applicable Building Code should be followed for reducing potential damage to the improvements from earthquake shaking.

Liquefaction

Liquefaction results in a loss of shear strength and potential volume reduction in saturated granular soils below the groundwater level from earthquake shaking. The occurrence of this phenomenon is dependent on many factors, including the intensity and duration of ground shaking, soil density and particle size distribution, and position of the groundwater table (Seed and Idriss, 1982). The site does not lie within a liquefaction potential zone as mapped by the California Division of Mines and Geology for the City and County of San Francisco (CDMG, 2000). In addition, the earth materials encountered in the boring at the subject site have a low potential for liquefaction due to the lack of free groundwater and the high cohesive fines contents or bedrock being present. Therefore, it is my opinion that there is a low potential for damage to the planned improvements from liquefaction.

Lateral Spreading

Lateral spreading or lurching is generally caused by liquefaction of marginally stable soils underlying gentle slopes. In these cases, the surficial soils move toward an unsupported face, such as an incised channel, river, or body of water. Because the site has a low potential for liquefaction, I judge that there is a low risk for damage of the improvements from seismically-induced lateral spreading.

Densification

Densification can occur in clean, loose granular soils during earthquake shaking, resulting in seismic settlement and differential compaction. It is my opinion that earth materials subject to seismic densification do not exist beneath the site in sufficient thickness to adversely impact the planned improvements.

Landsliding

The site is mapped within an area of potential landslide hazard by URS/John A. Blume & Associates (1974). Qualifying projects may be subject to the Slope Protection Act (San Francisco Building Code 106A.4.1.4). The San Francisco Building Code (106A.4.1.4.3) states construction work that is subject to these requirements includes the construction of new buildings or structures having over 1000 square feet of new projected roof area and horizontal or vertical additions having over 1000 square feet of new projected roof area. In addition, these requirements apply to the following activity or activities, if, in the opinion of the Director, the proposed work may have a substantial impact on the slope stability of any property: shoring, underpinning, excavation or retaining wall work; grading, including excavation or fill, of over 50 cubic yards of earth materials; or any other construction activity.

The geologic map of the site vicinity reviewed for this study (Schlocker, 1958) did not show landslides at the subject site. In addition, a map prepared by the California Division of Mines and Geology for the City and County of San Francisco (CDMG, 2000) does not indicate earthquake induced landsliding at the subject site. During his site reconnaissance, my field engineer did not observe evidence of active slope instability at the subject site. Therefore, it is my opinion that the potential for damage to the improvements from slope instability at the site is low provided the recommendations presented in this report are incorporated into the design and construction of the project.

RECOMMENDATIONS

Site Preparation and Grading

General

The thickness of soil blanketing the site and the depth to bedrock can vary across the site. Design criteria are provided for foundations and retaining walls in soil and rock. Soil design criteria may be assumed within 4 feet of the current ground surface and rock design criteria may be assumed more than 4 feet below the current ground surface. However, if during construction, soil is observed more than 4 feet below the ground surface at foundation levels, the foundations will need to be deepened to bear in rock, or the foundations will need to be redesigned using the soil values. Likewise, if more than 4 feet of soil is being retained by subsurface walls, the portions of walls supporting the additional soil will need to be designed using the lateral earth pressures for soil conditions.

I assume that the planned improvements will be constructed at or below existing site grades. If site grades are raised by filling more than about 1 foot, I should be retained to calculate the impact of filling on slope stability, site settlements, and foundations.

Clearing

Areas to be graded should be cleared of debris, deleterious materials, and vegetation, and then stripped of the upper soils containing root growth and organic matter. I anticipate that the required depth of stripping will generally be less than 2 inches. Deeper stripping may be required to remove localized concentrations of organic matter, such as tree roots. The cleared materials should be removed from the site; strippings may be stockpiled for reuse as topsoil in landscaping areas or should be hauled off site.

Excavation of Bedrock

Bedrock was encountered in the boring at the subject site at a depth of about 4 feet. The upper portion of the bedrock is fractured and will generally excavate with conventional equipment. During the excavation operations, additional effort may be required to remove some of the bedrock materials underlying the site, particularly in the lower portions of the excavations. Since the bedrock may locally be massive, localized hoe-ram work and/or hand work with jackhammers may be necessary to break down massive blocks and large boulders.

Overexcavation

Loose, porous soils and topsoil, if encountered, should be overexcavated in areas designated for placement of future engineered fill or support of improvements. Difficulty in achieving the recommended minimum degree of compaction described below should be used as a field criterion by the geotechnical engineer to identify areas of weak soils that should be removed and replaced as engineered fill. The depth and extent of excavation should be approved in the field by the geotechnical engineer prior to placement of fill or improvements.

Subgrade Preparation

Exposed soils designated to receive engineered fill should be cut to form a level bench, scarified to a minimum depth of 6 inches, brought to at least optimum moisture content, and compacted to at least 90 percent relative compaction, in accordance with ASTM test designation D 1557.

Material for Fill

It is anticipated that the on-site soil will be suitable for reuse as fill provided that lumps greater than 6 inches in largest dimension and perishable materials are removed, and that the fill materials are approved by the geotechnical engineer prior to use.

Fill materials brought onto the site should be free of vegetative mater and deleterious debris, and should be primarily granular. The geotechnical engineer should approve fill material prior to trucking it to the site.

Compaction of Fill

Fill should be placed in level lifts not exceeding 8 inches in loose thickness. Each lift should be brought to at least the optimum moisture content and compacted to at least 90 percent relative compaction, in accordance with ASTM test designation D 1557.

Underpinning

During excavations adjacent to improvements, care should be taken to adequately support the existing improvements. When excavating below the level of foundations supporting existing structures, some form of underpinning may be required where excavations extend below an imaginary plane sloping at 1H:1V downward and outward from the edge of the existing footings. All temporary underpinning design and construction are the responsibility of the contractor. H. Allen Gruen, Geotechnical Engineer is available to provide consultation regarding underpinning adjacent improvements.

Temporary Slopes

Temporary slopes will be necessary during the planned site excavations. In order to safely develop the site, temporary slopes will need to be laid back in conformance with OSHA standards at safe inclinations, or temporary shoring will have to be installed. All temporary slopes and shoring design are the responsibility of the contractor. H. Allen Gruen, Geotechnical Engineer is available to provide consultation regarding stability and support of temporary slopes during construction.

Finished Slopes

In general, finished cut and fill slopes in soil should be constructed at an inclination not exceeding 2:1 (horizontal:vertical). Routine maintenance of slopes should be anticipated. The tops of cut slopes should be rounded and compacted to reduce the risk of erosion. Fill and cut slopes should be planted with vegetation to resist erosion, or protected from erosion by other measures, upon completion of grading. Surface water runoff should be intercepted and diverted away from the tops and toes of cut and fill slopes by using berms or ditches.

Seismic Design

If the improvements are designed using the 2019 California Building Code with San Francisco Amendments, the following parameters apply:

Design Code Reference Document: ASCE7-16

Risk Category II

Site Class C – Very Dense Soil and Soft Rock

$S_s = 1.5$

$S_1 = 0.6$

$S_{Ms} = 1.8$

$S_{M1} = 0.84$

$S_{Ds} = 1.2$

$S_{D1} = 0.56$

Foundations

General

The thickness of soil blanketing the site and the depth to bedrock can vary across the site. Design criteria are provided for foundations in soil and rock. Soil design criteria may be assumed within 4 feet of the current ground surface and rock design criteria may be assumed more than 4 feet below the current ground surface. However, if during construction, soil is observed more than 4 feet below the ground surface at foundation levels, the foundations will need to be deepened to bear in rock, or the foundations will need to be redesigned using the soil values.

It is my opinion that the planned improvements may be supported on a conventional spread footing foundation bearing in competent earth materials. If the spread footings would cover a substantial portion of the building area, a mat foundation may be used as an alternative to reduce forming and steel bending costs. The Structural Engineer may also choose to use drilled piers to support improvements, or for shoring and underpinning, if required. Design criteria for each foundation type are presented below.

Spread Footings

New spread footings should extend at least 18 inches below lowest adjacent grade. If soft or unstable soil areas are encountered at the bottom of the footings, localized deepening of the footing excavation will be necessary. Footing depths may be reduced if competent bedrock is exposed in footing excavations. Footings should be stepped to produce level tops and bottoms and should be deepened as necessary to provide at least 7 feet of horizontal clearance between the portions of footings designed to impose passive pressures and the face of the nearest slope or retaining wall.

Spread footings bottomed in soil can be designed to impose dead plus code live load bearing pressures and total design load bearing pressures of 2,000 and 3,000 psf, respectively. If foundations are bottomed in bedrock, the footings may be designed for maximum allowable rock contact pressures of 3,500 pounds per square foot (psf) for dead plus sustained live loads, and 5,000 psf for total loads, including wind or seismic forces.

There should be no isolated footing pads, where practical. Resistance to lateral pressures can be obtained from passive earth pressures against the face of the footing and soil friction along the base of footings. A passive pressure equivalent to that obtained using a fluid weight of 250 pounds per cubic foot (pcf) and a friction factor of 0.3 may be used to resist lateral forces and sliding in soil. In bedrock, a uniform pressure of 3000 psf and a friction factor of 0.4 times the net vertical dead load may be used for design to resist lateral forces and sliding. These values include a safety factor of 1.5 and may be used in combination without reduction. Passive pressures should be disregarded in areas with less than 7 feet of horizontal soil confinement and for the uppermost 1-foot of foundation depth unless confined by concrete slabs or pavements.

Drilled Piers

Drilled, cast-in-place, reinforced concrete piers should be at least 14 inches in diameter and extend at least 10 feet below grade, or to practical drilling refusal in bedrock. Piers should be designed for a maximum allowable skin friction of 500 psf for combined dead plus sustained live loads in soil. In bedrock, piers should be designed for a maximum allowable skin friction of 1,000 psf for combined dead plus sustained live loads. The above values may be increased by one-third for total loads, including the effect of seismic or wind forces. The weight of the foundation concrete extending below grade may be disregarded.

Resistance to lateral displacement of individual piers will be generated primarily by passive earth pressures acting on the pier. Passive pressures in soil should be assumed equivalent to those generated by a fluid weighing 250 pcf acting on 2 pier diameters. In bedrock, a passive pressure equivalent to that generated by a uniform pressure of 3000 psf acting on 1.5 pier diameters may be used. Passive pressures should be neglected within 12 inches of the ground surface in areas not confined by slabs or pavements and in areas with less than 7 feet of horizontal confinement.

Where groundwater is encountered during pier shaft drilling, it should be removed by pumping, or the concrete must be placed by the tremie method. If the pier shafts will not stand open, temporary casing may be necessary to support the sides of the pier shafts until concrete is placed. Concrete should not be allowed to free fall more than 5 feet to avoid segregation of the aggregate.

Mat Foundation

A mat foundation may be used to support the planned improvements. The mat can be designed for an average allowable bearing pressure in soil over the entire mat of 2,000 psf for combined dead plus sustained live loads, and 3,000 psf for total loads including wind or seismic forces. The weight of the mat extending below current site grade may be neglected in computing bearing loads. Localized increases in bearing pressures of up to 4,000 psf may be utilized. If the mat is bottomed in bedrock, the mat may be designed for maximum allowable rock contact pressures of 3,500 pounds per square foot (psf) for dead plus sustained live loads, and 5,000 psf for total loads, including wind or seismic forces, with localized increases up to 8,000 psf. For elastic design, a modulus of subgrade reaction for soil of 50 kips per cubic foot and for rock of 200 kips per cubic foot may be used.

Resistance to lateral pressures can be obtained from passive earth pressures against the face of the mat and soil friction along the base of the mat foundation. I recommend that an allowable passive equivalent fluid pressure in soil of 250 pcf and a friction factor of 0.3 times the net vertical dead load be used for design. In bedrock, a uniform pressure of 3000 psf and a friction factor of 0.4 times the net vertical dead load may be used for design to resist lateral forces and sliding. If a waterproofing membrane or vapor retarder is used beneath the mat slab, a friction factor of 0.2 should be used. Passive pressures should be disregarded in areas with less than 7 feet of horizontal soil confinement and for the uppermost 1-foot of foundation depth unless confined by concrete slabs or pavements.

Retaining Walls

The geotechnical design criteria presented in this section may also be used for the design of temporary shoring.

The thickness of soil blanketing the site and the depth to bedrock can vary across the site. Design criteria are provided for retaining walls in soil and rock. Soil design criteria may be assumed within 4 feet of the current ground surface and rock design criteria may be assumed more than 4 feet below the current ground surface. However, if more than 4 feet of soil is being retaining by subsurface walls, the portions of walls supporting the additional soil will need to be designed using the lateral earth pressures for soil conditions.

Retaining walls should be fully backdrained. The backdrains should consist of at least a 3-inch-diameter, rigid perforated pipe, or equivalent such as a "high profile collector drain", surrounded by a drainage blanket. The pipe should be sloped to drain by gravity to appropriate outlets. Accessible subdrain cleanouts should be provided and maintained on a routine basis. The drainage blanket should consist of clean, free-draining crushed rock or gravel, wrapped in a filter fabric such as Mirafi 140N. Alternatively, the drainage blanket could consist of Caltrans Class 2 "Permeable Material" or a prefabricated drainage structure such as Mirafi Miradrain. The bottom of the collector drain should be at least 12 inches below lowest adjacent grade. Aggregate drainage blankets should be at least 1 foot in width and extend to within 1 foot of the surface. The uppermost 1-foot should be backfilled with compacted native soil to exclude surface water.

Vertical retaining walls that are free to rotate at the top should be designed to resist active lateral soil pressures equivalent to those exerted by a fluid weighing 40 pcf where the backslope is level, and 60 pcf for backfill at a 2:1 (horizontal:vertical) slope. In areas where bedrock is exposed and backfill is placed behind the wall, the structural engineer may use active lateral earth pressures equivalent to those exerted by a fluid weighing 30 pcf where the backslope is level, and 45 pcf for backfill at a 2:1 (horizontal:vertical) slope. If the retaining wall is constructed directly against the bedrock with no backfill, the structural engineer may use active lateral earth pressures equivalent to those exerted by a fluid weighing 20 pcf where the backslope is level, and 26 pcf for backfill at a 2:1 (horizontal:vertical) slope. For intermediate slopes, interpolate between these values. I should be consulted to calculate lateral pressures on retaining walls that are tied-back or braced.

In addition to lateral earth pressures, retaining walls must be designed to resist horizontal pressures that may be generated by surcharge foundation loads applied at or near the ground surface. If a footing surcharge is located above a retaining wall within a horizontal distance of $0.4 \bullet H$, where H is the height of soil retained by the wall, then a horizontal lateral resultant force equal to $0.55 \bullet Q_L$ should be applied to the retaining wall at a height above the base of the wall equal to $0.6 \bullet H$. Q_L equals the equivalent resultant footing line load. This footing surcharge load applies equally to walls that are fixed or free to rotate. As an example, a retaining wall supporting 10 feet of soil has a footing 2 feet away from the top of the wall carrying a line load of 1,000 pounds per lineal foot. This footing is within $0.4 \bullet H = 4$ feet of the retaining wall. The resultant horizontal force on the retaining wall from the footing surcharge load would be $0.55 \times 1,000 = 550$ pounds acting $0.6 \bullet H = 6$ feet above the base of the retaining wall.

In addition to lateral earth pressures and adjacent footing loads, retaining walls must be designed to resist horizontal pressures that may be generated by surcharge loads applied at or near the ground surface. Where an imaginary 1:1 (H:V) plane projected downward from the outermost edge of a surcharge load intersects a retaining wall, that portion of the wall below the intersection should be designed for an additional horizontal thrust from a uniform pressure equivalent to one-third the maximum anticipated surcharge pressure in soil and one-fourth the maximum anticipated surcharge pressure in rock. In some cases, this value yields a conservative estimate of the actual lateral pressure imposed. I should be contacted if a more precise estimate of lateral loading on the retaining wall from surcharge pressures is desired.

Rigid retaining walls constrained against such movement could be subjected to "at-rest" lateral earth pressures equivalent to those exerted by the fluid pressures listed above plus a uniform load of $6 \bullet H$ pounds per square foot in soil and of $4 \bullet H$ pounds per square foot in rock, where H is the height of the backfill above footing level. Where an imaginary 1:1 (H:V) plane projected downward from the outermost edge of a surcharge load intersects a lower retaining wall, that portion of the constrained wall below the intersection should be designed for an additional horizontal thrust from a uniform pressure equivalent to one-half the maximum anticipated surcharge pressure in soil and one-third the maximum anticipated surcharge pressure in rock. In some cases, this value yields a conservative estimate of the actual lateral pressure imposed. I should be contacted if a more precise estimate of lateral loading on the retaining wall from surcharge pressures is desired.

If retaining walls are designed using the 2019 California Building Code, a seismic pressure increment equivalent to a rectangular pressure distribution of $10 \bullet H$ pounds per square foot may be used, where H is the height of the soil retained in feet. The seismic pressure increment does not need to be applied to constrained walls where at-rest lateral earth pressure is applied or to temporary shoring.

Wall backfill should consist of soil that is spread in level lifts not exceeding 8 inches in thickness. Each lift should be brought to at least optimum moisture content and compacted to not less than 90 percent relative compaction, per ASTM test designation D 1557. Retaining walls may yield slightly during backfilling. Therefore, walls should be properly braced during the backfilling operations.

Where migration of moisture through retaining walls would be detrimental or undesirable, retaining walls should be waterproofed as specified by the project architect or structural engineer.

Retaining walls should be supported on footings designed in accordance with the recommendations presented above. A minimum factor of safety of 1.5 against overturning and sliding should be used in the design of retaining walls.

Slab-on-Grade Floors

The subgrade soil in slab and flatwork areas should be proof rolled to provide a firm, non-yielding surface. If moisture penetration through the slab would be objectionable, slabs should be underlain by a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel graded such that 100 percent will pass the 1-inch sieve and less than 5 percent will pass the No. 4 sieve. Further protection against slab moisture penetration can be provided by means of a moisture vapor retarder membrane, placed between the drain rock and the slab. The membrane may be covered with 2 inches of damp, clean sand to protect it during construction.

Additional protection against moisture infiltration into finished basement areas may be provided by installing a slab underdrain system. Retaining wall back drains should be separated from under slab drains. If selected, the slab underdrain system would consist of trenches, which are at least 12 inches deep and 6 inches wide, spaced no further than 10 feet apart beneath the floor slab. The bottoms of the trenches should slope to drain to a low-point by gravity. A 3-inch diameter, rigid perforated pipe should be placed near the bottom of the trench which is fully encapsulated in drain rock. The drainrock should be fully encapsulated in an approved filter fabric. The perforated pipes should be tied to closed conduits which outlet at appropriate discharge points.

Site Drainage

Positive drainage should be provided away from the improvements. Roof downspouts should discharge into closed conduits that drain into the site storm drain system. Surface drainage facilities (roof downspouts and drainage inlets) should be maintained entirely separate from subsurface drains (retaining wall backdrains and under slab drains). In addition, retaining wall back drains should be separated from under slab drains. Drains should be checked periodically, and cleaned and maintained as necessary to provide unimpeded flow.

Supplemental Services

H. Allen Gruen, Geotechnical Engineer recommends that he be retained to review the project plans and specifications to determine if they are consistent with his recommendations. In addition, he should be retained to observe geotechnical construction, particularly site excavations, placement of retaining wall backdrains, fill compaction, and excavation of foundations, as well as to perform appropriate field observations.

If, during construction, subsurface conditions different from those described in this report are observed, or appear to be present beneath excavations, I should be advised at once so that these conditions may be reviewed and my recommendations reconsidered. The recommendations made in this report are contingent upon my notification and review of the changed conditions.

If more than 18 months have elapsed between the submission of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at or adjacent to the site, the recommendations of this report may no longer be valid or appropriate. In such case, I recommend that I review this report to determine the applicability of the conclusions and recommendations considering the time elapsed or changed conditions. The recommendations made in this report are contingent upon such a review.

These services are performed on an as-requested basis and are in addition to this geotechnical investigation. I cannot accept responsibility for conditions, situations or stages of construction that I am not notified to observe.

LIMITATIONS

This report has been prepared for the exclusive use of Mr. Enda Keane and his consultants for the proposed project described in this report.

My services consist of professional opinions and conclusions developed in accordance with generally-accepted geotechnical engineering principles and practices. I provide no other warranty, either expressed or implied. My conclusions and recommendations are based on the information provided regarding the proposed construction, my site reconnaissance and investigation, review of published data, and professional judgment. Verification of my conclusions and recommendations is subject to my review of the project plans and specifications, and my observation of construction.

The test boring log represents subsurface conditions at the location and on the date indicated. It is not warranted that they are representative of such conditions elsewhere or at other times. Site conditions and cultural features described in the text of this report are those existing at the time of my field exploration, conducted on October 7, 2022, and may not necessarily be the same or comparable at other times.

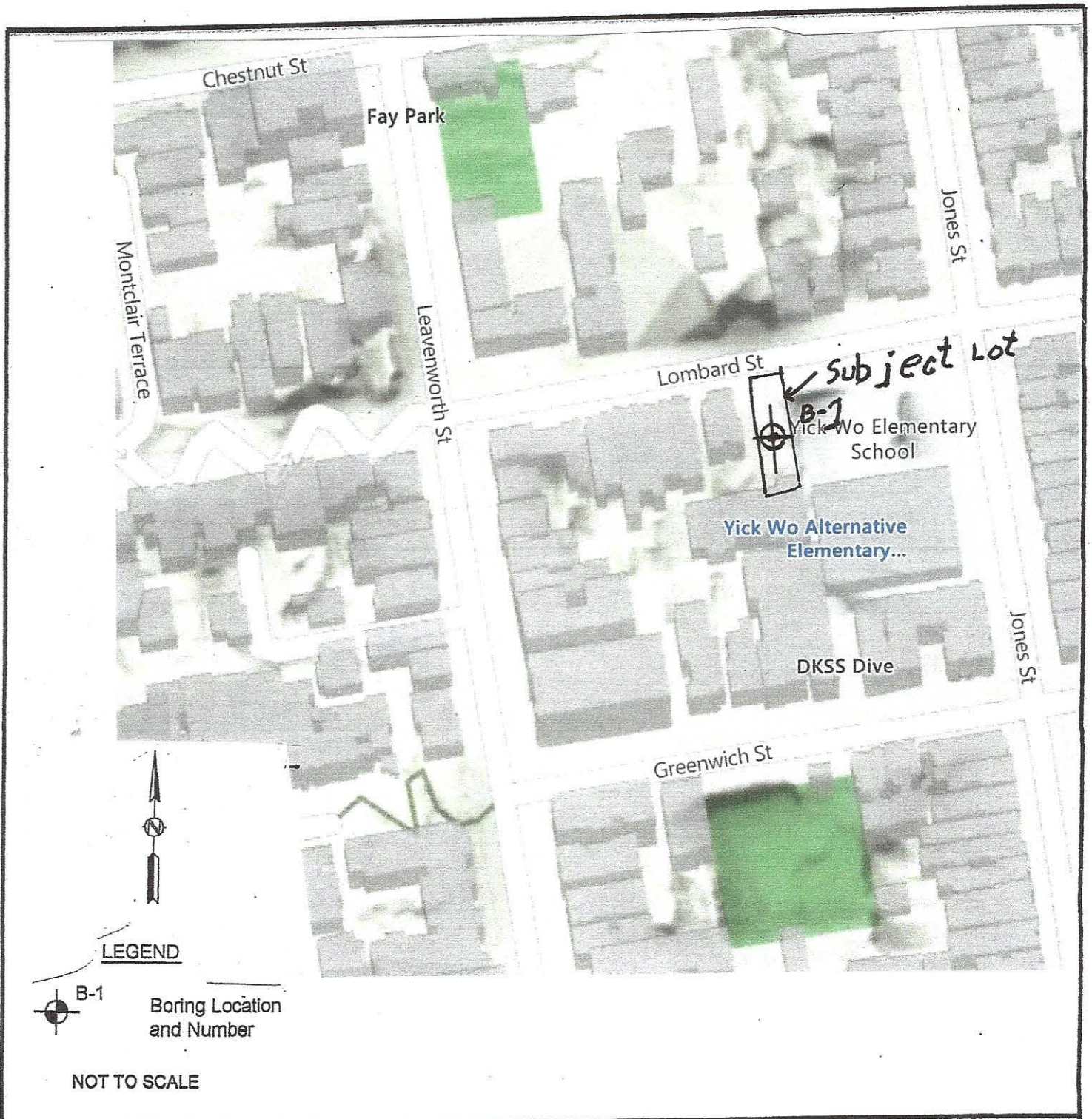
The location of the test boring was established in the field by reference to existing features and should be considered approximate only.

The scope of my services did not include an environmental assessment or an investigation of the presence or absence of hazardous, toxic, or corrosive materials in the soil, surface water, groundwater or air, on or below, or around the site, nor did it include an evaluation or investigation of the presence or absence of wetlands.

APPENDIX A

List of Plates

- | | | |
|---------|---|--|
| Plate 1 | - | Boring Location Map |
| Plate 2 | - | Log of Boring 1 |
| Plate 3 | - | Soil Classification Chart and Key to Test Data |
| Plate 4 | - | Engineering Geology Rock Terms |



H. Allen Gruen
Geotechnical Engineer

Job. No:
APPR:
Drwn:
Date:

BORING LOCATION MAP
939 Lombard Street
San Francisco, CA

PLATE

1

Location of Boring:

Project:

939 Lombard St

Boring No.: 1

Total Depth: 6.5'

Job No.: 20-5001

Logged By: RG

Proj. Mgr.: AG

Date: 10/18/22

Drilling Contractor: Access Drilling

Hammer Wt.: 140 lbs

Drop: 30"

Water Depth (ft.):

Time:

Date:

Backfilled, Time:

Date:

By:

Surface Elev.:

Datum:

Conditions:

Brown clayey SAND with Gravel
(SC), Medium dense, dry

- Dense to very dense
- Conglomerate

Bottom of Boring = 6.5 feet

Sample Depth	Sampler Type	Blows/Foot	Inches Driven	Inches Recovered	Sample Condition	Pocket Penetrometer Shear Strength (KSF)	Moisture Content (%)	Dry Density (PSF)	% Passing #200 Sieve	Depth in Feet	Graphic Log
	SAH									1	
		25								2	
	SAH	52								3	
	2"	67								4	
	SPT	53								5	
	SPT									6	
		52								7	
										8	
										9	
										10	
										11	
										12	
										13	
										14	
										15	
										16	
										17	
										18	
										19	
										20	

H. Allen Gruen
Geotechnical Engineer

Job No:

Appr:

Date:

LOG OF BORING 1

939 Lombard Street







San Francisco, California

PLATE

2

MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS More than Half > #200 sieve	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS, GRAVEL-SAND
			GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES
FINE GRAINED SOILS More than Half < #200 sieve	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY	
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
		OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS	
		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
	HIGHLY ORGANIC SOILS		Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION SYSTEM

		 Shear Strength, psf  Confining Pressure, psf	
Consol	Consolidation	Tx	2630 (240) Unconsolidated Undrained Triaxial
LL	Liquid Limit (in %)	Tx sat	2100 (575) Unconsolidated Undrained Triaxial, saturated prior to test
PL	Plastic Limit (in %)	DS	3740 (960) Unconsolidated Undrained Direct Shear
PI	Plasticity Index	TV	1320 Torvane Shear
Gs	Specific Gravity	UC	4200 Unconfined Compression
SA	Sieve Analysis	LVS	500 Laboratory Vane Shear
	Undisturbed Sample (2.5-inch ID)	FS	Free Swell
	2-inch-ID Sample	EI	Expansion Index
	Standard Penetration Test	Perm	Permeability
	Bulk Sample	SE	Sand Equivalent

KEY TO TEST DATA

H. Allen Gruen
Geotechnical Engineer

Job No:

Appr:

Drwn:

Date:

SOIL CLASSIFICATION CHART
AND KEY TO TEST DATA

PLATE

3

ROCK SYMBOLS



SHALE OR CLAYSTONE



CHERT



SERPENTINITE



SILTSTONE



PYROCLASTIC



METAMORPHIC ROCKS



SANDSTONE



VOLCANIC



DIATOMITE



CONGLOMERATE



PLUTONIC



SHEARED ROCKS

LAYERING

MASSIVE	Greater than 6 feet
THICKLY BEDDED	2 to 6 feet
MEDIUM BEDDED	8 to 24 inches
THINLY BEDDED	2-1/2 to 8 inches
VERY THINLY BEDDED	3/4 to 2-1/2 inches
CLOSELY LAMINATED	1/4 to 3/4 inches
VERY CLOSELY LAMINATED	Less than 1/4 inch

JOINT, FRACTURE, OR SHEAR SPACING

VERY WIDELY SPACED	Greater than 6 feet
WIDELY SPACED	2 to 6 feet
MODERATELY SPACED	8 to 24 inches
CLOSELY SPACED	2-1/2 to 8 inches
VERY CLOSELY SPACED	3/4 to 2-1/2 inches
EXTREMELY CLOSELY SPACED	Less than 3/4 inch

HARDNESS

SOFT - Pliable: can be dug by hand

FIRM - Can be gouged deeply or carved with a pocket knife

MODERATELY HARD - Can be readily scratched by a knife blade; scratch leaves heavy trace of dust and is readily visible after the powder has been blown away

HARD - Can be scratched with difficulty; scratch produces little powder and is often faintly visible

VERY HARD - Cannot be scratched with pocket knife; leaves a metallic streak

STRENGTH

PLASTIC - Capable of being molded by hand

FRIABLE - Crumbles by rubbing with fingers

WEAK - An unfractured specimen of such material will crumble under light hammer blows

MODERATELY STRONG - Specimen will withstand a few heavy hammer blows before breaking

STRONG - Specimen will withstand a few heavy ringing hammer blows and usually yields large fragments

VERY STRONG - Rock will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments

DEGREE OF WEATHERING

HIGHLY WEATHERED - Abundant fractures coated with oxides, carbonates, sulphates, mud, etc., thorough discoloration, rock disintegration, mineral decomposition

MODERATELY WEATHERED - Some fracture coating, moderate or localized discoloration, little to no effect on cementation, slight mineral decomposition

SLIGHTLY WEATHERED - A few stained fractures, slight discoloration, little or no effect on cementation, no mineral decomposition

FRESH - Unaffected by weathering agents, no appreciable change with depth

H. Allen Gruen
Geotechnical Engineer

Job No:

Appr:

Drwn:

Date:

ENGINEERING GEOLOGY
ROCK TERMS

939 Lombard Street
San Francisco, CA

PLATE

4

APPENDIX B

List of References

1. California Department of Conservation, Division of Mines and Geology, 1998, *Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada*.
2. CDMG, 2000, State of California Seismic Hazards Zones, City and County of San Francisco, California Division of Mines and Geology, released November 17, 2000.
3. DeLisle, M., 1993, *Map Showing Areas of Exposed Bedrock and Contours on Bedrock Surface on a Portion of the San Francisco North 7.5' Quadrangle*, unpublished map by the California Division of Mines and Geology.
4. DeLisle, M., 1993, *Map Showing Generalized Contours on the Groundwater Surface on a Portion of the San Francisco North 7.5' Quadrangle*, unpublished map by the California Division of Mines and Geology.
5. Schlocker, J., 1958, Geology of the San Francisco North Quadrangle, California, United States Geological Survey Professional Paper 782, scale 1:24,000.
6. Seed, H. B., and Idriss, E., 1982, *Ground Motion and Soil Liquefaction during Earthquakes*, Earthquake Engineering Research Institute Monograph.
7. United States Geological Survey, 1993, San Francisco North Quadrangle, 7.5 Minute Series, Scale 1:24,000.
8. URS/John A. Blume & Associates, Engineers, 1974, San Francisco Seismic Safety Investigation, Figure 4, June 1974.

APPENDIX C

Field Exploration

My field exploration consisted of a geologic reconnaissance and subsurface exploration by means of one test boring logged by my Engineer on October 7, 2022. The test boring was drilled with portable hand-carried equipment utilizing continuous flight, 3-inch-diameter augers. The boring was drilled at the approximate location shown on Plate 1.

The log of the test boring is displayed on Plate 2. Representative undisturbed samples of the earth materials were obtained from the test boring at selected depth intervals with a 1.4-inch inside diameter, split-barrel Standard Penetration Test (SPT) sampler, a 2-inch inside diameter, split-barrel sampler, and a 2.5-inch inside diameter, modified California sampler.

Penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The sampler was driven 24 inches or less and the number of blows was recorded for each 6 inches of penetration. The blows per foot recorded on the Boring Log represents the accumulated number of equivalent SPT blows that were required to drive the sampler the last 12 inches or fraction thereof.

The soil classification is shown on the Boring Log and referenced on Plate 3. Engineering Geology Rock Terms are presented on Plate 4

H. Allen Gruen, Geotechnical Engineer
Project Number: 21-5018
939 Lombard Street, San Francisco
October 8, 2022

Page D-1

APPENDIX D

Distribution

Mr. Enda Keane
C/o: Byrne's Special Works LLC
51 Bernard Street
San Francisco, CA 94133

(4 wet signed and stamped originals)

enda@keane@gmail.com
quinlanz@comcast.net

EXHIBIT C
Discretionary Review Action Memo



DISCRETIONARY REVIEW ACTION DRA-829

HEARING DATE: JUNE 29, 2023

CORRECTED DATE: JULY 31, 2023

Record No.: 2021-007262DRP-02
Project Address: 939 Lombard Street
Building Permit: **2021.0709.4046**
Zoning: RM-1 (Residential Mixed- Low Density) Zoning District
40-X Height and Bulk District
Cultural District: N/A
Block/Lot: 0072 / 021
Project Sponsor: Curtis Hollenbeck
Curtis Hollenbeck Architect
576 Columbus Avenue #2
San Francisco, CA 94133
DR Requestor: Martin Eng
953 Lombard Street
San Francisco, CA 94133
Mark Swartz
945 Lombard Street
San Francisco, CA 94133
Staff Contact: David Winslow – (628) 652-7335
David.Winslow@sfgov.org

ADOPTING FINDINGS RELATED TO NOT TAKING DISCRETIONARY REVIEW OF RECORD NO. 2021-007262DRP-02 AND THE APPROVAL OF BUILDING PERMIT APPLICATION NO. 2021.0709.4046 PROPOSING DEMOLITION OF AN EXISTING 2-CAR PARKING STRUCTURE AT THE FRONT OF THE LOT AND CONSTRUCTION OF A NEW 5,173 SQUARE FOOT SINGLE-FAMILY DWELLING WITHIN THE RM-1 (RESIDENTIAL MIXED- LOW DENSITY) ZONING DISTRICT AND A 40-X HEIGHT AND BULK DISTRICT.

Preamble

On July 9, 2021 Curtis Hollenbeck filed for Building Permit Application No. 2021.0709.4046 proposing demolition of an existing 2-car parking structure at the front of the lot and construction of a new 5,173 square foot single-family dwelling within the RM-1 (Residential Mixed- Low Density) Zoning District and a 40-x Height and Bulk District.

On ~~January~~ May 24, 2023 Martin Eng and Mark Swartz (hereinafter “Discretionary Review (DR) Requestors”) filed an application with the Planning Department (hereinafter “Department”) for Discretionary Review (2021-007262DRP-02) of Building Permit Application No. 2021.0709.4046.

The Department has determined that the proposed project is exempt/excluded from environmental review, pursuant to CEQA Guideline Section 15303 (Class 3 – New Construction. Up to three new single-family residences or six dwelling units in one building.

On June 29, 2023, the San Francisco Planning Commission (hereinafter “Commission”) conducted a duly noticed public hearing at a regularly scheduled meeting on Discretionary Review Application 2021-007262DRP-02.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

Action

The Commission hereby does not take Discretionary Review requested in Record No. 2021-007262DRP-02 and approves Building Permit Application 2021.0709.4046.

The reasons that the Commission took the action described above include:

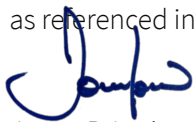
1. There are no extraordinary or exceptional circumstances in the case. The proposal complies with the Planning Code, the General Plan, and conforms with the Residential Design Guidelines.
2. The Commission determined that no modifications to the project were necessary, and they instructed staff to approve the Project per plans marked dated May 30, 2023, on file with the Planning Department.

APPEAL AND EFFECTIVE DATE OF ACTION: Any aggrieved person may appeal this Building Permit Application to the Board of Appeals only after the Department of Building Inspection (DBI) takes action (issuing or disapproving) the permit. Such appeal must be made within fifteen (15) days of DBI's action on the permit. For further information, please contact the Board of Appeals at (628) 652-1150, 49 South Van Ness Ave, Suite 1475, San Francisco, CA 94103.

Protest of Fee or Exaction: You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives NOTICE that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.

I hereby certify that the Planning Commission did not take Discretionary Review and approved the building permit as referenced in this action memo on June 29, 2023 and corrected on July 31, 2023.



Jonas P. Ionin
Commission Secretary

AYES: Braun, Diamond, Koppel, Tanner

NOES: Imperial, Moore

ABSENT: Ruiz

ADOPTED: June 29, 2023

CORRECTED: July 31, 2023