HOW TO VIEW THE MEETING: No physical location from which members of the public may observe the meeting and offer public comment will be provided.

HOW TO PARTICIPATE BEFORE THE MEETING: Members of the public are encouraged to submit email correspondence to gduncan@malibucity.org before the meeting begins.

HOW TO PARTICIPATE DURING THE MEETING: Members of the public may also speak during the meeting through the Zoom application by clicking the Raise Hand link at the bottom of the Zoom screen when the Chair calls the item. You must be present in the Zoom conference to be recognized.

Please visit https://malibucity.org/VirtualMeeting and follow the directions for downloading and using the Zoom application.

Malibu Environmental Review Board
Meeting Agenda

Wednesday, September 23, 2026

9:00 A.M. – ENVIRONMENTAL REVIEW BOARD MEETING
VIA TELECONFERENCE ONLY

Zoom Meeting Link:
https://us02web.zoom.us/j/83165629822

1. Written and Oral Communications from Staff and the Board

None.

2. Old Business

None.

3. New Business

A. Coastal Development Permit No. 23-038, Variance 23-014, and Site Plan Review No. 23-018 – An application for construction of a new 1,514 square foot two-story single-family residence, with a 486 square foot attached garage, and a 896 square foot basement, deck, roof deck, onsite wastewater treatment system, and associated development; including a variance for encroachment within a 100-foot environmentally sensitive habitat area buffer and a site plan review for construction above 18 feet, up to 24 feet

Application Filing Date:	June 13, 2023
Project Applicant:	Burdge & Associates Architects
Property Owner:	Jonathan Nakano and Linda Baek

Location:	31870 Sea Level Drive
APN:	4470-027-010
Zoning:	Single-Family Medium
Case Planner:	Contract Planner Casswell, 619-483-3950

Recommended Action: Review the proposed project and provide recommendations for the Planning Commission's consideration.

B. Coastal Development Permit No. 23-037, Variance 23-013, Minor Modification No. 23-005, and Site Plan Review No. 23-017 – An application for construction of a new 1,435 square foot two-story single-family residence, with a 464 square foot attached garage, and a 859 square foot basement, deck, onsite wastewater treatment system, and associated development; including a variance for encroachment within a 100-foot environmentally sensitive habitat area buffer, a minor modification for a 15 percent reduction to the north side yard setback, and a site plan review for construction above 18 feet, up to 27 feet 2 inches

Application Filing Date:	June 13, 2023
Project Applicant:	Burdge & Associates Architects
Property Owner:	Kell-Surprenant Family Trust
Location:	31882 Sea Level Drive
APN:	4470-027-022
Zoning:	Single-Family Medium
Case Planner:	Contract Planner Casswell, 619-483-3950

Recommended Action: Review the proposed project and provide recommendations for the Planning Commission's consideration.

Adjournment

Guide to the Meeting Proceedings

The Environmental Review Board meeting will be open and public but conducted virtually because the Board is not a Brown Act body.

Old Business items have appeared on previous agendas but have either been continued or tabled to this meeting with no final action having been taken. Applicants will be given 15 minutes to present their position to the Board. Members of the public wishing to speak will be limited to three (3) minutes. Members of the public wishing to speak during the meeting must participate through the Zoom application and click the raise hand button at the bottom of the Zoom screen when the item has been called by the Chair.

Items in New Business are items which are appearing for the first time for formal action. Applicants will be given 15 minutes to present their position to the Board. Members of the public wishing to speak will be limited to three (3) minutes. Members of the public wishing to speak during the meeting must participate through the Zoom application by clicking the Raise Hand link at the bottom of the screen when the Chair calls the item. Visit https://malibucity.org/VirtualMeeting and link to Zoom Video Tutorials prior to the meeting if you are a first-time user.

Copies of the staff reports or other written documentation relating to each item of business described above are available at https://www.malibucity.org/agendacenter. Requests to show an audio or video presentation during a Board meeting should be directed to gduncan@malibucity.org. Material must be submitted by ***12:00 PM. on the day prior to the meetin****g.*

I hereby certify under penalty of perjury, under the laws of the State of California that the foregoing agenda was posted in accordance with the applicable legal requirements. Regular and Adjourned Regular meeting agendas may be amended up to 72 hours in advance of the meeting. Dated this 16th day of September 2026 at 4:00 PM.

Gail Duncan, Management Analyst

Environmental Review Board
Agenda Report

ERB Meeting
09-23-26
Item 3.A.

To: Members of the Environmental Review Board

Prepared by: Rick Casswell, Contract Planner

Reviewed and Approved by: Courtney McCammon, City Biologist

Date prepared: September 16, 2026 Meeting date: September 23, 2026

Subject: Coastal Development Permit No. 23-038, Variance 23-014, and Site Plan Review No. 23-018 – An application for construction of a new 1,514 square foot two-story single-family residence, with a 486 square foot attached garage, and a 896 square foot basement, deck, roof deck, onsite wastewater treatment system, and associated development; including a variance for encroachment within a 100-foot environmentally sensitive habitat area buffer and a site plan review for construction above 18 feet, up to 24 feet

Application Filing Date:	June 13, 2023
Project Applicant:	Burdge & Associates Architects
Property Owner:	Jonathan Nakano and Linda Baek
Location:	31870 Sea Level Drive
APN:	4470-027-010
Zoning:	Single-Family Medium

RECOMMENDED ACTION: Review the proposed project and provide recommendations for the Planning Commission's consideration.

DISCUSSION: The subject property – which is currently undeveloped – lies entirely within the required 100-foot buffer from mapped stream and wetland environmentally sensitive habitat area (ESHA) to the west, in the form of Encinal Canyon Creek. Additionally, a 0.03-acre (1,398 square feet [sq. ft.]) portion of mapped ESHA encroaches onto the rear third of the property, as established within the Biological Assessment prepared by the project biologist and dated August 5, 2025. The proposed structural development will be located outside of this mapped ESHA area that overlaps the subject property (Figure 1). Per the Malibu Local Coastal Program's (LCP) Local

Implementation Plan (LIP) Sections 4.6.1.A and C, no development – including the fuel modification area – shall be within 100 feet of stream or wetland ESHA. According to the Biological Assessment, the proposed project, which involves a 1,514 square foot two-story single-family residence, with a 486 square foot attached garage, and a 896 square foot basement, deck, roof deck, and onsite wastewater treatment system (OWTS) is not anticipated to result in permanent impacts to the adjacent ESHA, special-status species, or protected trees. However, the fuel modification plan subsequently approved by the L.A. County Fire Department, which shows fuel modification will be contained within the subject parcel's property lines, will result in both permanent and temporary impacts to the 0.03-acre portion of stream/wetland ESHA that lies to the rear of the property. Consequently, the project requires a variance for fuel modification encroachment into ESHA, as well as development (inclusive of both structural and fuel modification) encroachment within the related 100-foot ESHA buffer. The Community Development Department is seeking recommendations from the Environmental Review Board (ERB) on how to mitigate the impact to ESHA.

Figure 1 – Project Aerial with Mapped ESHA



Source: Biological Resources Assessment, August 5, 2025

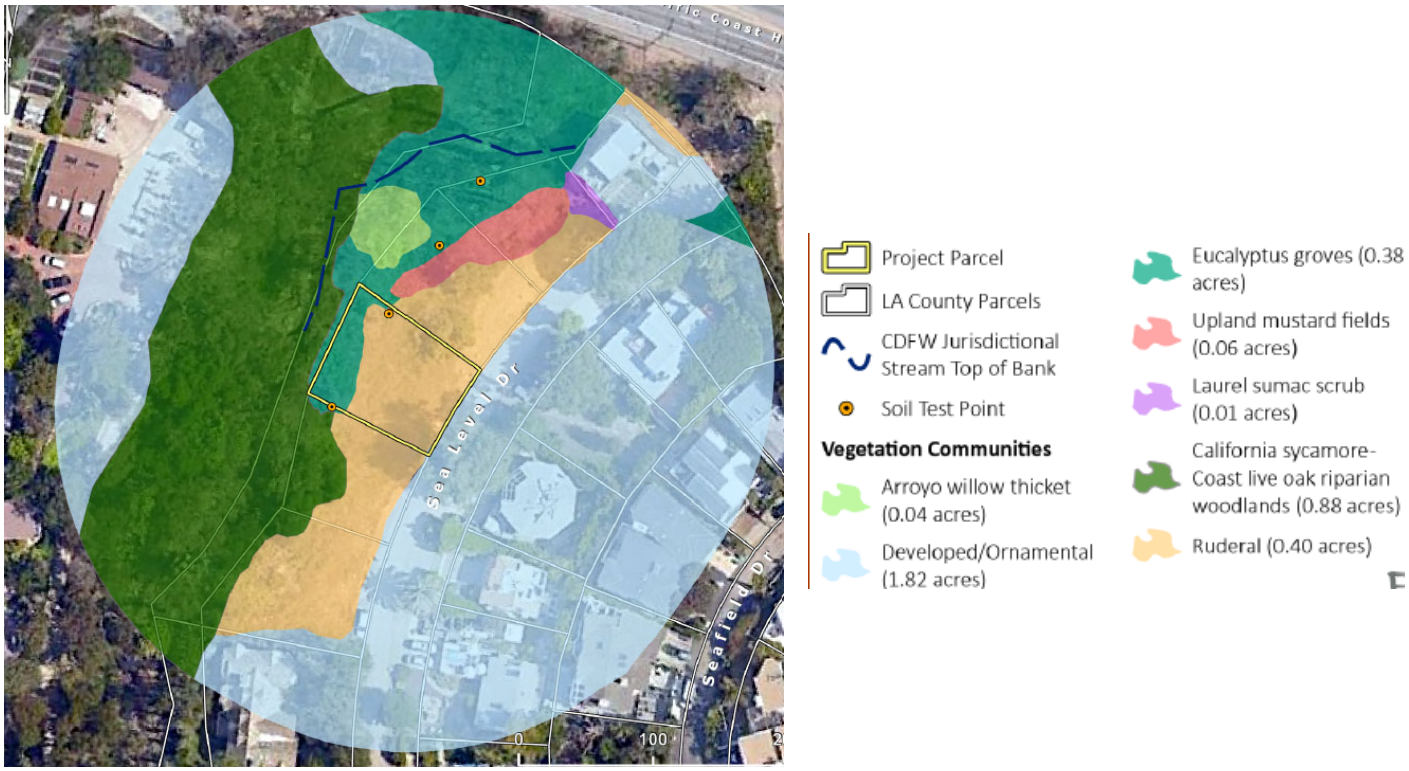
Setting

The subject property is located on the west side of Sea Level Drive in the single-family medium zoning district and approximately half a mile northwest of Broad Beach. The project includes construction of a new two-story residence and associated development on a vacant lot. Overall, the property is generally flat, with a stretch of steeper slopes

located on the west (rear) portion of the property and smaller gradually steeper slopes on the north side of the proposed residence. The surrounding area contains both developed and undeveloped residential properties, with the adjacent developed properties subject to existing fuel modification.

The biological resources assessment, prepared by Forde Biological Consultants (Exhibit 4), was required for the project pursuant to LIP Section 4.4.2 due to the proximity of mapped ESHA and the potential for native protected trees to be impacted. Said report identifies the subject property as being dominated by ruderal vegetation and non-native eucalyptus groves. Native riparian plant communities, along with California Sycamore-Coast Live Oak Riparian Woodlands and Arroyo Willow Thickets, occur along Encinal Canyon Creek and are identified as ESHA immediately west of and adjacent to the property, with a portion of the Arroyo Thicket ESHA encroaching onto the subject property (Figure 2). However, the biological assessment concluded that there are no protected native trees on the subject property.

Figure 2 – Vegetation and Trees



Source: Biological Resources Assessment, August 5, 2025

Figure 3 – Development Impacts (Site Plan)



Source: Biological Resources Assessment, August 5, 2025

Analysis

The applicant is proposing to construct a 1,514 square foot two-story single-family residence, with a 486 square foot attached garage, and a 896 square foot basement, deck, roof deck, and OWTS. The proposed total development square footage (TDSF) will total 2,000 sq. ft., since 1,000 square feet of basement area is exempt from TDSF per LIP Section 3.6.K.3. The maximum allowable TDSF for the 0.13-acre (5,800 sq. ft.) subject property is 2,027 square feet, in accordance with LIP Section LIP 3.6.K.

Per LIP Section 4.7.1, given that the subject property is located within ESHA and the 100-foot ESHA buffer, and all feasible building sites are ESHA or ESHA buffer, the proposed development area is limited to 25 percent of the parcel size; as defined in LIP Section 2.1. Consequently, the resulting allowable development area is 1,450 sq. ft. In this case, the applicant is proposing a development area of 1,449 sq. ft. The proposed house will meet the required setbacks established in LIP Section 3.6.F.

The primary impact to wetland/stream ESHA will be from fuel modification Zones A and B, as demonstrated in Figures 1 and 3, above. This required development, per L.A. County Fire Department, will result in onsite ESHA impacts of 0.03-acres (1,398 sq. ft.), with 0.0006-acres (26 sq. ft.) of that resulting in permanent impacts to ESHA (i.e. the ESHA located within Zone A of the fuel modification). The remaining area of onsite ESHA would be subject to temporary impacts, since that portion of ESHA would be located within fuel modification Zone B.

Pursuant to LIP Section 4.8.1, all new development shall include mitigation for unavoidable impacts to ESHA from the removal, conversion, or modification of natural habitat for new development, including required fuel modification and brush clearance. As previously noted, the proposed project would result in unavoidable impacts to ESHA as a result of the fuel modification. LIP Section 4.8.1 requires that, under such conditions, one of the following three Habitat Impact Mitigation methods shall be required: (1) habitat restoration; (2) habitat conservation; or (3) in-lieu fee for habitat conservation. To that end, the coastal development permit shall include conditions setting forth the requirements for habitat mitigation. Prior to final plan check the applicant shall provide either a detailed restoration plan, a habitat conservation plan, or evidence of payment of in lieu fees to the Santa Monica Mountains Conservancy.

Archaeology

Based on historical records, there is a high probability of cultural resources being discovered within the project area, although none were found during a phase two archaeological survey conducted by C.A. Singer and Associates in January 2005. As such, conditions will be included in the proposed resolution for this project which state that in the event that potentially important cultural resources are found in the course of geologic testing or construction, work shall immediately cease until a qualified archaeologist can provide an evaluation of the nature and significance of the resources and until the Community Development Director can review this information.

Department Reviews

The project was reviewed and approved by the City Biologist, City geotechnical consultant reviewers, the City Environmental Health Department, and the City Public Works Department, along with the Los Angeles County Fire Department and Los Angeles County Waterworks District 29. All conditions of approval from the various departments are included as Exhibit 3.

ENVIRONMENTAL REVIEW: Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the Community Development Department has analyzed the proposal as described above. The Community Development Department has found that this project is listed among the classes of projects that have been determined not to have a significant adverse effect on the environment; and therefore, is exempt from the provisions of CEQA. The Community Development Department has further determined that none of the six exceptions to the use of a categorical exemption applies to this project (CEQA Guidelines Section 15300.2). Accordingly, a categorical exemption will be prepared pursuant to CEQA Guidelines Section 15303(a) and (e) – New Construction – and Section 15304(a) and (b) – Minor Alterations to Land.

SUMMARY: The project has been reviewed and conditionally approved for conformance

with the LCP by staff and appropriate City and County agencies. The ERB can recommend additional mitigation measures for the Planning Commission to consider.

STAFF FOLLOW-UP: Recommendations of the ERB will be incorporated into the agenda report for the Planning Commission's review and consideration.

EXHIBITS:

1. Project Plans
2. Fuel Modification Plan
3. Department Review Sheets
4. Biological Resources Assessment, dated August 5, 2025

NEW SINGLE FAMILY RESIDENCE

31870 SEA LEVEL DRIVE
MALIBU, CA 92605

May 15 2026

ABBREVIATIONS

ADDITIONAL	ADD'L.
ADJUSTABLE	ADJ.
ABOVE FINISHED FLOOR	A.F.F.
ABOVE RAISED FLOOR	A.R.F.
AIR CONDITIONING	A/C.
ALTERNATE	ALT.
ARCHITECT (URAL)	ARCH.
AREA DRAIN	A.D.
BLOCKING	BLKG.
BOARD	BD.
BUILDING	BLDG.
CABINET	CAB.
CEILING	CLG.
CENTER	CTR.
CENTER LINE	C.L.
CERAMIC TILE	C.T.
CLEAR	CLR.
CONCRETE	CONC.
CONCRETE MASONRY UNIT	C.M.U.
CONSTRUCTION	CONST.
CONTINUOUS	CONT.
CONTROL JOINT	C.J.
DIAMETER	D.I.A..
DIMENSION	DIM.
DOUBLE	DBL.
DOUBLE HUNG	D.H.
DOWN	DN.
DRAWING	DWG.
ELECTRIC	ELECT.
ELECTRIC PANEL	ELECT. PNL.
ELEVATOR	ELEV.
ENCLOSURE	ENCL.
ENGINEER	ENGR.
EQUAL	EQ.
EQUIPMENT	EQUIP.
EXISTING	EXIST.
EXTRUDE OR EXTRUSION	EXTR.
FABRICATE(ED)	FAB.
FINISH	FIN.
FIXTURE	FIXT.
FLOOR	FL.
FLUORESCENT	FLUOR.
FOOT	FT.
FRESH AIR INTAKE (OR INLET)	F.A.I.
FURNISH(ED)	FURN.
FURRING	FUR.
GALVANIZED	GALV.
GAUGE	GA.
GROUND	GRND.
GYPSUM BOARD	GYP. BD.
HEIGHT	HT.
HOLLOW METAL	H.M.
HORIZONTAL	HORIZ.
HOT WATER	H.W.
INSIDE DIAMETER	I.D.
JOINT	JT.
MANUFACTURE	MFR.
MANUFACTURER'S	MFR'S.
MATERIAL	MATL.
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MTL.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
NORTH	N
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR X
ON CENTER	O.C.
OUTSIDE DIAMETER	O.D.
OPENING	OPG.
PAIR	PR.
PERFORATED(ED)	PERF.
PIECE/PIECES	PC./PCS.
PLANTER AREA	P.A.
QUANTITY	QTY.
RADIUS	RAD.
REFERENCE	REF.
REFRIGERATOR	REFRIG.
REINFORCE/REINFORCING	REINF.
REQUIRED	REQ.
RETURN AIR	R.A.
ROUGH OPENING	R.O.
SHEET	SHT.
SIMILAR	SIM.
SOUTH	S
SMOKE DETECTOR	S.D.
SPEAKER	SPKR.
SPECIFICATIONS	SPECS.
SPRINKLER HEAD	S.H.
SQUARE	SQ.
STAINLESS STEEL	S.S.
STANDARD	STD.
STEEL	STL.
STRUCTURAL	STRUCT.
TELEPHONE	TEL.
TELEVISION	TV
TEMPORARY	TEMP.
TONGUE AND GROOVE	T. & G.
TYPICAL	TYP.
UNLESS OTHERWISE NOTED	U.O.N.
VERTICAL	VERT.
VINYL COMPOSITION TILE	V.C.T.
WITH	W/
WITHOUT	W/O
WOOD	WD.

UNDER SEPARATED PERMIT

Deferred submittal documents shall be submitted to the architect- or engineer-of-record, who shall review them and forward them to the building official with a notation that they have been reviewed and have been found to be in general conformance with the design of the building or structure. The deferred items shall not be installed until their design and submittal documents have been reviewed and approved by the building official.

DEFERRED SUBMITTAL ITEMS:

- TBD

PROJECT TEAM

•Architect:
Douglas W. Burdge, A.I.A.
Burdge Architects, Inc.
24911 Pacific Coast Hwy
Malibu, CA 90265
P: (310) 456-5905
www.buaia.com

•Surveyor:
Land and Air Surveying, Inc.
22741 Pacific Coast Hwy.
Suite: 400A
Malibu, CA 90265
P: (310) - 456-9381
Fax: (310) - 456-9821

•Geology & Soil Engineer:
GeoConcepts Inc
14428 Hamlin St, #200
Van Nuys, CA 91401
T 818 994 8895
F 818 994 8599

•CIVIL:
Ahsirt Engineering INC.
360 Miller Way.
Arroyo Grande, CA 93420
P: 805-474-4008
Trisha Coffey

•Landscape Architect
BAREFOOT DESIGN
1187 Coast Village Road #287
Montecito, CA 93108
T (805) 697-7466

• Percolation Testing &
Septic system design:
Ensitu Engineering Inc.
7475 Carmelita Ave
Atascadero, CA 93422
Tel: (805) 772-0150
John N Yaroslasky, PE
Eml: jyaroslaski@ensitu.com

•Biologist:
Forde Biological Consultants
10664 Presilla Road
Santa Rosa Valley, CA 93012
P: (805) 402-3310
Andrew Forde, PE, QSD

•M.E.P. and TITLE 24:
TBD

•STRUCTURAL:
TBD

SYMBOL LEGEND

NORTH ARROW
INTERIOR ELEVATION FLAG
TYP. DOOR SCHEDULE SYMB.
TYP. WINDOW SCHEDULE SYMB.
ELEVATION DATUM
GRID LINE SYMB.
TRUE NORTH ARROW
BUILDING ELEVATION/ SECTION
WALL SECTION
TYP. ELEVATION VIEW DETAIL CALL OUT
TYP. CUT DETAIL CALL OUT
WOOD FRAME
CMU
CONCRETE
STONE

PROJECT DATA

•ADDRESS: **31870 SEA LEVEL DRIVE**, Malibu, CA 90265

•OWNER: Jon Nakano

•LEGAL DESCR.: See Survey

•A.P.N: 4470-027-010

•ZONING: SFM

•FIRE HAZARD SEVERITY ZONE: VHFHSZ

•SPRINKLERS : Required (Sprinklers per LACo. Fire Department's Requirement)

•OCCUPANCY GROUP: R3 / U1

•TYPE OF CONSTRUCTION: V-B

•NUMBER OF STORIES: 2 + Basement

•SCOPE OF WORK: Proposed New Two-Story, Single Family Residence w/attached Garage and Basement. Outdoor roof deck. New Driveway access and associated Retaining walls.
New OWTS. The proposed max flat roof height is 24ft and the max pitched roof is 24ft.
NEW LANDSCAPE, NEW EXTERIOR LIGHTING

•DISCRETIONARY REQUESTS:

-Site Plan review for increase of height for flat roof above 18ft not to exceed 24ft and for pitched roof not exceed 28ft.
-No Minor MOD
-Variance for construction within ESHA setback

•LOT INFO.:
Area:
Gross: **5,800** Sq.Ft. (0.75 Acres) Net: **5,800** Sq.Ft.

Width/Depth:
Depth: 87.22' Width: 66.27'

•MINIMUM SETBACKS:	Required	Proposed
Front (East) :	17.44'	17.46'
Side 10% (North) :	6.27'	6.64'
Side 15% (South) :	9.94'	9.95'
Rear (West) :	15.00'	41.45'

•MAX. AMOUNT OF SQUARE FOOTAGE

5,800 x .177 = 1,027 + 1,000= 2,027 SF

•AREA SUMMARY:

FIRST FLOOR:	720 SQ.FT. +
GARAGE:	486 SQ.FT. +
SECOND FLOOR:	794 SQ.FT. =
TOTAL:	2,000 SQ.FT. < 2,027 SQ.FT.

BASEMENT: 896 SQ.FT < 1,000 SQ.FT. (NOT COUNTED TOWARD TDSF)

•ALLOWABLE DEVELOPMENT AREA:

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
5,800 SF X 25% = 1,450 SF

1,449 SF < 1,450 SF (MAX)

•BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,206 SF
MAXIMUM ALLOWED OVER 18' = (1,206 x 0.67) = 804 SF
AREA OVER 18' = 794 SF < 804 SF

ADD'L PROJECT DATA

•BUILDING HEIGHT:
Allowed* max: 28' for pitched roof and 24' for Flat roof
Proposed max: 24' for pitched roof and 24' for Flat roof

NOTES:
Slope 3:1 or greater shall conform to Sections R403.1.7.1 through R403.1.7.4. (CRC 2016)
See Grading plans Sheet 2. and note on structural foundation plans.

•PARKING:
Required: Four (4) Parking Spaces of which min (2) enclosed
Proposed: Enclosed: Two (2) Unenclosed: Two (2)

•RETAINING WALLS HEIGHT:
Allowed max height: 6'
Proposed: in compliance with code

•FENCE, DRIVEWAY GATE:
Required: Max height 6' with 42" upper portion visually permeable.
Proposed: In compliance with code

•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE: 5,800 x 45% = 2,610 SF

•PROPOSED IMPERMEABLE COVERAGE:

BUILDING FOOTPRINT	1,268 SF
CONCRETE SLABS	471 SF
TOTAL	1,739 SF < 2,610 SF

APPLICABLE CODES

•2022 California Building Code (CBC) (Volume 1 & 2)
•2022 California Residential Code (CRC) and Title 24
•2022 California Electrical, Mechanical & Plumbing Code, (CMC), (CPC), (CEC)
•2022 CA Energy Code (2013 Building Energy Efficiency Standards), (CEnC) [§ R106.1.1 CRC]
•2022 CGBSC (California Green Building Code Standards)
•2023 County of LA Building, Mechanical, Electrical, Plumbing Code

VICINITY MAP



SHEET INDEX

COVER SHEET / PROJECT INFO		
	T-1	COVER SHEET / PROJECT INFO
	T-2	SURVEY
	T-3	CR-SITE PLANS AND TABLES
	T-4	COLOR CODED SLOPE ANALYSIS
Site Plans		
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	A-0.2	SITE PLAN
	A-0.3	AREA DIAGRAMS
	A-0.4	2/3RD'S CALCULATIONS DIAGRAM
	A-0.5	FIRE DEPARTMENT PLAN
	F-1.1	BROADWAY IMPROVEMENT ACCESS PLAN
	A-0.6	STORY POLE PLAN
Plans		
	A-1.1	PROPOSED BASEMENT PLAN
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	A-1.3	PROPOSED SECOND FLOOR PLAN
	A-1.4	PROPOSED ROOF PLAN
Elevations		
	A-2.1	PROPOSED ELEVATIONS NORTH AND SOUTH
	A-2.2	PROPOSED ELEVATIONS EAST AND WEST
Sections		
	A-3.1	PROPOSED SECTIONS A AND B
	A-3.2	PROPOSED SECTIONS C AND D
	A-3.3	PROPOSED SECTIONS E, F AND G
Civil		
	G1 OF 3	PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN
	G2 OF 3	COSTAL DEVELOPMENT PERMIT GRADING AND DRAINAGE PLAN
	G3 OF 3	EROON CONTROL PLAN AND LOCAL SWPPP
Landscape		
	L0.00	COVER SHEET
	L1.00	HARDSCAPE & LIGHTING PLAN
	L2.00	IRRIGATION PLAN
	L2.01	IRRIGATION DETAILS
	L3.00	PLANTING PLAN
	L3.01	PLANTING DETAILS

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.
WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

COVER SHEET / PROJECT INFO

DRAWING NO.
T-1

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	
DRAWN BY	D.W.B.,

EXHIBIT 1

PROPERTY ADDRESS:

31870 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-010 (LOS ANGELES COUNTY)

LEGAL DESCRIPTION:

LOT 167,OF TRACT NO. 10630, IN THE CITY OF MALIBU, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 181 PAGES 6 THROUGH 11, IN THE OFFICE OF THE RECORDER OF SAID COUNTY.

EXCEPT ALL METALS AND MINERALS AND ALL PETROLEUM, NATURAL GAS, AND OTHER HYDROCARBON SUBSTANCES, AND ALL SURFACE AND ALL SUBSOIL PRODUCTS OF ANY NATURE OR CHARACTER WHATSOEER, IN, UNDER OR UPON SAID LAND AND EVERY PART THEREOF, BUT WITHOUT RIGHT TO EXTRAXT MINERALS, AS PROVIDED FOR IN DEED FROM MARBLEHEAD LAND COMPANY, RECORDED MARCH 8, 1945

BASIS OF BEARINGS:

THE BASIS OF BEARINGS WAS DERIVED FROM THE INVERSE MEASUREMENT OF FOUND MONUMENTS AS SHOWN ON TRACT MAP NO. 10630 AS FILED IN BOOK 181 PAGES 6-11 OF MAPS, IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, STATE OF CALIFORNIA.

BENCHMARK:

MALIBU (2008) 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MIE/O DECKER RD 33FT W/O DR TO HSE*31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

NOTES:

1) TITLE REPORT USED FOR THIS SURVEY WAS PREPARED BY PRIORITY TITLE, ORDER NO. C104742, DATED JUNE 10, 2021, EASEMENTS, AS SHOWN ON THIS MAP ARE FROM INFORMATION OBTAINED FROM SAID TITLE REPORT.

2) PERTAINING TO SURVEY AND TOPO MAP, IF RETAINING WALLS OR SIMILAR STRUCTURES ARE TO BE DESIGNED FROM CONTOURS SHOWN ON THIS MAP, GROUND ELEVATIONS AT CRITICAL POINTS CONTROLLING THE DESIGN SHOULD BE VERIFIED BY DIRECT LOCATION AND LEVELSPRIOR TO FINAL DESIGN ADOPTION.

3) UTILITIES, IF LOCATED, ARE BY SURFACE EVIDENCE ONLY. (MANHOLES, WATER METERS, GAS METERS, POWER POLES, ETC.)

4) POLE LINE EASEMENTS PER BOOK 16485, PAGE 374 IS NON-SPECIFIC AND CANNOT BE PLOTTED.

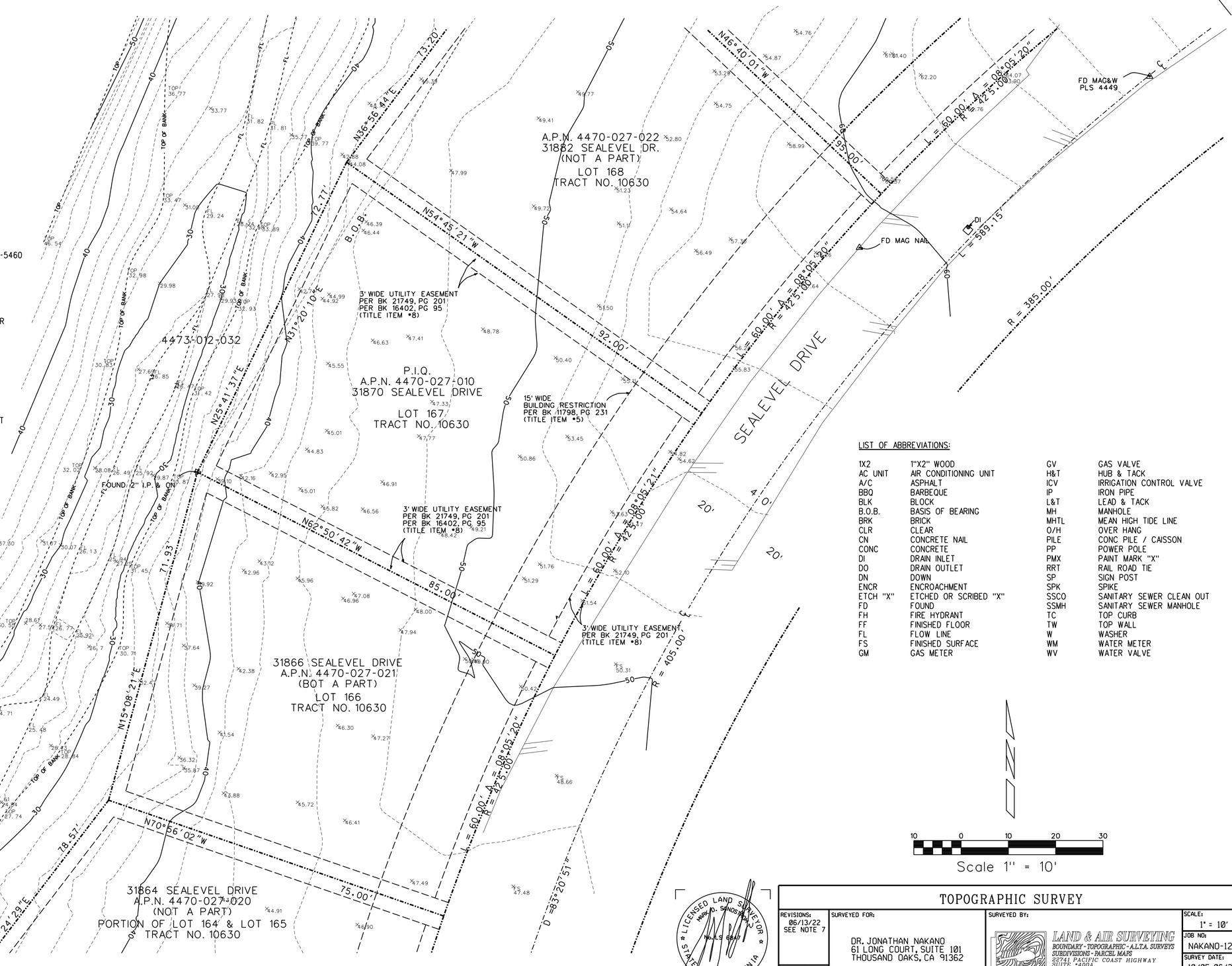
5) RECREATION EASEMENT PER BOOK 16402, PAGE 95, IS OUTSIDE AREA SHOWN ON MAP.

6) GROSS PARCEL AREA = 5,800 SQ. FT. / 0.13 ACRES

7) 05/13/22 EXTENDED AND UPDATED NORTHWESTERLY TOPOGRAPHY.

LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.): X
WOOD FENCE: W
WIRE FENCE: II
WROUGHT IRON-FENCE: WIF
CONCRETE (CONC.):
TILE:
SLATE/FLAGSTONE:
DIRT/GRAVEL:
BRICK (BRK):
MANHOLE (M.H.):
TREES: PINE, PALM, EUC, OAK, TREE, SYC, PEPPER, CORK, OLIVE



LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
AC UNIT	AIR CONDITIONING UNIT	H&T	HUB & TACK
A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

Scale 1" = 10'

STAMP

TOPOGRAPHIC SURVEY

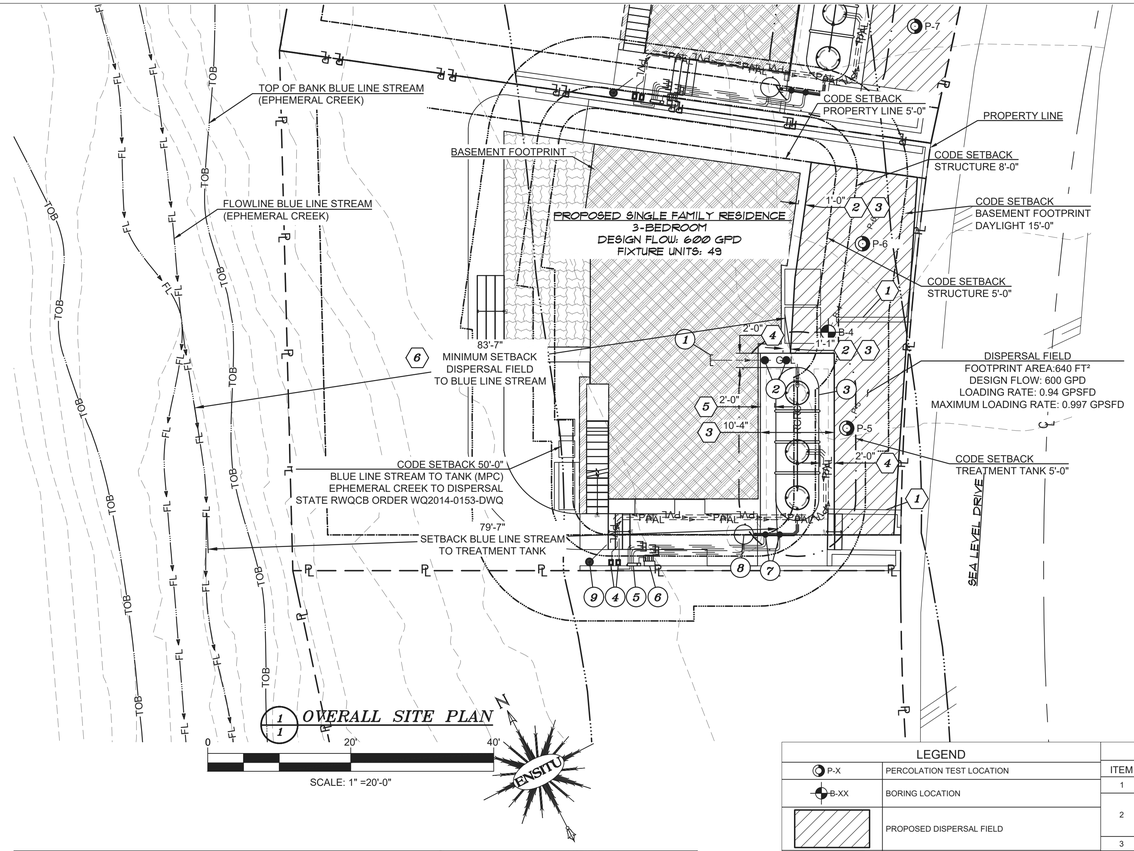
REVISIONS: 06/13/22 SEE NOTE 7
SURVEYED BY: JM,HC
DRAWN BY: AL

SURVEYED FOR:
DR. JONATHAN NAKANO
61 LONG COURT, SUITE 101
THOUSAND OAKS, CA 91362

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY - TOPOGRAPHIC - A.L.T.A. SURVEYS
SUBDIVISIONS - PARCEL MAPS
22741 PACIFIC COAST HIGHWAY
SUITE #409A
MALIBU, CA 90265
BUSINESS (310) 456-9381
FAX (310) 456-9821

SCALE: 1" = 10'
JOB NO: NAKANO-121
SURVEY DATE: 10/05-06/21
SHEET: 1 OF 1

T-2



GENERAL NOTES:

1. EXISTING OWTS COMPONENTS LOCATION AND ABANDONMENT:
   - 1.1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS. THE LOCATIONS ON THE ENGINEERING PLANS ARE INFORMATIONAL AND MAY NOT INCLUDE ALL COMPONENTS OF THE OWTS. MANY ITEMS, SUCH AS TANKS, PIPING, DISTRIBUTION DEVICES, SEEPAGE PITS, DISPERSAL FIELDS, AND OTHER APPURTENANCES ARE BURIED AND NOT LOCATABLE BY THE SURVEYOR OR UTILITIES LOCATOR .
   - 1.2. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS AN "OWTS ABANDONMENT PERMIT" SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWTS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REGULATORY REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THIS SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
   - 1.3. THE EXISTING OWTS COMPONENTS INCLUDING, SEPTIC TANK(S), PIPING, CLEANOUT(S) SEEPAGE PIT(S), DISPERSAL FIELD(S), AND ALL OTHER APPURTENANCES SHALL BE PROPERLY ABANDONED PURSUANT TO CITY OF MALIBU ORDINANCE 435, SECTION 15.40.170 C, AND SECTION 15.40.170 D, TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES. METHOD OF ABANDONMENT SHALL BE DETERMINED BY THE ENGINEER AND/OR THE OWNER'S REPRESENTATIVE
2. SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH SPECIFICATIONS AND TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND ORDINANCES.
3. SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS, VENTS, BACKWATER VALVES, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
4. ELECTRICAL COMPONENTS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 27 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA ELECTRICAL CODE, LOCAL ELECTRICAL CODE, AND ORDINANCES.
5. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. ENSITU ENGINEERING INC., IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
6. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE INSTALLATION OF THE TANK AND DISPERSAL SYSTEM COMPONENTS OF THE AOWTS (INCLUDING BUT NOT LIMITED TO; (A) TANK EXCAVATION, BEDDING, AND BACKFILL (B) SEEPAGE PITS EXCAVATION, CONSTRUCTION, AND BACKFILL (C) SUBSURFACE DISPERSAL SYSTEM BEDDING, FILL MATERIAL, CONSTRUCTION, AND BACKFILL) AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE TANK AND DISPERSAL SYSTEM COMPONENTS WERE INSTALLED PER APPROVED AOWTS PLANS.
7. LEACH FIELDS AND DISPERSAL SYSTEMS DESIGNATED AS SAND CATEGORY: ANY REMAINING FILL MATERIAL AND ANY BEACH SAND SEDIMENT THAT MIGHT HAVE REDUCED PERMEABILITY FROM EXISTING LEACH FIELD OPERATIONS ENCOUNTERED BELOW THE BOTTOM OF THE PROPOSED LEACH FIELD OR ANY MATERIAL ENCOUNTERED IN THE CONSTRUCTION OF THE LEACH FIELD THAT IS NOT CATEGORIZED AS BEACH SAND DEPOSITS SHALL BE EXCAVATED TO THE LEVEL OF THE NATIVE BEACH SAND DEPOSITS AND REPLACED WITH DOUBLE- WASHED SAND. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE EXCAVATION OF THE LEACH FIELD AND CONFIRM IN WRITING THAT ALL THE DELETERIOUS FILL AND NON-BEACH SAND MATERIALS BELOW THE LEACH FIELD HAVE BEEN REMOVED AND REPLACED WITH CLEAN SAND AND THE LEACH FIELD WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED OWTS PLANS.
8. SUBSURFACE DRIP LINE SHALL BE PLACED IN UNCOMPACTED NATIVE SOILS RIPPED AND TILLED A MINIMUM OF 18 INCHES. SOIL SHALL BE AMENDED TO BE 30% SAND, 30% MULCH, 40% NATIVE OR LANDSCAPE DESIGNER SHALL BE CONTACTED TO ADVISE CONTRACTOR ON TYPE OF TOPSOIL TO IMPORT FOR MINIMUM BURIAL DEPTH. DISPERSAL FIELD SHALL BE PLANTED AND ESTABLISHED PRIOR TO OCCUPANCY (ENGINEER TO VERIFY)
9. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SYSTEM INSTALLATION, BUILDING SEWER DEPTH OR CONNECTION POINT WAS NOT PROVIDED AND SHALL BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION
10. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF BUILDING SEWER CONNECTION, MINIMUM 2% SLOPE FROM STRUCTURE TO CONNECTION POINT.
11. ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE VENTED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.

LEGEND	
P-X	PERCOLATION TEST LOCATION
B-XX	BORING LOCATION
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT

EQUIPMENT SCHEDULE			
ITEM	QTY	DESCRIPTION	MFG/PART NUMBER
1	1	CONNECTION TO BUILDING SEWER[1]	
2	1	GRAVITY CLEAN-OUT AND BACKWATER VALVE[1]	INDUSTRIAL BACKWATER VALVE (SPEARS MODEL S475P FOR 4") 8" I.D. VALVE BOX (CHRISTY MODEL F08)
3	1	TREATMENT TANK[1][2]	MICROSEPTEC ES12
4	2	AIR COMPRESSOR[1][2]	MICROSEPTEC
5	1	REMOTE TELEMETRY CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	MICROSEPTEC
6	1	CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	GEOFLOW
7	2	GRAVITY UV DISINFECTION UNIT (2 IN SERIES 100% REDUNDANCY)	SALCOR
8	1	DUPLEX PUMP SYSTEM WITH 30" DIAMTER VAULT[1][2]	MICROSEPTEC
9	1	VENT ASSEMBLY[1][2]	ORENCO
[1]		ALL PLUMBING APPURTENANCES AND WORK SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE PLUMBING CODES. APPURTENANCES AND WORK INCLUDE, BUT ARE NOT LIMITED TO; CONNECTION TO BUILDING PLUMBING, VENTILATION, ISOLATION, BACKWATER VALVES, CLEANOUTS, AND FITTINGS.	
[2]		ALL ELECTRICAL APPURTENANCES INCLUDING BUT NOT LIMITED TO; CONDUIT, CONDUCTOR, CONTROL PANELS, CONTACTORS, FLOATS, PUMPS, DISCONNECTS, AND COMMUNICATION DEVICES SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE ELECTRICAL CODE AND CURRENT NATIONAL ELECTRIC CODE. CONDUIT AND CONDUCTOR RUNS AND SIZING SHOWN ON PLAN ARE FOR ALIGNMENT AND COST ESTIMATION. ELECTRICAL CONTRACTOR SHALL SPECIFY ALL ELECTRICAL APPURTENANCES. CONTROL AND POWER CONDUCTORS SHALL BE PLACED IN SEPARATE CONDUIT	

PIPING SCHEDULE			
	TAG	DESCRIPTION	SPECIFICATION
GSL	GSL	PROPOSED GRAVITY SEWER LINE	4" SCH40 PVC
PEL	PEL	PROPOSED PUMPED EFFLUENT LINE	2" SCH80 PVC
PVL	PVL	PROPOSED AIR VENT LINE	4" SCH40 PVC
RCRC	RCRC	RECIRCULATION RETURN LINE	1½" SCH80 PVC
LFH	LFH	DISPERSAL FIELD HEADER	1½" SCH80 PVC
LFL	LFL	DISPERSAL FIELD LATERAL	1½" SCH80 PVC
FL	FL	FLOWLINE	
TOB	TOB	TOP OF BANK	

OWTS Capacity (Design and Maximum)				
Component	Description	Size/Capacity	Design Capacity	Max Capacity
Treatment Volume (Fixture Unit Capacity)	1-MicroSepTec ES12	3,634 gallons	49 fixture units	105 fixture units
Treatment (Organic Capacity)	1-MicroSepTec ES12	2.00 lb BOD5/day	600 gpd at 220 mg/L BOD5	1,200 gpd at 220 mg/L BOD5
Disinfection	2-Salcor Gravity UV	1,200 gpd	600 gpd	1,200 gpd
Subsurface Irrigation Dispersal	Subsurface Irrigation	640 square feet at 0.938 gallons per square foot per day	600 gpd	638 gpd

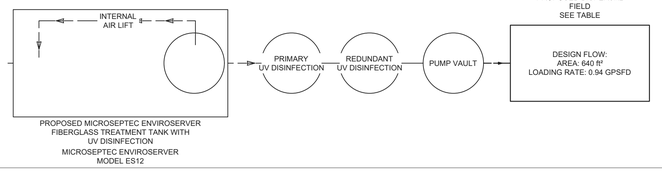
Fixture Units Summary		
Total Proposed Fixture Units	49	
Total Fixture Units	49	
Dwelling Units Summary		
Total Proposed Dwelling Units	1	
Proposed Bedroom Summary		
Total Proposed Bedrooms	3	bedrooms
Number of Proposed Master Bedrooms	1	bedrooms
Number of Proposed Standard Bedrooms	2	bedrooms
Flow Calculations (Q)		
Peak Flow per Master Bedroom	300	gpd
Peak Flow per Standard Bedroom	150	gpd
Average Flow per Master Bedroom	200	gpd
Average Flow per Standard Bedroom	100	gpd
Flow Calculations Proposed (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Design Flow, Q_I	600	gpd
Influent Characteristics		
BOD5 (mg/l)	220	
TSS (mg/l)	220	
TN (mg/l)	35	
Effluent Characteristics		
BOD5 (mg/l)	20	
TSS (mg/l)	20	
TN (mg/l)	17.5	

MicroSepTec Design		
Design Flow	600	gpd
Design Influent BOD	220	mg/L
Design Effluent BOD	20	mg/L
Design Organic Loading BOD	1.00	lb BOD_5
MicroSepTec Model Specified	ES12	
MicroSepTec Tank Volume	3634	gal
MicroSepTec ES12 Base Organic Removal (1)	2.00	lb BOD_5
Minimum Number of MicroSepTec ES12 Required	1	units
Design Organic Removal	2.00	lb BOD_5
Design Tank Volume	3634	gal
Maximum Effluent Flow Based on Organic loading	1200	gpd
Maximum Effluent Flow Based on Hydraulic Loading	1200	gpd
Maximum Fixtures Based on Design Tank Volume	105	

Septic Tank (ST) Calculations		
Total Existing Fixture Units		
Total Proposed Fixture Units	49	
Total Fixture Units	49	
Minimum Septic Tank Size based on Fixtures	2250	gal
Number of Dwelling Units	1	
Number of Bedrooms	3	bedrooms
Minimum Septic Tank Size based on Bedrooms	1500	gal
Design Septic Tank Size	3634	gal
Flow Calculations (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Leaching Field Design Flow, Q_I	600	gpd
Drip Distribution Calculations		
Design Subsurface Irrigation Loading (Application) Rate, I	0.997	gpsfd
Minimum Square Feet of Leaching Area Required, Q_I/I	602	ft^2
Design Square Feet of leaching Area from Site Plan, A	640	ft^2
Actual Loading Rate (Application), $L_R = Q/A$	0.938	gpsfd
Maximum Effluent Capacity, $Q_{MAX} = AxI$	638	gpsfd
Design Safetey Factor, H	1.0	

Ryons T value to Subsurface Irrigation Conversion Calculations											
Test Pit Number	Test Depth	Percolation Rate from Ryons T est Method Converted to Gal/day					Percolation Area F (SEE FIGURE)	Infiltration rate G=B/F	Safety Factor H	Application Rate I=G/H
		A	B=1/A	C=Bx1440	D=C/12	E=Dx7.481				
	ft	min/inch	inch/min	in/day	ft/day	gal/day	ft^2	gal/ft^2-day		gal/ft^2-day
P-5	7	30	0.033	48.00	4.00	29.92	3	9.97	10	0.997
P-6	7	25	0.040	57.60	4.80	35.91	3	11.97	10	1.197
T Average		27.5						Application Rate Average		1.1
T Max		30						Application Rate Max		1.20
T Ryon (T_R)		30						Design Application Rate		0.997

SETBACK REDUCTIONS				
	COMPONENT	SITE ELEMENT	CODE REQUIREMENT	ACTUAL
1	DISPERSAL FIELD	SITE WALL	8'	0
2	DISPERSAL FIELD	STRUCTURE	8'	1'-0"±
3	DISPERSAL FIELD	BASEMENT	15' DAYLIGHT	1'-0"± 10'-4"±
4	DISPERSAL FIELD	TREATMENT TANK	5'	2'-0"
5	TREATMENT TANK	STRUCTURE	5'	2'-0"±
6	DISPERSAL FIELD	BLUE LINE STREAM	100'-0" (MPC) 50'-0" SRWQCB	83'-7"±



PROPOSED MICROSEPTEC ENVIROSERVER
FIBERGLASS TREATMENT TANK WITH
UV DISINFECTION
MICROSEPTEC ENVIROSERVER
MODEL ES12

FINAL FOR APPROVAL
ISSUED
10/31/2022

JOHN N. YAROSLASKI
PRINCIPAL ENGINEER

ENSITU ENGINEERING, INC.
7476 CARMELITA AVE.
ATASCADERO, CA. 93422
Phone: 805.772.0013
Fax: 805.772.0013
ENSITU@ensitu.com

"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."

REVISIONS			
NO.		DATE	BY

31870 SEA LEVEL DRIVE, CONFORMANCE REVIEW
DESIGN PLANS
CR–SITE PLANS AND TABLES 31870
MALIBU, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN N. YAROSLASKI
No. 60149
EXP 06-2024
CIVIL
STATE OF CALIFORNIA

DATE: 10/31/2022
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: JNY

JOB NO. 114–118

SHEET 1 OF 1

Project Engineer: John N. Yaroslaski, PE # 60149
DWG NAME: D:\Ensitu Engineering Inc\SEE - P\144-118 31870 Sea Level Drive PWCR-01.dwg
CREATION TIME: Friday, November 4, 2022 10:02:16 AM
LAST SAVED: Monday, October 31, 2022 10:45:58 AM
PLOT TIME: Friday, November 4, 2022 10:05:58 AM

PROPERTY ADDRESS:

31870 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-010 (LOS ANGELES COUNTY)

LEGAL DESCRIPTION:

LOT 167,OF TRACT NO. 10630, IN THE CITY OF MALIBU, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 181 PAGES 6 THROUGH 11, IN THE OFFICE OF THE RECORDER OF SAID COUNTY.

EXCEPT ALL METALS AND MINERALS AND ALL PETROLEUM, NATURAL GAS, AND OTHER HYDROCARBON SUBSTANCES, AND ALL SURFACE AND ALL SUBSOIL PRODUCTS OF ANY NATURE OR CHARACTER WHATSOEER, IN, UNDER OR UPON SAID LAND AND EVERY PART THEREOF, BUT WITHOUT RIGHT TO EXTRAXT MINERALS, AS PROVIDED FOR IN DEED FROM MARBLEHEAD LAND COMPANY, RECORDED MARCH 8, 1945

BASIS OF BEARINGS:

THE BASIS OF BEARINGS WAS DERIVED FROM THE INVERSE MEASUREMENT OF FOUND MONUMENTS AS SHOWN ON TRACT MAP NO. 10630 AS FILED IN BOOK 181 PAGES 6-11 OF MAPS, IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, STATE OF CALIFORNIA.

BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MI E/O DECKER RD 33FT W/O DR TO HSE •31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N (2008) DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

NOTES:

1) TITLE REPORT USED FOR THIS SURVEY WAS PREPARED BY PRIORITY TITLE, OREDER NO. C104742, DATED JUNE 10, 2021, EASEMENTS, AS SHOWN ON THIS MAP ARE FROM INFORMATION OBTAINED FROM SAID TITLE REPORT.

2) PERTAINING TO SURVEY AND TOPO MAP, IF RETAINING WALLS OR SIMILAR STRUCTURES ARE TO BE DESIGNED FROM CONTOURS SHOWN ON THIS MAP, GROUND ELEVATIONS AT CRITICAL POINTS CONTROLLING THE DESIGN SHOULD BE VERIFIED BY DIRECT LOCATION AND LEVELSPRIOR TO FINAL DESIGN ADOPTION.

3) UTILITIES, IF LOCATED, ARE BY SURFACE EVIDENCE ONLY. (MANHOLES, WATER METERS, GAS METERS, POWER POLES, ETC.)

4) POLE LINE EASEMENTS PER BOOK 16485, PAGE 374 IS NON-SPECIFIC AND CANNOT BE PLOTTED

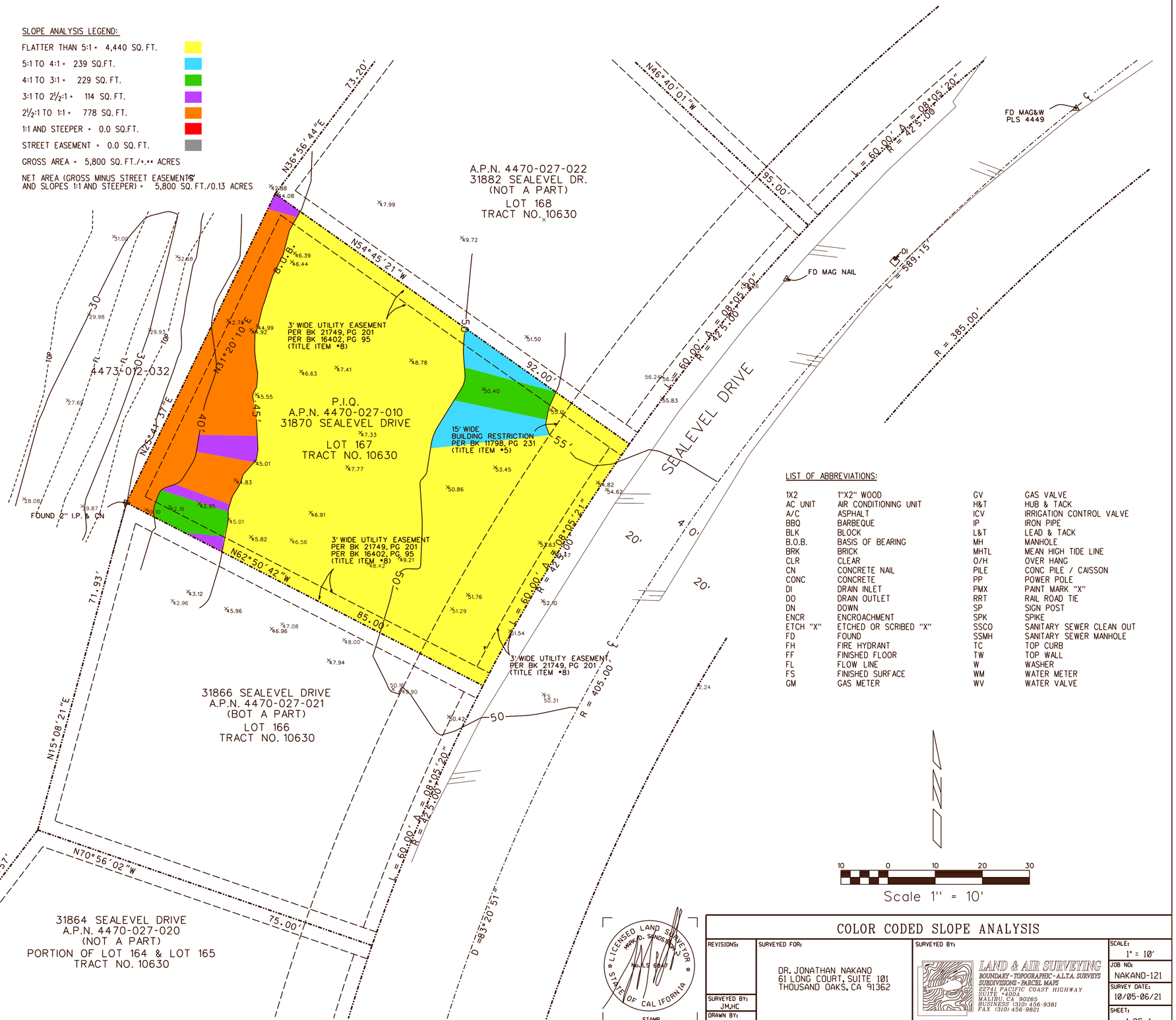
5) RECREATION EASEMENT PER BOOK 16402, PAGE 95, IS OUTSIDE AREA SHOWN ON MAP.

6) GROSS PARCEL AREA = 5,800 SQ. FT. / 0.13 ACRES

SLOPE ANALYSIS LEGEND:

FLATTER THAN 5:1 = 4,440 SQ. FT.
5:1 TO 4:1 = 239 SQ.FT.
4:1 TO 3:1 = 229 SQ. FT.
3:1 TO 2½:1 = 114 SQ. FT.
2½:1 TO 1:1 = 778 SQ. FT.
1:1 AND STEEPER = 0.0 SQ.FT.
STREET EASEMENT = 0.0 SQ. FT.
GROSS AREA = 5,800 SQ. FT./*.** ACRES

NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) = 5,800 SQ. FT./0.13 ACRES



LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
AC UNIT	AIR CONDITIONING UNIT	H&T	HUB & TACK
A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.): X
WOOD FENCE: W
WIRE FENCE:
WROUGHT IRON-FENCE WIF
CONCRETE (CONC.):
TILE:
SLATE/FLAGSTONE:
DIRT/GRAVEL:
BRICK (BRK):
MANHOLE (M.H.):
TREES: PINE PALM EUC OAK TREE SYC PEPPER CORK OLIVE

LICENSED LAND SURVEYOR
MARK D. SANDS
No. LS 6847
STATE OF CALIFORNIA
STAMP

COLOR CODED SLOPE ANALYSIS

REVISIONS:

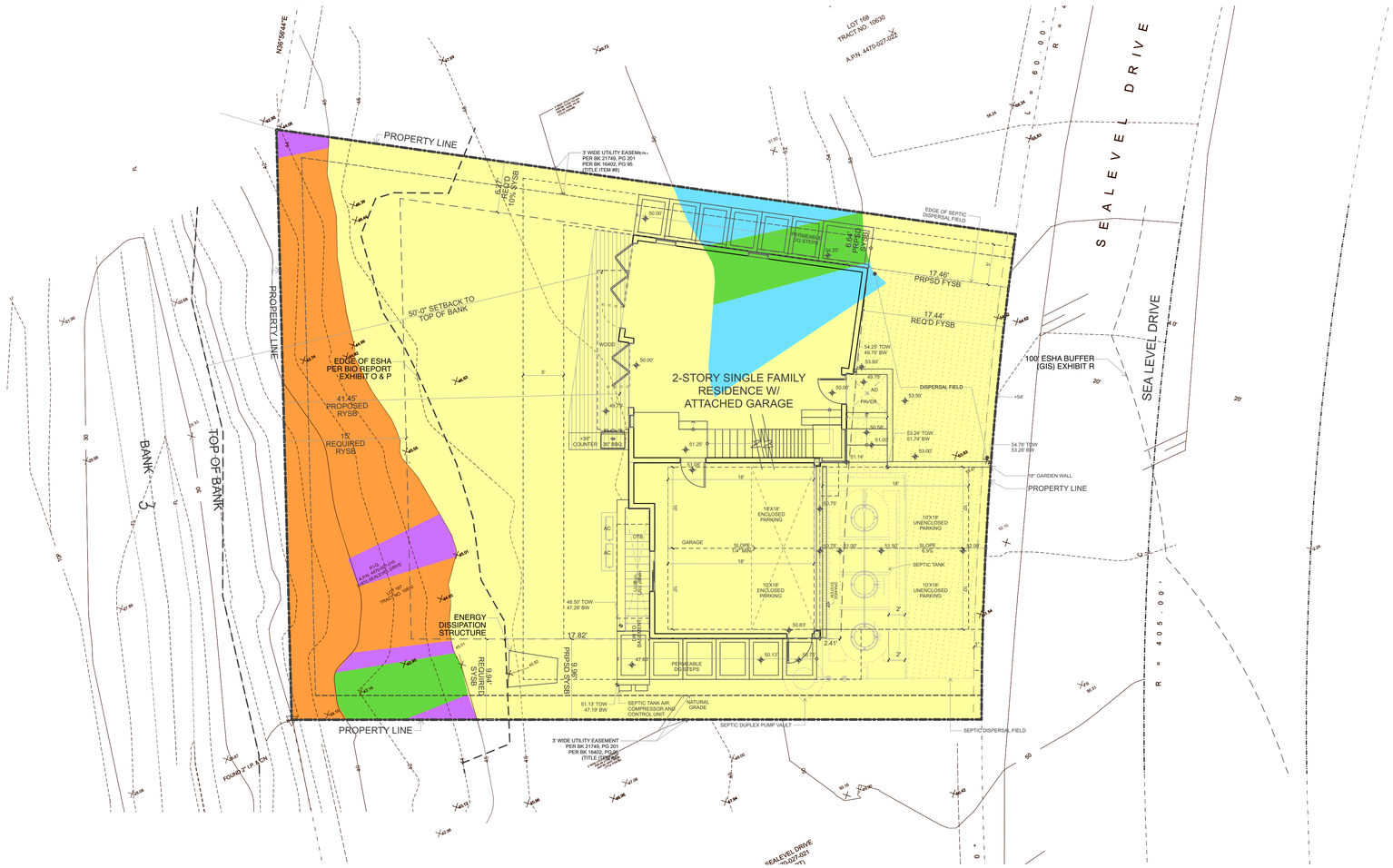
SURVEYED FOR:
DR. JONATHAN NAKANO
61 LONG COURT, SUITE 101
THOUSAND OAKS, CA 91362

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY - TOPOGRAPHIC - A.L.T.A. SURVEYS
SUBDIVISIONS - PARCEL MAPS
32741 PACIFIC COAST HIGHWAY
SUITE *200A
MALIBU, CA 90265
BUSINESS (310) 456-9381
FAX (310) 456-9821

SURVEYED BY: JM,HC
DRAWN BY: AL

SCALE: 1" = 10'
JOB NO: NAKANO-121
SURVEY DATE: 10/05-06/21
SHEET: 1 OF 1

T-4



SLOPE ANALYSIS LEGEND:

FLATTER THAN 5:1 = 4,440 SQ. FT.

5:1 TO 4:1 = 239 SQ.FT.

4:1 TO 3:1 = 229 SQ. FT.

3:1 TO $2^{1/2}$:1 = 114 SQ. FT.

$2^{1/2}$:1 TO 1:1 = 778 SQ. FT.

1:1 AND STEEPER = 0.0 SQ.FT.

STREET EASEMENT = 0.0 SQ. FT.

GROSS AREA = 5,800 SQ. FT./*.** ACRES

NET AREA (GROSS MINUS STREET EASEMENTS
AND SLOPES 1:1 AND STEEPER) = 5,800 SQ. FT./0.13 ACRES

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/25
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

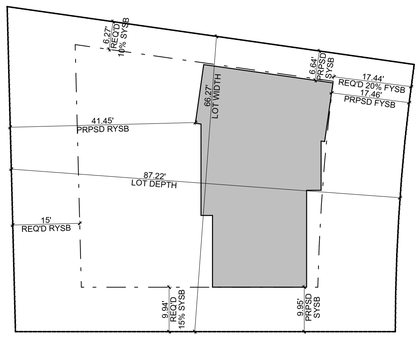
SITE PLAN WITH
COLOR CODED
SLOPE

DRAWING NO.
A-0.1

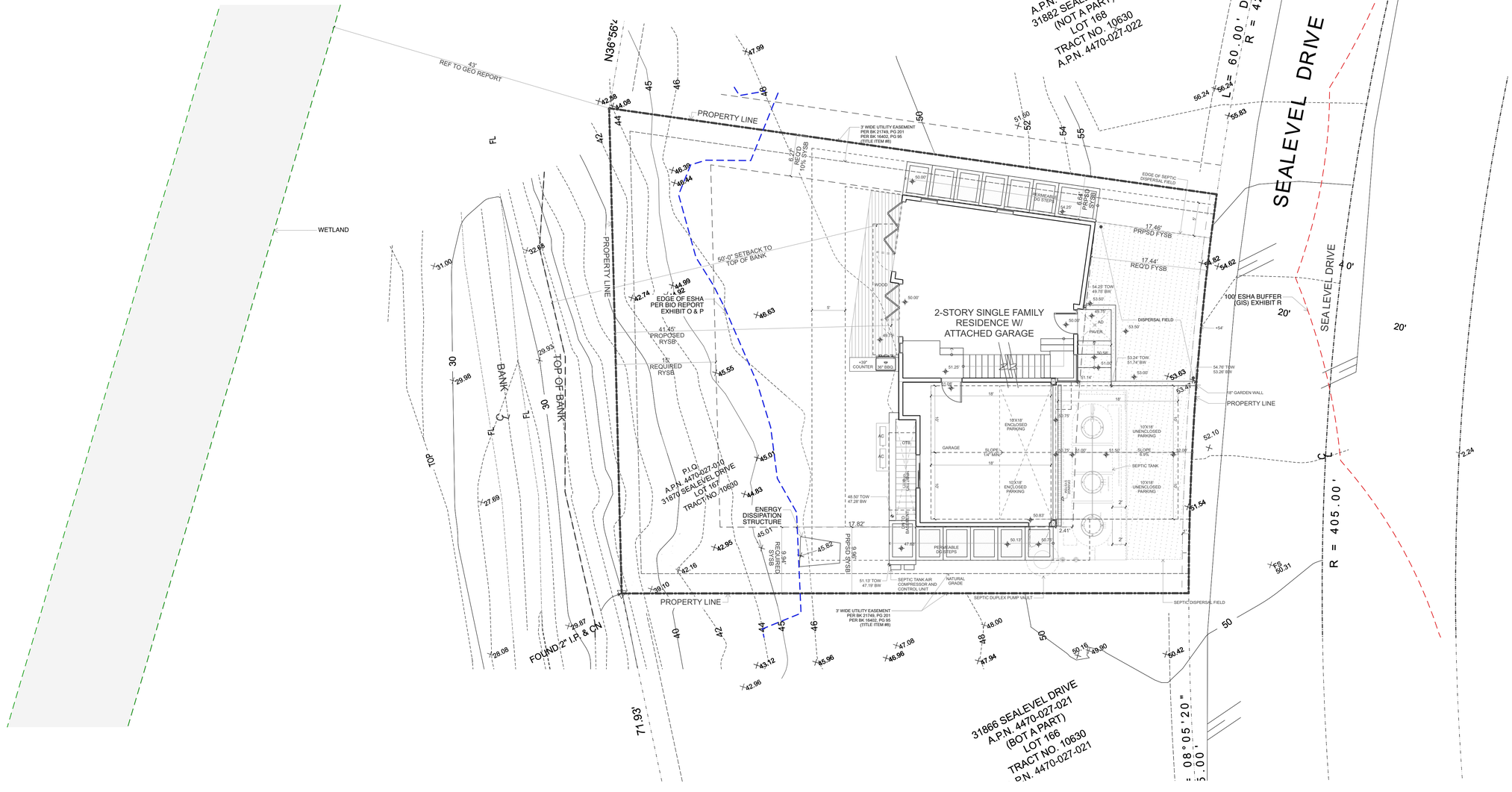
PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/8" = 1'-0"
DRAWN BY	D.W.B.,

Width/Depth:
Depth: 87.22' Width: 66.27'

•MINIMUM SETBACKS:	Required	Proposed
Front (East) :	17.44'	17.46'
Side 10% (North) :	6.27'	6.64'
Side 15% (South) :	9.94'	9.95'
Rear (West) :	15.00'	41.45'



SETBACK PLAN
SCALE: 1/16" = 1'-0" 2



SITE PLAN
SCALE: 1/8" = 1'-0" 1

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

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TEL. 310-456-5905

SHEET TITLE

SITE PLAN

DRAWING NO.
A-0.2

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

•MAX. ALLOWABLE SQUARE FOOTAGE:

5,800 x .177 = 1,027 + 1,000= **2,027 SF**

•PROPOSED SQUARE FOOTAGE TABULATION:

First Floor.....	720	Sq.Ft.+	
Garage at First Floor.....	486	Sq.Ft.+	
Second Floor	794	Sq.Ft.=	
Total Enclosed area	2,000	Sq.Ft.	< 2,027 Sq.Ft.

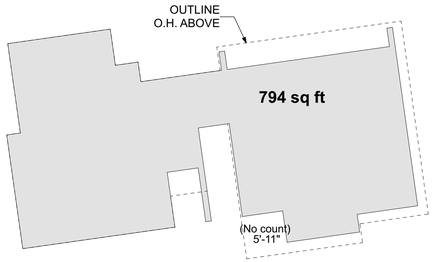
Basement 896 Sq. Ft. sf < 1,000 Sq. Ft.

City of Malibu Planning Division

Total Development Square Footage Calculator

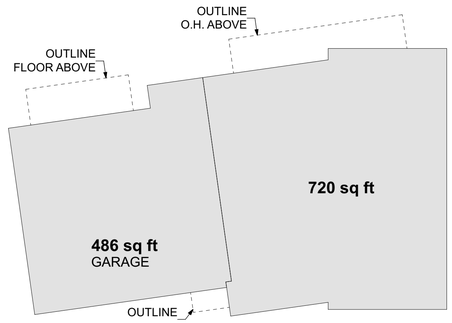
Plug in Net Lot Area* here

>>>>	5800			<<<<
				subtotal
	Up to 0.5 acre	5800	5800	2,027 s.f.
	0.5 to 1 acre	-15980		0 s.f.
	1 to 1.5 acres	0		0 s.f.
	1.5 acres or more	0	0	0 s.f.
				1885
	TDSF -->>>	2,027		



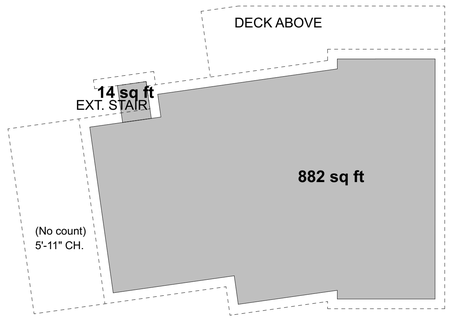
SECOND FLOOR PLAN 3

SCALE: 1/8" = 1'-0"



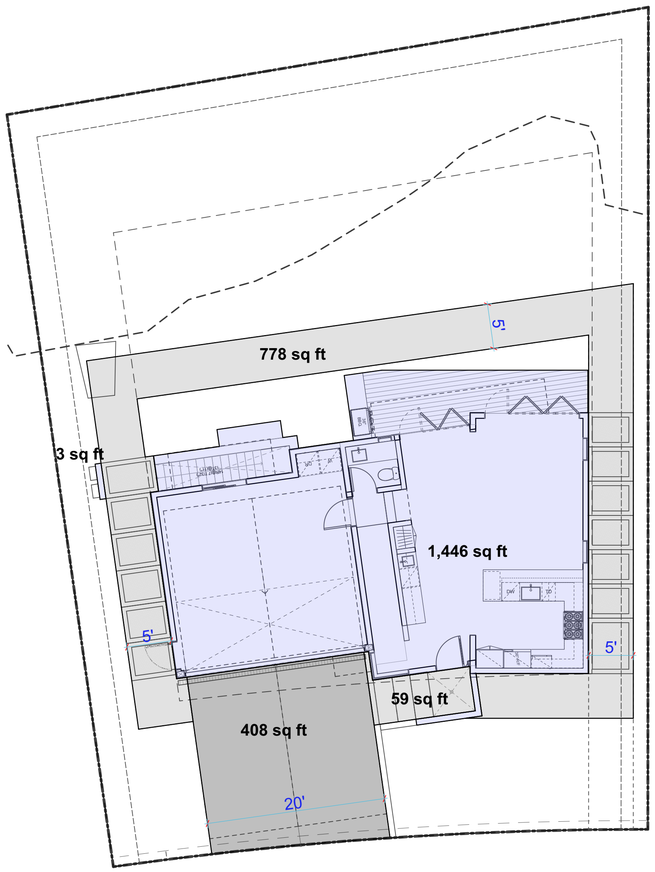
FIRST FLOOR PLAN 2

SCALE: 1/8" = 1'-0"



BASEMENT PLAN 1

SCALE: 1/8" = 1'-0"



LIMIT OF DEVELOPEMENT AREA 5

SCALE: 1/8" = 1'-0"

SYMBOL LEGEND:

	DEVELOPMENT AREA	1,449 SF
	FD SQUARE FOOTAGE	1,186 SF (EXEMPT)

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
5,800 SF X 25% = 1,450 SF : 1,449 SF < 1,450 SF (MAX)

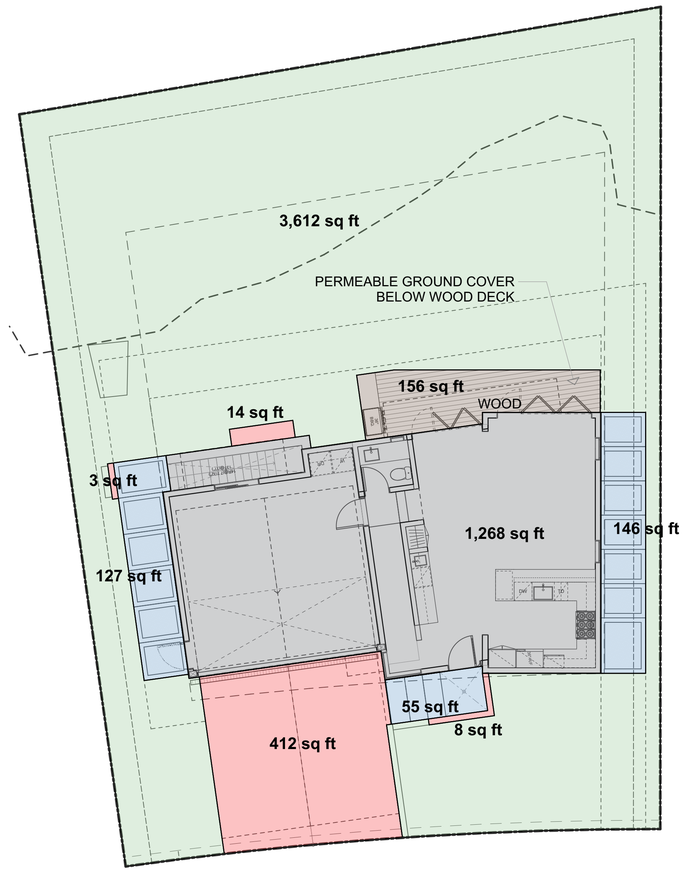
•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE : 5,800 X 45 = 2,610 Sq.Ft.

•PROPOSED IMPERMEABLE COVERAGE:

	Buildings footprint	1,268 sf+
	Concrete slabs	437 sf+
	TOTAL	1,705 sf < 2,610 sf limit

•**OTHER** PROPOSED PERMEABLE AREAS:

	Wooden deck	156 sf
	Existing grading to remain	3,612 sf
	DG	328 sf



IMPERMEABLE COVERAGE AREA 4

SCALE: 1/8" = 1'-0"

PLAN NORTH

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
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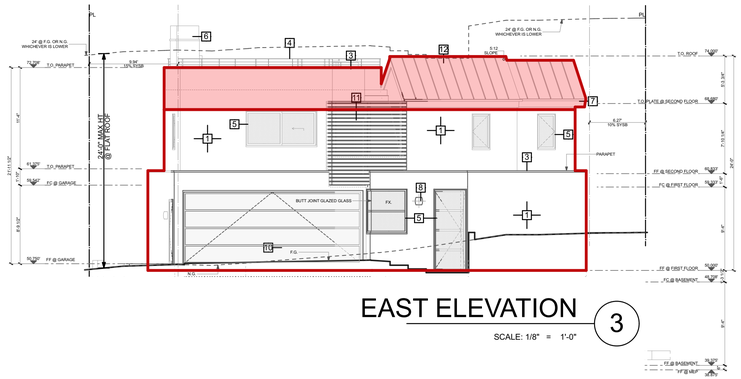
SHEET TITLE

AREA DIAGRAMS

DRAWING NO.
A-0.3

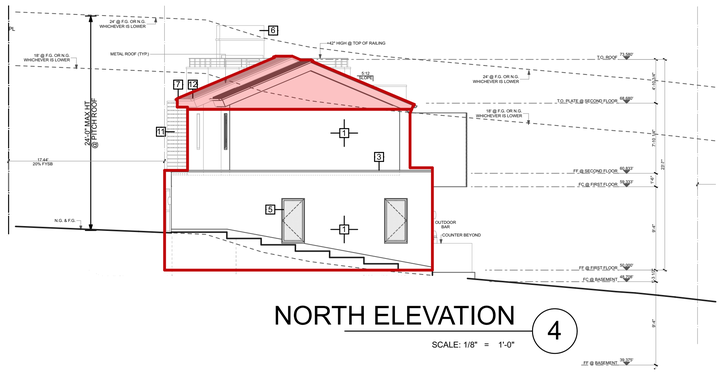
PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

T:\Users\pf-22\Library\CloudStorage\Box-Box\2025-02-11 In Use\Nakano_V27-2026-05-06.pln LAST DAVED AT 2026/05/07 BY PF-22



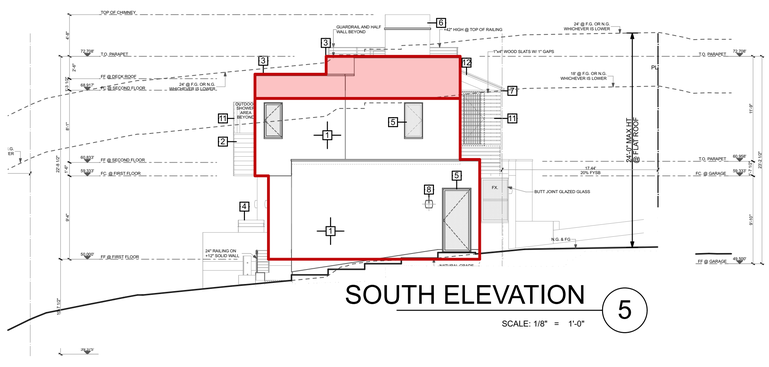
EAST ELEVATION 3

SCALE: 1/8" = 1'-0"



NORTH ELEVATION 4

SCALE: 1/8" = 1'-0"



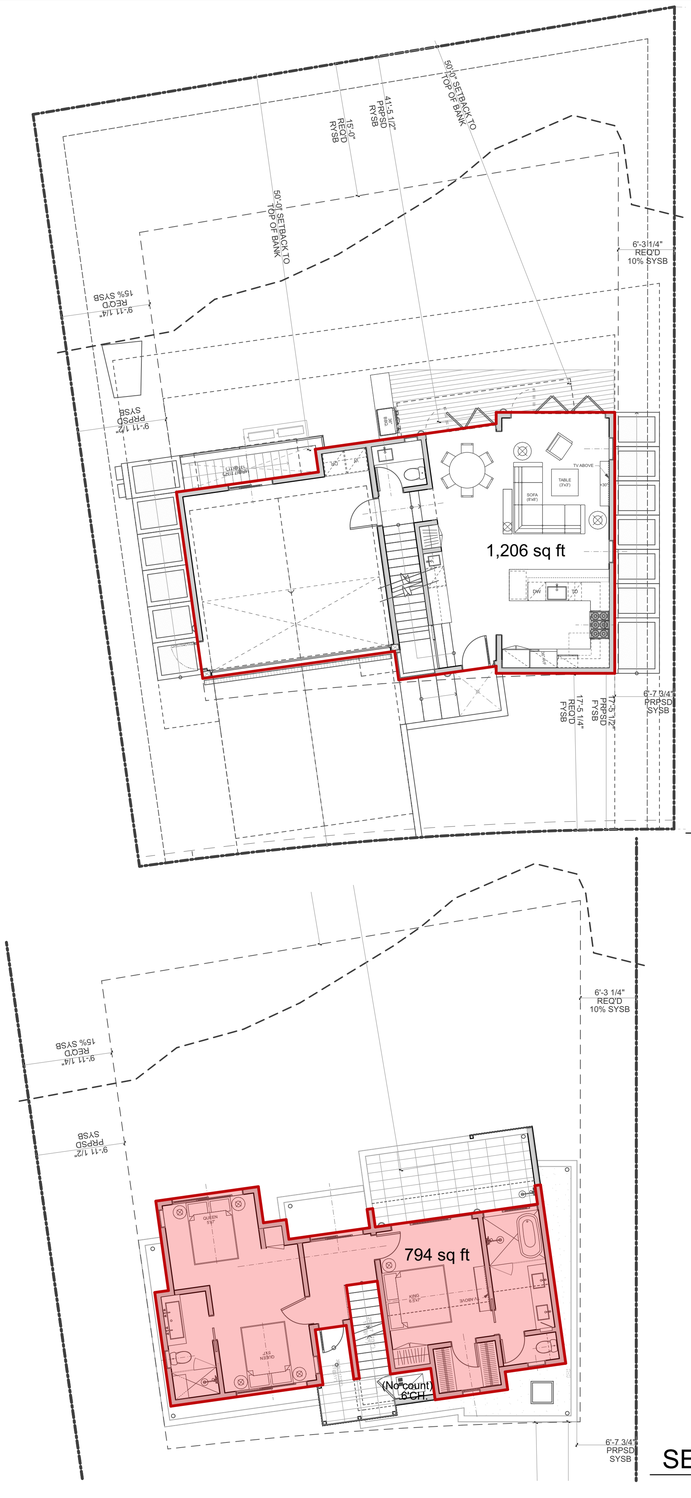
SOUTH ELEVATION 5

SCALE: 1/8" = 1'-0"



WEST ELEVATION 6

SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN 1

SCALE: 1/8" = 1'-0"

SECOND FLOOR PLAN 2

SCALE: 1/8" = 1'-0"

BULK AREA TABULATION: (2/3's RULE)

AREA BELOW 18' = 1,206 Sq. Ft.
MAXIMUM ALLOWED OVER 18'= (1,206 x 0.67) = 804 Sq.Ft.
AREA OVER 18' = 794 Sq.Ft. < 804 Sq.Ft.

FIRST FLOOR AREA (1,206 SF)

SECOND FLOOR AREA (794 SF)

PLAN NORTH

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SHEET TITLE

2/3RD'S CALCULATIONS DIAGRAM

DRAWING NO.

A-0.4

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

FIRE DEPARTMENT NOTES

1. PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 20 FEET, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6 AND AN UNOBSTRUCTED VERTICAL CLEARANCE "CLEAR TO SKY" FIRE DEPARTMENT VEHICULAR ACCESS TO WITHIN 150 FEET OF ALL PORTIONS OF THE EXTERIOR BUILDING WALLS. FIRE CODE 503.2.1

2. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED FIRE DEPARTMENT TURNAROUND. FIRE CODE 503.2.5

3. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE PROVIDED WITH A 32 FOOT CENTERLINE TURNING RADIUS. FIRE CODE 503.2.4

4. THE GRADIENT OF FIRE DEPARTMENT VEHICLE ACCESS ROADS SHALL NOT EXCEED 15% UNLESS APPROVED BY THE FIRE CODE OFFICIAL. FIRE CODE 503.2.7

5. A MINIMUM 5 FOOT WIDE APPROVED FIREFIGHTER ACCESS WALKWAY LEADING FROM THE FIRE APPARATUS ACCESS ROAD TO THE BUILDINGS EXTERIOR OPENINGS SHALL BE PROVIDED FOR FIREFIGHTING AND RESCUE PURPOSES. FIRE CODE 504.1

6. GRADE BREAKS SHALL NOT EXCEED THE MAXIMUM ANGLE OF APPROACH OR DEPARTURE FOR FIRE DEPARTMENT APPARATUS.

7. THE INSPECTION, HYDROSTATIC TEST AND FLUSHING OF THE FIRE SPRINKLER PIPING SHALL BE WITNESSED BY AN AUTHORIZED FIRE DEPARTMENT REPRESENTATIVE. FIRE CODE 901.6

8. PROVIDE AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM AS SET FORTH BY BUILDING CODE 903, AND FIRE CODE 903. PLANS SHALL BE SUBMITTED TO THE SPRINKLER PLAN CHECK UNIT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

REASON : FIRE CODE 903.2.8 AND 903.2.11.7
LOCATION : MAIN HOUSE, GUEST HOUSE, AND DETACHED GARAGE
TYPE OF FIRE SPRINKLER SYSTEM : FIRE CODE 903.3.1.3 - NFPA 13D

9. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE HARDSCAPE ALL WEATHER ACCESS IN ACCORDANCE WITH THE DEPARTMENT'S ALL WEATHER ACCESS REQUIREMENTS. FIRE CODE 503.2.3

10. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. FIRE CODE 505.1

11. FIRE APPARATUS ACCESS ROADS SHALL BE IDENTIFIED WITH APPROVED SIGNS. TEMPORARY SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS. FIRE CODE 505.2

12. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. BUILDING CODE 1008.1.9

13. ALL ROOF COVERINGS SHALL BE CLASS "A" AS SPECIFIED IN BUILDING CODE 1505.1.1 (RESIDENTIAL CODE R327.5.2 & R902)

14. ROOF VALLEY FLASHINGS SHALL BE NOT LESS THAN 0.0019-INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36-INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF NO. 72 ASTM CAP SHEET MEETING RUNNING THE FULL LENGTH OF THE VALLEY. (RESIDENTIAL CODE R327.5.3 AND BUILDING CODE 705A.3)

15. ROOF GUTTERS SHALL BE PROVIDED WITH A MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER. (RESIDENTIAL CODE R327.534 AND BUILDING CODE 705A.4)

16. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

17. FIRE DEPARTMENT VEHICULAR ACCESS ROADS MUST BE INSTALLED AND MAINTAINED IN A SERVICEABLE MANNER PRIOR TO AND DURING THE TIME OF CONSTRUCTION. FIRE CODE 501.4

18. PROVIDE APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS NO PARKING - FIRE LANE. SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE BY 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS, TO CLEARLY INDICATE THE ENTRANCE TO SUCH ROAD, OR PROHIBIT THE OBSTRUCTION THEROF AND AT INTERVALS, AS REQUIRED BY THE FIRE INSPECTOR. FIRE CODE 503.3.

19. AN APPROVED KEY BOX, LISTED IN ACCORDANCE WITH UL 1037 SHALL BE PROVIDED AS REQUIRED BY FIRE CODE 506. THE LOCATION OF EACH KEY BOX SHALL BE DETERMINED BY THE FIRE INSPECTOR.

20. THE ELECTRIC SECURITY GATE SHALL PROVIDE AN APPROVED MEANS OF EMERGENCY OPERATION, AND SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES AND REPLACED OR REPAIRED WHEN DEFECTIVE. ELECTRIC GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F220. GATES SHALL BE OF THE SWINGING OR SLIDING TYPE. CONSTRUCTION OF GATES SHALL BE OF MATERIALS THAT ALLOW MANUAL OPERATION BY ONE PERSON. FIRE CODE 503.6.

21. ALL FIRE HYDRANTS SHALL MEASURE 6" X 4" X 2-1/2", BRASS OR BRONZE, CONFORMING TO AMERICAN WATER WORKS ASSOCIATION STANDARD C503, OR APPROVED EQUAL, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE COUNTY OF LOS ANGELES FIRE DEPARTMENT REGULATION 8.

22. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. RESIDENTIAL CODE R314.4

23. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. REQUIRED CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. RESIDENTIAL CODE R315.1.2, BUILDING CODE 420.4.1

24. VENTS SHALL RESIST THE INTRUSION OF FLAME AND EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS. VENT OPENINGS SHALL BE PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH A MINIMUM 1/16TH INCH OPENINGS AND SHALL NOT EXCEED 1/8TH INCH. VENTS SHALL NOT BE INSTALLED IN EAVES OR CORNICES. (RESIDENTIAL CODE R327.6.1 AND BUILDING CODE 706A.1)

25. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

FIRE FLOW AVAILABILITY

THE REQUIRED FIRE FLOW FOR FIRE HYDRANTS AT THIS LOCATION IS 1,250 GPM, AT 20 PSI RESIDUAL PRESSURE, FOR A DURATION OF 2 HOURS OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND. FIRE CODE 507.3 AND APPENDIX B105.1 APPENDIX B.

THE REQUIRED FIRE FLOW IS BASED ON THE FOLLOWING CALCULATION:

TYPE OF CONSTRUCTION PER THE BUILDING CODE:	TYPE VB
VHFHSZ	YES
SIZE OF LOT (ACRES)	0.75 AC
FIRE FLOW BASED ON THE FIRE-FLOW CALCULATION AREA	1,500 GPM
REDUCTION FOR FIRE SPRINKLERS (MAXIMUM 50%):	750 GPM
TOTAL FIRE FLOW REQUIRED:	1,250 GPM (MIN)

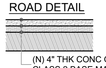
FIREFIGHTER WALKING ACCESS HOSE PULL DISTANCE

31870 SEA LEVEL
A-A^1 = 135'
B-B^1 = 12'

FIRE DEPT. LEGEND

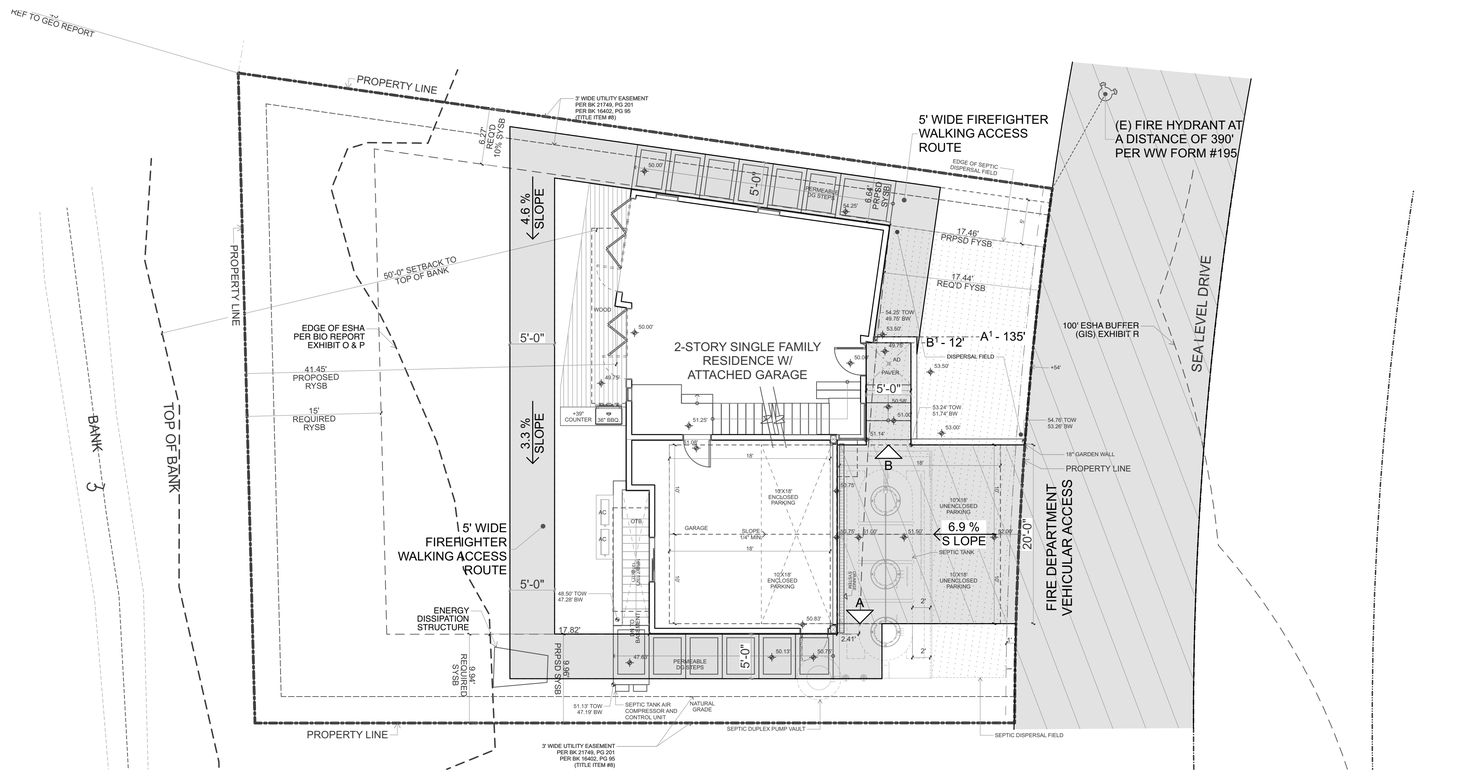
FIRE DEPT. VEHICULAR AND WALKING ACCESS

ROAD DETAIL



(N) 4" THK CONC O/ 4" THK CLASS 2 BASE MAT DRIVEWAY

FIRE FLOW AREA CALCULATION			
HOUSE AREA	TYPE V-B[b]	FIRE FLOW (GALLONS PER MINUTE)	FLOW DURATION (HOURS)
2,896 SF	0 - 3,600	1,500	2



SITE PLAN

SCALE: 1/8" = 1'-0"

1

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

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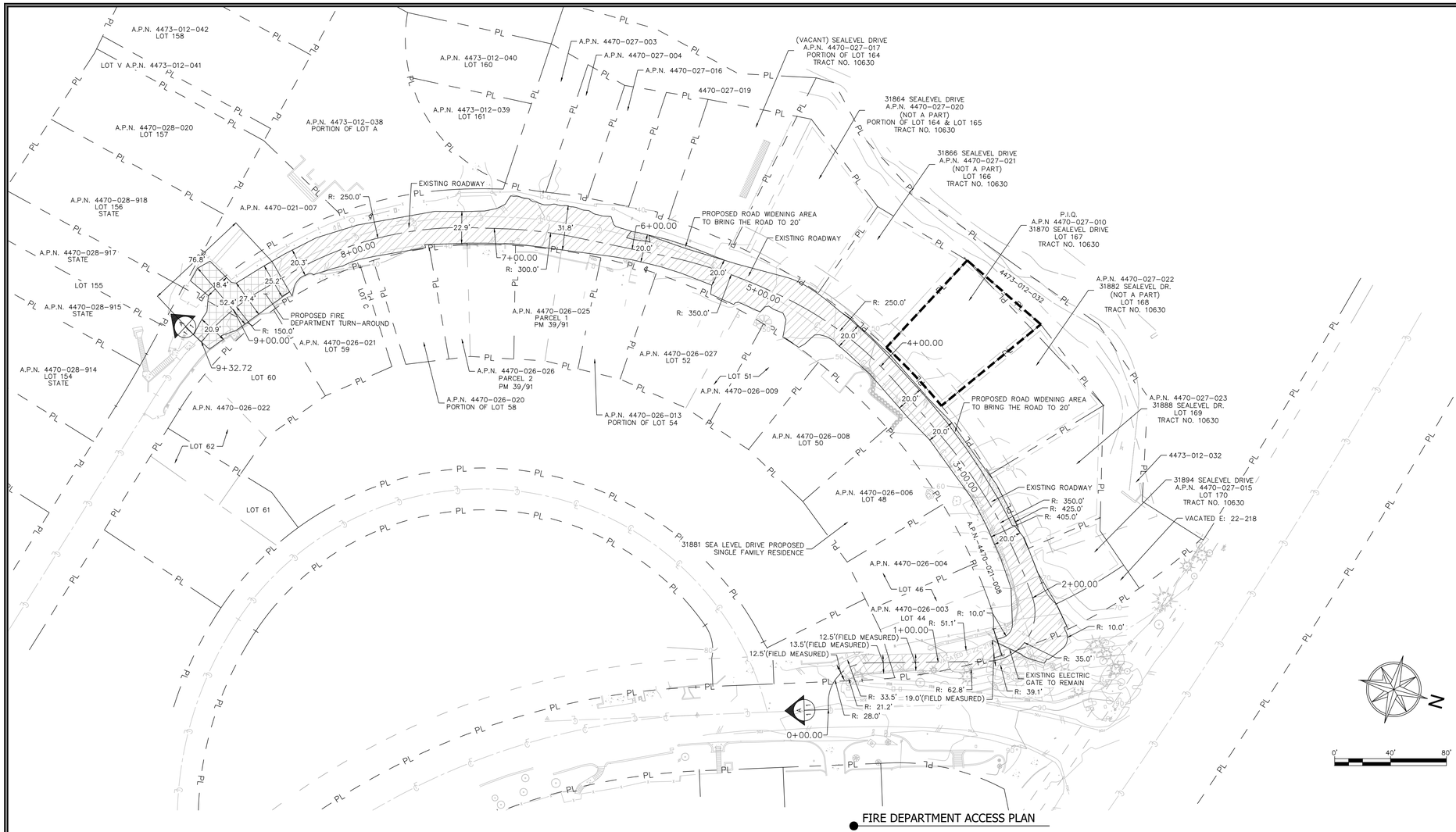
BURDGE ARCHITECTS
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MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

FIRE DEPARTMENT PLAN

DRAWING NO.
A-0.5

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,



FIRE DEPARTMENT ACCESS PLAN

LINETYPE	DESCRIPTION
— — — PL —	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
	PROPOSED MINOR CONTOURS
	ROAD CENTERLINE
	EASEMENT LINE

PROPOSED ON GRADE ROAD WIDENING AREA TO BRING THE ROAD TO 20'

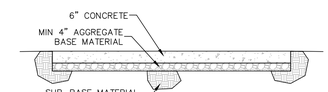
EXISTING FIRE DEPARTMENT ACCESS ROAD PER TYPICAL DRIVEWAY DETAIL HEREON

EXISTING FIRE DEPARTMENT TURN-AROUND

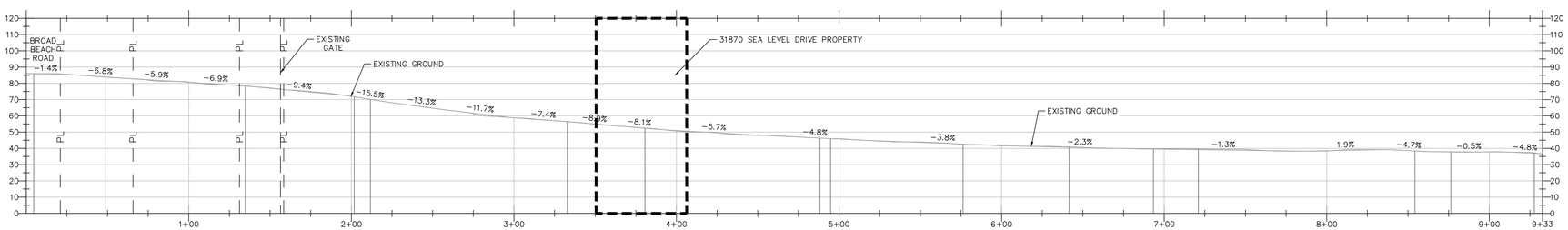
GENERAL NOTES:

THE DRIVEWAY SHALL BE FLUSH WITH EXISTING GRADES WITH NO CURBS.

THE DRIVEWAY MAY ALSO BE CONSTRUCTED OF MIN 4" ASPHALT CONCRETE OVER MIN 6" OF AGGREGATE BASE.



TYPICAL DRIVEWAY SECTION
DETAIL (NTS)



CROSS SECTION A
DRIVEWAY PROFILE
(SCALE: 1" = 40')

REVISIONS

REV	BY	DATE

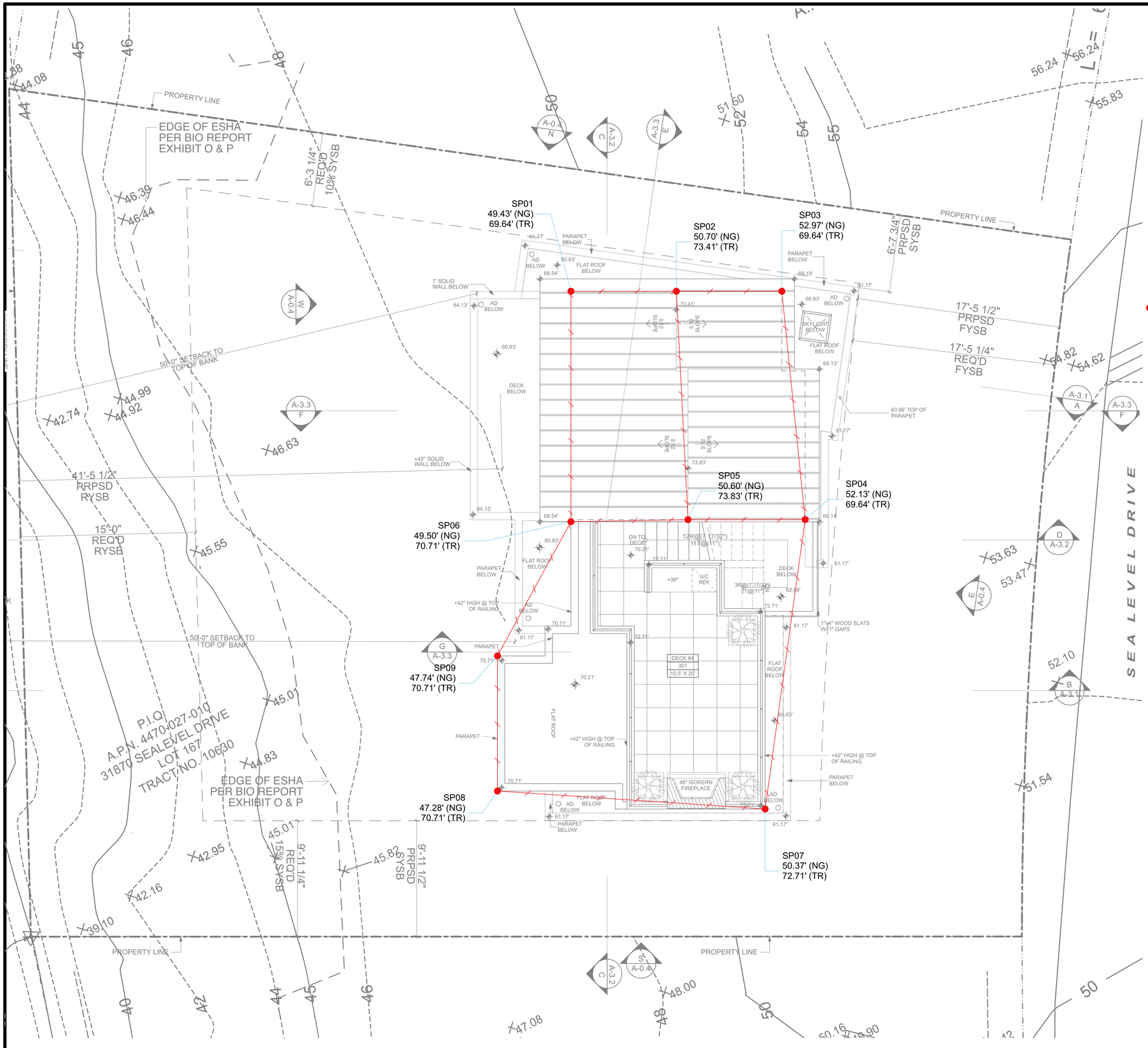
AHSIRT
ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

ROADWAY IMPROVEMENT ACCESS PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31870 SEA LEVEL DRIVE
MALIBU, CA 90265

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
EXP06/2023
CIVIL
STATE OF CALIFORNIA

JOB #	104-13
DATE	12/24
DRAWN BY	HN
CHECKED BY	TAC
SHEET NUMBER	F1.1

DRAWING NAME: P:\TRISHA PROJECTS\SEA LEVEL DR\VC-01-CAD\00-BCS\00\ROADWAY IMPROVEMENT ACCESS PLAN - 31870.DWG
XREF NAME: 11/29/2023 8:31:16 PM
DATE: 11/29/2023 8:31:16 PM
PLOT DATE: 11/29/2023 8:30:44 PM



PLAN NOTES:

"The top one-foot (1'-0") of the story pole shall be painted with a clearly visible black paint. Markings shall also be made at 18 feet above finish or natural grade, whichever results in a lower building height, and at one (1) foot increments above 18 feet. Bright orange construction mesh approximately one (1) foot in width shall be placed connecting poles to show all proposed roof and ridgelines.

"If at anytime the story pole becomes unsafe, they shall be repaired and reset immediately. The story poles shall be removed immediately if determined by the City to be a public safety risk."

INSTRUCTIONS:

Indication of story pole Height- The elevation of the height of each story pole and the natural and finish grades shall be indicated on the plans. In addition, the applicant shall provide an Elevation plan showing a typical story pole.

LEGEND:

- Plastic Ribbon
- Story Pole
- SP# XX.XX' XX.XX' — Story pole Number / Datum @ Bottom of Pole / Datum @ Top of Pole
- SP# — Datum @ Top of Pole/ Story Pole Number
- ER/EG# — Datum @ Bottom of Pole

STORY POLE PLAN APPROVED BY:

I hearby absolve the City of any liability associated with the construction of, or
damage caused by, the placement of the approved story poles.

Project Applicant _____ Date _____

Burdge & Associates Architects, Inc.

STORY POLE			
STORY POLE ID	NG DATUM @ BOTTOM	DATUM @ TOP	STORY POLE HEIGHT
SP01	49.43'	69.64'	20.22'
SP02	50.70'	73.41'	22.71'
SP03	52.97'	69.64'	16.67'
SP04	52.13'	69.64'	17.52'
SP05	50.60'	73.83'	23.23'
SP06	49.50'	70.71'	21.21'
SP07	50.37'	72.71'	22.34'
SP08	47.28'	70.71'	23.43'
SP09	47.74'	70.71'	22.97'

PLAN NORTH

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

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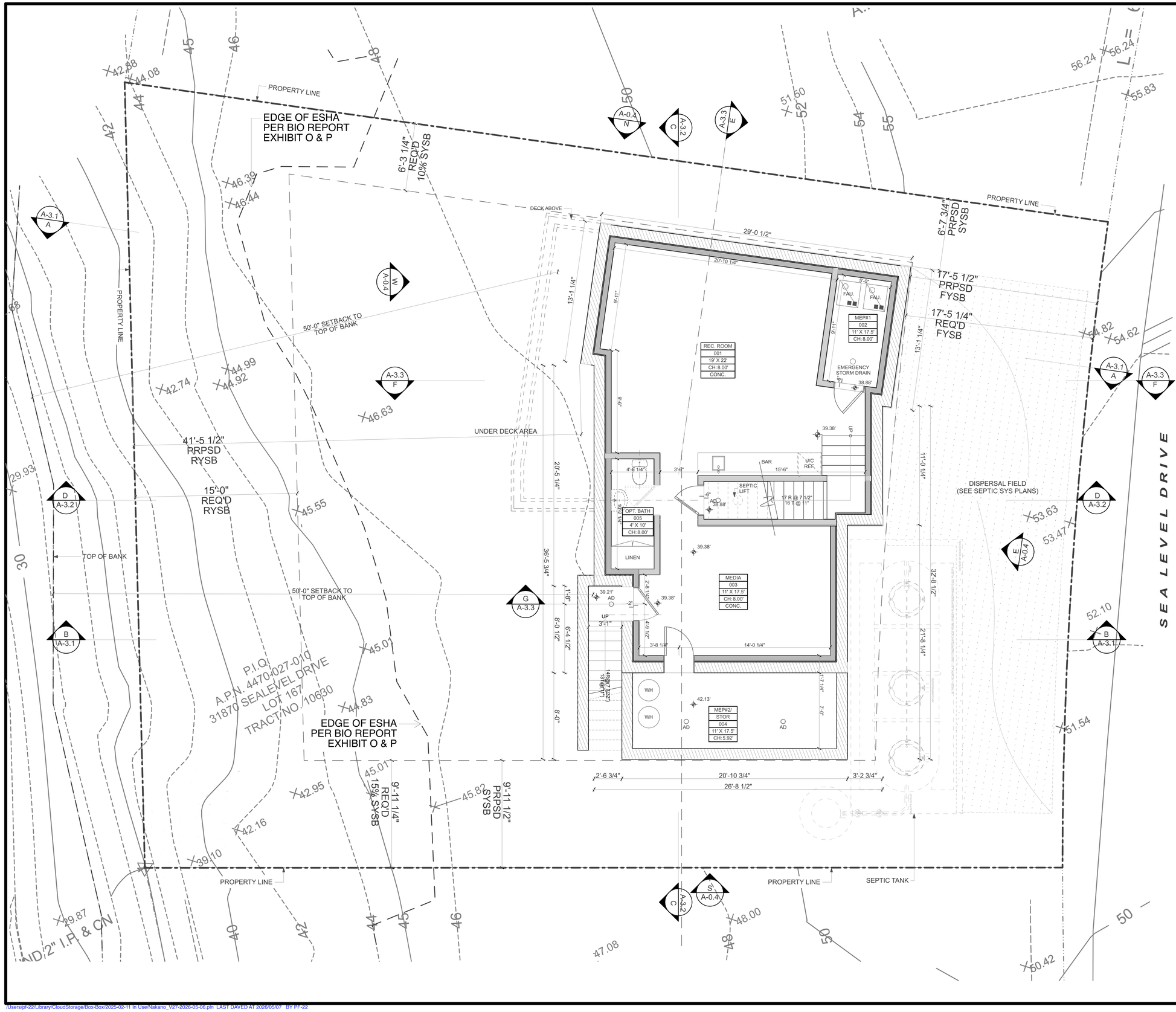
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

STORY POLE PLAN

DRAWING NO.
A-0.6

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



KEYNOTES

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02	SELECTIVE DEMOLITION ONLY
03	ALIGN
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06	+42 GUARDRAIL. ESR-3563. REF; 7/A-5.7
07	PLANTER BED/ PLANTER AREA
08	RET. WALL WATERPROOFING
09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
12	1 Hr. FIRE RATED CONSTRUCTION 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS. REF; 8/A-5.9
13	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY 1-HR. FIRE-RESISTANCE RATED CONSTRUCTION OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSURE, WHICHEVER IS GREATER, ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. [CBC 1009.5.3]
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17	MASONRY NOTES - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING REINF'G & INSTALLATION
18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
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34	PREFABRICATED FIREPLACE 72" MODORE 185 FIREPLACE, ANSI Z21.11.50a-2008
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37	SPECIAL CONSTRUCTION
38	FIRE PROTECTION SPRINKLER SYSTEM
39	TV. ABOVE
40	ELEVATOR- RESIDENTIAL ELEVATOR TO COMPLY WITH ASME A17.1/CAS-B44
41	BUILDING BEYOND
42	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
43	NOTE: 5' H. POOL FENCING ENCLOSURE W.5' W. X 5' H. SELF CLOSING , SELF LATCHING. RE: A-0.1 FOR POOL BARRIER SURROUND
44	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
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NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS), MEETS THE IAPMO CERTIFICATIONS

LIGHTWELL CALCULATION
13.9% < 25% PER LCP POLICY 4

LINEAR FEET OF EXT WALL = 153.23'
LIGHTWELL LENGTH = 21.29'
21.29' / 153.23' = 13.9%

NAKANO RESIDENCE

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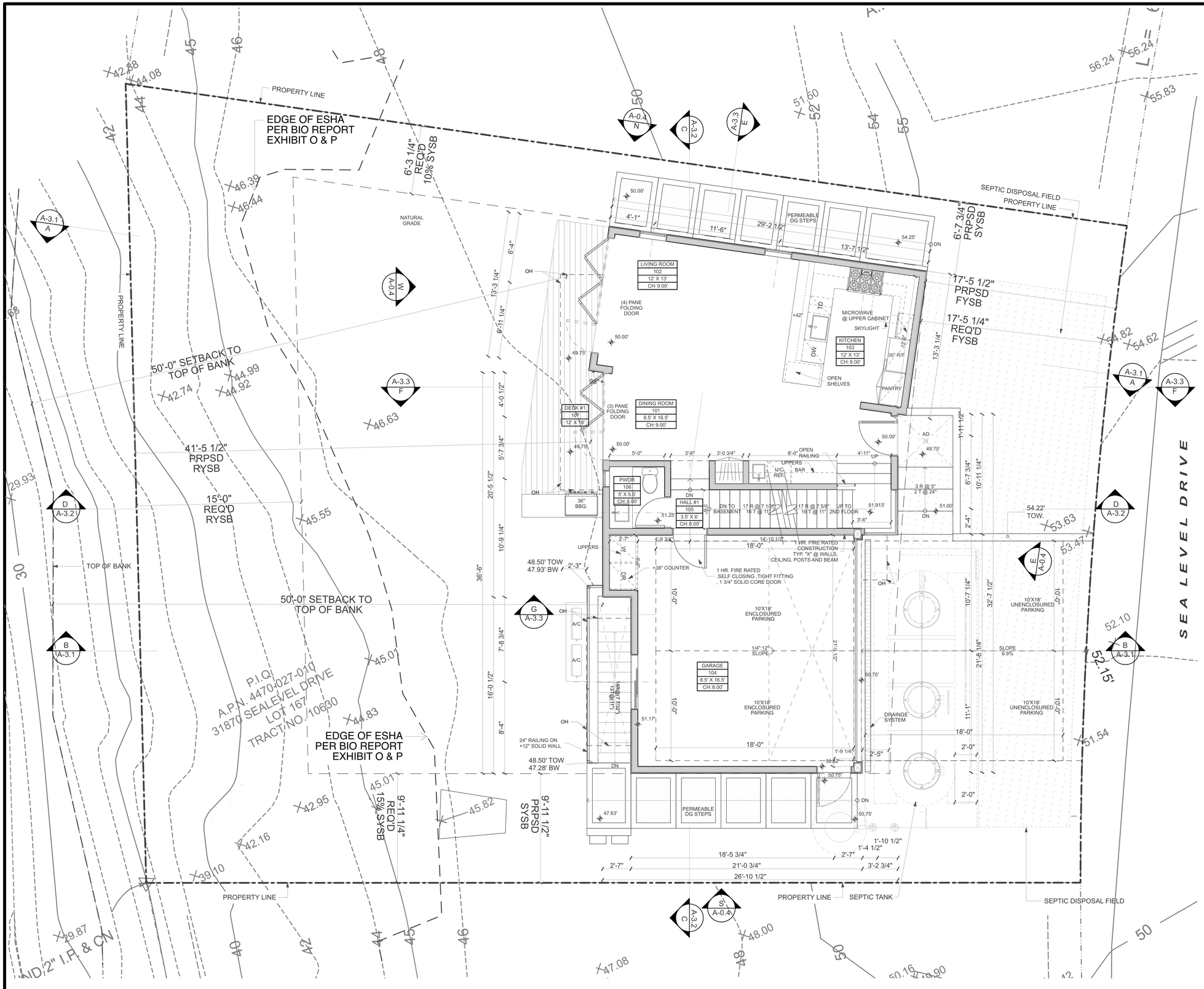
BURDGE ARCHITECTS
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MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED
BASEMENT PLAN

DRAWING NO.
A-1.1

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



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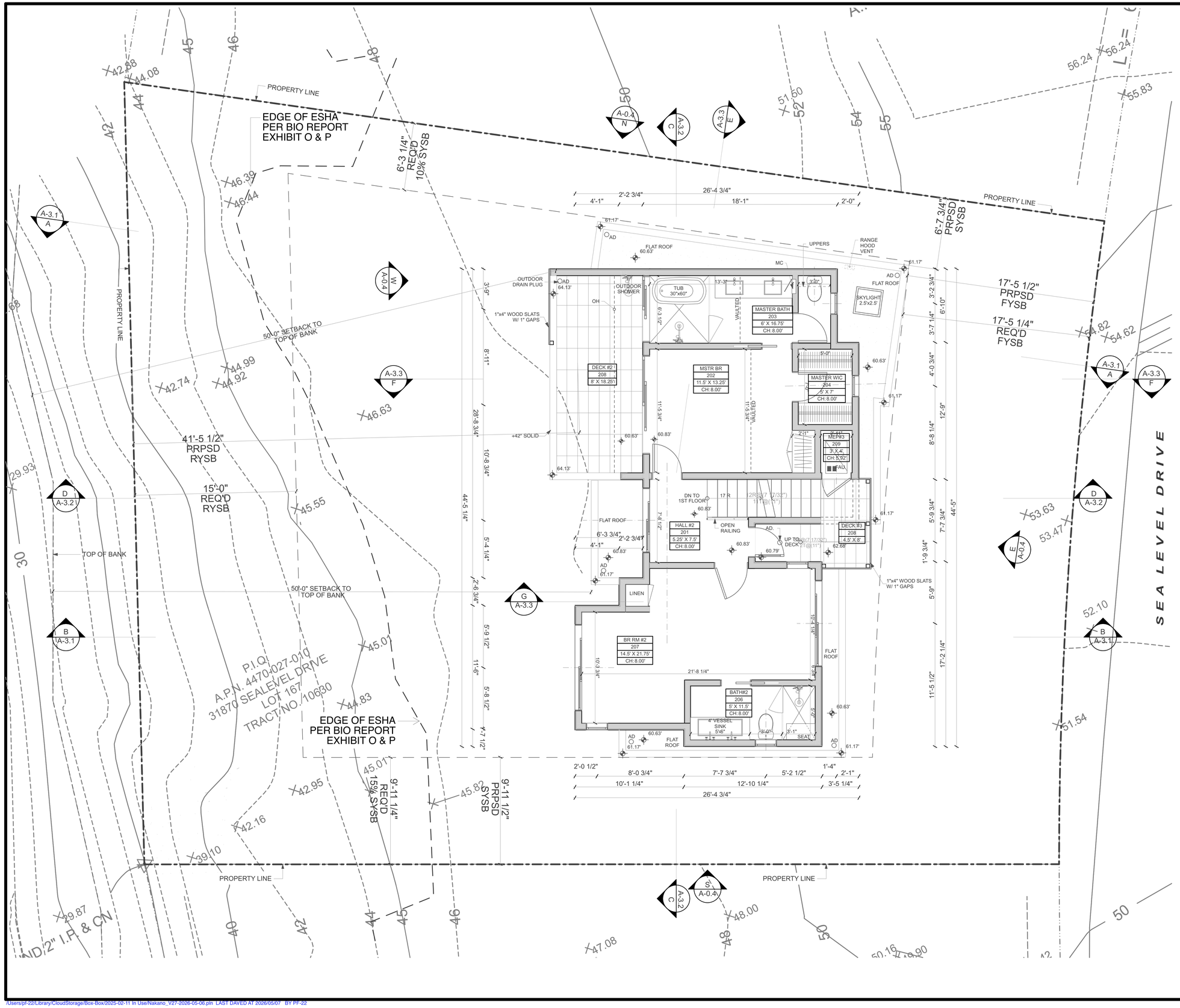
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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED FIRST FLOOR PLAN

DRAWING NO.
A-1.2

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



KEYNOTES

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54	ELECTRICAL – ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
55	ELECTRICAL – RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
56	ELECTRICAL – LIGHTING FIXTURE/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & RCP/LIGHTING PLANS
57	LOW VOLTAGE COMMUNICATIONS SYSTEM
58	LOW VOLTAGE DATA SYSTEM
59	ELEC. VEHICLE CHARGING STATION
60	MINIMUM OF 1" I.D. LISTED RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED 208/240 VOLT BRANCH CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV CAPABLE. [GBC 4.106.4]
61	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.
62	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY, OR OTHER SIMILAR AREAS [210.11(0(1) CEC]
63	All new one- and two-family dwelling units, the service panels and/or sub panels shall have the capacity of an additional load not less than 5 kVA for every 2,000 square feet of living space, designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub panels shall have space(s) reserved/dedicated to permit installation of the branch circuit over-current protective device(s) for the energy storage system. (LACEC 220.41)
64	WP GFCI >6', <20' FROM POOL
65	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP) DOWN CAST, SHIELDED
66	PLUMBING – WATER METER REFER TO PLUMBING ENGINEERING PLANS
67	PLUMBING – SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
68	PLUMBING – WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
69	PLUMBING FIXTURE - REFER TO PLUMBING ENGINEERING PLANS
70	WASTEWATER TREATMENT EQUIPMENT LOCATION – REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS), MEETS THE IAPMO CERTIFICATIONS

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION

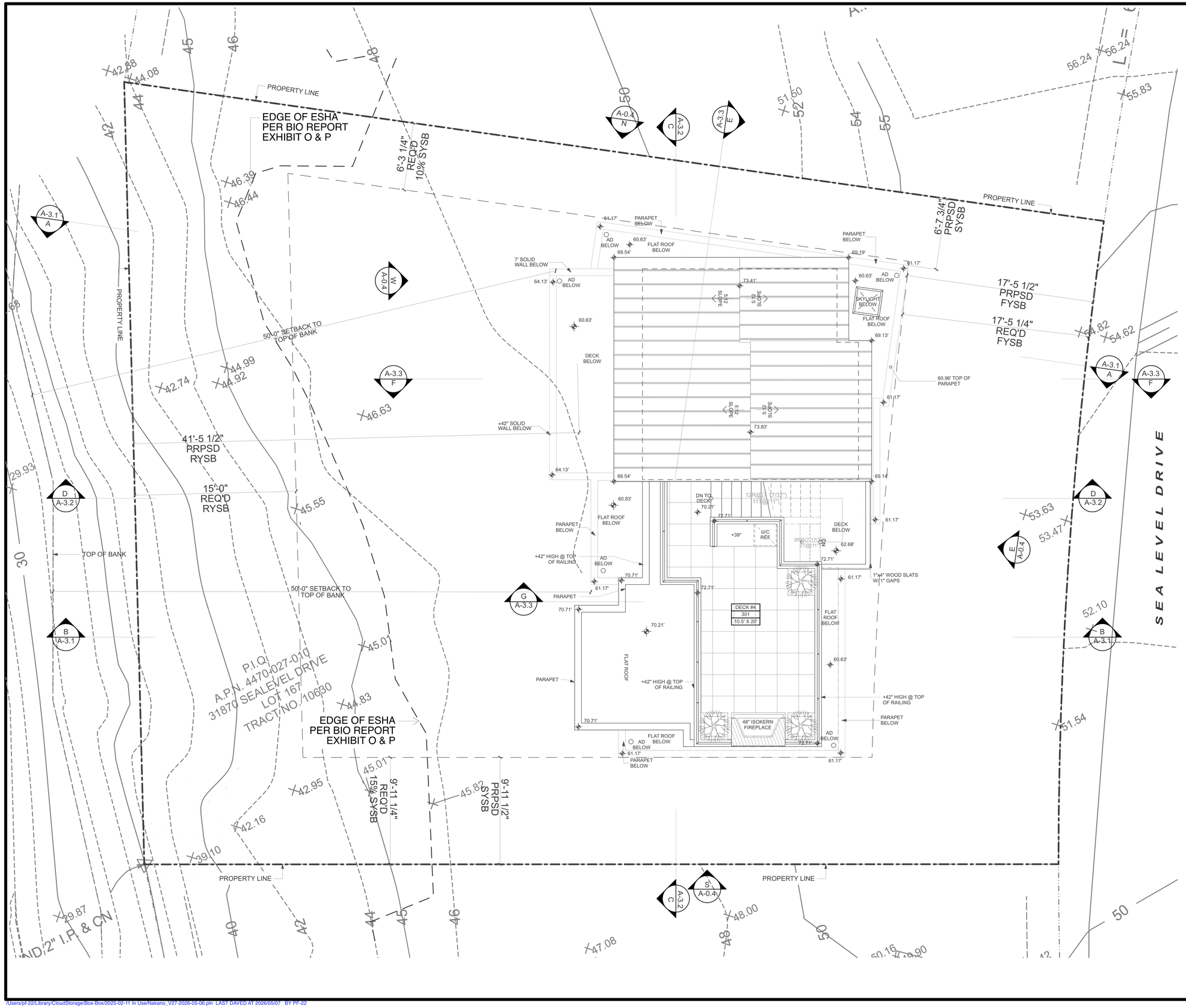
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED SECOND FLOOR PLAN

DRAWING NO.
A-1.3

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



KEYNOTES

01	DEMOLISH
02	SELECTIVE DEMOLITION ONLY
03	ALIGN
04	GRADING – REFER TO GRADING PLANS
05	GRID LINES @ EXTERIOR WALLS REPRESENT F.O. PLYD/ F.O. CONC. U.O.N
06	+42 GUARDRAIL. ESR-3563. REF; 7/A-5.7
07	PLANTER BED/ PLANTER AREA
08	RET. WALL WATERPROOFING
09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
12	1 HR. FIRE RATED CONSTRUCTION 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS. REF; 8/A-5.9
13	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY 1-HR. FIRE-RESISTANCE RATED CONSTRUCTION OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSURE, WHICHEVER IS GREATER, ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. [CBC 1009.5.3]
14	ROOFING MEMBRANES, CLASS "A" RATED ROOF CARLISLE SYNTEC SYSTEMS, CARLISLE TPO SINGLE-PLY ROOFING MEMBRANES (ESR- 1463) (TYP)
15	ENDURO-KOTE (APAO ER- 483) CLASS "A" WALKING DECK SURFACE OVER 80 MIL. 3-COAT LIQ. APPLIED POLYUREA (TYP)
16	R-XX BUILDING INSULATION PER ENERGY REPORT
17	MASONRY NOTES - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING REINF'G & INSTALLATION
18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
19	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
20	GUTTERS & DOWN SPOUTS
21	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP)
22	FLASHING AND SHEET METAL
23	SEALANTS AND CAULKING
24	ALUMINUM DOORS & FRAMES
25	ALUMINUM WINDOWS
26	FRAMELESS GLASS
27	FINISH HARDWARE
28	METAL WALL CLADDING
29	BOARD FORMED CONCRETE
30	HARDWOOD FLOORING
31	CERAMIC TILE
32	GYPSUM WALLBOARD SYSTEM
33	SHOWER ENCLOSURES
34	PREFABRICATED FIREPLACE 72" MODORE 185 FIREPLACE, ANSI Z21.11.50a-2008
35	BATHROOM ACCESSORIES – REFER TO ACCESSORIES SCHEDULE
36	WINDOW COVERINGS
37	SPECIAL CONSTRUCTION
38	FIRE PROTECTION SPRINKLER SYSTEM
39	TV. ABOVE
40	ELEVATOR- RESIDENTIAL ELEVATOR TO COMPLY WITH ASME A17.1/CAS-B44
41	BUILDING BEYOND
42	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
43	NOTE: 5' H. POOL FENCING ENCLOSURE W.5' W. X 5' H. SELF CLOSING , SELF LATCHING RE: A-0.1 FOR POOL BARRIER SURROUND
44	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
45	BATHROOM EXHAUST FAN WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP)
46	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 [150(o) CEnC]
47	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (q). THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 -FAN CAPACITY TO BE A MINIMUM OF 150 CFM
48	CHIMNEY FLUE FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
49	DRYER VENT EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS , LOUVERS OR GRILLES WITH OPENING OF 1/4" -1/2" IN ANY DIMENSION
50	DRYER VENT PATH EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3'-0" FROM OPENING INTO THE BUILDING [§ 504.5 CMC]
51	HVAC SYSTEM – CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
52	HVAC SYSTEM – DUCT/DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
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NOTES

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C-16899
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BURDGE ARCHITECTS

24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ROOF PLAN

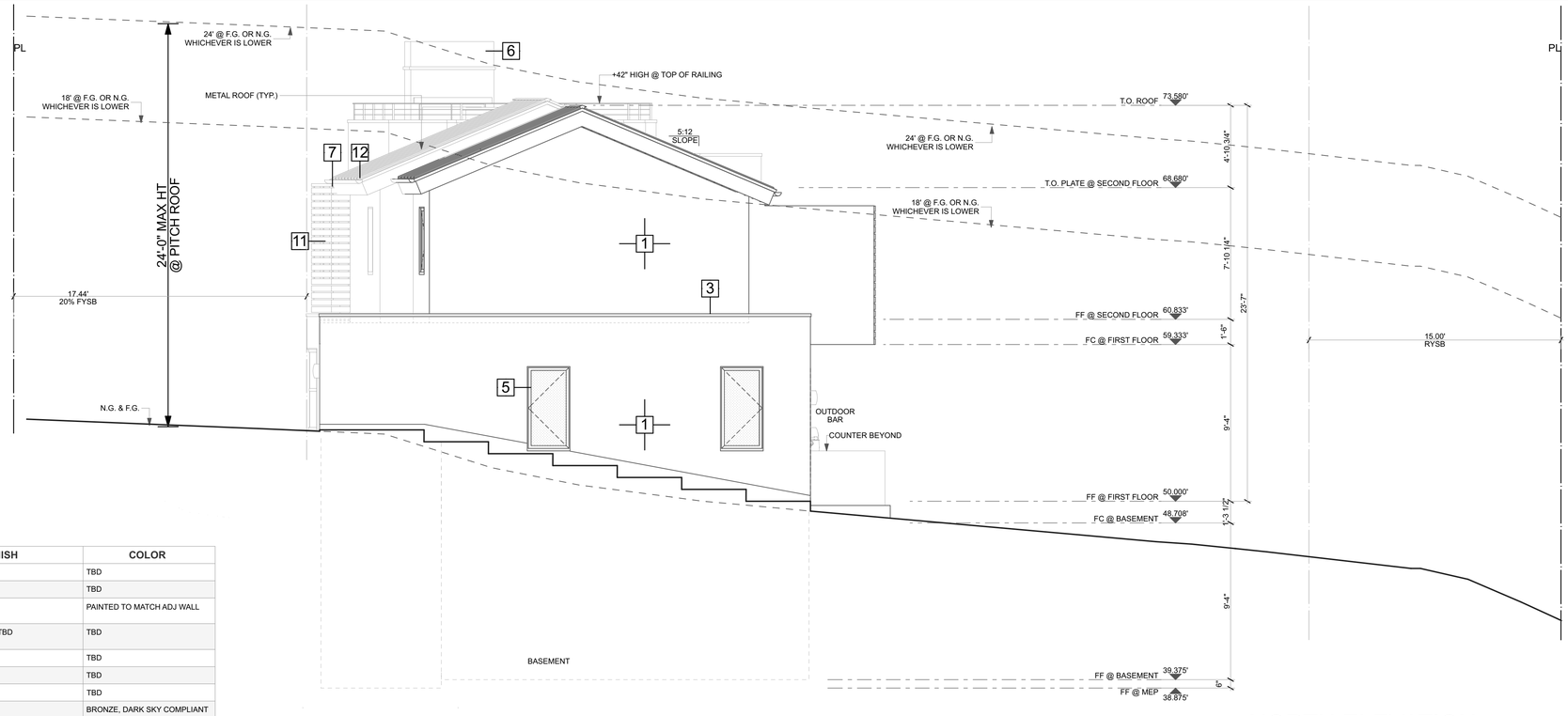
DRAWING NO.

A-1.4

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,

MATERIAL SCHEDULE

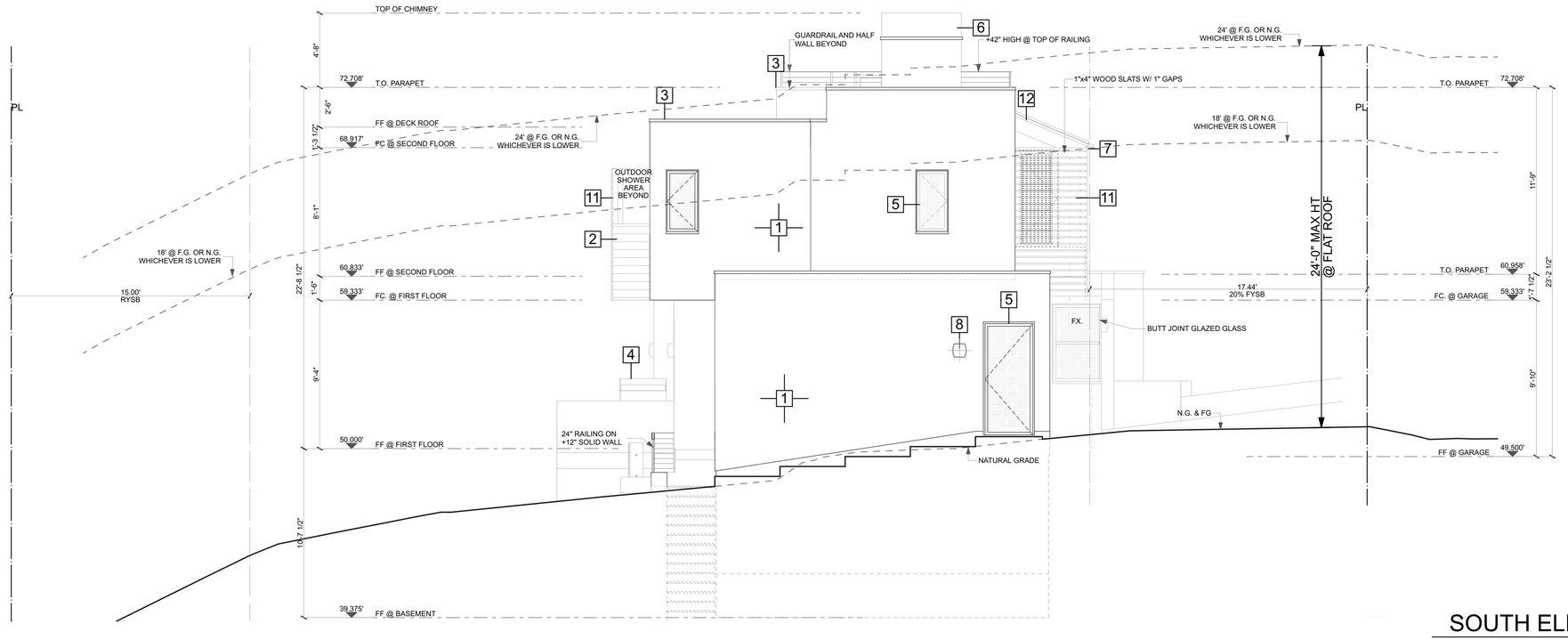
ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	PLASTER	TYPICAL	3-COAT SYSTEM	BURNISHED	TBD
2	WOOD SIDING	TBD	TBD	6" CEDAR WOOD	TBD
3	FLASHING CAP	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL
4	RAILING	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR & WINDOW	TBD	TBD	TBD	TBD
6	CHIMNEY CAP	SHEET METAL: SUBCONTRACTOR	TBD	TBD	TBD
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TECH LIGHTING	PITCH SINGLE, 700 WS PIT-'S-Z-LED827-277, 823 LUMENS	BRONZE	BRONZE, DARK SKY COMPLIANT
9	WEEPSCREED	TBD	20 OZ 315 MARINE GRADE STAINLESS STEEL	NATURAL	NATURAL
10	GARAGE DOOR	TBD	TBD	ALUM. CLAD	TBD
11	1"x4" WOOD SLATS W/ 1" GAPS	TBD	TBD	6" CEDAR WOOD	TBD
12	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)



NORTH ELEVATION

SCALE: 1/4" = 1'-0"

1



SOUTH ELEVATION

SCALE: 1/4" = 1'-0"

2

NAKANO RESIDENCE

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MALIBU, CA 90265
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SHEET TITLE

PROPOSED ELEVATIONS NORTH AND SOUTH

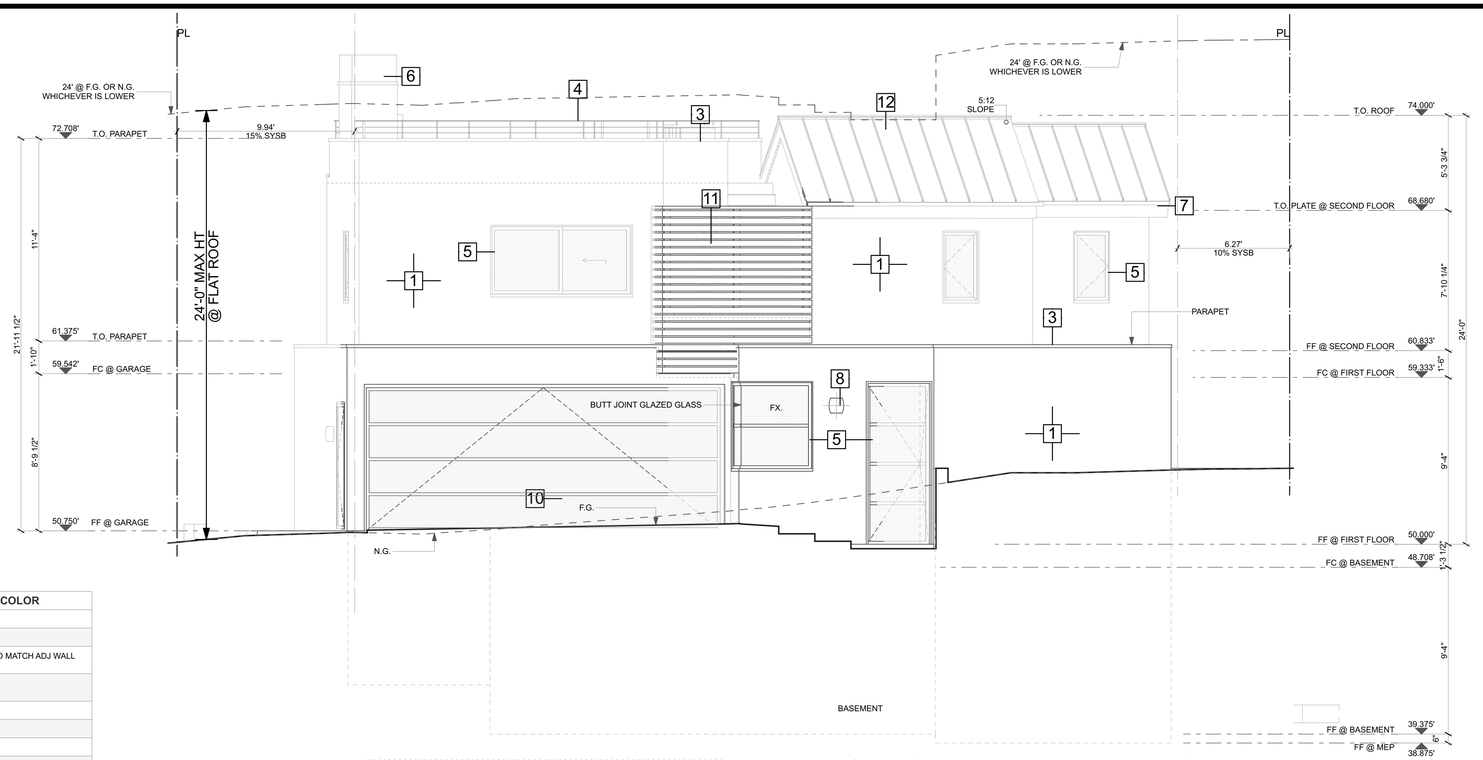
DRAWING NO.

A-2.1

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

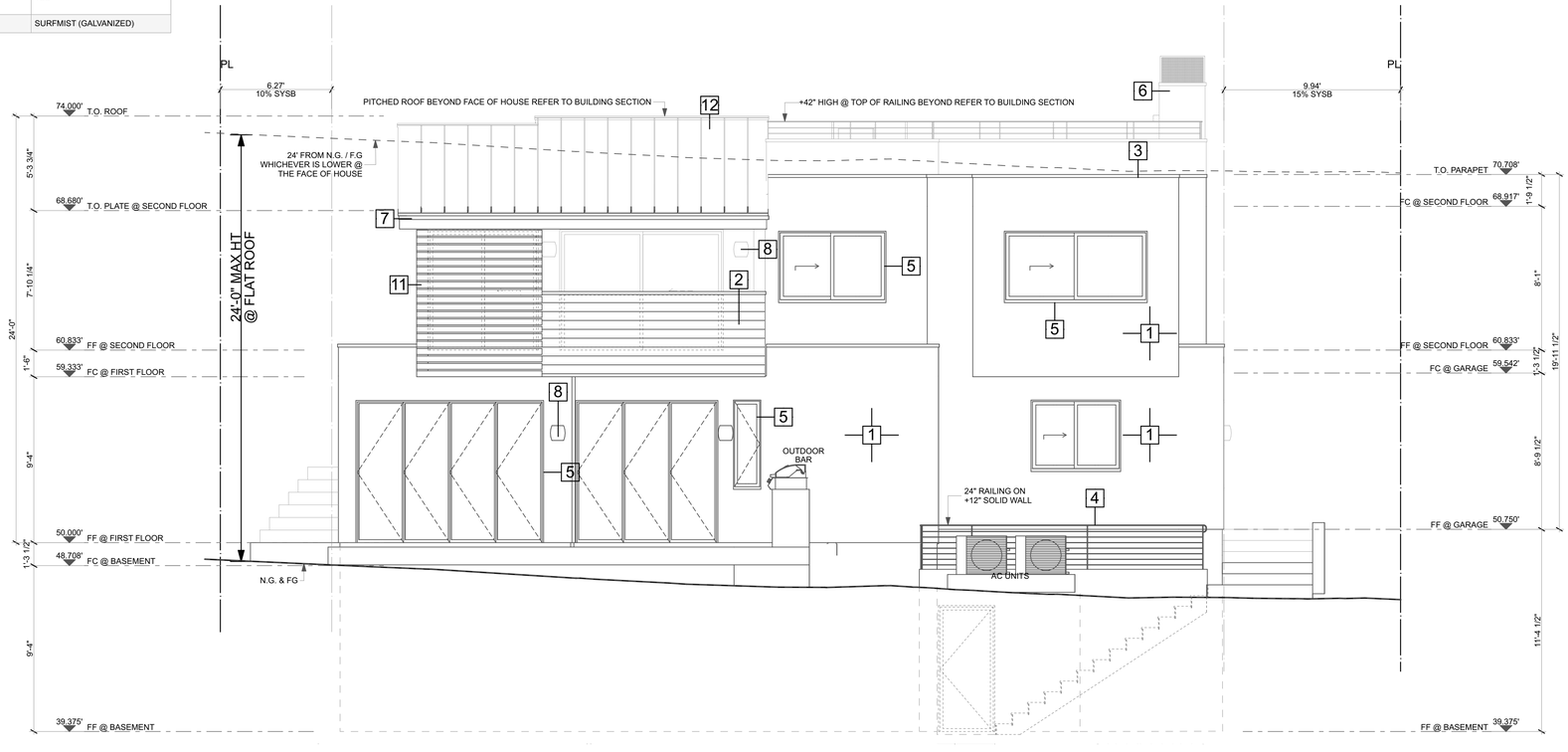
MATERIAL SCHEDULE

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5	EXTERIOR DOOR & WINDOW	TBD	TBD	TBD	TBD
6	CHIMNEY CAP	SHEET METAL: SUBCONTRACTOR	TBD	TBD	TBD
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TECH LIGHTING	PITCH SINGLE, 700 WS PIT-'S-Z-LED827-277, 823 LUMENS	BRONZE	BRONZE, DARK SKY COMPLIANT
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10	GARAGE DOOR	TBD	TBD	ALUM. CLAD	TBD
11	1"x4" WOOD SLATS W/ 1" GAPS	TBD	TBD	6" CEDAR WOOD	TBD
12	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)



EAST ELEVATION

SCALE: 1/4" = 1'-0" (1)



WEST ELEVATION

SCALE: 1/4" = 1'-0" (2)

NAKANO RESIDENCE

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LICENSED ARCHITECT
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RENEWAL 11/30/25
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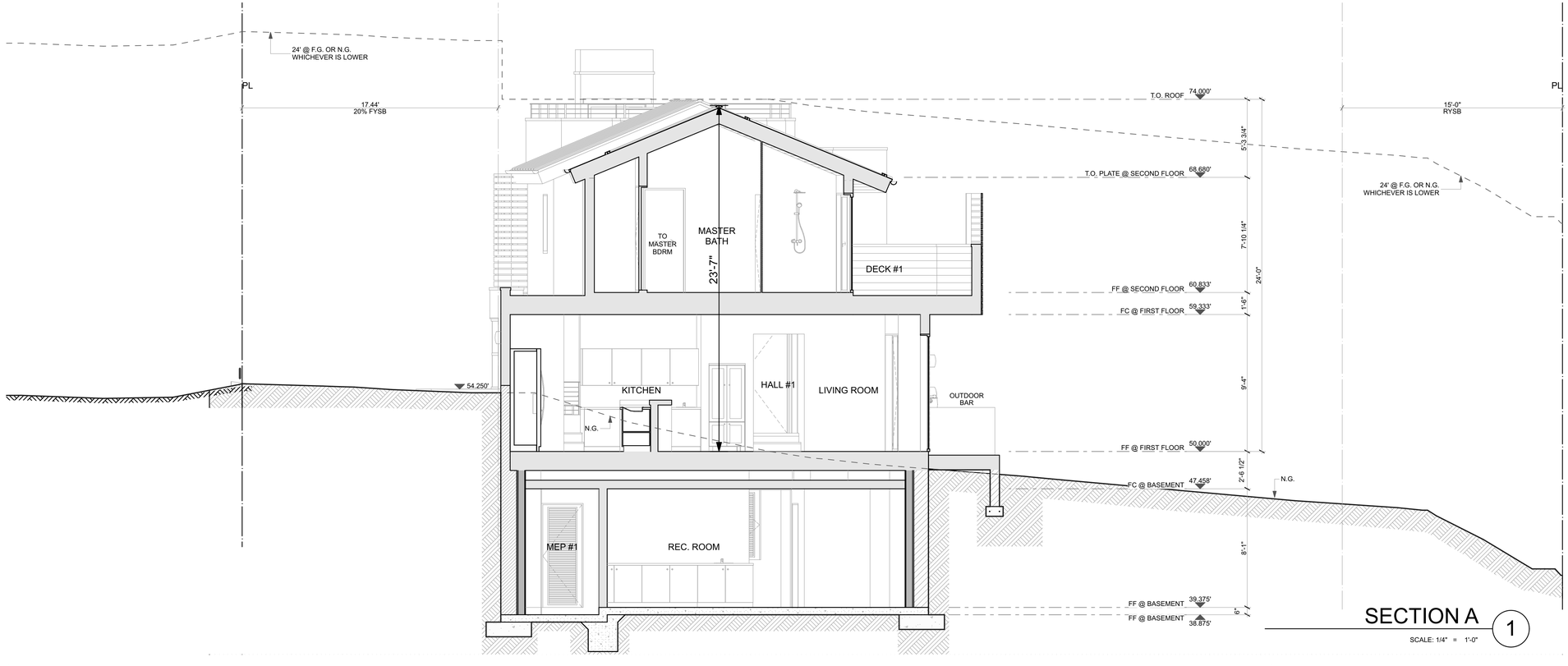
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ELEVATIONS EAST AND WEST

DRAWING NO.
A-2.2

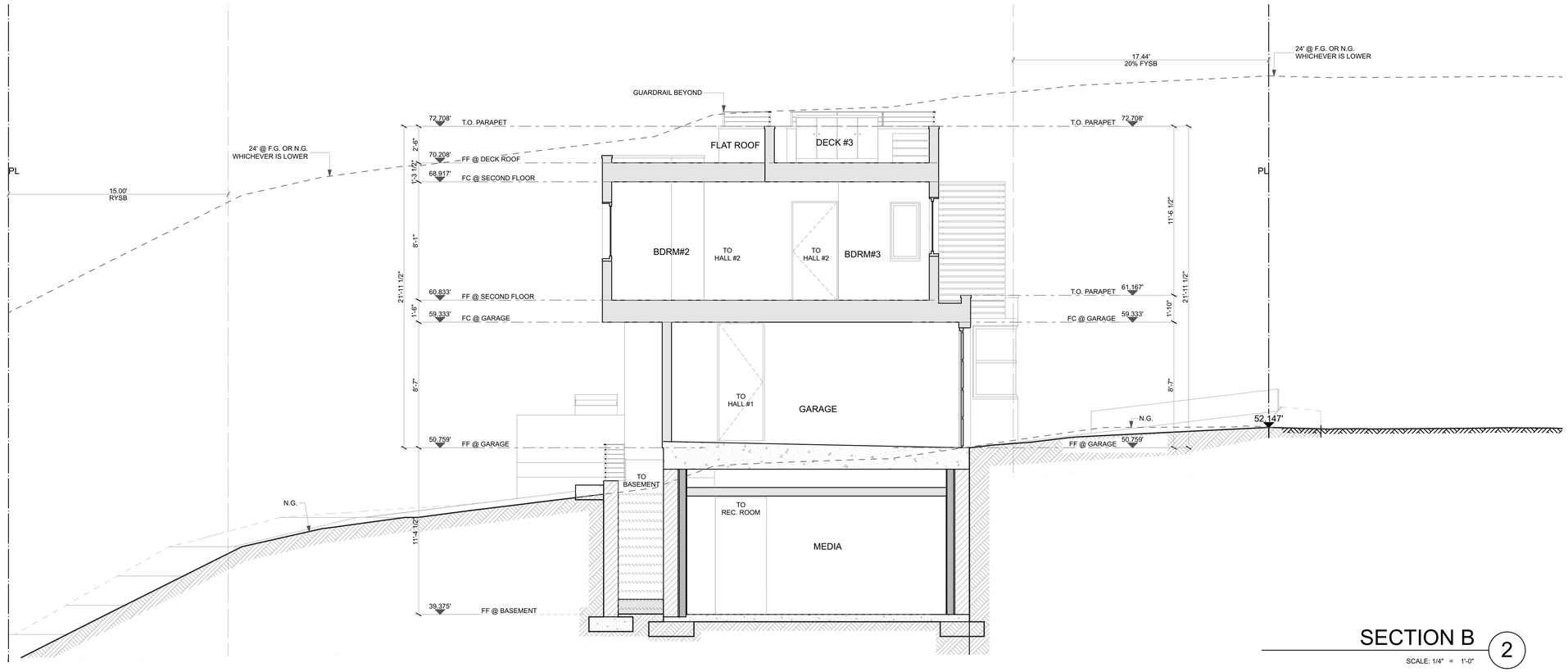
PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,



SECTION A

SCALE: 1/4" = 1'-0"

1



SECTION B

SCALE: 1/4" = 1'-0"

2

NAKANO RESIDENCE

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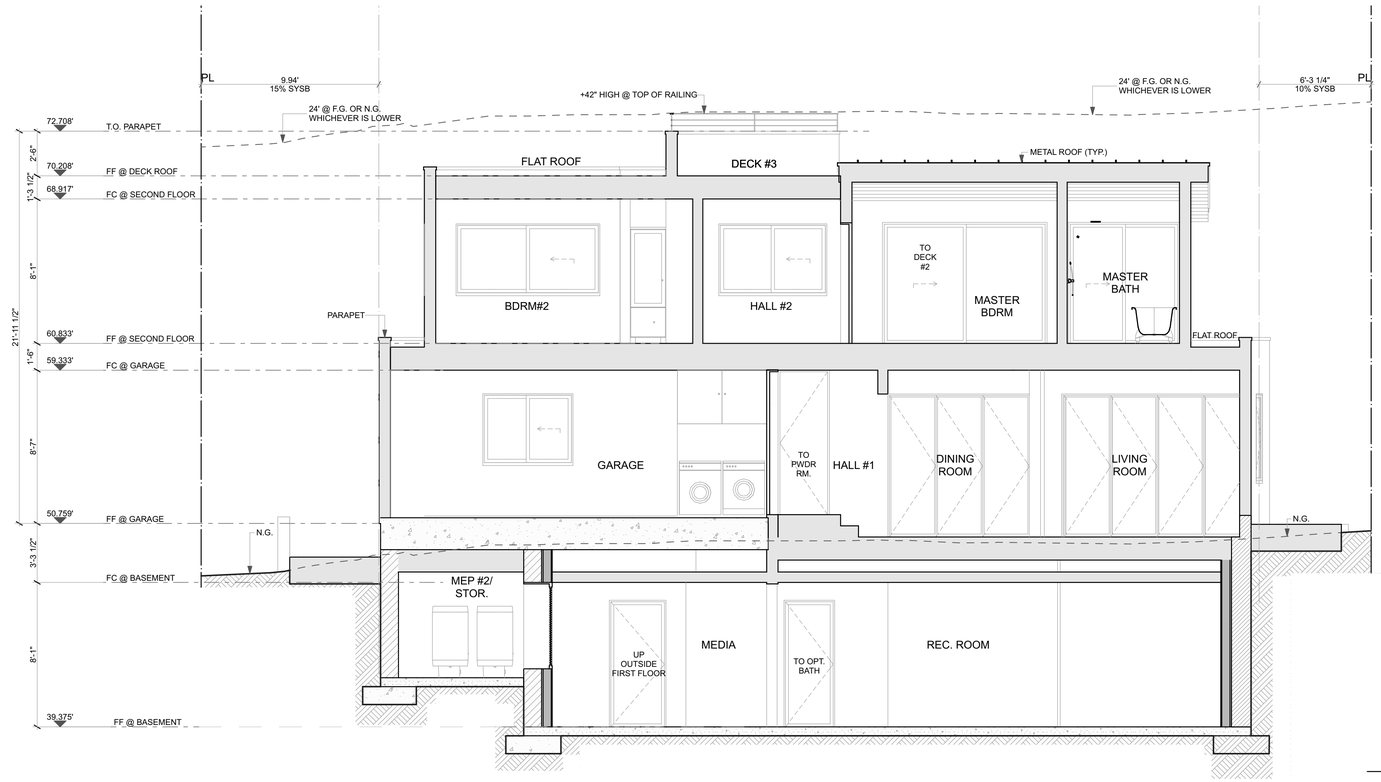
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PROPOSED
SECTIONS A AND B

DRAWING NO.
A-3.1

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

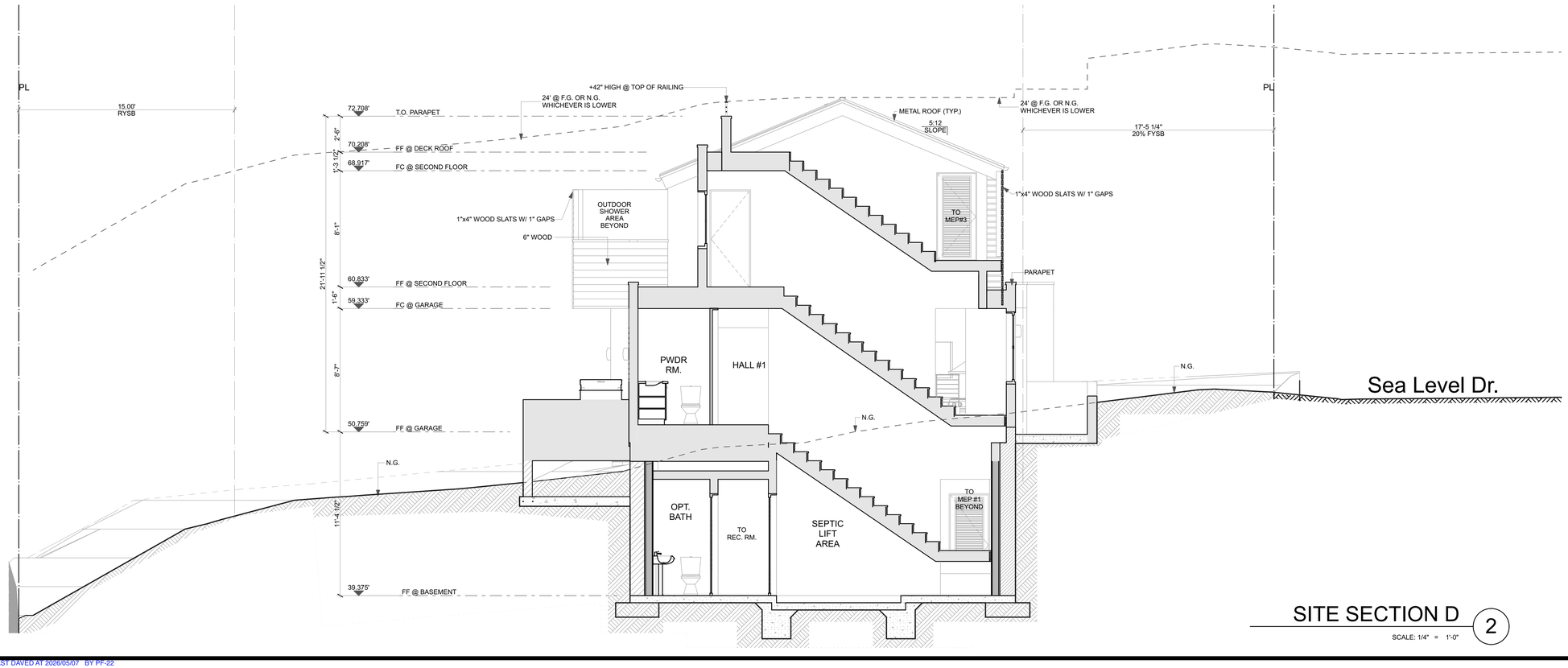
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SECTION C

SCALE: 1/4" = 1'-0"

1



SITE SECTION D

SCALE: 1/4" = 1'-0"

2

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

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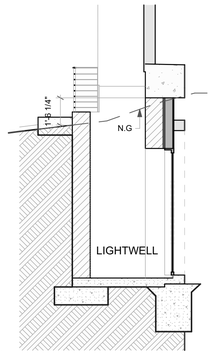
SHEET TITLE

PROPOSED
SECTIONS C AND D

DRAWING NO.
A-3.2

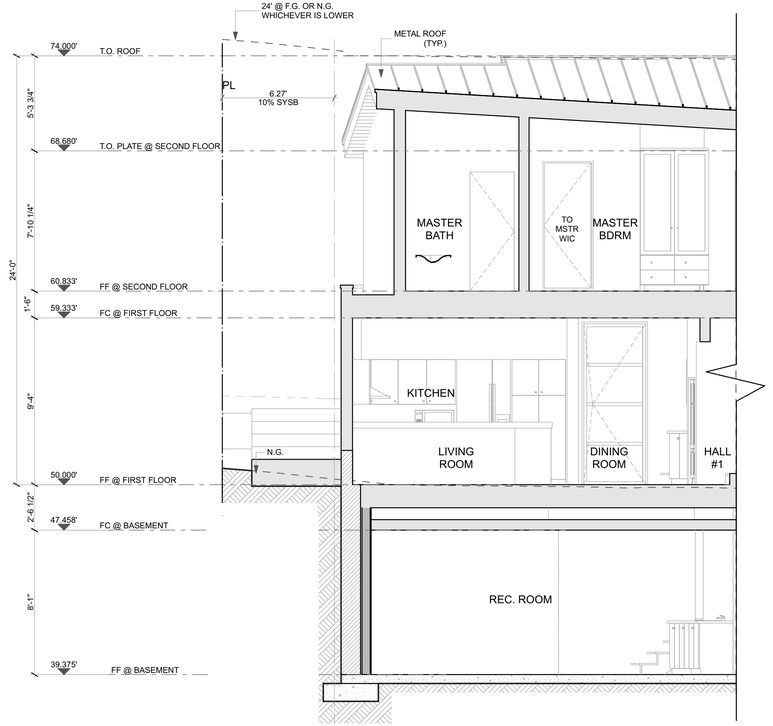
PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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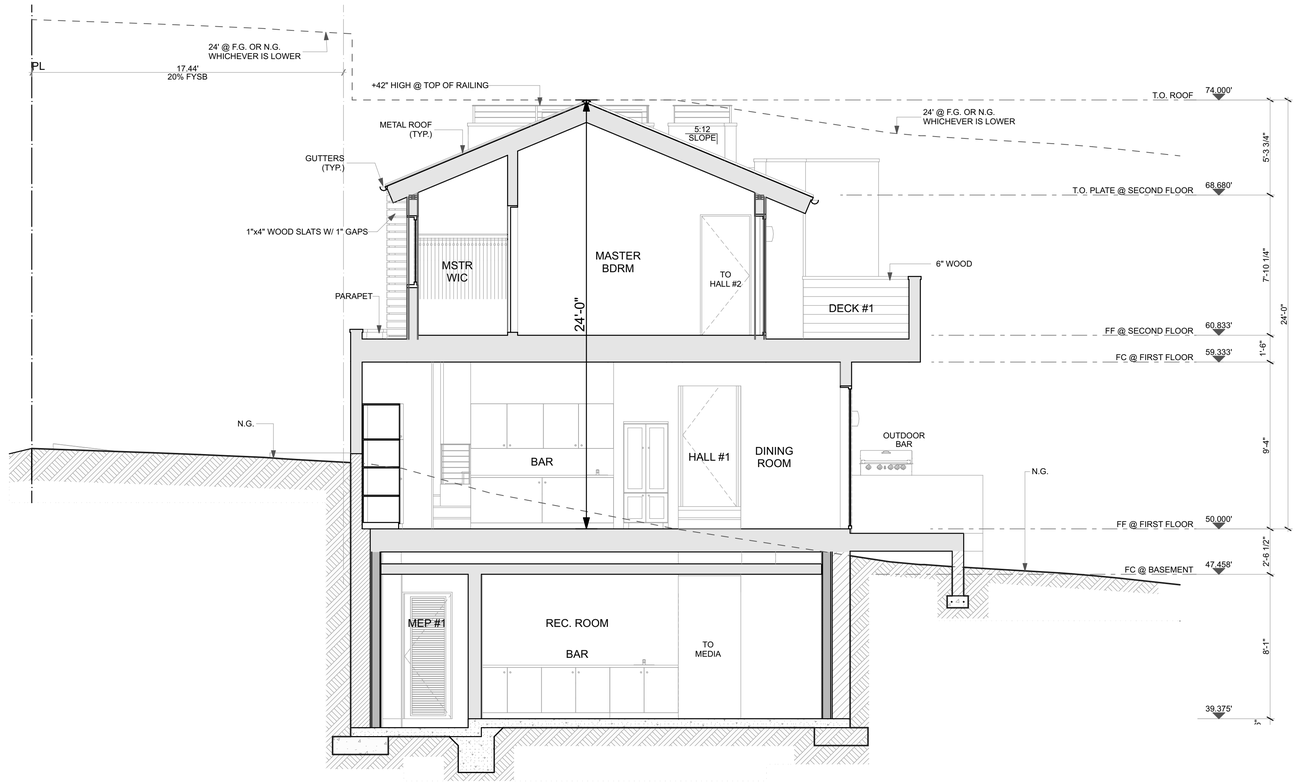
PARTIAL SECTION G 3

SCALE: 1/4" = 1'-0"



SECTION E 1

SCALE: 1/4" = 1'-0"



SECTION F 2

SCALE: 1/4" = 1'-0"

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MALIBU, CA 90265
TEL. 310-456-5905

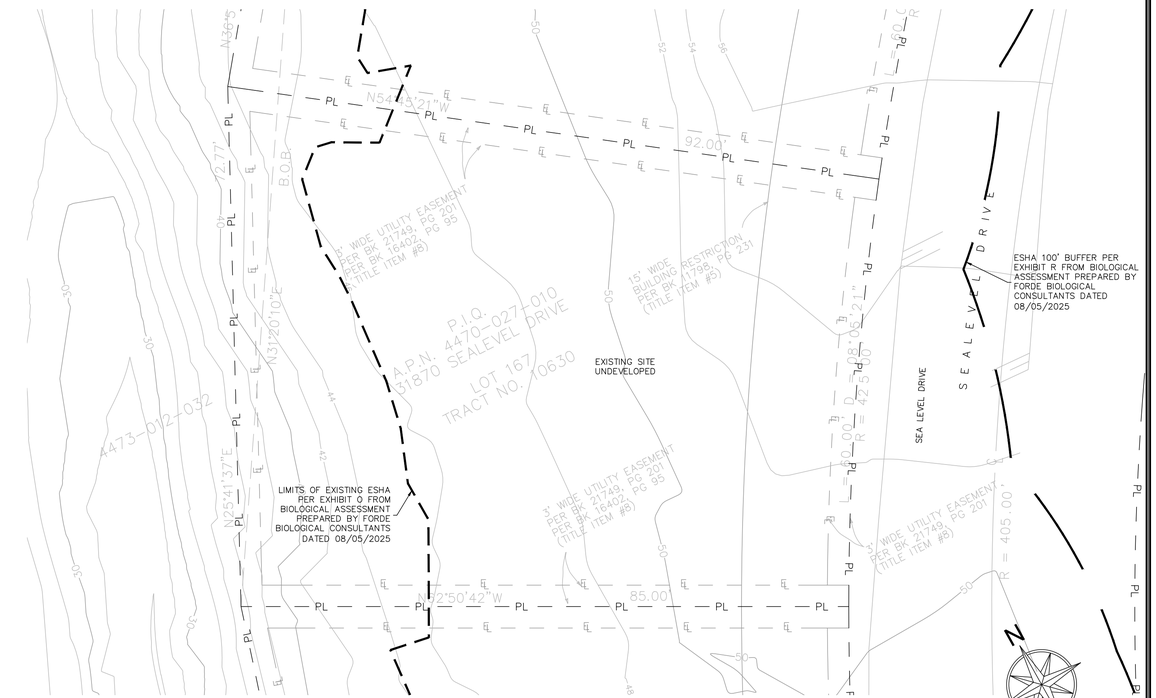
SHEET TITLE

PROPOSED
SECTIONS E, F AND G

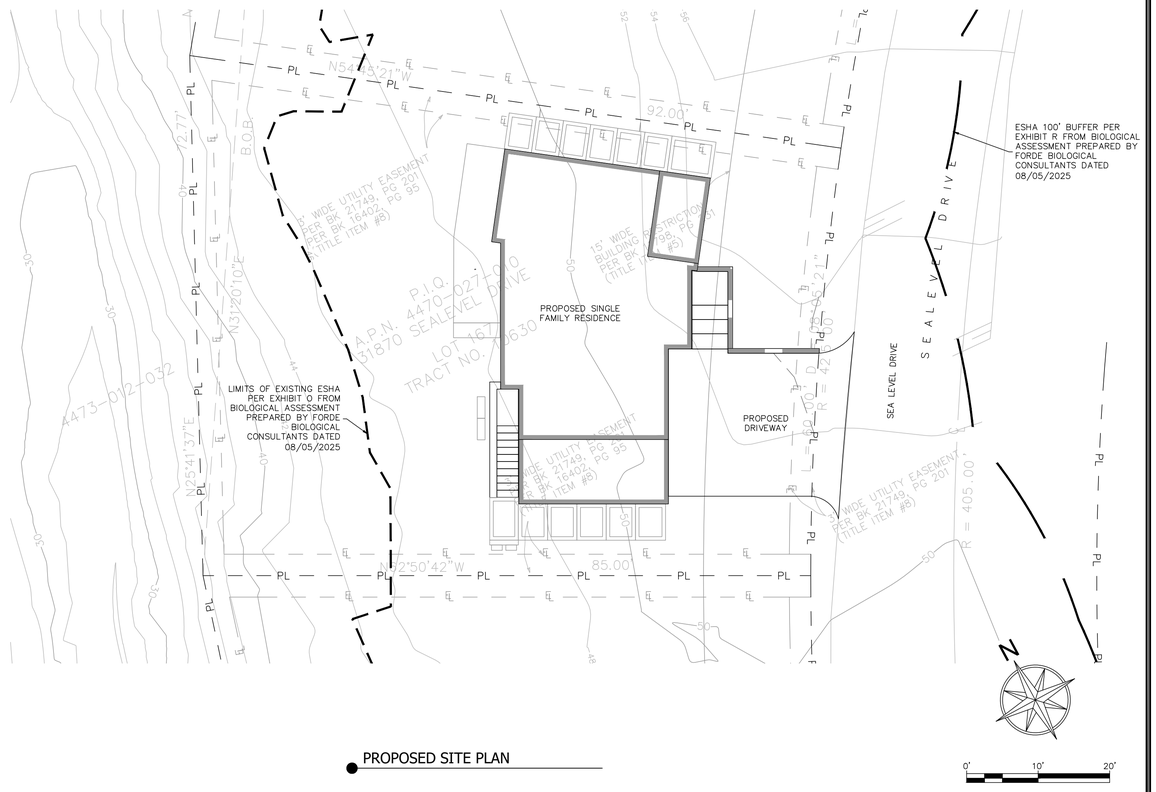
DRAWING NO.
A-3.3

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2026/05/15
SCALE	AS NOTED
DRAWN BY	D.W.B.,

/Users/pf-22/Library/CloudStorage/Box-Box/2025-02-11 In Use/Nakano_V27-2026-05-06.pln LAST DAVED AT 2026/05/07 BY PF-22



EXISTING SITE PLAN



PROPOSED SITE PLAN

PUBLIC WORKS DEPARTMENT GENERAL NOTES

1. ALL WORK SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) "GREEN BOOK."
2. CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (CAL-OSHA) SAFETY STANDARDS. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM SAID DIVISION.
3. CONTRACTOR SHALL CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 FOR PRE-CONSTRUCTION MEETING PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR GRADING OPERATIONS. CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS INSPECTOR 48 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION AND 24 HOURS IN ADVANCE OF SPECIFIC INSPECTION NEEDS DURING THE COURSE OF THE WORK.
4. NO IMPROVEMENTS ARE PROPOSED WITHIN THE PUBLIC RIGHT-OF-WAY.
5. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CITY PUBLIC RIGHT OF WAY SHALL REQUIRE A CITY ENCROACHMENT PERMIT. CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 TO APPLY FOR A PERMIT.
6. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CALTRANS PUBLIC RIGHT OF WAY SHALL REQUIRE A CALTRANS ENCROACHMENT PERMIT. SUBMIT A COPY OF THE CALTRANS ENCROACHMENT PERMIT TO THE PUBLIC WORKS DEPARTMENT.
7. ALL WORK SHALL BE PERFORMED DURING CITY WORKING HOURS AND IN COMPLIANCE WITH THESE PLANS.
8. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
9. CONTRACTOR SHALL LOCATE, PROTECT, AND SAVE ANY AND ALL SURVEY MONUMENTS THAT WILL BE OR MAY BE DAMAGED OR DESTROYED BY THEIR OPERATIONS. ONCE FOUND, THE CONTRACTOR SHALL THEN NOTIFY BOTH THE DEVELOPER'S SUPERVISING CIVIL ENGINEER AND THE PUBLIC WORKS INSPECTOR. THE SUPERVISING CIVIL ENGINEER SHALL RESET ALL SAID MONUMENTS PER THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY INSOFAR AS IT MAY BE AFFECTED BY THESE OPERATIONS.
11. EXISTING TRAFFIC SIGNS ARE NOT TO BE REMOVED WITHOUT PRIOR NOTIFICATION AND APPROVAL OF THE CITY ENGINEER. AS A MINIMUM, CONSTRUCTION WORK ZONE TRAFFIC SIGNS AND STRIPING SHALL BE FURNISHED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (THE "WATCH MANUAL"), PUBLISHED BY BNI BUILDING NEWS, INC. A TRAFFIC CONTROL PLAN, PREPARED BY THE DEVELOPER, MAY BE REQUIRED BY THE CITY.
12. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES.
13. EROSION CONTROL PLANS SHALL BE PROVIDED FOR ALL PROJECTS. GRADING AND CLEARING IS PROHIBITED FROM NOVEMBER 1 TO MARCH 31 FOR ALL DEVELOPMENTS WITHIN OR ADJACENT TO ESHA AND/OR INCLUDING GRADING ON SLOPES GREATER THAN 4:1.
14. ALL UNDERGROUND UTILITIES AND SERVICE LATERALS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS, AND PAVING UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER.
15. THE DEVELOPER SHALL COMPLY WITH NPDES REQUIREMENTS. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES AND SHALL BE KEPT UPDATED.
16. ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL/SOILS ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED), AND CONTAINED IN THE REPORTS REFERENCED HEREON, AS APPROVED OR CONDITIONED BY THE CITY, SHALL BE CONSIDERED A PART OF THE GRADING PLAN.
17. ALL STORM DRAIN PIPE WITHIN THE PUBLIC RIGHT-OF-WAY AND EASEMENTS SHALL BE REINFORCED CONCRETE PIPE (RCP).
18. TERRACE DRAINS, INTERCEPTOR DRAINS, AND DOWN DRAINS SHALL BE CONSTRUCTED OF 3" P.C.C. REINFORCED WITH 6"X6" X #10 W.W.M. AND SHALL BE EITHER SEMICIRCULAR OR TRIANGULAR CROSS SECTION. CONCRETE COLOR SHALL BE "OMAHA TAN" OR APPROVED EQUIVALENT.
19. GRADING QUANTITIES: SEE GRADING YARDAGE VERIFICATION FORM HEREON
20. TOTAL DISTURBED AREA 0.2 ACRES (INCLUDING GRADING, CLEARING, AND LANDSCAPING AREA)
    TOTAL EXISTING IMPERVIOUS SURFACE AREA 0 SQ. FT.
    TOTAL PROPOSED IMPERVIOUS SURFACE AREA 1732 SQ. FT.
    FLOOD ZONE ON FIRM: X (FEMA MAP 06037C1511G EFFECTIVE APRIL 21, 2021)
    BASE FLOOD ELEVATION: N/A FT.
21. ALL SLOPES ON PRIVATE PROPERTY ADJOINING STREETS, DRAINAGE CHANNELS, OR OTHER PUBLIC FACILITIES SHALL BE GRADED NOT STEEPER THAN 2:1 FOR CUT AND FILL UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER ON RECOMMENDATION OF THE PROJECT'S GEOTECHNICAL/SOILS CONSULTANT.
22. THE APPLICANT SHALL LABEL ALL CITY/COUNTY STORM DRAIN INLETS WITHIN 250 FEET FROM EACH PROPERTY LINE PER THE CITY OF MALIBU'S STANDARD LABEL TEMPLATE.

PUBLIC WORKS COMMENT SHEET NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 EACH YEAR PER LCP SECTION 17.2.1. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER
- EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH LIP, SECTION 8.3.

GEOTECHNICAL COMMENT SHEET NOTE(S)

- PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF ALL DENSITY TESTS, LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACKDRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACKDRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

PLANNING COMMISSION APPROVAL CONDITION NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 OF EACH YEAR FOR PROJECTS WITHIN OR ADJACENT TO ESHA AND FOR PROJECTS THAT INCLUDE GRADING ON SLOPES GREATER THAN 4 TO 1 PER LIP SECTION 8.4. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER 1.

PROJECT NOTES:

OWNER INFORMATION:

JOHN NAKANO
31870 SEA LEVEL DRIVE
MALIBU, CA 90265

ALL SURVEY DATA OBTAINED FROM:
10/05-06/21
05/13/22
LAND AND AIR SURVEYING
22741 PACIFIC COAST HIGHWAY
SUITE #400A
MALIBU, CA 90265
(310)456-9381

BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O DY-5460 (2008) BROAD BEACH RD 1.5MI E/O DECKER RD 33FT W/O DR TO HSE #31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N

PROJECT GEOLOGY/GEOTECHNICAL REPORTS:

GEOSYSTEMS, INC.
1545 CIVTORY BLCD. 2ND FLOOR
GLENDALE, CA 91201
(818) 500-9533

REPORT DATE(S): MARCH 13, 2023

GENERAL NOTES:

1. PROTECTION OF SENSITIVE OR ENDANGERED SPECIES PER BIOLOGY STUDY (IF APPLICABLE) SHALL BE MAINTAINED AT ALL TIMES.
2. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE STORMWATER APPURTENANCES AND SHEET FLOW WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. AHSIRT ENGINEERING INC. IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
3. ALL DIMENSIONS, GRADES, EXISTING AND PROPOSED UTILITIES, EXISTING AND PROPOSED STRUCTURES, AND EXISTING AND PROPOSED APPURTENANCES SHALL BE VERIFIED AND LOCATED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS SHOWING ANY CONFLICTS LOCATED DURING CONSTRUCTION AND/OR PRE-BID INSPECTIONS.

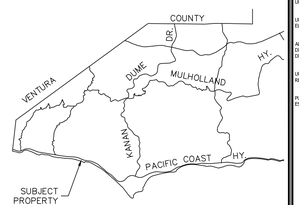
INSPECTION NOTES:

ALL CONSTRUCTION PROJECTS WITHIN THE CITY OF MALIBU WITH A GRADING PERMIT MUST OBTAIN A "ROUGH GRADING APPROVAL" AND "FINAL SUPERVISED GRADING INSPECTION VERIFICATION" AS SPECIFIED IN THE CITY OF MALIBU SITE GRADING POLICY. THE CIVIL ENGINEER IS REQUIRED TO VERIFY THAT THE GRADING HAS BEEN PERFORMED UNDER THEIR SUPERVISION AND IN CONFORMANCE WITH THE PLANS APPROVED BY THE CITY OF MALIBU. THIS VERIFICATION INCLUDES APPROXIMATE ELEVATIONS, PRIMARY DRAINAGE DEVICES, SLOPE VEGETATION, LOCATION AND GRADIENT OF FILL SLOPES, STORMWATER POLLUTION CONTROL DEVICES, AND PROPERTY LINES.

IN ORDER TO BE ABLE TO VERIFY THESE ITEMS, AHSIRT ENGINEERING, INC. NEEDS TO BE INVOLVED IN THE CONSTRUCTION PROCESS, MADE AWARE OF PROJECT SCHEDULES AND PERIODICALLY INSPECT CONSTRUCTION. BELOW IS A LIST OF ABSOLUTE MINIMUM INSPECTIONS THAT WILL BE REQUIRED FOR AHSIRT ENGINEERING INC. TO BE ABLE TO SIGN THE PROJECT ROUGH GRADING APPROVAL REQUIRED BY THE CITY OF MALIBU. WITHOUT THESE INSPECTIONS, AHSIRT ENGINEERING, INC. CANNOT VERIFY THE ITEMS REQUIRED BY THE CITY OF MALIBU.

1. CONSTRUCTION STARTUP
2. PRIMARY STORM DRAIN DEVICE LAYOUT
3. BACKDRAIN AND SUBDRAIN OUTLETS
4. 80% ROUGH GRADING COMPLETION
5. ROUGH GRADING COMPLETION
6. FINAL STORMDRAIN DEVICE LAYOUT
7. 80% TO FINAL COMPLETION
8. FINAL COMPLETION

IN ADDITION TO THESE INSPECTIONS, ANY TIME THERE ARE PROPOSED CHANGES TO THE CIVIL ENGINEER'S APPROVED PLAN SET, THE CIVIL ENGINEER NEEDS TO BE NOTIFIED IMMEDIATELY.



VICINITY MAP (NTS)



LOCATION MAP (NTS)

City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-7650 · www.malibucity.org

TOTAL GRADING YARDAGE VERIFICATION CERTIFICATE

PLANNING DEPARTMENT REVIEW LEVEL

PROJECT NUMBER: _____

PROJECT ADDRESS: 31870 SEA LEVEL DRIVE

All projects proposing land form alteration which involves more than 100 cubic yards of grading shall complete this form. The completed form must be provided at the time of Planning Department application for grading approval. All applicable cubic yardages shall be completed in the table. **All calculations utilized to estimate the cubic yardages indicated shall be attached to this form.** This form and the required calculations must be prepared by a State of California Licensed Civil Engineer. The form and the calculations shall be stamped and wet signed by the preparing party.

	EXEMPT			NON EXEMPT	REMEDIAL GRADING	TOTAL
	R&R	UNDERSTRUCTURE	SAFETY			
CUT	50	465	0	55	0	570
FILL	50	0	0	5	0	55
TOTAL	100	465	0	60	0	625
IMPORT	0	0	0	0	0	0
EXPORT	0	465	0	50	0	515

All quantities indicated shall be in cubic yards only.
R&R = Removal and Recompaction – *R&R must be balanced.*
Safety Grading is required grading for L.A. County Fire Department access approval beyond the 15 foot minimum access and may include turnouts, hammerheads, turnarounds, and access roadway widening.
Remedial grading is grading recommended by a full site geotechnical or soils report prepared by a licensed geologist or soils engineer which is necessary to correct physical deficiencies on the site for the construction of a primary residential structure or access to the lot.
Imported means soil that is brought on to the site. Exported means soil that is leaving the site. This information will be used to calculate the number of truck trips required for site preparation.

PREPARED BY: TRISHA A. COFFEY
PRINT NAME
SIGN NAME

DATE: 2024-12-12

REGISTERED PROFESSIONAL ENGINEER TRISHA A. COFFEY 67657 EXP06/2027 CIVIL STATE OF CALIFORNIA

Page 1 of 1
P:\Forms\COUNTER FORMS\Planning\PLN Grading Verification Certificate_130701.doc

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18
UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSMPP NOTES		
2	TJM	2024-12-12
UPDATE SITE PLAN, GARAGE ELEVATION, DRIVEWAY ELEVATION, CROSS SECTION, GRADING CALCS, ETC		
3	TJM	2025-02-17
ADD ESHA BOUNDARY, MOVE VELOCITY DISSIPATION STRUCTURE UP SLOPE, ADD VELOCITY DISSIPATION STRUCTURE DETAIL, UPDATE LSMPP		
4	TJM	2025-03-16
UPDATE CALLOUT FOR ESHA ON EACH PAGE TO REFERENCE BIOLOGICAL REPORT		
5	TJM	2025-06-05
FULL ENERGY DISSIPATION STRUCTURE OUT OF ESHA, UPDATE STORMWATER PIPES ACCORDINGLY		

AHSIRT ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN

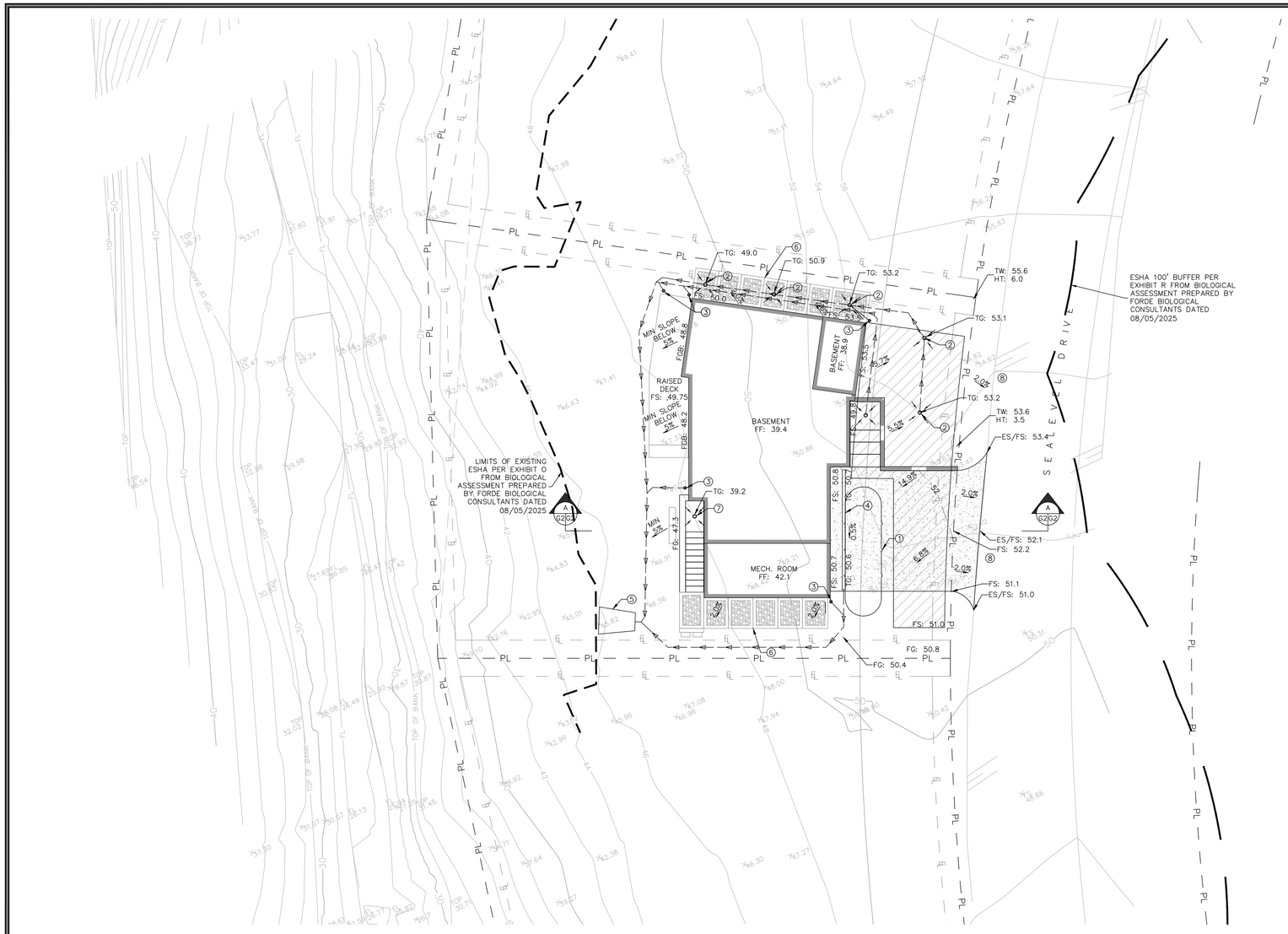
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION

31870 SEA LEVEL DRIVE
MALIBU, CA

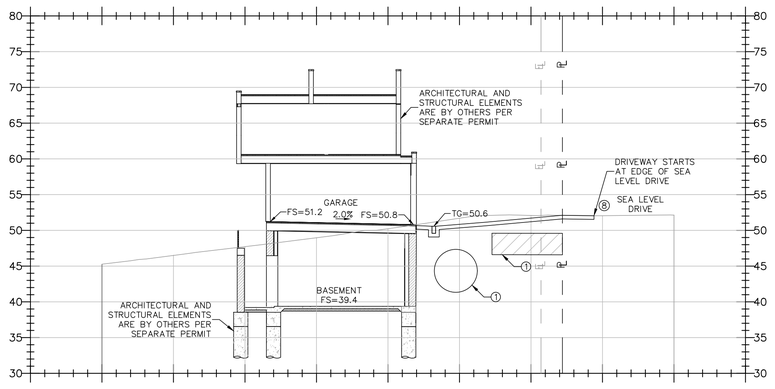
REGISTERED PROFESSIONAL ENGINEER TRISHA A. COFFEY 67657 EXP06/2027 CIVIL STATE OF CALIFORNIA

JOB # 104-13
DATE SEPTEMBER 2022
DRAWN BY TJM
CHECKED BY TAC
SHEET NUMBER G1 OF 3

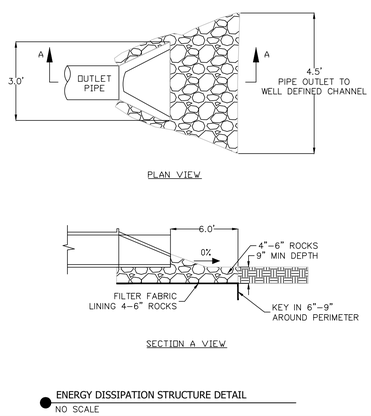
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DATE: 6/5/2025 1:36:56 PM
PLOT DATE: 6/5/2025 1:36:58 PM



GRADING AND DRAINAGE PLAN



CROSS SECTION A
(SCALE: 1" = 10')



ENERGY DISSIPATION STRUCTURE DETAIL
NO SCALE

ABBREVIATION	DESCRIPTION
BOF	BOTTOM OF FOUNDATION ELEVATION
EG	EXISTING GRADE ELEVATION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE ELEVATION
FGB	FINISHED GRADE BELOW SURFACE ELEVATION
FS	FINISHED SURFACE ELEVATION
HT	HEIGHT OF WALL FROM FS (DOES NOT INCLUDE HEIGHT OF FOOTING)
INV	INVERT ELEVATION
R&R	REMOVAL AND RECOMPACTION
SPPWC	CURRENT VERSION OF STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
TW/TOW	TOP OF WALL ELEVATION
TG	TOP OF GRATE ELEVATION
TBD	TO BE DETERMINED BY CONTRACTOR IN FIELD
WW	WASTEWATER

LINETYPE	DESCRIPTION
	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
	PROPOSED MINOR CONTOURS
	LIMITS OF DISTURBED SITE AREA
	FLOW LINES
	4" SDR35 PVC PIPE AT 2.0% MIN SLOPE INSTALLED PER THE LATEST VERSION OF CALIFORNIA PLUMBING INCLUDING CLEANOUTS WHEN THE AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDS 135° OR CONTINUOUS PIPE LENGTHS EXCEED 100 FEET.
	ROAD CENTERLINE
	EASEMENT LINE
	PROPOSED RETAINING WALL (BY OTHERS PER SEPARATE PERMIT)
	AREA DRAIN CAPTURING ROOF DOWNSPOUT
	CATCH BASIN WITH 2.0% MIN SLOPE TOWARDS DRAIN
	6" AREA DRAIN WITH 2.0% MIN SLOPE TOWARDS DRAIN
	PERMEABLE SURFACE PER ARCHITECTURAL PLANS
	IMPERMEABLE SURFACE PER ARCHITECTURAL PLANS
	LEACH FIELD PER WW PLANS

#	DESCRIPTION
1.	WASTEWATER APPURTENANCE PER WASTEWATER PLANS BY OTHERS PER SEPARATE PERMIT
2.	6" AREA DRAIN
3.	ROOF DOWNSPOUT CONNECTED DIRECTLY TO STORMWATER COLLECTION SYSTEM OR OUTLETS TO SPLASH PAD AND A 2.0% MINIMUM SLOPE AWAY FROM THE STRUCTURE
4.	TRENCH DRAIN
5.	ENERGY DISSIPATION STRUCTURE
6.	PROPOSED DECOMPOSED GRANITE STEPS ON GRADE ALONG NORTH AND SOUTH SIDE OF RESIDENCE PER ARCHITECTURAL PLANS. SLOPE 2.0% MIN AWAY FROM STRUCTURE.
7.	EXTERIOR BASEMENT ENTRY AREA DRAINS CONNECTED TO BUILDING STORMWATER/GROUNDWATER SUMP PUMP OUTLETTING TO ENERGY DISSIPATION STRUCTURE (BY OTHERS)
8.	MAINTAIN SEA LEVEL DRIVES EXISTING FLOWLINE AWAY FROM PROPOSED RESIDENCE AND TO THE EAST

STORMWATER NOTES:

ALL ROOF DOWNSPOUTS SHALL BE DIRECTLY ROUTED TO A NON-ERODIBLE SURFACE, DOWNSPOUT DISSIPATION STRUCTURE, THE CLOSEST CATCH BASIN OR DRAINAGE SWALE.

ALL STORMWATER APPURTENANCES SHALL BE MONITORED BEFORE, DURING AND AFTER EVERY STORM TO ENSURE THERE ARE NO BLOCKAGES OF THE STORMWATER CONVEYANCE SYSTEM.

SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT APPLICABLE PLUMBING CODE.

RETAINING WALL NOTES:

SITE RETAINING WALLS AND/OR FOUNDATION WALLS ARE BY OTHERS PER SEPARATE PERMIT.

SUBDRAINS BEHIND ALL WALLS SHALL BE INSTALLED PER THE STRUCTURAL PLAN AND GEOTECHNICAL RECOMMENDATIONS.

ALL WALLS WITH A DROP OFF GREATER THAN 30" (OR THE HEIGHT DETERMINED BY THE LOCAL AUTHORITY HAVING JURISDICTION, WHICHEVER IS LESS) SHALL HAVE A RAILING INSTALLED PER THE STRUCTURAL OR ARCHITECT'S PLANS.

SOILS ENGINEER NOTES:

PRIOR TO CONSTRUCTION/GRADING, THE BUILDING AREAS SHOULD BE CLEARED OF ANY LOOSE SLOUGH, ARTIFICIAL FILL, SOIL, VEGETATION, AND/OR MAN-MADE DEBRIS.

IDEALLY, ALL EXTERIOR CONCRETE SLABS AND HARDSCAPE, SUCH AS ON-GRADE DECKING, STEPS, WALKWAYS, ETC., SHOULD BE SUPPORTED ON CERTIFIED COMPACTED FILL OR BEDROCK, OR THEY SHOULD BE DESIGNED AS STRUCTURAL ELEMENTS THAT DERIVE THEIR SUPPORT FROM FOUNDATIONS BEARING IN BEDROCK OR OTHER APPROVED BEARING MATERIAL. HOWEVER, EXTERIOR SLABS AND HARDSCAPE ARE NOT NORMALLY SUBJECT TO BUILDING CODE REQUIREMENTS FOR STRUCTURAL SUPPORT, AND IT MAY BE DESIRABLE TO SUPPORT THESE STRUCTURES ON THE EXISTING SURFICIAL SOILS. IN ORDER TO REDUCE THE POTENTIAL FOR FUTURE DISTRESS, IT MAY BE DESIRABLE TO PROVIDE ADDITIONAL SUBGRADE PREPARATION AND ADDITIONAL STEEL AND CONCRETE THICKNESS FOR THE PROPOSED SLABS AND HARDSCAPE. AT A MINIMUM, WE RECOMMEND THAT PATIO SLABS AND HARDSCAPE BE REINFORCED WITH MINIMUM OF #4 REBAR PLACED AT 16-INCHES ON CENTER, EACH WAY. THE UPPER 12 INCHES OF EXISTING SURFICIAL SOIL TO BE USED FOR SUPPORT SHOULD BE REMOVED AND RECOMPACTED TO 90 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM METHOD D1557-02E1.

TEMPORARY EXCAVATIONS FOR RETAINING WALLS ARE EXPECTED TO BE UP TO 12-FEET IN TOTAL HEIGHT AND ARE EXPECTED TO EXPOSE ARTIFICIAL FILL AND TERRACE DEPOSITS OVER BEDROCK. THE MAXIMUM RECOMMENDED HEIGHT OF TEMPORARY VERTICAL EXCAVATIONS IN TERRACE DEPOSITS OR BEDROCK IS 5-FEET, AND ANY PORTION EXPOSING ARTIFICIAL FILL OR LOOSE SOILS, SHOULD BE TRIMMED TO A 1:1 SLOPE OR THE EXCAVATION MAY BE SHORED.

PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF DENSITY TESTS, AND LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACK DRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACK DRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

THIS IS NOT AN EXHAUSTIVE LIST OF RECOMMENDATIONS FROM THE SOILS ENGINEER. THE ENTIRE SOILS REPORT SHALL BE REVIEWED BY ALL PARTIES INVOLVED WITH THE GRADING ACTIVITIES AND ALL RECOMMENDATIONS MADE IN THE SOILS REPORT SHALL BE CONSIDERED PART OF THE GRADING AND DRAINAGE PLAN.

GENERAL NOTES:

ALL RETAINING WALLS, BASEMENT WALLS, SHORING DESIGN, WATERPROOFING DESIGN AND ALL OTHER DESIGN NOT SPECIFICALLY CALLED OUT ON THIS PLAN ARE BY OTHERS PER SEPARATE PERMIT.

EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH THE CITY'S LOCAL IMPLEMENTATION PLAN (LIP), SECTION 8.3.

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18
UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES		
2	TJM	2024-12-12
UPDATE SITE PLAN, GARAGE ELEVATION, DRIVEWAY ELEVATION, CROSS SECTION, GRADING CALCS, ETC		
3	TJM	2025-02-17
ADD ESHA BOUNDARY, MOVE VELOCITY DISSIPATION STRUCTURE UP SLOPE, ADD VELOCITY DISSIPATION STRUCTURE DETAIL, UPDATE LSWPPP		
4	TJM	2025-03-16
UPDATE CALLOUT FOR ESHA ON EACH PAGE TO REFERENCE BIOLOGICAL REPORT		
5	TJM	2025-05-05
FULL ENERGY DISSIPATION STRUCTURE OUT OF ESHA, UPDATE STORMWATER PIPES ACCORDINGLY		

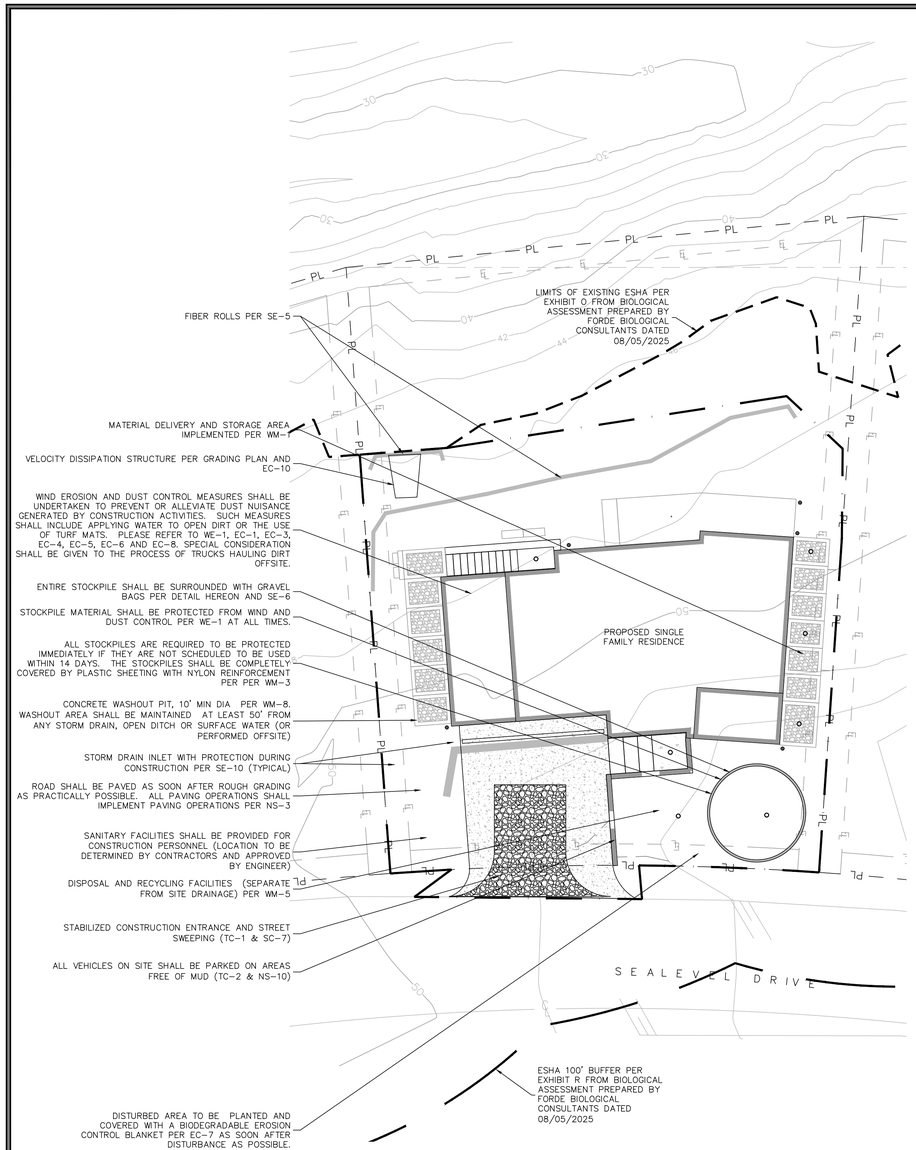
AHSIRT ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

COASTAL DEVELOPMENT PERMIT GRADING AND DRAINAGE PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31870 SEA LEVEL DRIVE
MALIBU, CA

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
EXP 06/2027
CIVIL
STATE OF CALIFORNIA

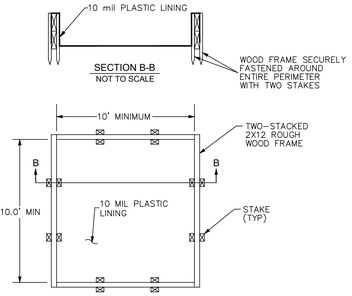
JOB # 104-13
DATE SEPTEMBER 2022
DRAWN BY TJM
CHECKED BY TAC
SHEET NUMBER G2 OF 3

DRAWING NAME: C:\USERS\TRAVI\ONEDRIVE\DOCUMENTS\AHSIRT\PROJECTS\104-13 31870 SEA LEVEL DR\VC LOCAL\G2 31870 SEA LEVEL DWG
PLOT DATE: 5/5/2025 1:36:15 PM
SAVE DATE: 5/5/2025 1:36:15 PM
LAST EDITED BY: TRAVIS COFFEY

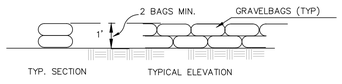


EROSION CONTROL PLAN AND LOCAL SWPPP

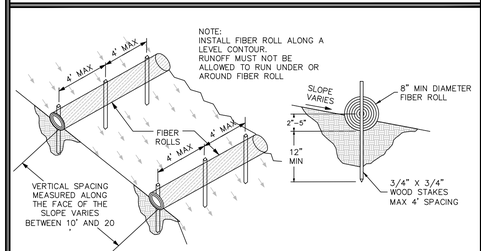
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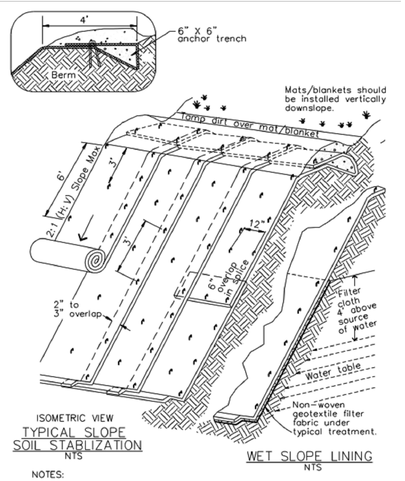
CONCRETE WASHOUT PIT DETAIL (WM-8)
NO SCALE



GRAVEL BAG BERM DETAIL (SE-6)
NO SCALE

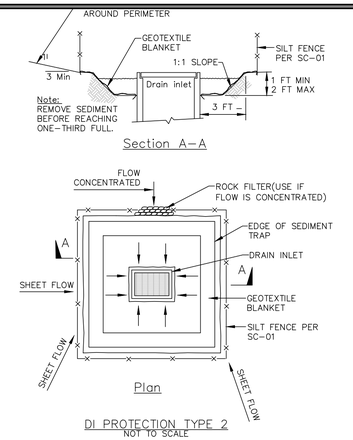


FIBER ROLL DETAIL
NO SCALE



NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

EROSION CONTROL BLANKET EC-7
NO SCALE



DI PROTECTION TYPE 2
NOT TO SCALE

NOTES
1. FOR USE IN CLEARED AND GRUBBED AND IN GRADED AREAS.
2. SHAPE BASIN SO THAT LONGEST INFLOW AREA FACES LONGEST LENGTH OF TRAP.
3. FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

STORM DRAIN INLET PROTECTION DETAIL (SE-10)
NO SCALE



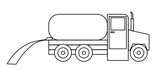
CONCRETE CURING GENERAL NOTES
- AVOID OVER-SPRAY OF CURING COMPOUNDS
- USE PROPER STORAGE AND HANDLING TECHNIQUES FOR CONCRETE CURING COMPOUNDS. REFER TO BMP WM-1.
- PROTECT ANY POTENTIAL DRAIN INLETS PRIOR TO APPLYING OF CURING COMPOUNDS.
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION NS-12

CONCRETE CURING DETAIL (NS-12)
NO SCALE



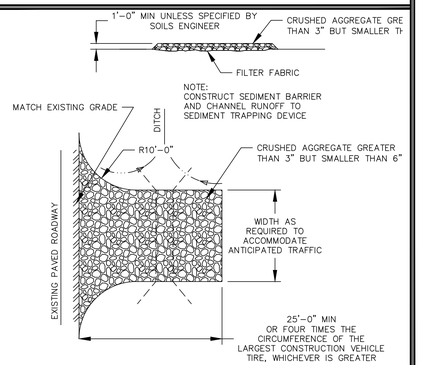
SWEET SWEEPING GENERAL NOTES
- DURING ACTIVE CONSTRUCTION, ALL POINTS OF INGRESS AND EGRESS SHALL BE MONITORED AT ALL TIMES
- BE CAREFUL NOT TO SWEEP UP ANY UNKNOWN SUBSTANCE OR ANY OBJECT THAT MAY BE POTENTIALLY HAZARDOUS
- AFTER SWEEPING IS FINISHED, PROPERLY DISPOSE OF SWEEPER WASTES AT AN APPROVED DUMPSITER
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION SE-7)

STREET SWEEPING DETAIL (SE-7)
NO SCALE



WIND EROSION CONTROL GENERAL NOTES
- WATERING PREVENTS DUST ONLY FOR A SHORT PERIOD AND SHOULD BE APPLIED DAILY TO BE EFFECTIVE
- DO NOT OVER WATER – THAT MAY LEAD TO EROSION AND TRACKING OFF SITE
- SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE EXPOSURE TO WINDY ACTIVITIES
- WATER SHOULD BE APPLIED USING NOZZLES THAT ENSURE EVEN DISTRIBUTION
- IDENTIFY AND STABILIZE KEY ACCESS POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION
- STABILIZE INACTIVE AREAS OF CONSTRUCTION SITES USING
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION WE-7)

WIND EROSION CONTROL DETAIL (WE-1)
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

TC	TRACKING CONTROL BMP
SE	SEDIMENT CONTROL BMP
NS	NON-STORMWATER MANAGEMENT CONTROL BMP
WM	WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMP
EC	EROSION CONTROL BMP
SE-#/TC-#/NS-#	ALL PER LATEST CASQA BMP HANDBOOK
WM-#	ALL PER LATEST CASQA BMP HANDBOOK
CASQA	CALIFORNIA STORMWATER QUALITY ASSOCIATION

HATCH	DESCRIPTION
	EXPOSED DISTURBED AREA TO BE PLANTED AND COVERED WITH A BIODEGRADABLE EROSION CONTROL BLANKET PER EC-7 AS SOON AFTER DISTURBANCE AS POSSIBLE.

EROSION AND SEDIMENT CONTROL PLAN (ESCP) GENERAL NOTES:

1. In case of emergency, call TO BE DETERMINED at 24-HOUR TELEPHONE
   i. Please fill in name and number
2. Total Disturbed Area < 0.2 ACRES WDID # N/A
   i. Risk Level 1 2 3 (circle one as determined by State General Permit for sites greater than 1 acre)
3. A stand-by crew for emergency work shall be available at all times during the rainy season (November 1 to April 15). Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
4. Erosion control devices shown on this plan may be removed when approved by the Building Official if the grading operation has progressed to the point where they are no longer required.
5. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of slope at the conclusion of each working day. All loose soils and debris that may create a potential hazard to off-site property shall be stabilized or removed from the site on a daily basis.
6. All silt and debris shall be removed from all devices within 24 hours after each rainstorm and be disposed of properly.
7. A guard shall be posted on the site whenever the depth of water in any device exceeds two feet. The device shall be drained or pumped dry within 24 hours after each rainstorm. Pumping and draining of all basins and drainage devices must comply must comply with the appropriate BMP for dewatering operations.
8. The placement of additional devices to reduce erosion damage and contain pollutants within the site is left to the discretion of the Field Engineer. Additional devices as needed shall be installed to retain sediments and other pollutants on site.
9. Desilting basins may not be removed or made inoperable between November 1 and April 15 of the following year without the approval of the Building Official.
10. Storm Water Pollution and Erosion Control devices are to be modified, as needed, as the project progresses, the design and placement of these devices is the responsibility of the field engineer. Plans representing changes must be submitted for approval if requested by the Building Official.
11. Every effort should be made to eliminate the discharge of non-storm water from the project sites at all times.
12. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
13. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.
14. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
15. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.
16. Developers/contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly if there is a 50% or greater probability of predicted precipitation, and after actual precipitation. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official (copies of the self-inspection check list and inspection logs are available upon request).
17. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
18. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
19. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
20. As the engineer/QSD of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness.

Civil Engineer/QSD Signature Date

21. The following notes must be on the plan:

"As the project owner or authorized agent of the owner, "I certify that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to ensure that a qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/or adequately implement the ESCP may result in revocation of grading and/or other permits or other sanctions provided by law."

Owner or Authorized Representative (Permittee) Date

22. Developers/contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly as required by the State Construction General Permit. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official.
23. The following BMPs from the "2009 Construction BMP Handbook/Portal" must be implemented for all construction activities as applicable. As an alternative, details from "Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMP) Manual" may be used. Additional measures may be required if deemed appropriate by the Building Official.

EROSION CONTROL
EC1 – SCHEDULING
EC2 – PRESERVATION OF EXISTING VEGETATION
EC3 – HYDRAULIC MULCH
EC4 – HYDROSEEDING
EC5 – SOIL BINDERS
EC6 – STRAW MULCH
EC7 – GEOTEXTILES & MATS
EC8 – WOOD MULCHING
EC9 – EARTH DIKES AND DRAINAGE SWALES
EC10 – VELOCITY DISSIPATION DEVICES
EC11 – SLOPE DRAINS
EC12 – STREAMBANK STABILIZATION
EC13 – RESERVED
EC14 – COMPOST BLANKETS
EC15 – SOIL PREPARATION/ROUGHENING
EC16 – NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL
SE1 – SILT FENCE
SE2 – SEDIMENT BASIN
SE3 – SEDIMENT TRAP
SE4 – CHECK DAM
SE5 – FIBER ROLLS
SE6 – GRAVEL BAG BERM
SE7 – STREET SWEEPING AND VACUUMING
SE8 – SANDBAG BARRIER
SE9 – STRAW BALE BARRIER
SE10 – STORM DRAIN INLET PROTECTION
SE11 – ACTIVE TREATMENT SYSTEMS
SE12 – TEMPORARY SILT DIKE
SE13 – COMPOST SOCKS & BERMS
SE14 – BIOFILTER BAGS

WIND EROSION CONTROL
WE1 – WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL
TC1 – STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 – STABILIZED CONSTRUCTION ROADWAY
TC3 – ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT
NS1 – WATER CONSERVATION PRACTICES
NS2 – DEWATERING OPERATIONS
NS3 – PAVING AND GRINDING OPERATIONS
NS4 – TEMPORARY STREAM CROSSING
NS5 – CLEAR WATER DIVERSION
NS6 – ILLICIT CONNECTION/DISCHARGE
NS7 – POTABLE WATER/IRRIGATION
NS8 – VEHICLE AND EQUIPMENT CLEANING
NS9 – VEHICLE AND EQUIPMENT FUELING
NS10 – VEHICLE AND EQUIPMENT MAINTENANCE
NS11 – PILE DRIVING OPERATIONS
NS12 – CONCRETE CURING
NS13 – CONCRETE FINISHING
NS14 – MATERIAL AND EQUIPMENT USE
NS15 – DEMOLITION ADJACENT TO WATER
NS16 – TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 – MATERIAL DELIVERY AND STORAGE
WM2 – MATERIAL USE
WM3 – STOCKPILE MANAGEMENT
WM4 – SPILL PREVENTION AND CONTROL
WM5 – SOLID WASTE MANAGEMENT
WM6 – HAZARDOUS WASTE MANAGEMENT
WM7 – CONTAMINATION SOIL MANAGEMENT
WM8 – CONCRETE WASTE MANAGEMENT
WM9 – SANITARY/SEPTIC WASTE MANAGEMENT
WM10 – LIQUID WASTE MANAGEMENT

REVISIONS

REV	BY	DATE	
1	TJM	2023-04-18	UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS INFORMATION/REPORT, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES
2	TJM	2024-12-12	UPDATE SITE PLAN, GARAGE ELEVATION, DRIVEWAY ELEVATION, CROSS SECTION, GRADING CALCS, ETC
3	TJM	2025-02-17	ADD ESHA BOUNDARY, MOVE VELOCITY DISSIPATION STRUCTURE UP SLOPE, ADD VELOCITY DISSIPATION STRUCTURE DETAIL, UPDATE LSWPPP
4	TJM	2025-03-16	UPDATE CALLOUT FOR ESHA ON EACH PAGE TO REFERENCE BIOLOGICAL REPORT
5	TJM	2025-06-05	PLUS ENERGY DISSIPATION STRUCTURE OUT OF ESHA, UPDATE STORMWATER PIPES ACCORDINGLY

AHSIRT ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

EROSION CONTROL PLAN AND LOCAL SWPPP

FOR APPROVAL ONLY - NOT FOR CONSTRUCTION

31870 SEA LEVEL DRIVE

MALIBU, CA

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
Exp06/2027
CIVIL
STATE OF CALIFORNIA

JOB # 104-13

DATE SEPTEMBER 2022

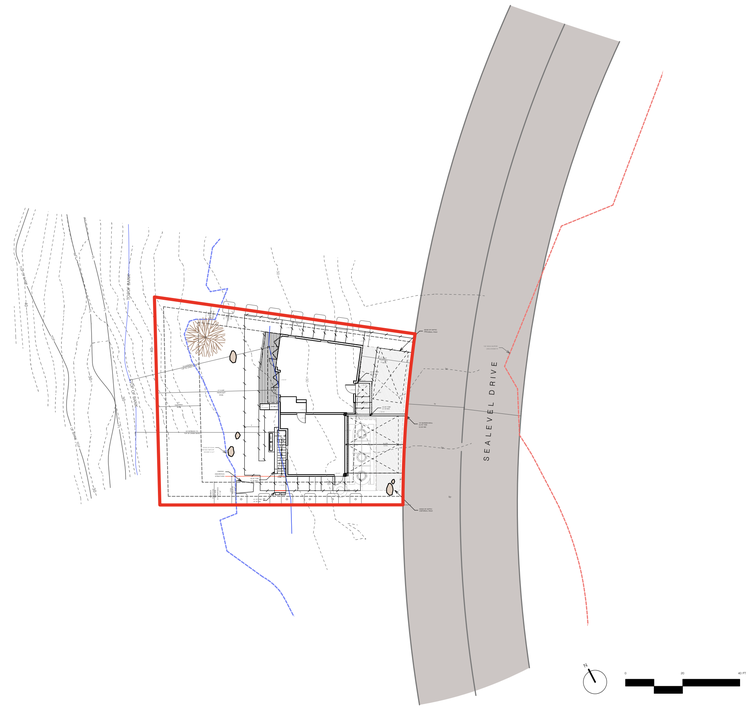
DRAWN BY TJM

CHECKED BY TAC

SHEET NUMBER G3 OF 3

31870 SEA LEVEL DRIVE

MALIBU, CA 92605





vicinity map

Project Description

Exterior landscape, lighting and irrigation for Proposed two-story single family residence with attached garage.

Project Details

project address:	31870 Sea Level Drive Malibu, CA 92605
owner:	Jon Nakano
assessors number:	4470-027-010
zoning:	SFM
total proposed landscape area:	1,488 SF low water use - 376 SF med water use - 1,113 SF high water use - 0 SF
total irrigated landscape:	1,488 SF
water supply type:	potable
water municipality:	Los Angeles Waterworks District 29

Consultants

architect:	Burdge & Associates 24911 PCH Malibu, CA 90265 p: 310.456.5905
landscape:	Barefoot Design, Inc. 1187 Coast Village Road, #287 Santa Barbara, CA 93108 p: 805.697.7466

Sheet Index

sheet #	Title
L0.00	Cover Sheet
L1.00	Hardscape & Lighting Plan
L1.01	Lighting Specifications
L2.00	Irrigation Plan
L2.01	Irrigation Details
L3.00	Planting Plan
L3.01	Planting Details
L4.00	Site Photos
L4.01	Fuel Modification Plan

Statement of Compliance

I have complied with the criteria of the Landscape Water Conservation Ordinance and applies them for the efficient use of water in the landscape design.

Preparer Name: Jessica Harlin

Preparer Signature:

Professional License / Designation: Landscape Architect, #6606

BAREFOOT DESIGN
1187 Coast Village Road, #287
Santa Barbara, CA 93108
TEL 805-697-7466
WEB www.barefoot-design.net

SUBMITTALS

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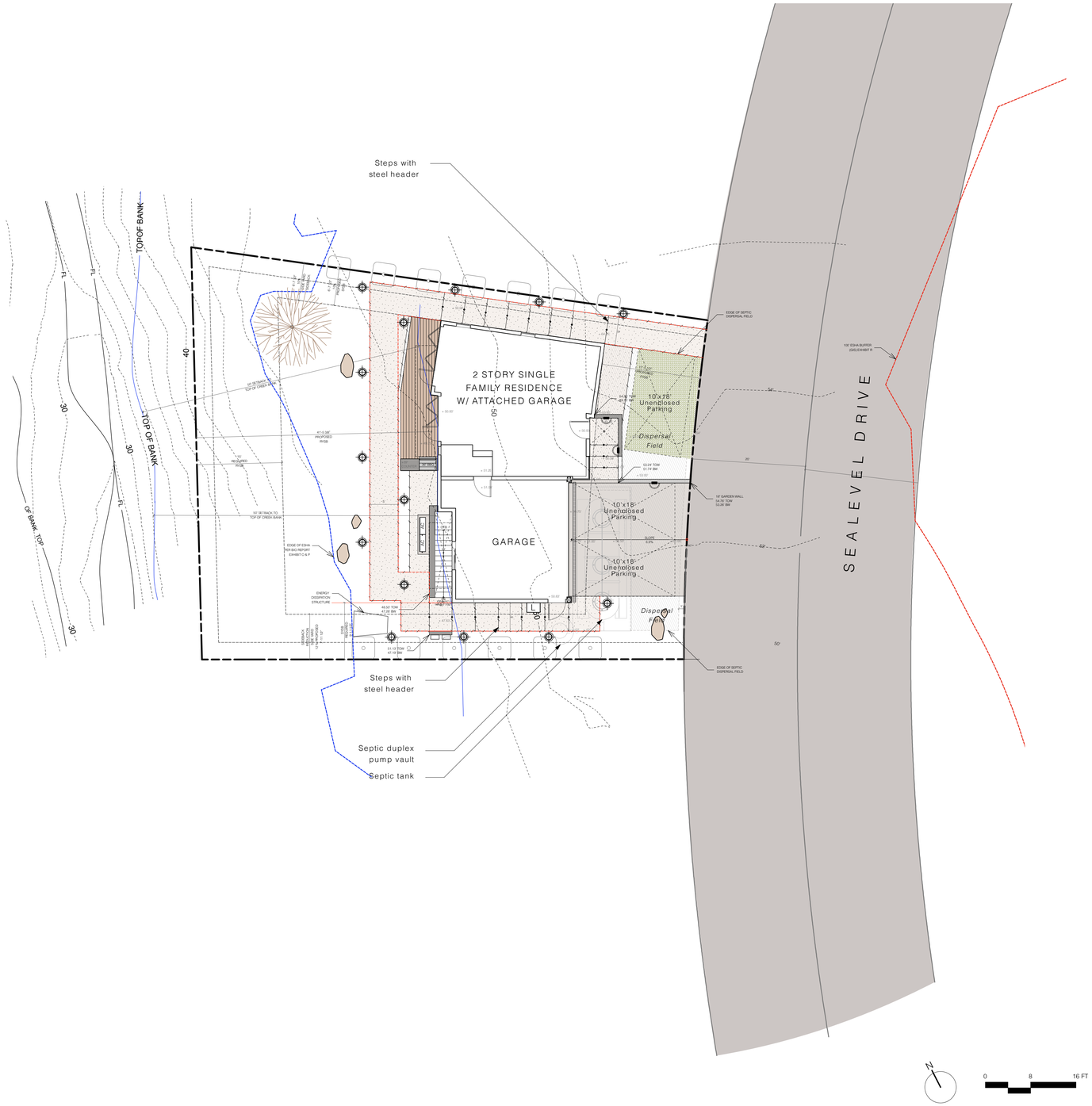
REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HARLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

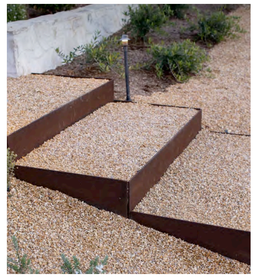
SHEET CONTENTS: **Cover Sheet**

DATE 5/15/26
SCALE 1" = 20'-0"
DRAWN KR
JOB 24-16
SHEET **L0.00**
1 OF 9 SHEETS



Materials Legend:

symbol	description
	Gravel
	Concrete
	Wood Deck
	GrassPave
	Garden Wall
	1/4" Steel Landscape Header
	Santa Barbara Sandstone Boulder



Steps with steel header

Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	14	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	3	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light

BAREFOOT DESIGN
1187 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805-697-7866
WEB www.barefoot-design.net

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HANLEY
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Hardscape & Lighting Plan

DATE 5/15/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L1.00**
2 OF 9 SHEETS

Lighting Specification Sheets:







ATLANTIS

15014SK-LL

12V SMALL LED PATH LIGHT

Atlantis features a minimalist design with bold, clean lines to complement contemporary architecture with ultimate urban sophistication.

DETAILS	
FINISH:	Satin Black
MATERIAL:	Aluminum
GLASS:	Etched Lens
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY

DIMENSIONS	
WIDTH:	6.5"
HEIGHT:	15.8"
DEPTH:	1.8
WEIGHT:	2lb

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
LED NAME:	EA-LMW-1.5W
WATTAGE:	1-1.5ow Mini Wedge LED *Included
VOLTAGE:	12v
VOLT AMPS:	2.5
LUMENS:	150
CRI:	80
INCANDESCENT EQUIVALENCY:	1 x 25w
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY
TRANSFORMER REQUIRED:	Yes

MOUNTING	
LEAD WIRE:	1 X 36"

SHIPPING	
CARTON LENGTH:	17.5
CARTON WIDTH:	8
CARTON HEIGHT:	4
CARTON WEIGHT:	2.5

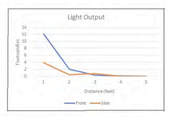
PRODUCT DETAILS:

- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- LED Bolts carry a 3-year limited warranty
- For more information on how to control your landscape lighting via the Hinkley Home Automation App, click here.
- Bold lines and a clean, minimalist style complement contemporary architecture
- A wiring lid and ground spike are supplied

HINKLEY

15014xx-LL — **Photometric Data**

15014	front	side view
1	12.13	3.95
2	1.98	0.438
3	0.36	0.78
4	0.06	0.05
5	0.01	0





HINKLEY

HINKLEY
3000 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free 1 (800) 446-5039

hinkley.com

Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	14	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	3	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light

FXLuminaire

LED Wall Lights


RD


ST


SQ


WW

PROJECT	
CATALOG #	
TYPE	
NOTES	

PO Wall Light SPECIFICATIONS

Output	1LED
Total Lumens†‡	4-29
Input Voltage	10 to 15V
Input Power (W)	2.0
VA	2.4
Efficacy (Lumens/Watt)	8
Color Rendering Index (CRI)	80+
Max Candela‡	24
Dimming	PWM, Phase**
RGBW Available	No
Luxor Compatibility	
Default	Zoning
ZD Option	Zoning/Dimming
ZDC Option	---
Minimum Rated Life (L90/B10)	55,000 Hrs

† *Measured using the 3,900K CCT lens. Multipliers for other CCTs include 0.80 (2,700K), 0.65 (4,500K), and 0.65 (5,200K).*
‡ *Measured using the Round (RD) faceplate. Multipliers for other faceplates include: 1.0 (Square), 2.0 (Spot), and 0.4 (Wall Wash).*
** *For optimal performance, use a trailing-edge, phase cut dimmer.*

FX Luminaire
FX Luminaire is an industry-leading manufacturer of landscape and architectural lighting products with a focus on the advancement of LED technology and digital lighting control with zoning, dimming, and color adjustment capabilities. We offer a full spectrum of specification-driven lighting fixtures that can be utilized to create elegant, cutting-edge landscape lighting systems for commercial or residential applications. Our products are available exclusively via our extensive professional distributor network.

Materials
Die-cast C360 brass faceplate, A380 aluminum housing, ABS construction conduit sleeve.

Socket
Socket contains MoistureBlock™ technology, preventing moisture from wicking up into sealed areas of the fixture.

Lamp
Integrated module with Cree LEDs. Gold-plated connectors and conformal coated for maximum reliability and corrosion resistance. Proprietary on-board intelligent driver uses firmware-controlled temperature regulation, maximizing LED life. Field upgradeable and replaceable, the LEDs are rated to 50,000 hrs. Maximum drive current: 1 A.

Optics
Polycarbonate color temperature adjustment lenses included with fixture; 2,700K (pre-installed), 3,900K (no lens), 4,500K, and 5,200K. Color temperature lenses field serviceable. Beam angle is calculated using LM-79 method for SSL luminaires.

Wiring
18 AWG (1 mm); SPT-1W, 220°F (105°C); 300V; 10' (3 m) length.

Power
Input 10–15 VAC/VDC, 50/60 Hz. Remote transformer required (specify separately).

Housing
Die-cast aluminum housing with capacity for 1LED integrated LEDs.

Faceplate
Die-cast brass faceplate.

Lens
Tempered glass lens with shock resistance and high tolerance for thermal expansion and stress.

Finish
Options of natural brass finish, antique finish with brushed (Antique Bronze) or tumbled (Antique Tumbled) effect, or TGIC powder-coat finish. Antique finishes sealed with a clear TGIC powder-coat layer.

Hardware
Includes: ABS conduit sleeve with 1/2"-14 (13 mm) NPT female hole for strain relief. Strain relief specified separately. Outer diameter of ABS conduit sleeve: 1.5" (48 mm).

Ambient Operating Temperature
0°F to 140°F (-18°C to 60°C)

Weight
2.3 lbs. (1.0 kg)

Control
ZD option utilizes Luxor technology to zone light fixtures in up to 250 groups, dim each group in 1% increments between 0% and 100%.

International Compliance
Compliant per IEC 60598-1 and IEC 60598-2-7 when used with International Wall Kit ("EXITWALL").

Sustainability
Innovation meets conservation in the design and manufacturing of our products. Where we can, we use recycled materials while maintaining superior functionality. Our LED products provide high-quality light at optimal energy efficiency, lifespan, and durability.

IES Classification
Type IV (RD & SQ), Type V (ST) Type II (WW).

Warranty
10-year limited warranty

Installation Requirements
RD & SQ – Designed for recessed installation in a vertical wall in its down lighting position only.

WW – Designed for recessed installation in a vertical wall in any orientation.

ST – Designed for recessed installation in a vertical or horizontal wall; ensure substantial drainage flow for up-lighting (e.g., decking).

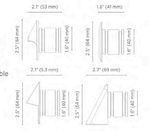
Listings

PO Wall Light DESIGNER PREMIUM

1 LED recessed wall light available in four brass faceplate styles for any application.

Quick Facts

- Die-cast brass or aluminum
- Natural, powder-coated, or antique brass
- Cree® integrated LEDs
- Color temperature filters
- Compatible with Luxor® technology
- Phase and PWM dimmable
- Input voltage: 10-15V



LANDSCAPE & ARCHITECTURAL LIGHTING

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PO Wall Light PHOTOMETRICS

PO 1LED Illuminance at a Distance	RD/SQ		
Feet (Meters)	Center Beam	Beam Width	
	Foot Candle (Lux)	Vertical 25°	Horizontal 65°
2.0' (0.6 m)	0.2 fc (2.2 lx)	1.3' (0.4 m)	2.2' (0.7 m)
4.0' (1.2 m)	0.1 fc (1.1 lx)	2.6' (0.8 m)	4.6' (1.4 m)
6.0' (1.8 m)	0.02 fc (0.2 lx)	4.0' (1.2 m)	6.9' (2.1 m)
8.0' (2.4 m)	0.01 fc (0.1 lx)	5.3' (1.6 m)	9.2' (2.8 m)
10.0' (3.1 m)	0.01 fc (0.1 lx)	6.6' (2.0 m)	11.5' (3.5 m)

PO 1LED Illuminance at a Distance	ST		
Feet (Meters)	Center Beam	Beam Width	
	Foot Candle (Lux)	Vertical 80°	Horizontal 75°
2.0' (0.6 m)	6.1 fc (66 lx)	3.3' (1.0 m)	3.1' (1.0 m)
4.0' (1.2 m)	1.5 fc (16.4 lx)	6.6' (2.0 m)	6.3' (1.9 m)
6.0' (1.8 m)	0.7 fc (7.3 lx)	9.8' (3.0 m)	9.4' (2.9 m)
8.0' (2.4 m)	0.4 fc (4.1 lx)	13.1' (4.0 m)	12.6' (3.8 m)
10.0' (3.1 m)	0.24 fc (2.6 lx)	16.4' (5.0 m)	15.7' (4.8 m)

PO 1LED Illuminance at a Distance	WW	
Feet (Meters)	Center Beam	Beam Width
	Foot Candle (Lux)	Vertical 45°	Horizontal 60°
2.0' (0.6 m)	0.9 fc (9.5 lx)	1.6' (0.5 m)	2.2' (0.7 m)
4.0' (1.2 m)	0.2 fc (2.4 lx)	3.2' (1.0 m)	4.5' (1.4 m)
6.0' (1.8 m)	0.1 fc (1.1 lx)	4.9' (1.5 m)	6.7' (2.0 m)
8.0' (2.4 m)	0.1 fc (0.5 lx)	6.5' (2.0 m)	9.0' (2.7 m)
10.0' (3.1 m)	0.04 fc (0.4 lx)	8.1' (2.5 m)	11.2' (3.4 m)

Cree is a registered trademark of Cree Inc. MoistureBlock is a trademark of DSM&T Co. Inc.
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Learn more. Visit fxl.com | +1 760.744.5240

BAREFOOT DESIGN
1197 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805-697-7866
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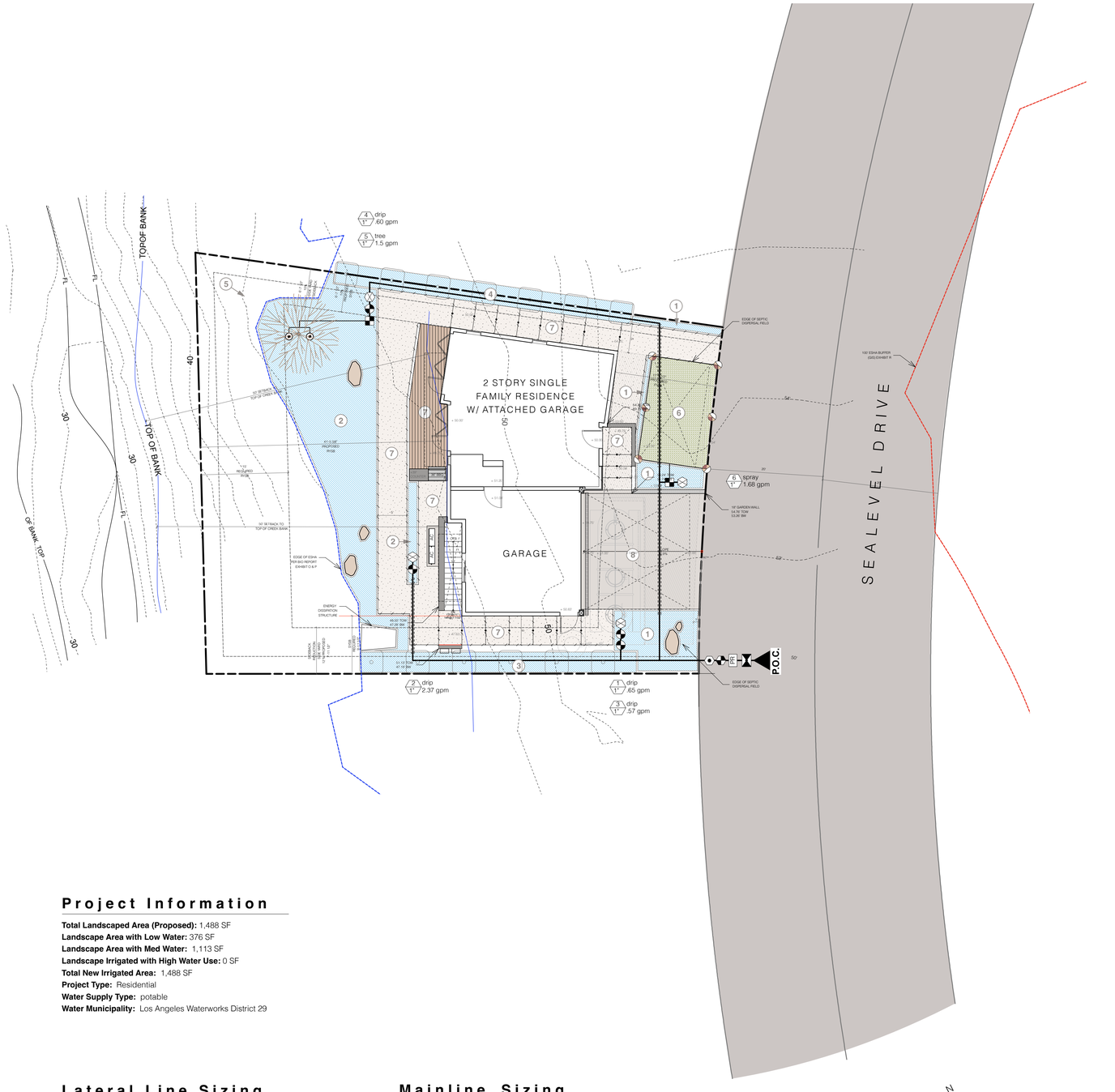
REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE PALMER
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Lighting Specifications

DATE 5/15/26
SCALE N/A
DRAWN KR
JOB 24-16
SHEET **L1.01**
1 OF 9 SHEETS



Project Information

Total Landscaped Area (Proposed): 1,488 SF
Landscape Area with Low Water: 376 SF
Landscape Area with Med Water: 1,113 SF
Landscape Irrigated with High Water Use: 0 SF
Total New Irrigated Area: 1,488 SF
Project Type: Residential
Water Supply Type: potable
Water Municipality: Los Angeles Waterworks District 29

Lateral Line Sizing

0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

N

0 8 16 FT

Irrigation Legend

symbol	description	manufacture / model
	domestic mainline	2" sch 40 PVC
	irrigation lateral	see Lateral Line Sizing
	irrigation sleeve	see Irrigation Notes
P.O.C.	point of connection	(N) 1" dedicated water meter, labeled "FOR IRRIGATION ONLY"
	irrigation controller	HUNTER I-Core IC-600-SS controller w/ (3) HUNTER ICM-600 Module & (1) HUNTER Wireless Rain-clik Rain Sensor WR-CLICK-TR. Rain Sensor to be programmed to automatically shutoff when onsite rainfall exceeds 1/4 inch.
	backflow preventer	1-1/2" FEBCO 825Y or approved equal
PR	pressure regulator	HONEYWELL D06-G with gauge (70 psi)
	master control valve	HUNTER IBV-151G-FS-R (65 psi)
	flow sensor	HUNTER HFS w/ FCT-100 (65 psi)
	spray valve	WEATHERMATIC 11024FCR (65 psi)
	drip valve	WEATHERMATIC 11024FCR w/ pressure regulating Y-Filter (30 psi)
	hose bib	3/4" brass hose bibb
	manual shut-off valve	PVC ball valve, size to match mainline
	root watering system	HUNTER RZWS (65 psi), see Emitter Legend for size and model
	rotary spray head, 360 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP800SR-360 nozzles (40 psi)
	rotary spray head, 90-210 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP1000-90 nozzles (40 psi)
#	drip irrigation zones	HUNTER 1/2" Supply Tubing w/ HUNTER Point Source Emitters, see Emitter Legend
#	temporary spray irrigation zones	HUNTER Pro-Spray PROS-12-PRS40-CV w/ MP Rotator (40psi). Temporary spray irrigation zones to be terminated after 2 year establishment period.

Valve Identification

valve number — # type — valve type
valve size — 1" flow — valve flow rate

Hydrozone Legend

valve/zone	description	area	plant type	exposure
1	Ornamental Shrubs and Grasses - Front Yard	193 SF	M	Full Sun
2	Ornamental Shrubs and Grasses - Backyard	710 SF	M	Full Sun
3	Hedge - North	166 SF	L	Part Sun
4	Hedge - South	180 SF	L	Full Sun
5	Tree	30 SF	L	Full Sun
6	GrassPave	210 SF	M	Full Sun
7	Hardscape - Permeable	1,048 SF	NA	Partial Sun
8	Hardscape - Impermeable	422 SF	NA	Full Sun

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Irrigation Plan**

DATE 5/15/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L2.00**
4 OF 9 SHEETS

Maximum Applied Water Allowance Calculations:

ETo	40.6	
LA	1488	
SLA	1470	
ETAF	0.23	
MAWA (Gallons)		**37,252**
MAWA (Inches per sq.ft.)		40.2
MAWA (Inches per DAY)		0.11

Maximum Applied Water Allowance Equation:
MAWA = (ETo) (0.62) [(.55 x LA) + (1-0.55 x SLA)]

Definitions:

Eto	Reference provided in Appendix A - CIMIS
ETAF	Evapotranspiration Adjustment Factor - 0.55 or less
HA	Hydro zone area = Irrigated area
IE	Irrigation efficiency. Must exceed 0.71.
LA	Landscaped area
PF	Plant water use factor- WUCLOS
SLA	Special landscaped area WITHIN the landscaped area

Estimated Total Water Use:

ETo	40.6	
PFxHA (see chart)	1158	
HA (same as LA)	1488	
IE (see chart)	0.90	
SLA	1470	
ETWU (Gallons)		**21,331**
ETWU (Inches per sq.ft.)		23.0
ETWU (Inches per DAY)		0.06

Estimated Total Water Use Equation:
ETWU = ETo x 0.62 x [(PFxHA)/IE) +SLA]

Irrigation Efficiency:

H.Z.	Description	Type	PF	Irrigation Method	IE	ETAF (PF/IE)	HA	ETAF x Area	PF x HA	ETWU
Regular Landscape Areas										
1	Ornamental Shrubs & Grasses - Front Yard	Med	0.5	drip	0.81	0.41	192	77.76	96	
2	Ornamental Shrubs & Grasses - Backyard	Med	0.5	drip	0.81	0.41	710	287.55	355	
3	Hedge - North	Low	0.2	drip	0.81	0.16	166	26.89	33.2	
4	Hedge - South	Low	0.2	drip	0.81	0.16	180	29.16	36	
5	Trees	Low	0.2	Tree	0.81	0.16	30	4.86	6	
6	GrassPave	Med	0.5	Spray	0.75	0.38	210	78.75	105	
				Subtotal:	**0.80**	**0.28**	**1488**	**504.97**	631.2	19,861
Special Landscape/Hardscape Areas										
7	Hardscape - Permeable	Low	0.1	N/A	1.0	0.10	1048	104.80	104.8	
8	Hardscape - Impermeable	Low	1.0	N/A	1.0	1.00	422	422.00	422	
				Subtotal:	**1.00**	**0.55**	**1470**	**526.80**	**526.8**	13,261
								ETWU Total:		**33,121**
								MAWA Allowance:		**37,252**

Average System IE (IE is a derivative of DU defined as IE = DU x IME. Where IME= Irrigation Management Efficiency

Irrigation Notes

1. This system is diagrammatic. All pipes, valves, etc. shown within paved areas are for design clarification only and shall be installed in planting areas wherever possible.

2. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that obstructions or grade differences exist and should be brought to the attention of the owner's authorized representative. In the event that this notification is not performed, the contractor must assume full responsibility for all revisions necessary.

3. Irrigation system is designed assuming a static water pressure of approximately 70 PSI at point-of-connection. Prior to installation of irrigation system, contractor shall verify pressure at point-of-connection.

4. It is the intent of this plan to provide adequate irrigation to all planting areas, prevent run-off, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas in accordance with MWELO sections 492.7(a)(1)(I) and 492.7(a)(1)(J)

Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to ensure 100% irrigation coverage of all planting areas and MWELO compliance.

5. Emitter shall be located on grade and staked a maximum of six inches from the center of plant, or edge of rootball, whichever is greater.

6. All piping installed under pathways or paved areas, through walls or footings shall be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe and any couplings in the sleeve. Provide (2) extra 2" sleeves in all locations where mainline or lateral line crosses under paving greater than 3' in dimension.

7. Irrigation lines shall be buried at the following minimum depths: PVC pressure mainline:18" PVC lateral line:12"

8. Irrigation Contractor shall adjust flow control for proper performance and valve longevity.

9. Pressure regulating devices shall be installed where necessary to ensure the dynamic pressure at each emission device is within manufacturer's recommended pressure range for optimal performance.

10. Flush valves shall be installed at the ends of all polyethylene drip tubing in round valve boxes with gravel fill.

11. Check valves shall be installed at low points on irrigation line to prevent leakage.

12. All planting areas shall be provided with a 3" thickness of mulch, samples to be provided to owner's representative.

13. No lawn or landscape irrigation with potable water allowed apart from the hours of 8:00PM and 8:00AM. Except for hand held hose equipment with a positive shut-off nozzle.

14. Irrigation water shall not run off landscaped areas to adjacent property, adjoining streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

15. All irrigation emission devices will meet the criteria set forth by MWELO section 492.7(a)(1)(M) and shall be installed per manufacturer's recommendations.

16. All irrigation piping and equipment to be purple in color and to be field or factory marked "CAUTION: NON-POTABLE RAINWATER, DO NOT DRINK." All irrigation piping to be purple reclaimed water pipe.

17. A manual indicating layout of irrigation system and manufacturer instructions for all equipment and procedures shall be provided to the owner at completion of project.

18. Certifcate of Completion in accordance with MWELO Section 492.9 will be submitted for review/approval by the Building and Safety Division prior to final occupancy.

19. Landscape Constractor shall clean up on a daily basis per Owner's representative's approval.

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

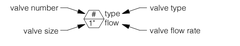
Lateral Line Sizing

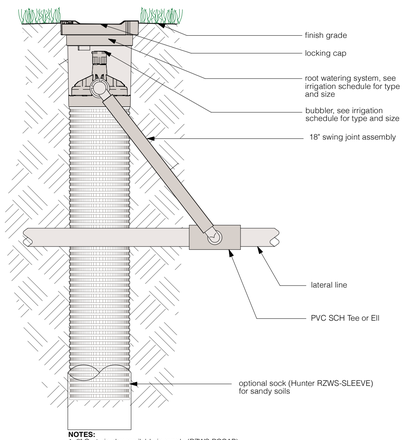
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10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Emitter Legend

plant material	equipment
flatted groundcover	Microspray Emitters
4" pot	2 - HE-20-B Emitters per plant
1 gallon	2 - HE-20-B Emitters per plant
5 gallon shrubs	3 - HE-20-B Emitters per plant
15 gallon shrubs	4 - HE-20-B Emitters per plant
15 gallon trees	2 - RZWS-18-50-CV per tree
24" box trees	2 - RZWS-18-50-CV per tree
36" box trees	3 - RZWS-36-50-CV per tree
48" box trees	4 - RZWS-36-50-CV per tree
60" box trees and above	(Consult with a Local Arborist)

Valve Identification

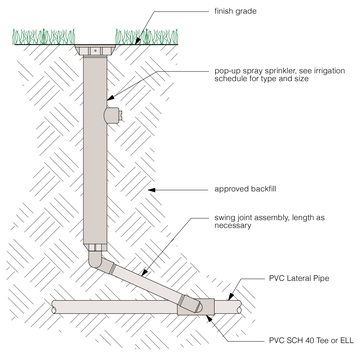




NOTES:
1. 3' Grate is also available in purple (RZWS-RCCAP).
2. Install product so that the grate is even with finish grade or top of mulch.
3. Optional sand sock (RZWS-SLEEVE) to cover mesh basket area.
4. When installing in extremely hard or clay soils, add 3/4" gravel under and around the unit to allow faster water infiltration and root penetration.
5. Once RZWS has been installed fill the basket with pea gravel before locking lid.

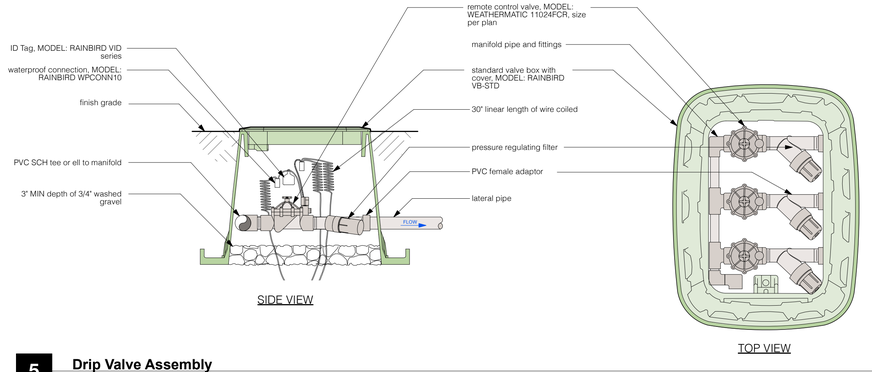
7 Root Watering System

scale: N.T.S.



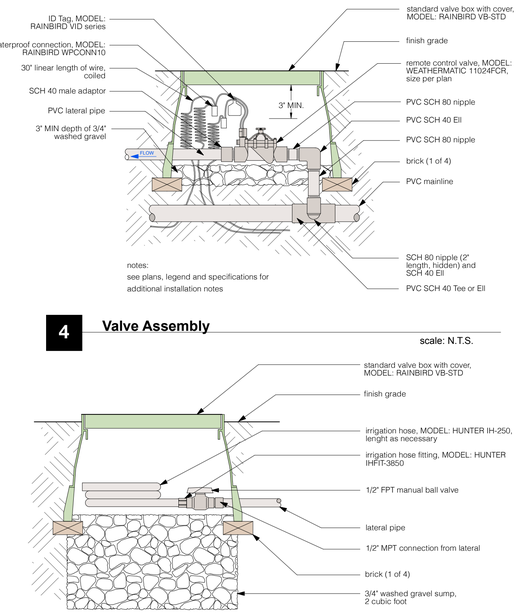
6 Spray Head

scale: N.T.S.



5 Drip Valve Assembly

scale: N.T.S.

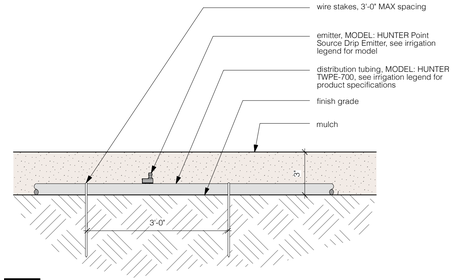


4 Valve Assembly

scale: N.T.S.

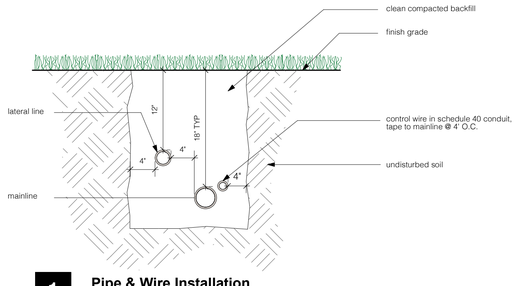
3 Manual Flush Valve

scale: N.T.S.



2 Drip Irrigation

scale: N.T.S.



1 Pipe & Wire Installation

scale: N.T.S.

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1197 Coast Village Road, #387
Santa Barbara, CA 93108
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WEB www.barefoot-design.net

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Irrigation Details**

DATE 5/15/26
SCALE as noted
DRAWN KR
JOB 24-16
SHEET **L2.01**
5 OF 9 SHEETS

Planting Notes

All plant materials shall be set out as shown on plan. Final locations shall be approved by the Landscape Designer prior to planting.

1. Landscape Contractor shall be responsible for becoming aware of all underground utilities, pipes and structures. The Contractor shall be held responsible for contacting all utility companies for field location of underground utility lines prior to any excavation.

2. Do not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the landscape designer, Barefoot Design, 805.697.7466.

3. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.

4. Landscape Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

5. The Landscape Contractor shall allow for the addition of specified quantities of soil amendments and conditioners in soil preparation and finish grading, per recommendation of soils report.

6. Recommendations in the Soils Management Report shall be incorporated into the landscape installation and a copy of the report is to be on-site at the time of inspection.

Unless soils have greater than 6% organic matter in the top 6" of soil, compost at a rate of a minimum of (4) cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of 6" into the soil.

7. It is the Landscape Contractor's responsibility to furnish plant material free of pests or plant diseases. Contract-grown or 'tagged' material must be inspected by the Landscape Contractor and certified disease free. It is the Landscape Contractor's obligation to warranty all plant materials.

8. The Landscape Contractor shall provide healthy, vigorous plant stock grown under climatic conditions similar to the conditions in the locality of the project.

9. Specimen trees will be selected and tagged by Landscape Designer prior to plant installation. Landscape Contractor is responsible to do their own quantity take-offs for all plant materials and sizes shown on plans. All substitutions shall be reviewed and approved by the Landscape Designer.

10. See details and specifications for staking method, plant pit dimensions and backfill requirements. If details have not been provided, contact Landscape Designer. Plant crown elevations relative to finish grade are shown on planting details and shall be strictly adhered to. Proper compaction of backfill to prevent settlement shall be required.

11. The Landscape Designer will approve finish grades at all landscape areas prior to planting.

12. The Landscape Designer reserves the right to adjust the location of plant material during installation as appropriate to the project.

13. Landscape mulch shall be applied at 3 inches thick over all landscape surfaces except lawn areas and per City of Malibu guidelines. Mulch must be approved by Landscape Designer. 0-5 feet from structure, flammable mulch is prohibited. 5 feet to 30 feet, limited non-continuous use of organic mulch is permitted with a maximum application area of 20 feet x 20 feet, and a minimum 5 foot separation between application areas. 30 feet from the structure, organic mulch and wood chips are permitted.

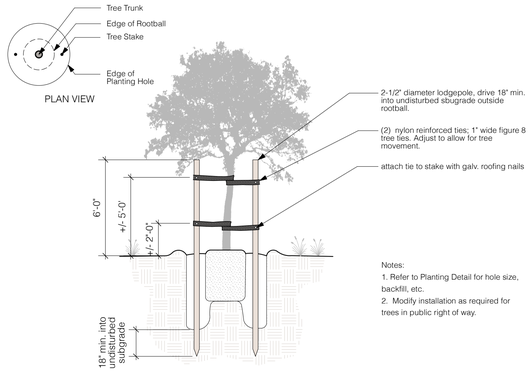
14. All side and rear yard hedges shall be maintained at or below 6'-0" in height.

15. View impermeable hedges occurring within the front setback serving the same function as a fence or wall shall be maintained at or below 42" in height.

16. Vegetation shall be situated on the propoerty so as not to obstruct the primary view from private property at any given time. Giving consideration to the plant materials future growth.

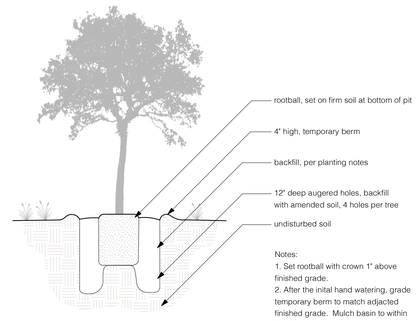
General Notes

1. Refer to Architectural and Civil Engineer for hardscape and walls.
2. Refer to Civil Engineer for all grading and drainage



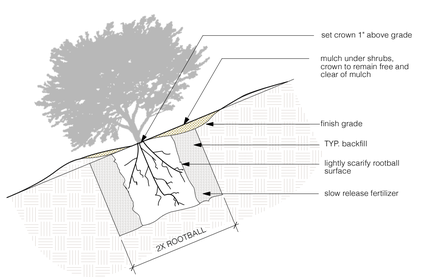
6 Tree Staking

scale: N.T.S.



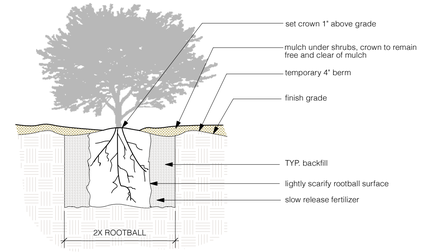
5 Tree Planting

scale: N.T.S.



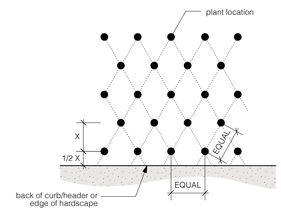
4 Shrub Planting on Slope

scale: N.T.S.



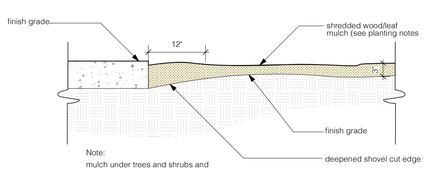
3 Shrub Planting

scale: N.T.S.



2 Groundcover Layout

scale: N.T.S.



1 Mulch Installation

scale: N.T.S.

BAREFOOT DESIGN
1187 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805.697.7466
WEB www.barefoot-design.net

SUBMITTALS

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2024
Date
STATE OF CALIFORNIA

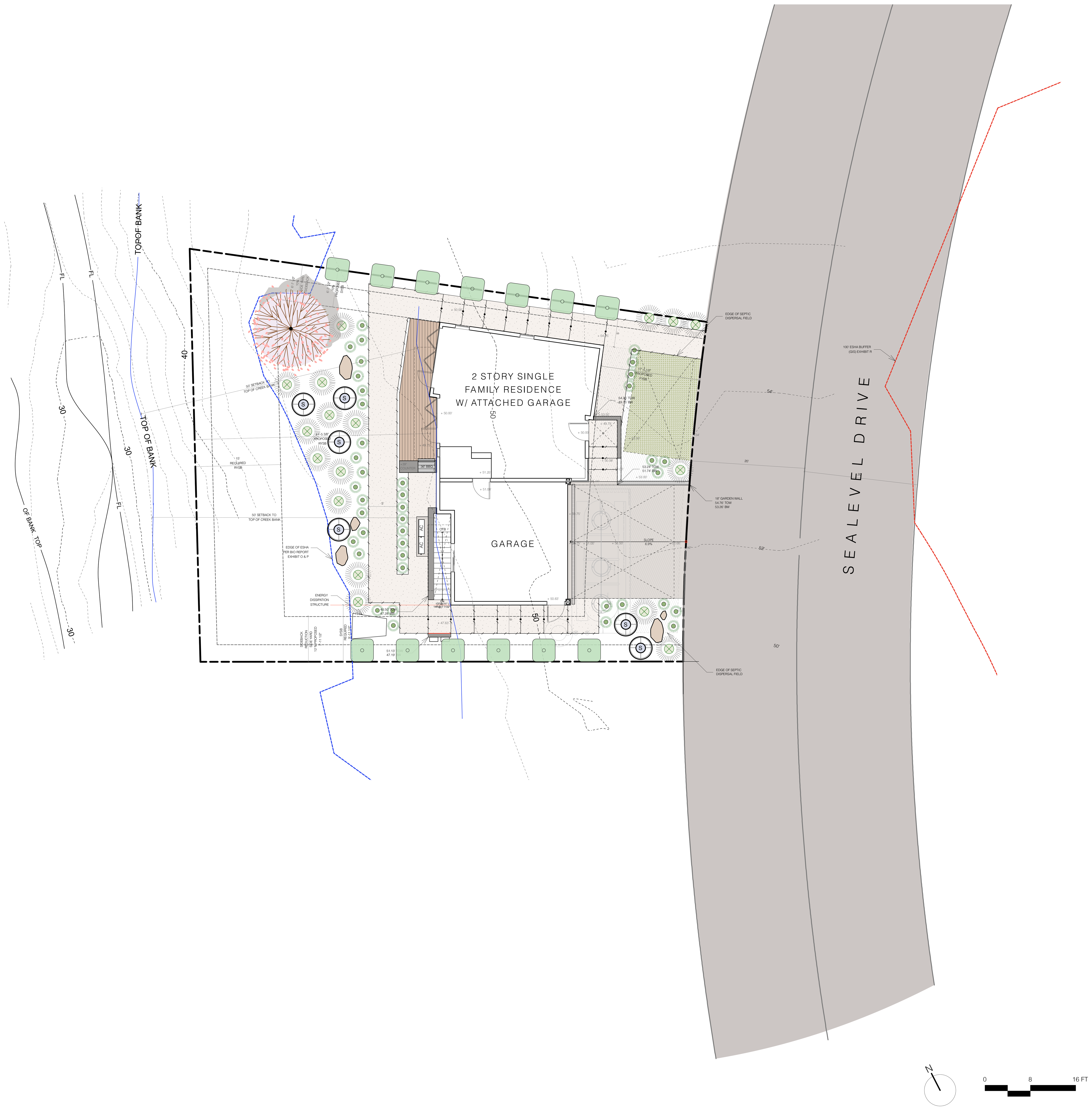
Nakano Residence
31870 Sea Level Drive

PROJECT:

SHEET CONTENTS
Planting Details

DATE	5/15/26
SCALE	as noted
DRAWN	KR
JOB	24-16
SHEET	L3.01

7 OF 9 SHEETS



Plant Palette:

	Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs					
	Prunus ilicifolia	Hollyleaf Cherry	15g	13	col.
	Cercis occidentalis	Western Redbud	36" Box	1	multi.

	Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials					
	Carex tumulicola	Foothill Sedge	1g	40	1'-0"
	Muhlenbergia rigens	Deer Grass	1g	17	4-5'-0"
	Salvia leucophylla	Purple Sage	5g	6	6'-0"
Groundcover					
	Agrostic pallens	Native Bentgrass (GrassPave)		210 sf	

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HARLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Planting Plan

DATE 5/15/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET
L3.00
6 OF 9 SHEETS





Photo 1



Photo 2



Photo 3



Photo 4

3 BAREFOOT DESIGN
1187 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805-697-7866
WEB www.barefoot-design.net

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Site Photos

DATE 5/15/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L4.00**
8 OF 9 SHEETS





COUNTY OF LOS ANGELES
FIRE DEPARTMENT

FUEL MODIFICATION UNIT
605 NORTH ANGELENO AVENUE
AZUSA, CA 91702
(626) 969-5205
Email: forestryfuelmodification@fire.lacounty.gov
Website: https://fire.lacounty.gov/forestry-fuel-modification/

"Proud Protectors of Life, Property, and the Environment"

ANTHONY C. MARRONE
FIRE CHIEF FORESTER &
FIRE WARDEN

BOARD OF SUPERVISORS
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FIFTH DISTRICT

Fuel Modification Plan Notes

Ember Resistant Zone (Pending State Fire Marshal Approval)

- Extends 5 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. The areas beneath eaves, overhangs or parts of structures including attached decks and pergolas shall be included in the ember resistant zone.
- This area shall be free of materials or landscaping known to be receptive to flying embers.
- **Disclaimer:** Please be advised, plants approved within the first five feet of the structure today, may not be compliant when the occupancy inspection or future defensible space inspections take place. Once the State Fire Code PRC 4291 and/or the LA County Fire Code Section 325 are updated to reflect the requirements of AB3074, they will take precedent. Defensible space is a year-round requirement and structures in a fire hazard severity zone must comply with the most current defensible space fire codes.

Zone 1

- Extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Plant species selected for Zone 1 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.
- Vines and climbing plants are not allowed on any combustible structure requiring review.

Zone 2

- Extends from the outer edge of Zone 1 an additional 70 feet for a total of 100 feet from the structure.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone 1 but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained.
- Plant species selected for Zone 2 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees in Zone 2 may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel ladders. Tree selections are subject to denial upon review.

Zone 3

- Extends from the outer edge of Zone 2 an additional 100 feet for a total of 200 feet from the structure.
- Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2).

Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private road, driveways and turnarounds used by firefighting resources.
- Clear and remove flammable vegetation on each side of access roads (Fire Code 325.10).
- Fire access roads shall have an unobstructed vertical clearance a minimum width of 20' and vertically clear to the sky (Fire Code 503.2.1).
- Additional clearance beyond 10 feet may be required upon an on-site inspection.
- All proposed plantings, unless otherwise approved, shall be positioned so they do not obstruct access at maturity. Pruning will not be considered as an alternative to plant selection.

Maintenance

Routine maintenance shall be regularly performed in all zones. Above all else, regular maintenance is paramount to the fire resistance of a well-planned fire-resistant landscape. Critical items are outlined below. Additional information may be found on our website listed in the header of this document.

- Start with the structure. Remove leaf litter and other combustible debris from roofs, eaves, rain gutters etc.
- Ensure the ember resistant zone is maintained free of any material known to be receptive to flying embers.
- Remove any plant or portion of a plant that is dead or dying throughout all zones.
- Remove downed, accumulated plant litter and dead wood throughout all zones.
- Prune to reduce the overall amount and continuity of fuels. Eliminate horizontal and vertical fuel ladders throughout all zones.
- All invasive species and their parts should be removed from the site.
- Ensure irrigation systems are functioning properly.
- Compliance with the fire code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of fine fuels between the months of April and June depending on the geographic region each dwelling exists.
- Inspection for compliance with an approved fuel modification plan may occur at any time.
- All future planting shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation.

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

BAREFOOT DESIGN
1187 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805-697-7866
WEB www.barefoot-design.net

SUBMITTALS

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PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Fuel Modification Plan**

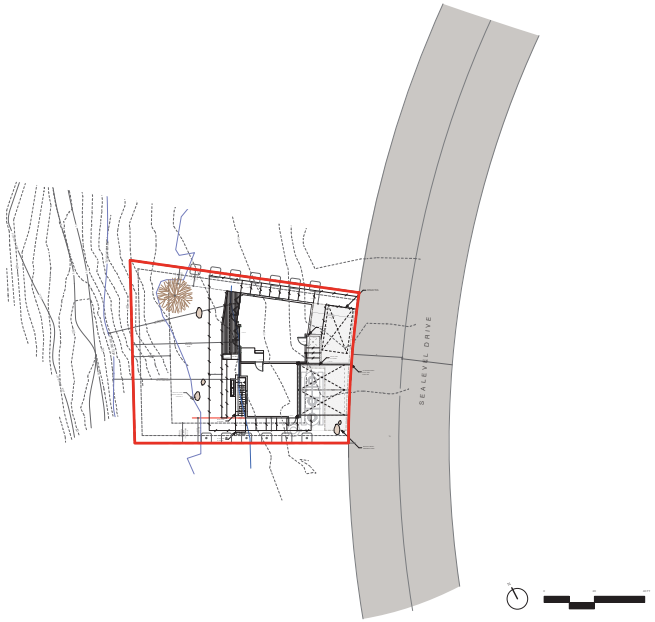
DATE 5/15/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L4.01**
9 OF 9 SHEETS

31870 SEA LEVEL DRIVE

MALIBU, CA 92605



vicinity map



Project Description

Exterior landscape, lighting and irrigation for Proposed two-story single family residence with attached garage.

Project Details

project address:	31870 Sea Level Drive Malibu, CA 92605
owner:	Jon Nakano
assessors number:	4470-027-010
zoning:	SFM
total proposed landscape area:	1,488 SF low water use - 376 SF med water use - 1,113 SF high water use - 0 SF
total irrigated landscape:	1,488 SF
water supply type:	potable
water municipality:	Los Angeles Waterworks District 29

Consultants

architect:	Burdge & Associates 24911 PCH Malibu, CA 90265 p: 310.456.5905
landscape:	Barefoot Design, Inc. 1187 Coast Village Road, #287 Santa Barbara, CA 93108 p: 805.697.7466

Sheet Index

sheet #	Title
L0.00	Cover Sheet
L1.00	Hardscape & Lighting Plan
L1.01	Lighting Specifications
L2.00	Irrigation Plan
L2.01	Irrigation Details
L3.00	Planting Plan
L3.01	Planting Details
L4.00	Site Photos
L4.01	Fuel Modification Plan

Statement of Compliance

I have compiled with the criteria of the Landscape Water Conservation Ordinance and applies them for the efficient use of water in the landscape design.

Preparer Name: Jessica Harlin

Preparer Signature:

Professional License / Designation: Landscape Architect #6606

EXHIBIT 2

BAREFOOT DESIGN
1187 Coast Village Road, #287
Santa Barbara, CA 93108
t/f: 805.697.7466
www.barefootdesign.net

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HARLIN
No.6606
STATE OF CALIFORNIA

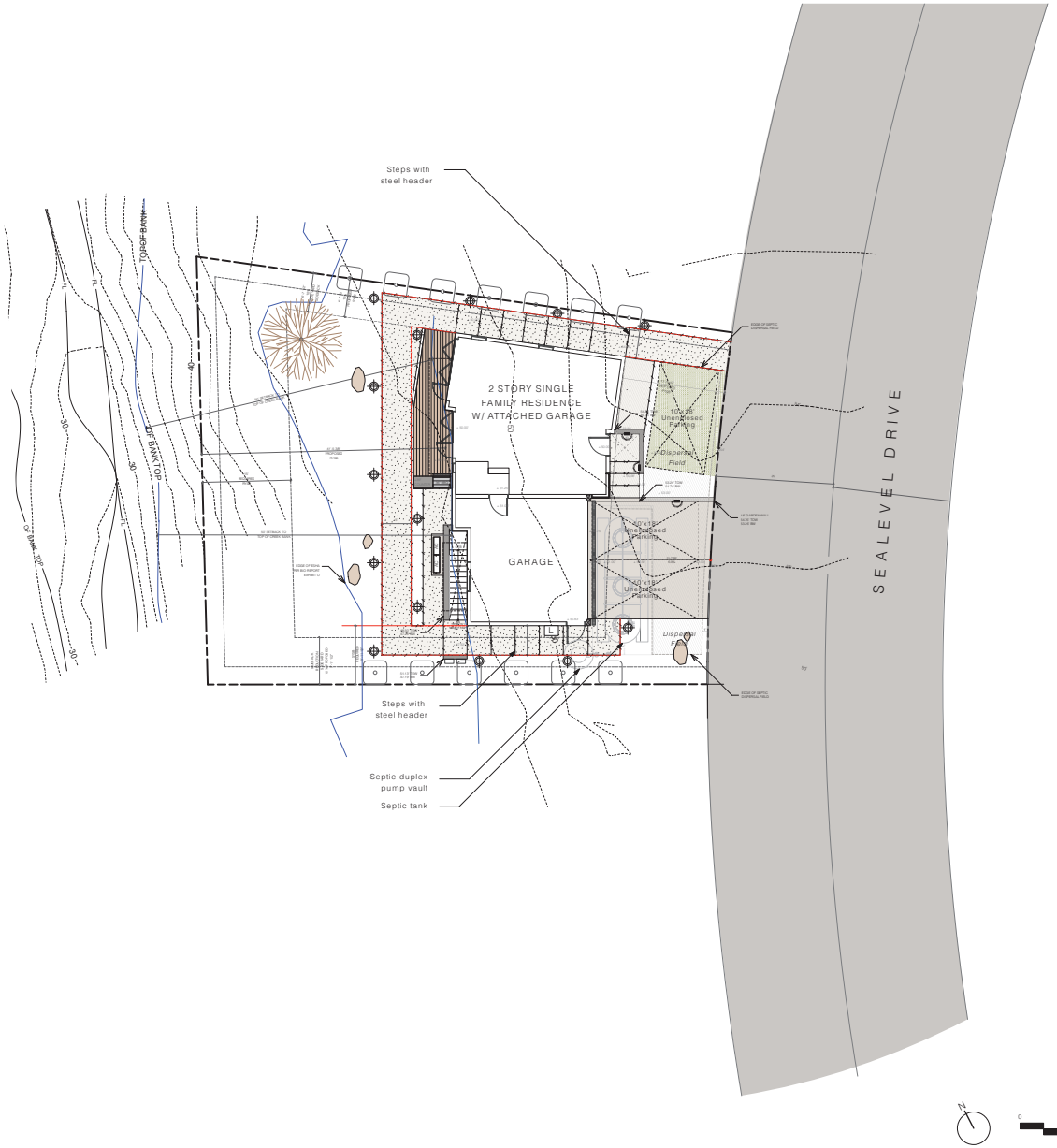
PROJECT

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS

Cover Sheet

DATE 2/27/25
SCALE 1" = 20'-0"
DRAWN KR
JOB 24-16
SHEET **L0.00**
1 OF 9 SHEETS



Materials Legend:

symbol	description
	Gravel
	Concrete
	Wood Deck
	GrassPave
	Garden Wall
	1/4" Steel Landscape Header
	Santa Barbara Sandstone Boulder



Steps with steel header

Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	14	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	3	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light

BAREFOOT DESIGN
1371 Cold Spring Road, #207
Santa Barbara, CA 93108
T/F: 805.687.7984
www.barefootdesign.net

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REGISTERED LANDSCAPE ARCHITECT
No.6808
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Hardscape & Lighting Plan

DATE 2/27/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L1.00**
2 OF 9 SHEETS

Lighting Specification Sheets:







ATLANTIS

15014SK-LL

12V SMALL LED PATH LIGHT

Atlantis features a minimalist design with bold, clean lines to complement contemporary architecture with ultimate urban sophistication.

DETAILS	
FINISH:	Satin Black
MATERIAL:	Aluminum
GLASS:	Etched Lens
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY

DIMENSIONS	
WIDTH:	5.5"
HEIGHT:	15.8"
DEPTH:	1.8
WEIGHT:	2lb

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
LED NAME:	EA LMH 1 SW
WATTAGE:	1-1.5Dw Mini Wedge LED *Included
VOLTAGE:	12v
VOLT AMPS:	2.5
LUMENS:	150
CRI:	90
INCANDESCENT EQUIVALENCY:	1 x 20w
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY
TRANSFORMER REQUIRED:	Yes

MOUNTING	
LEAD WIRE:	1 X 36"

SHIPPING	
CARTON LENGTH:	17.5
CARTON WIDTH:	9
CARTON HEIGHT:	4
CARTON WEIGHT:	2.5

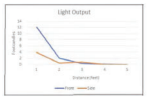
PRODUCT DETAILS:

- Suitable for low-V, wet (outdoor direct rain) locations as defined by NEC and CEC. Meets Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- LED Bulbs carry a 3-year limited warranty
- Easily connect this fixture to control your landscape lighting via the Hinkley Home Automation App, click here.
- Bold lines and a clean, minimalist style complement contemporary architecture
- 4-wiring kit and ground spike are supplied

HINKLEY

15014xx-LL	Photometric Data

15014	front	side view
1	12.13	3.95
2	1.98	0.418
3	0.36	0.78
4	0.06	0.05
5	0.01	0





HINKLEY

HINKLEY
33000 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	14	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	3	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light

FXLuminaire

LED Wall Lights



PROJECT

CATALOG #

TYPE

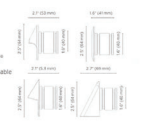
NOTES

PO Wall Light **DESIGNER PREMIUM**

1 LED recessed wall light available in four brass faceplate styles for any application.

Quick Facts

- Die-cast brass or aluminum
- Natural, powder-coated, or antique brass
- Cree® integrated LEDs
- Color temperature filters
- Compatible with Luxer® technology
- Phase and PWM dimmable
- Input voltage: 10-15V



LANDSCAPE & ARCHITECTURAL LIGHTING

PO Wall Light SPECIFICATIONS

Output	1LED
Total Lumens*†	4-39
Input Voltage	10 to 15V
Input Power (W)	2.0
VA	2.4
Efficacy (Lumens/Watt)	8
Color Rendering Index (CRI)	80+
Max Candela†	24
Dimming	PWM, Phase**
RGBW Available	No
Luxor Compatibility	
Default	Zoning
ZD Option	Zoning/Dimming
ZDC Option	--
Minimum Rated Life (L90/B10)	55,000 hrs

* Measured using the 3.5000K CCT lens. Multipliers for other CCTs include 0.80 (2,700K), 0.83 (4,100K), and 0.85 (5,200K).
† Measured using the Round (RD) faceplate. Multipliers for other faceplates include: 1.0 (Square), 2.0 (Slot), and 0.4 (Wall Wash).
** For optimal performance, use a trailing-edge, phase-cut dimmer.

FX Luminaire
FX Luminaire is an industry-leading manufacturer of outdoor LED landscape and lighting products with a focus on the advancement of LED technology and digital lighting control with zoning, dimming, and color adjustment capabilities. Our products are known for specification-driven lighting fixtures that can be utilized to create elegant, cutting-edge landscape lighting systems for commercial or residential applications. Our products are available exclusively via our extensive professional distributor network.

Materials
Die-cast C360 brass faceplate, A380 aluminum housing, ABS construction conduit sleeve.

Socket
Socket contains MoistureBlock™ technology, preventing moisture from wicking up into sealed areas of the fixture.

Lamp
Integrated module with Cree LEDs. Gold-plated connections for optimal coupling for maximum reliability and corrosion resistance. Proprietary on-board intelligent driver uses firmware-controlled temperature regulation, maximizing lamp life.
Field upgradable and replaceable, the LEDs are rated to 50,000 hrs. Maximum drive current: 1 A.

Optics
Polycarbonate color temperature adjustment lenses included with fixture: 2,700K (pre-installed), 3,500K (no lens), 4,500K, and 5,200K. Color temperature lenses field-serviceable. Beam angle is calculated using LM-79 method for SSL luminaires.

Wiring
18 AWG (1 mm), SPT-1W, 220°F (105°C), 300V, 10" (3 m) length.

Power
Input 10-15 VAC / VDC, 50/60 Hz. Remote transformer required (sized for total wattage).

Housing
Die-cast aluminum housing with capacity for 5 LED integrated LEDs.

Faceplate
Die-cast brass faceplate.

Lens
Tempered glass lens with shock resistance and high tolerance for thermal expansion and stress.

Finish
Options of natural brass finish, antique finish with brushed (Antique Bronze) or tumbled (Antique Tumbled) effect, or TGIC powder-coat finish. Anti-graffiti finishes available on the TGIC powder-coat layer.

Hardware
Includes ABS conduit sleeve with 1/4-18 (6 mm) NPT female hole for strain relief. Strain relief specified separately. Outer diameter of ABS conduit sleeve: 1.9" (48 mm).

Ambient Operating Temperature
0°F to 140°F (-18°C to 60°C)

Weight
2.1 lbs. (1.0 kg)

Control
ZD option utilizes Luxor technology to drive light fixtures in up to 250 groups, with 4 groups per ZL-1 connected to between 0% and 100%.

International Compliance
Compliant per IEC 62598-1 and IEC 62386-2-7 when used with International Wall Kit ("SKITWALL").

Sustainability
Innovation meets conservation in the design and manufacturing of our products. Where we can, we incorporate materials, while maintaining superior functionality. Our LED products provide high quality light at optimal energy efficiency, lifespan, and durability.

IES Classification
Type IV (RD & SQ), Type V (ST), Type II (WW).

Warranty
10-year limited warranty

Installation Requirements
RD & SQ – Designed for recessed installation in a vertical wall in the down lighting position only.
WW – Designed for recessed installation in a vertical wall in any orientation.
ST – Designed for recessed installation in a vertical wall or horizontal wall, ensure substantial drainage flow for up lighting (e.g., decking).

Listings
cULus Listed, RoHS, CE, IP66

Learn more. Visit fxl.com | +1 760.744.5240

PO Wall Light PHOTOMETRICS

PO 1LED Illuminance at a Distance — RD/SQ

Feet (Meters)	Center Beam (Foot-Candle (Lux))	Beam Width: Vertical 30°	Beam Width: Horizontal 60°
2.0' (0.6 m)	0.2 fc (2.2 lx)	1.8' (0.4 m)	2.2' (0.7 m)
4.0' (1.2 m)	0.1 fc (1.1 lx)	3.6' (0.8 m)	4.4' (1.4 m)
6.0' (1.8 m)	0.02 fc (0.2 lx)	5.3' (1.2 m)	6.9' (2.1 m)
8.0' (2.4 m)	0.01 fc (0.1 lx)	5.3' (1.6 m)	5.2' (2.8 m)
10.0' (3.1 m)	0.01 fc (0.1 lx)	5.6' (2.0 m)	11.5' (3.5 m)

PO 1LED Illuminance at a Distance — ST

Feet (Meters)	Center Beam (Foot-Candle (Lux))	Beam Width: Vertical 90°	Beam Width: Horizontal 70°
2.0' (0.6 m)	6.1 fc (66 lx)	3.3' (1.0 m)	3.1' (1.0 m)
4.0' (1.2 m)	1.5 fc (16.4 lx)	6.6' (2.0 m)	6.3' (1.9 m)
6.0' (1.8 m)	0.7 fc (7.5 lx)	9.9' (3.0 m)	9.4' (2.9 m)
8.0' (2.4 m)	0.4 fc (4.1 lx)	13.1' (4.0 m)	12.6' (3.8 m)
10.0' (3.1 m)	0.24 fc (2.6 lx)	16.4' (5.0 m)	15.7' (4.8 m)

PO 1LED Illuminance at a Distance — WW

Feet (Meters)	Center Beam (Foot-Candle (Lux))	Beam Width: Vertical 90°	Beam Width: Horizontal 80°
2.0' (0.6 m)	0.9 fc (9.5 lx)	1.6' (0.5 m)	2.2' (0.7 m)
4.0' (1.2 m)	0.2 fc (2.4 lx)	3.2' (1.0 m)	4.5' (1.4 m)
6.0' (1.8 m)	0.1 fc (1.1 lx)	4.9' (1.5 m)	6.7' (2.0 m)
8.0' (2.4 m)	0.1 fc (0.5 lx)	6.5' (2.0 m)	9.0' (2.7 m)
10.0' (3.1 m)	0.04 fc (0.4 lx)	8.1' (2.5 m)	11.2' (3.4 m)

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FXLPT-DS-SS-WALL-DSN-PO 10/20

BAREFOOT DESIGN
LEE BAREFOOT, ASLA
1107 Cook Ave Lakeland, 33815
863.602.0766
www.barefootdesign.net

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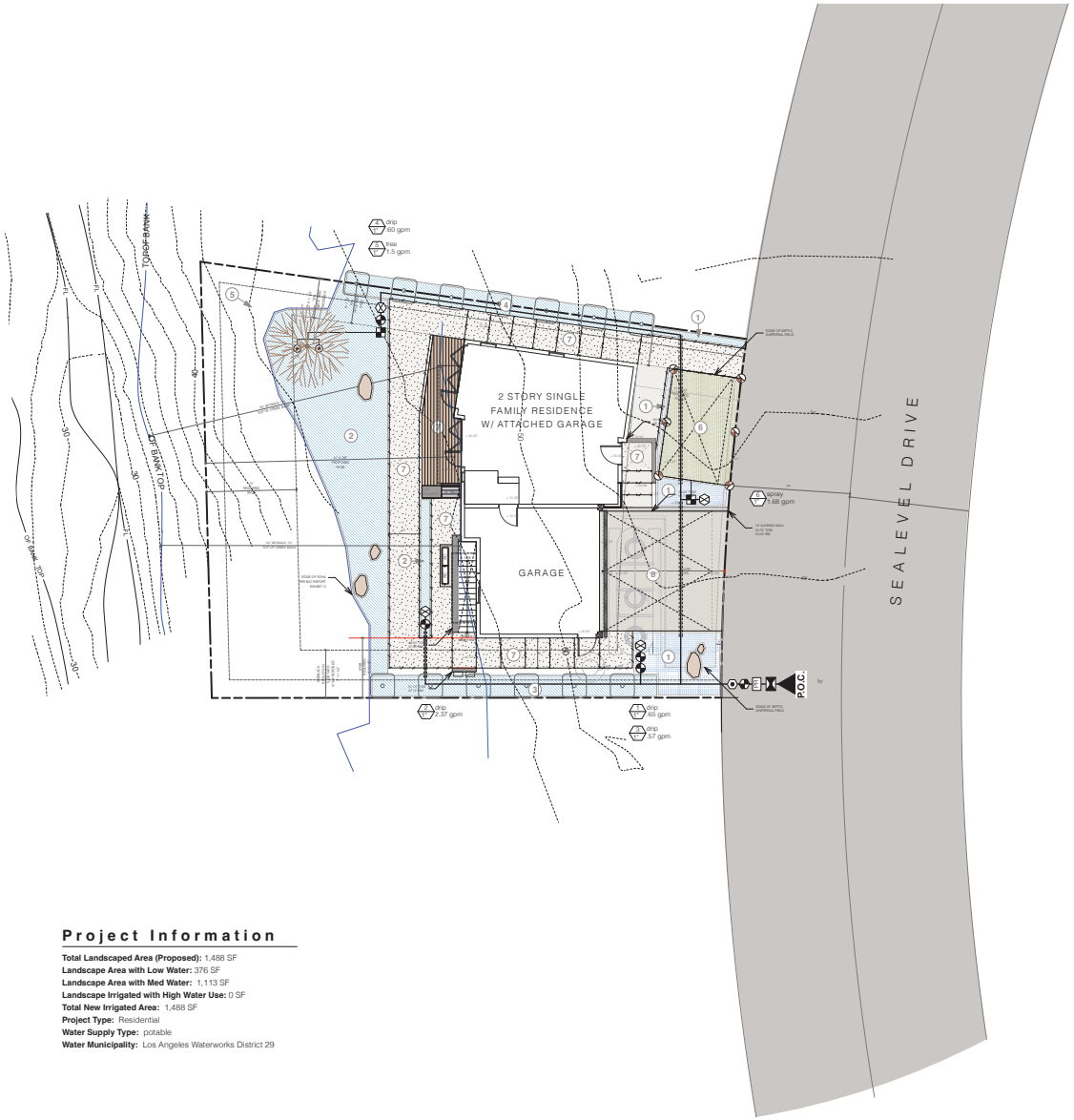
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REGISTERED LANDSCAPE ARCHITECT
LEE BAREFOOT
No.6800
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Lighting Specifications

DATE 2/27/25
SCALE N/A
DRAWN KR
JOB 24-16
SHEET L1.01
2 OF 9 SHEETS



Irrigation Legend

symbol	description	manufacture / model
	domestic mainline	2" sch 40 PVC
	irrigation lateral	see Lateral Line Sizing
	irrigation sleeve	see Irrigation Notes
P.O.C.	point of connection	(N) 1" dedicated water meter, labeled "FOR IRRIGATION ONLY"
	irrigation controller	HUNTER I-Core IC-600-SS controller w/ (3) HUNTER ICM-600 Module & (1) HUNTER Wireless Rain-clik Rain Sensor WR-CLICK-TR. Rain Sensor to be programmed to automatically shutoff when onsite rainfall exceeds 1/4 inch.
	backflow preventer	1-1/2" FEBCO 825Y or approved equal
PR	pressure regulator	HONEYWELL D06-G with gauge (70 psi)
	master control valve	HUNTER IBV-151G-FS-R (65 psi)
	flow sensor	HUNTER HFS w/ FCT-100 (65 psi)
	spray valve	WEATHERMATIC 11024FCR (65 psi)
	drip valve	WEATHERMATIC 11024FCR w/ pressure regulating Y-Filter (30 psi)
	hose bib	3/4" brass hose bibb
	manual shut-off valve	PVC ball valve, size to match mainline
	root watering system	HUNTER RZWS (65 psi), see Emitter Legend for size and model
	rotary spray head, 360 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP800SR-360 nozzles (40 psi)
	rotary spray head, 90-210 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP1000-90 nozzles (40 psi)
#	drip irrigation zones	HUNTER 1/2" Supply Tubing w/ HUNTER Point Source Emitters, see Emitter Legend
#	temporary spray irrigation zones	HUNTER Pro-Spray PROS-12-PRS40-CV w/ MP Rotator (40psi). Temporary spray irrigation zones to be terminated after 2 year establishment period.

Valve Identification

valve number — # type — valve type
valve size — 1" flow — valve flow rate

Hydrozone Legend

valve/zone	description	area	plant type	exposure
1	Ornamental Shrubs and Grasses - Front Yard	193 SF	M	Full Sun
2	Ornamental Shrubs and Grasses - Backyard	710 SF	M	Full Sun
3	Hedge - North	166 SF	L	Part Sun
4	Hedge - South	180 SF	L	Full Sun
5	Tree	30 SF	L	Full Sun
6	GrassPave	210 SF	M	Full Sun
7	Hardscape - Permeable	1,048 SF	NA	Partial Sun
8	Hardscape - Impermeable	422 SF	NA	Full Sun

Project Information

Total Landscaped Area (Proposed): 1,488 SF
Landscape Area with Low Water: 376 SF
Landscape Area with Med Water: 1,113 SF
Landscape Irrigated with High Water Use: 0 SF
Total New Irrigated Area: 1,488 SF
Project Type: Residential
Water Supply Type: potable
Water Municipality: Los Angeles Waterworks District 29

Lateral Line Sizing

0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

0 8 16 FT

3 BAREFOOT DESIGN
1371 Cold Spring Road, #307
Port Hueneme, CA 93041
TEL 805.407.7964
www.barefootdesign.net

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REGISTERED LANDSCAPE ARCHITECT
LEE
No.6800
STATE OF CALIFORNIA

PROJECT
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Irrigation Plan

DATE 2/27/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L2.00**
4 OF 9 SHEETS

Maximum Applied Water Allowance Calculations:

ETo	40.6	
LA	1488	
SLA	1470	
ETAF	0.23	
MAWA (Gallons)		**37,252**
MAWA (Inches per sq.ft.)		40.2
MAWA (Inches per DAY)		0.11

Maximum Applied Water Allowance Equation:
MAWA = (ETo) (0.62) [(.55 x LA) + (1-0.55 x SLA)]

Definitions:

Eto	Reference provided in Appendix A - CIMIS
ETAF	Evapotranspiration Adjustment Factor - 0.55 or less
HA	Hydro zone area = Irrigated area
IE	Irrigation efficiency. Must exceed 0.71.
LA	Landscaped area
PF	Plant water use factor- WUCLOS
SLA	Special landscaped area WITHIN the landscaped area

Estimated Total Water Use:

ETo	40.6	
PF*HA (see chart)	1158	
HA (same as LA)	1488	
IE (see chart)	0.90	
SLA	1470	
ETWU (Gallons)		**21,331**
ETWU (Inches per sq.ft.)		23.0
ETWU (Inches per DAY)		0.06

Estimated Total Water Use Equation:
*ETWU = ETo x 0.62 x [(PF*HA)/IE) +SLA]*

Irrigation Efficiency:

H.Z	Description	Type	PF	Irrigation Method	IE	ETAF (PF/IE)	HA	ETAF x Area	PF x HA	ETWU
Regular Landscape Areas										
1	Ornamental Shrubs & Grasses - Front Yard	Med	0.5	drip	0.81	0.41	192	77.76	96	
2	Ornamental Shrubs & Grasses - Backyard	Med	0.5	drip	0.81	0.41	710	287.55	355	
3	Hedge - North	Low	0.2	drip	0.81	0.16	166	26.89	33.2	
4	Hedge - South	Low	0.2	drip	0.81	0.16	180	29.16	36	
5	Trees	Low	0.2	Tree	0.81	0.16	30	4.86	6	
6	Grass/Pave	Med	0.5	Spray	0.75	0.38	210	78.75	105	
				Subtotal:	**0.80**	**0.28**	**1488**	**504.97**	631.2	19,861
Special Landscape/Hardscape Areas										
7	Hardscape - Permeable	Low	0.1	N/A	1.0	0.10	1048	104.80	104.8	
8	Hardscape - Impermeable	Low	1.0	N/A	1.0	1.00	422	422.00	422	
				Subtotal:	**1.00**	**0.55**	**1470**	**526.80**	**526.8**	13,261
								ETWU Total:		**33,121**
								MAWA Allowance:		**37,252**

Average System IE (IE is a derivative of DU defined as
IE = DU x IME. Where IME= Irrigation Management Efficiency

Irrigation Notes

1. This system is diagrammatic. All pipes, valves, etc. shown within paved areas are for design clarification only and shall be installed in planting areas wherever possible.

2. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that obstructions or grade differences exist and should be brought to the attention of the owner's authorized representative. In the event that this notification is not performed, the contractor must assume full responsibility for all revisions necessary.

3. Irrigation system is designed assuming a static water pressure of approximately 70 PSI at point-of-connection. Prior to installation of irrigation system, contractor shall verify pressure at point-of-connection.

4. It is the intent of this plan to provide adequate irrigation to all planting areas, prevent run-off, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas in accordance with MWELO sections 492.7(a)(1)(I) and 492.7(a)(11)(U)

Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to ensure 100% irrigation coverage of all planting areas and MWELO compliance.

5. Emitter shall be located on grade and staked a maximum of six inches from the center of plant, or edge of rootball, whichever is greater.

6. All piping installed under pathways or paved areas, through walls or footings shall be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe and any couplings in the sleeve. Provide (2) extra 2" sleeves in all locations where mainline or lateral line crosses under paving greater than 3' in dimension.

7. Irrigation lines shall be buried at the following minimum depths: PVC pressure mainline:18" PVC lateral line:12"

8. Irrigation Contractor shall adjust flow control for proper performance and valve longevity.

9. Pressure regulating devices shall be installed where necessary to ensure the dynamic pressure at each emission device is within manufacturer's recommended pressure range for optimal performance.

10. Flush valves shall be installed at the ends of all polyethylene drip tubing in round valve boxes with gravel fill.

11. Check valves shall be installed at low points on irrigation line to prevent leakage.

12. All planting areas shall be provided with a 3" thickness of mulch, samples to be provided to owner's representative.

13. No lawn or landscape irrigation with potable water allowed apart from the hours of 8:00PM and 8:00AM. Except for hand held hose equipment with a positive shut-off nozzle.

14. Irrigation water shall not run off landscaped areas to adjacent property, adjoining streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

15. All irrigation emission devices will meet the criteria set forth by MWELO section 492.7(a)(1)(M) and shall be installed per manufacturer's recommendations.

16. All irrigation piping and equipment to be purple in color and to be field or factory marked "CAUTION: NON-POTABLE RAINWATER, DO NOT DRINK." All irrigation piping to be purple reclaimed water pipe.

17. A manual indicating layout of irrigation system and manufacturer instructions for all equipment and procedures shall be provided to the owner at completion of project.

18. Certificate of Completion in accordance with MWELO Section 492.9 will be submitted for review/approval by the Building and Safety Division prior to final occupancy.

19. Landscape Constractor shall clean up on a daily basis per Owner's representative's approval.

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

Lateral Line Sizing

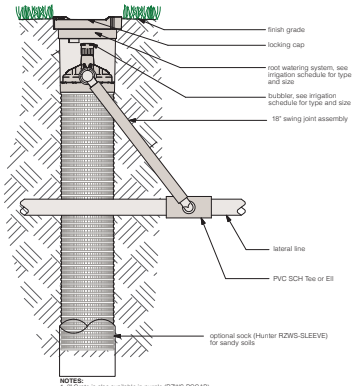
0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Emitter Legend

plant material	equipment
flatted groundcover	Microspray Emitters
4" pot	2 - HE-20-B Emitters per plant
1 gallon	2 - HE-20-B Emitters per plant
5 gallon shrubs	3 - HE-20-B Emitters per plant
15 gallon shrubs	4 - HE-20-B Emitters per plant
15 gallon trees	2 - RZWS-18-50-CV per tree
24" box trees	2 - RZWS-18-50-CV per tree
36" box trees	3 - RZWS-36-50-CV per tree
48" box trees	4 - RZWS-36-50-CV per tree
60" box trees and above	(Consult with a Local Arborist)

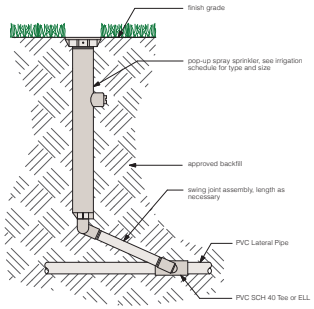
Valve Identification

valve number, valve size, type, flow, valve type, valve flow rate

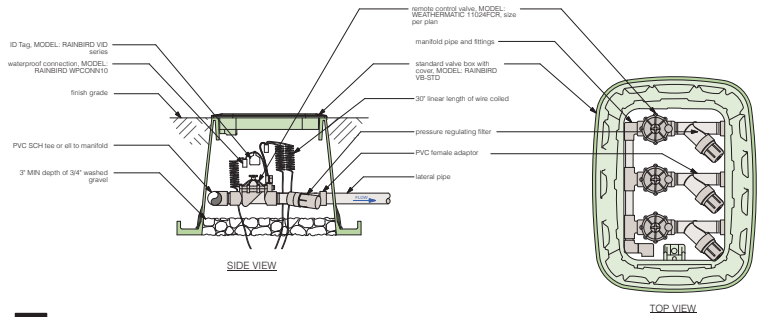


NOTES:
1. 3" Grate is also available in purple (RZWS-RCCAP).
2. Install product so that the grate is even with finish grade or top of mulch.
3. Optional sand sock (RZWS-SLEEVE) to cover mesh basket area.
4. When installing in extremely hard or clay soils, add 3/4" gravel under and around the unit to allow faster water infiltration and root penetration.
5. Once RZWS has been installed fill the basket with pea gravel before locking lid.

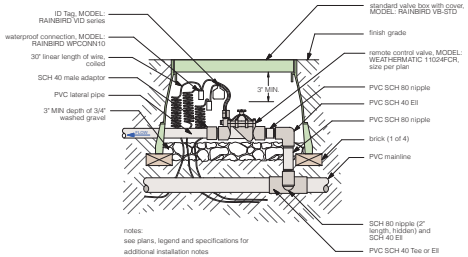
7 Root Watering System
scale: N.T.S.



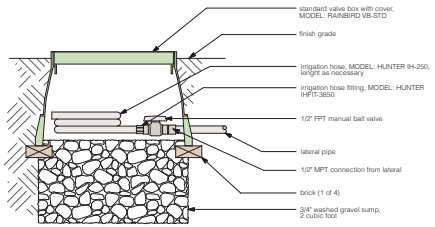
6 Spray Head
scale: N.T.S.



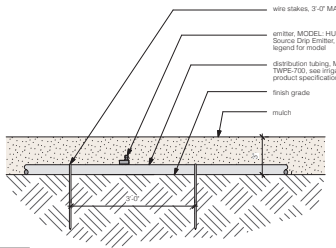
5 Drip Valve Assembly
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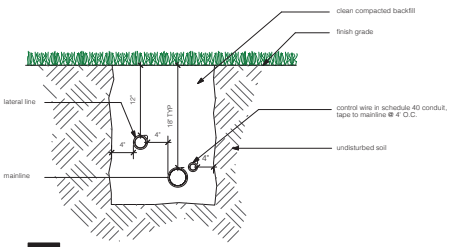
4 Valve Assembly
scale: N.T.S.



3 Manual Flush Valve
scale: N.T.S.



2 Drip Irrigation
scale: N.T.S.



1 Pipe & Wire Installation
scale: N.T.S.

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REGISTERED LANDSCAPE ARCHITECT — No.5800 — STATE OF CALIFORNIA

BAREFOOT DESIGN

P.O. BOX 247 Trabuco Canyon, CA 92678
949.589.4687 Fax 949.589.4687
www.barefootdesign.net

SUBMITTALS

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: Irrigation Details

DATE 2/27/25
SCALE as noted
DRAWN KR
JOB 24-16
SHEET L2.01
5 OF 9 SHEETS



Plant Palette:

Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs				
Prunus ilicifolia	Hollyleaf Cherry	15g	13	col.
Cercis occidentalis	Western Redbud	36" Box	1	multi.

Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials				
Carex tumulicola	Foothill Sedge	1g	42	1'-0"
Muhlenbergia rigens	Deer Grass	1g	17	4-5'-0"
Salvia leucophylla	Purple Sage	5g	6	6'-0"
Groundcover				
Agrostic pallens	Native Bentgrass (GrassPave)		210 sf	

12182

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
COMMUNITY RISK REDUCTION BUREAU
FINAL
FUEL MODIFICATION PLAN
APPROVED
By Sean C Haynes
Digitally signed by Sean Haynes
DN: C=US, E=Sean.Haynes@fire.lacounty.gov, OU=LACoFD, OU=Fuel Modification Unit, CN=Sean Haynes
Date: 2025.08.26 11:09:08 -07'00'
FUEL MODIFICATION UNIT
The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County/City or State law

BAREFOOT DESIGN
1171 Cuesta Del Mar Road, #207
San Marcos, CA 92069
T.619.507.7964
www.barefootdesign.net

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REGISTERED LANDSCAPE ARCHITECT
LEE
No.6800
Renewal 01/31/2027
STATE OF CALIFORNIA

PROJECT
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Planting Plan

DATE 2/27/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L3.00**
4 OF 9 SHEETS

Planting Notes

All plant materials shall be set out as shown on plan. Final locations shall be approved by the Landscape Designer prior to planting.

1. Landscape Contractor shall be responsible for becoming aware of all underground utilities, pipes and structures. The Contractor shall be held responsible for contacting all utility companies for field location of underground utility lines prior to any excavation.

2. Do not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the landscape designer, Barefoot Design, 805.697.7466.

3. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.

4. Landscape Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

5. The Landscape Contractor shall allow for the addition of specified quantities of soil amendments and conditioners in soil preparation and finish grading, per recommendation of soils report.

6. Recommendations in the Soils Management Report shall be incorporated into the landscape installation and a copy of the report is to be on-site at the time of inspection.

Unless soils have greater than 6% organic matter in the top 6" of soil, compost at a rate of a minimum of (4) cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of 6" into the soil.

7. It is the Landscape Contractor's responsibility to furnish plant material free of pests or plant diseases. Contract-grown or 'tagged' material must be inspected by the Landscape Contractor and certified disease free. It is the Landscape Contractor's obligation to warranty all plant materials.

8. The Landscape Contractor shall provide healthy, vigorous plant stock grown under climatic conditions similar to the conditions in the locality of the project.

9. Specimen trees will be selected and tagged by Landscape Designer prior to plant installation. Landscape Contractor is responsible to do their own quantity take-offs for all plant materials and sizes shown on plans. All substitutions shall be reviewed and approved by the Landscape Designer.

10. See details and specifications for staking method, plant pit dimensions and backfill requirements. If details have not been provided, contact Landscape Designer. Plant crown elevations relative to finish grade are shown on planting details and shall be strictly adhered to. Proper compaction of backfill to prevent settlement shall be required.

11. The Landscape Designer will approve finish grades at all landscape areas prior to planting.

12. The Landscape Designer reserves the right to adjust the location of plant material during installation as appropriate to the project.

13. Landscape mulch shall be applied at 3 inches thick over all landscape surfaces except lawn areas and per City of Malibu guidelines. Mulch must be approved by Landscape Designer. 0-5 feet from structure, flammable mulch is prohibited. 5 feet to 30 feet, limited non-continuous use of organic mulch is permitted with a maximum application area of 20 feet x 20 feet, and a minimum 5 foot separation between application areas. 30 feet from the structure, organic mulch and wood chips are permitted.

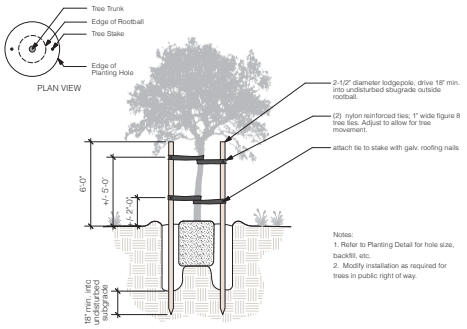
14. All side and rear yard hedges shall be maintained at or below 6'-0" in height.

15. View impermeable hedges occurring within the front setback serving the same function as a fence or wall shall be maintained at or below 42" in height.

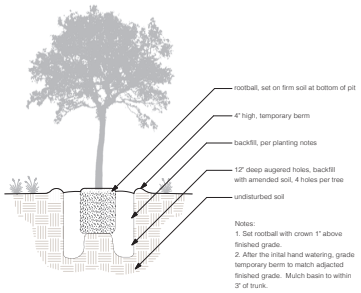
16. Vegetation shall be situated on the propoerty so as not to obstruct the primary view from private property at any given time. Giving consideration to the plant materials future growth.

General Notes

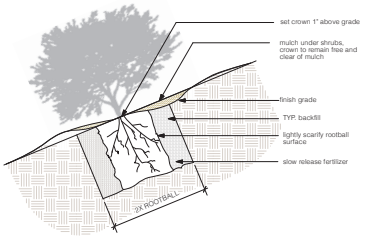
1. Refer to Architectural and Civil Engineer for hardscape and walls.
2. Refer to Civil Engineer for all grading and drainage



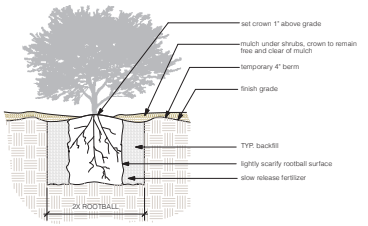
6 Tree Staking
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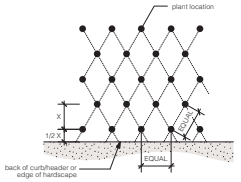
5 Tree Planting
scale: N.T.S.



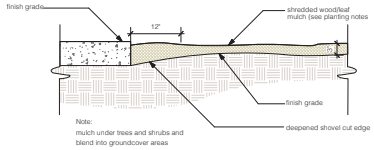
4 Shrub Planting on Slope
scale: N.T.S.



3 Shrub Planting
scale: N.T.S.



2 Groundcover Layout
scale: N.T.S.



1 Mulch Installation
scale: N.T.S.

3 BAREFOOT DESIGN
1171 Cave Ridge Road, #207
Santa Barbara, CA 93105
ph. 805.697.7466
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REGISTERED LANDSCAPE ARCHITECT
LEE
No.6808
RENEWAL 08/31/2026
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Planting Details

DATE 2/27/25
SCALE as noted
DRAWN KR
JOB 24-16
SHEET
L3.01
7 OF 9 SHEETS





Photo 1



Photo 2



Photo 3



Photo 4

3 BAREFOOT DESIGN
1171 Calle Mirlo Drive, #107
San Marcos, CA 92078
T/F: 760.607.7964
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REGISTERED LANDSCAPE ARCHITECT
No.6800
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Site Photos**

DATE: 12/2/24
SCALE: 1/8" = 1'-0"
DRAWN: KR
JOB: 24-16
SHEET: **L4.00**
8 OF 9 SHEETS



COUNTY OF LOS ANGELES
FIRE DEPARTMENT

FUEL MODIFICATION UNIT
605 NORTH ANGELENO AVENUE
AZUSA, CA 91702
(626) 969-5205
Email: fmreply@fire.lacounty.gov
Website: https://fire.lacounty.gov/brushclearance/

ANTHONY C. MARRONE
FIRE CHIEF FORESTER &
FIRE WARDEN

"Proud Protectors of Life, Property, and the Environment"

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HILDA L. SOLIS
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SECOND DISTRICT
LINDSEY P. HORVATH
THIRD DISTRICT
JANICE HAHN
FOURTH DISTRICT
KATHRYN BARGER
FIFTH DISTRICT

Fuel Modification Plan Notes

Ember Resistant Zone (Pending State Fire Marshal Approval)

- Extends 5 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. The areas beneath eaves, overhangs or parts of structures including attached decks and pergolas shall be included in the ember resistant zone.
- This area shall be free of materials or landscaping known to be receptive to flying embers.
- **Disclaimer:** Please be advised, plants approved within the first five feet of the structure today, may not be compliant when the occupancy inspection or future defensible space inspections take place. Once the State Fire Code PRC 4291 and/or the LA County Fire Code Section 325 are updated to reflect the requirements of AB3074, they will take precedent. Defensible space is a year-round requirement and structures in a fire hazard severity zone must comply with the most current defensible space fire codes.

Zone 1

- Extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Plant species selected for Zone 1 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.
- Vines and climbing plants are not allowed on any combustible structure requiring review.

Zone 2

- Extends from the outer edge of Zone 1 an additional 70 feet for a total of 100 feet from the structure.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone 1 but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained.
- Plant species selected for Zone 2 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees in Zone 2 may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel ladders. Tree selections are subject to denial upon review.

Zone 3

- Extends from the outer edge of Zone 2 an additional 100 feet for a total of 200 feet from the structure.
- Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2).

Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private road, driveways and turnarounds used by firefighting resources.
- Clear and remove flammable vegetation on each side of access roads (Fire Code 325.10).
- Fire access roads shall have an unobstructed vertical clearance a minimum width of 20' and vertically clear to the sky (Fire Code 503.2.1).
- Additional clearance beyond 10 feet may be required upon an on-site inspection.
- All proposed plantings, unless otherwise approved, shall be positioned so they do not obstruct access at maturity. Pruning will not be considered as an alternative to plant selection.

Maintenance

Routine maintenance shall be regularly performed in all zones. Above all else, regular maintenance is paramount to the fire resistance of a well-planned fire-resistant landscape. Critical items are outlined below. Additional information may be found on our website listed in the header of this document.

- Start with the structure. Remove leaf litter and other combustible debris from roofs, eaves, rain gutters etc.
- Ensure the ember resistant zone is maintained free of any material known to be receptive to flying embers.
- Remove any plant or portion of a plant that is dead or dying throughout all zones.
- Remove downed, accumulated plant litter and dead wood throughout all zones.
- Prune to reduce the overall amount and continuity of fuels. Eliminate horizontal and vertical fuel ladders throughout all zones.
- All invasive species and their parts should be removed from the site.
- Ensure irrigation systems are functioning properly.
- Compliance with the fire code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of fine fuels between the months of April and June depending on the geographic region each dwelling exists.
- Inspection for compliance with an approved fuel modification plan may occur at any time.
- All future planting shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation.

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

BAREFOOT DESIGN
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Simi Valley, CA 93063
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SUBMITTALS

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REGISTERED LANDSCAPE ARCHITECT
No.6800
STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Fuel Modification Plan**

DATE: 12/2/24
SCALE: 1/8" = 1'-0"
DRAWN: KR
JOB: 24-16
SHEET: **L4.01**
9 OF 9 SHEETS

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4804
(310) 456-2489 FAX (310) 456-7650

BIOLOGY REVIEW REFERRAL SHEET

TO: City of Malibu Biologist

FROM: City of Malibu Planning Department **REVISED DATE** 05/19/2026

PROJECT NUMBER: CDP 23-038

JOB ADDRESS: 31870 SEA LEVEL DR

APPLICANT / CONTACT: Karen Hau, Burdge & Associates Architects

APPLICANT EMAIL: karen@buaia.com

PLANNER: Rick Casswell

PROJECT DESCRIPTION: NSFR

REVISION:

TO: Malibu Planning Department and/or Applicant

FROM: City Biologist, Courtney McCammon

_____ **The project review package is INCOMPLETE and; CANNOT proceed through Final Planning Review until corrections and conditions from Biological Review are incorporated into the proposed project design** (See Attached).

X **The project is APPROVED, consistent with City Goals & Policies associated with the protection of biological resources and CAN proceed through the Planning process.**

X Building Plan Check (BPC) Required ☐ Yes ☐ No BPC Fees Req'd $_____

_____ **The project may have the potential to significantly impact the following resources, either individually or cumulatively: Sensitive Species or Habitat, Watersheds, and/or Shoreline Resources and therefore Requires Review by the Environmental Review Board (ERB).**

Courtney McCammon 6/2/26

Signature Date

Additional requirements/conditions may be imposed upon review of plan revision

Contact Information:
Courtney McCammon, City Biologist, biology@malibucity.org, (310) 456-2489, extension 277

City of Malibu

Biology • Planning Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

BIOLOGY REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email)	Karen Hau, Burdge & Associates Architects karen@buaia.com	
Project Address:	**31870 SEA LEVEL DR** Malibu, CA 90265	
Planning Case No.:	CDP 23-038	
Project Description:	NSFR	
Date of Review:	June 2, 2026	
Reviewer:	Courtney McCammon	Signature: Courtney McCammon
Contact Information:	Phone: (310) 456-2489 ext 277	Email: biology@malibucity.org

SUBMITTAL INFORMATION

Site Plan:	5/19/26
Site Survey:	5/19/26
Landscape Plan:	3/23/26
Hydrozone Plan:	3/23/26
Irrigation Plan:	3/23/26
Fuel Modification Plan:	3/23/26
Grading Plan:	5/19/26
OWTS Plan:	5/19/26
Bio Assessment:	8/5/25 (Forde Biological)
Bio Inventory:	
Native Tree Survey:	
Native Tree Protection Plan:	
Miscellaneous:	Overwintering Monarch Survey Report (1/12/26)
Previous Reviews:	6/23/23 (Incomplete), 1/16/25 (Incomplete), 8/26/25 (Incomplete)

REVIEW FINDINGS

Review Status:	☐	**INCOMPLETE**: Additional information and/or a response to the listed review comments is required.
	☒	**APPROVED**: The project has been approved with regards to biological impacts.
	☐	**CANNNOT APPROVE AS SUBMITTED**: The proposed project does not conform to the requirements of the MMC and/or LCP.
	☒	**ERB**: This project has the potential to impact ESHA and may require review by the Environmental Review Board pursuant to LIP Section 4.4.4

Recycled Paper

DISCUSSION:

1. The Maximum Applied Water Allowance (MAWA) for this project totals 37,252 gallons per year (gpy). The Estimated Applied Water Use (EAWU) totals 33,121 gpy. Therefore, the project meets the Landscape Water Conservation Ordinance Requirements.

RECOMMENDATIONS:

1. The project is recommended for **APPROVAL** with the following conditions:

   A. Pursuant to LIP Section 4.7.1, the allowable development area is limited to 10,000 square feet 25 percent of the parcel size, whichever is less, as all feasible building areas will result in impacts to Environmentally Sensitive Habitat Area (ESHA). The proposed development area is 1,449 square feet.

   B. Pursuant to LIP Section 4.8.1, all new development shall include mitigation for unavoidable impacts to Environmentally Sensitive Habitat Area (ESHA) from the removal, conversion, or modification of natural habitat for new development, including required fuel modification and brush clearance. The proposed project will result in *0.411* acres of permanent impacts (development footprint and/or Fuel Modification Zones A and/or B) to ESHA and *0.88* acres of partial impacts (Fuel Modification Zone C). One of the following three Habitat Impact Mitigation methods shall be required: (1) habitat restoration; (2) habitat conservation; or (3) in-lieu fee for habitat conservation. The CDP shall include conditions setting forth the requirements for habitat mitigation. Prior to final plan check the applicant shall provide either a detailed restoration plan, a habitat conservation plan, or evidence of payment of in lieu fees to the Santa Monica Mountains Conservancy.

   C. Prior to installation of any landscaping, the applicant shall obtain plumbing permit for the proposed irrigation system from the Building Safety Division.

   D. Prior to or at the time of a Planning final inspection, the property owner/applicant shall submit to the case planner a copy of the plumbing permit for the irrigation system installation that has been signed off by the Building Safety Division.

   E. Prior to final Planning inspection or other final project sign off (as applicable), the applicant shall submit to the Planning Community Development Director for review and approval a certificate of completion in accordance with MMC Chapter 17.53. The certificate shall include the property owner's signed acceptance of responsibility for maintaining the landscaping and irrigation in accordance with the approved plans and MMC Chapter 17.53.

   F. Prior to a final plan check approval, the property owner /applicant must provide a landscape water use approval from the Los Angeles County Waterworks District No. 29. For approval contact:

   LA County Waterworks District 29
   Address: 23533 Civic Center Way, Malibu, CA 90265

Email: wwsmaeng@dpw.lacounty.gov
Phone: (310) 317 – 0209

Please note: submit plans through EPIC-LA using the "Waterworks Division Landscape Water Efficiency Approval" application. This action may require several weeks. As such, the applicant should submit their approved landscape plans as soon as feasible in order to avoid a delay at plan check.

G. Vegetation forming a view impermeable condition serving the same function as a fence or wall (also known as a hedge) located within the side or rear yard setback shall be maintained at or below a height of six feet. A hedge located within the front yard setback shall be maintained at or below a height of 42 inches. Three violations of this condition will result in a requirement to permanently remove the vegetation from the site.

H. Plantings required for fuel modification, except for within irrigated Zone A nearest to approved residential structures, must be native, drought-tolerant species and shall blend with the existing natural vegetation and natural habitats on the site.

I. The use of wood chips and shredded rubber is prohibited anywhere on the site. Flammable mulch material, including shredded bark, pine needles, and artificial turf, are prohibited between zero and five feet of a structure. Non-continuous use of flammable mulch (excluding wood chips and shredded rubber) is allowed between 5 and 30 feet from the eave/overhang of a structure with limited application areas. Any mulch materials (excluding wood chips and shredded rubber) are allowed 30 feet or more from a structure with no limitation on application area.

J. Invasive plant species, as determined by the City of Malibu, are prohibited.

K. No non-native plant species shall be approved greater than 50 feet from the residential structure.

L. The landscape plan shall prohibit the use of building materials treated with toxic compounds such as creosote and copper arsenate.

M. Any site preparation activities, including removal of vegetation, between February 1 and September 15 will require nesting bird surveys by a qualified biologist at least five days prior to initiation of site preparation activities. Should active nests be identified, a buffer area no less than 150 feet (300 feet for raptors) shall be fenced off until it is determined by a qualified biologist that the nest is no longer active. A report discussing the results of nesting bird surveys shall be submitted to the City within two business days of completing the surveys.

N. Grading and/or demolition shall be scheduled only during the dry season from April 1 – October 31. If it becomes necessary to conduct grading activities from November 1 – March 31, a comprehensive erosion control plan shall be submitted for approval prior to issuance of a grading permit and implemented prior to initiation of vegetation removal and/or grading activities.

O. Construction fencing shall be placed within five feet of the limits of grading. Construction fencing shall be installed prior to the beginning of any construction and shall be maintained throughout the construction period to protect the site's sensitive habitat areas, the stream and riparian habitat.

P. All open areas not used for buildings, driveways, parking areas, or walkways shall be attractively landscaped and maintained in accordance with a landscape plan, with native plant species, to the satisfaction of the Planning Community Development Director.

Q. Night lighting from exterior and interior sources shall be minimized. All exterior lighting shall be low intensity and shielded directed downward and inward so there is no offsite glare or lighting of natural habitat areas. Lighting of the shore or the beach in excess of one foot-candle is prohibited.

2. **PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY**, the City Biologist shall inspect the project site and determine that all planning conditions to protect natural resources are in compliance with the approved plans.

3. **ERB REQUIRED**

Pursuant to LIP Section 4.4.4, the proposed project will require review by the Environmental Review Board (ERB) as it has the potential to impact special status biological resources.

-o0o-

If you have any questions regarding the above requirements, please contact the City Biologist office at your earliest convenience.

cc: Planning Project file
Planning Department

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4861
(310) 456-2489 FAX (310) 456-7650

PUBLIC WORKS REVIEW
REFERRAL SHEET

TO: Public Works Department

FROM: City of Malibu Planning Department **DATE:** 06/13/2023

PROJECT NUMBER:	CDP 23-038
JOB ADDRESS:	31870 SEA LEVEL DR
APPLICANT / CONTACT:	Karen Hau, Burdge & Associates Architects
APPLICANT ADDRESS:	24911 Pacific Coast Hwy Malibu, CA 90265
APPLICANT PHONE #:	(310)456-5905
APPLICANT FAX #:	
APPLICANT EMAIL:	karen@buaia.com
PROJECT DESCRIPTION:	NSFR

TO: Malibu Planning Department and/or Applicant

FROM: Public Works Department

____ The following items described on the attached memorandum shall be addressed and resubmitted.

_✓_ The project was reviewed and found to be in conformance with the City's Public Works and LCP policies and CAN proceed through the Planning process.

Nicolia Fahrun
SIGNATURE

6/20/2023
DATE

City of Malibu
MEMORANDUM

To: Planning Department

From: Public Works Department
Nadia Fahoum, Assistant Civil Engineer

Date: June 20, 2023

Re: Proposed Conditions of Approval for 31870 Sea Level Dr CDP 23-038

The Public Works Department has reviewed the plans submitted for the above-referenced project. Based on this review sufficient information has been submitted to confirm that conformance with the Malibu Local Coastal Plan (LCP) and the Malibu Municipal Code (MMC) can be attained. Prior to the issuance of building and grading permits, the applicant shall comply with the following conditions.

GRADING AND DRAINAGE

1. Clearing and grading during the rainy season (extending from November 1 to March 31) shall be prohibited for development LIP Section 17.3.1 that:
    - Is located within or adjacent to ESHA, or
    - Includes grading on slopes greater than 4:1
    - Approved grading for development that is located within or adjacent to ESHA or on slopes greater than 4:1 shall not be undertaken unless there is sufficient time to complete grading operations before the rainy season. If grading operations are not completed before the rainy season begins, grading shall be halted and temporary erosion control measures shall be put into place to minimize erosion until grading resumes after March 31, unless the City determines that completion of grading would be more protective of resources

2. Exported soil from a site shall be taken to the County Landfill or to a site with an active grading permit and the ability to accept the material in compliance with the City's LIP Section 8.3. **A note shall be placed on the project that addresses this condition.**

3. A grading and drainage plan shall be approved containing the following information prior to the issuance of grading permits for the project.

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- Public Works Department General Notes
- The existing and proposed square footage of impervious coverage on the property shall be shown on the grading plan (including separate areas for buildings, driveways, walkways, parking, tennis courts and pool decks).
- The limits of land to be disturbed during project development shall be delineated on the grading plan and a total area shall be shown on the plan. Areas disturbed by grading equipment beyond the limits of grading, areas disturbed for the installation of the septic system, and areas disturbed for the installation of the detention system shall be included within the area delineated.
- The grading limits shall include the temporary cuts made for retaining walls, buttresses, and over excavations for fill slopes and shall be shown on the grading plan.
- If the property contains trees that are to be protected they shall be highlighted on the grading plan.
- If the property contains rare and endangered species as identified in the resources study the grading plan shall contain a prominent note identifying the areas to be protected (to be left undisturbed). Fencing of these areas shall be delineated on the grading plan if required by the City Biologist.
- Private storm drain systems shall be shown on the grading plan. Systems greater than 12-inch diameter shall also have a plan and profile for the system included with the grading plan.
- Public storm drain modifications shown on the grading plan shall be approved by the Public Works Department prior to the issuance of the grading permit.

4. A digital drawing (AutoCAD) of the project's private storm drain system, public storm drain system within 250 feet of the property limits, and post-construction BMP's shall be submitted to the Public Works Department prior to the issuance of grading or building permits. The digital drawing shall adequately show all storm drain lines, inlets, outlet, post-construction BMP's and other applicable facilities. The digital drawing shall also show the subject property, public or private street, and any drainage easements.

STORMWATER

5. A Local Storm Water Pollution Prevention Plan shall be provided prior to the issuance of the Grading/Building permits for the project. This plan shall include an Erosion and Sediment Control Plan (ESCP) that includes, but not limited to:

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Entrance
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations

Recycled Paper

Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

All Best Management Practices (BMP) shall be in accordance to the latest version of the California Stormwater Quality Association (CASQA) BMP Handbook. Designated areas for the storage of construction materials, solid waste management, and portable toilets must not disrupt drainage patterns or subject the material to erosion by site runoff.

MISCELLANOUS

6. The developer's consulting engineer shall sign the final plans prior to the issuance of permits.

Recycled Paper

City of Malibu

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(310) 456-2489 • Fax (310) 456-3356 • www.malibucity.org

GEOTECHNICAL REVIEW SHEET

Project Information

Date:	January 21, 2025	**Review Log #:**	**5089**
Site Address:	31870 Sea Level Drive		
Lot/Tract/PM #:	Lot 167, Tract 10630, APN 4470-027-010	**Planning #:**	CDP 23-038
Applicant/Contact:	Karen Hau, karen@buaia.com	**BPC/GPC #:**	
Contact Phone #:	310-456-5905 **Fax #:**	**Planner:**	
Project Type:	New single-family residence		

Submittal Information

Consultant(s)/Report Date(s): *(Current submittal(s) in **Bold**.)*	GeoSystems, Inc. (Gladson, CEG 1758; Tsai, GE 2268): **11-13-2024**, 03-13-2023 GeoSystems, Inc. (Gladson, CEG 1758; Chi-Hsin Lin, RCE 67109): 12-05-2007; 03-17-2008 GeoSystems, Inc. (Kruger, CEG 2345; Chi-Hsin Lin, RCE 67109): 06-27-2005; 01-06-2006 [Ref: GeoPlan, Inc.: 05-14-1990; RSA Associates, Inc.: 06-06-1989] Ensitu Engineering, Inc. (Yaroslaski, PE 60149): OWTS Plans **11-15-2024,** 10-31-2022; OWTS Report 05-30-2023 Ahsirt Engineering, Inc. (Coffey, PE 67657): Civil Plans **09-2022** Seed Design Collaborative (unsigned): Landscape Plans **05-26-2023** Burdge Architects (Burdge, C-16899): Architectural Plans 12-17-2024, 06-06-2023; Letters 06-05-2023**; 11-25-2024.** Reduction in Setback letter by TEG dated 09-17-2024.
Previous Reviews:	07-24-23, 08-03-2005; 02-06-2006; 05-11-2007; 01-10-2008; 04-17-2008

Review Findings

Planning Review

☒ The project is **ACCEPTABLE** from a geotechnical perspective.

☐ The project is **NOT ACCEPTABLE** from a geotechnical perspective. The listed "Planning Stage Review Comments" shall be addressed prior to approval.

Building Plan-Check Stage Review

☒ Awaiting Building Plan-Check submittal. Please respond to the listed "Building Plan-Check Stage Review Comments" AND review and incorporate the attached "Geotechnical Notes for Building Plan Check" into the plans.

☐ The plans are **COMPLETE** from a geotechnical perspective. Please review the attached "Geotechnical Notes for Building Plan Check" and incorporate into Building Plan-Check submittals.

☐ The plans are **NOT COMPLETE** from a geotechnical perspective. The listed "Building Plan-Check Stage Review Comments" shall be addressed prior to Building Plan-Check Stage approval.

Project submittals were reviewed from a geotechnical perspective for conformance with applicable codes, guidelines, and standards of practice, including the following current City adopted standards:

- City of Malibu Local Coastal Program – Land Use Plan and Local Implementation Plan (LCP-LUP and LCP-LIP)
- Malibu Municipal Code – Title 15, *Buildings and Construction*
- City of Malibu *Guidelines for the Preparation of Engineering Geology and Geotechnical Engineering Reports and Procedures for Report Submittal* (November 2013) referred to herein as "Geotechnical Guidelines"

In the case of conflicting requirements between the Geotechnical Guidelines and any other referenced standards, the latest standard will apply. The Applicant is responsible for complying with the submittal requirements for all Planning variances, as appropriate; any questions regarding variances should be directed to the case Planner.

NOTE TO PLAN PREPARERS: Please review the City's recently adopted Electronic Submittal Guidelines and resubmit plans that conform. https://www.malibucity.org/DocumentCenter/View/28469/Electronic-Plans-Submittal-Guideline

Remarks

The referenced documents have been reviewed by the City from a geotechnical perspective. The project consists of a new two-story, single-family residence over a basement, with an attached garage (486 square feet), portable BBQ on the first floor deck, an outdoor shower, and an advanced onsite wastewater treatment system (AOWTS). The recommended bearing material for the proposed residence and site walls is the bedrock, anticipated at 10 to 15 feet below the ground surface in the area of the proposed structures. A deepened foundation system consisting of friction piles is recommended to support the improvements.

According to the "Total Grading Yardage Verification Certificate" presented on the civil plans, the total grading volume (cut and fill) planned for the project is 465 cubic yards, of which 50 cubic yards are planned to be placed as compacted fill and 515 cubic yards are planned to be exported from the site. No imported soils are planned.

The AOWTS, which will consist of a 3,634-gallon primary treatment tank, two UV-disinfection tanks, and a microdosing dispersal field, is planned to be installed on the southeast side of the proposed residence, between the residence and Sea Level Drive. In lieu of constructing the proposed AOWTS beyond the required setbacks, the Project Geotechnical Consultants recommend to waterproof and design the basement retaining walls and floor slabs for hydrostatic pressure. Open subdrains down-gradient of the AOWTS are not planned.

Building Plan Check Stage Review Comments:

1. Please submit a fee of $1,179.00 to the City's geotechnical consultants for the final building plan check review for the project.
2. Ensure that all plans and design documents for the proposed project conform to the current Malibu Municipal Code, including the adoption of the 2022 California Building Code.
3. The basement retaining walls should be designed to resist hydrostatic pressure in addition to other at-rest and seismic earth pressures.
4. The following notes must be added to the grading plan:
    - The Project Geotechnical Consultant should determine the expansion potential of the finish grade materials at the completion of grading. Grading and Foundation design recommendations should be revised if the expansion potential of finish grade materials substantially differs from the assumed expansion range.

- At the completion of grading, samples of the onsite soils should be collected and tested for corrosion potential. Final recommendations for mitigation measures including cement type should be based on the corrosion potential of the finish grade materials

5. Please include the following note on the shoring plans, as appropriate: *"The Project Geotechnical Consultants shall prepare an as-built report documenting the installation of the pile foundation elements for the City's files. The report shall include total depths of the piles, depth into the recommended bearing material, minimum required depth into the recommended bearing material, and a map depicting the locations of the piles."*
6. Please include the following note on the shoring plans, as appropriate: *"Prior to final approval of the project, an as-built compaction report prepared by the Project Geotechnical Consultants must be submitted to the City for review. The report must include the results of all density tests, a dry density and optimum moisture maximum curve(s), a map depicting the limits of fill, locations and elevations of all density tests, locations and elevations of all removal bottoms, and the expansion index of the materials used for foundation embedment. Geologic conditions exposed during grading must be depicted on an as-built geologic map."*
7. Final grading, retaining wall, OWTS, and residence plans (**APPROVED BY BUILDING AND SAFETY**) incorporating the Project Geotechnical Consultant's recommendations and items on this review sheet must be **reviewed and electronically stamped and signed by the Project Engineering Geologist and Project Geotechnical Engineer**. City geotechnical staff will review the plans for conformance with the Project Geotechnical Consultants' recommendations and items on this review sheet over the counter at City Hall. **Appointments for final review and approval of the plans may be made by calling or emailing City Geotechnical staff.**

Please direct questions regarding this review sheet to the City's geotechnical consultants listed below.

Geotechnical Engineering Review by: _____ *01/21/2025*
Ali Abdel-Haq, G.E. #2308, Exp. 12-31-25 Date
Geotechnical Engineering Reviewer (805-496-1222)
Email: ali@geodynamics-inc.com

Engineering Geology Review by: _____ *01/21/2025*
Christopher J. Sexton, C.E.G. #1441 Exp. 11-30-26 Date
Engineering Geology Reviewer (805-496-1222)
Email: chris@geodynamics-inc.com

This review sheet was prepared by representatives of Cotton, Shires and Associates, Inc. and GeoDynamics, Inc., contracted through Cotton, Shires and Associates, Inc., as an agent of the City of Malibu.

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

GeoDynamics, Inc.
Applied Earth Sciences
Geotechnical Engineering & Engineering Geology Consultants

City of Malibu

– GEOTECHNICAL –

NOTES FOR BUILDING PLAN-CHECK

The following standard items should be incorporated into Building Plan-Check submittals, as appropriate:

1. One set of grading, retaining wall, OWTS, and residence plans, incorporating the Project Geotechnical Consultant's recommendations and items on this review sheet must be submitted to City geotechnical staff for review. **Additional review comments may be raised at that time that may require a response.**
2. Show the name, address, and phone number of the Project Geotechnical Consultant(s) on the cover sheet of the Building, OWTS, and Grading Plans.
3. Include the following note on Grading and Foundation Plans: "*Subgrade soils shall be tested for Expansion Index prior to pouring footings or slabs; Foundation Plans shall be reviewed and revised by the Project Geotechnical Consultant, as appropriate.*"
4. Include the following note on the Foundation Plans: "*All foundation excavations must be observed and approved by the Project Geotechnical Consultant prior to placement of reinforcing steel."*
5. The Foundation Plans for the proposed project shall clearly depict the embedment material and minimum depth of embedment for the foundations in accordance with the Project Geotechnical Consultant's recommendations.
6. Show the onsite wastewater treatment system (OWTS) on the Site Plan and/or Geologic Map.
7. Please contact the Building and Safety Department regarding the submittal requirements for a grading and drainage plan review.
8. A comprehensive Site Drainage Plan, incorporating the Project Geotechnical Consultant's recommendations, shall be included in the Plans. Show all area drains, outlets, and non-erosive drainage devices on the Plans. Water shall not be allowed to flow uncontrolled over descending slopes.

Grading Plans (as Applicable)

1. Grading Plans shall clearly depict the limits and depths of overexcavation, as applicable.
2. Prior to final approval of the project, an as-built compaction report prepared by the Project Geotechnical Consultant must be submitted to the City for review. The report must include the results of all density tests as well as a map depicting the limits of fill, locations of all density tests, locations and elevations of all removal bottoms, locations and elevations of all keyways and back drains, and locations and elevations of all retaining wall backdrains and outlets. Geologic conditions exposed during grading must be depicted on an as-built geologic map. This comment must be included as a note on the grading plans.

Retaining Walls (As Applicable)

1. Show retaining wall backdrain and backfill design, as recommended by the Geotechnical Consultant, on the Plans.
2. Retaining walls separate from a residence require separate permits. Contact the Building and Safety Department for permit information. One set of retaining wall plans shall be submitted to the City for review by City geotechnical staff. Additional concerns may be raised at that time which may require a response by the Project Geotechnical Consultant and applicant.

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4861
(310) 456-2489 FAX (310) 456-3356 www.malibucity.org

ENVIRONMENTAL HEALTH REVIEW
REFERRAL SHEET

TO: City of Malibu Environmental Health Administrator

FROM: City of Malibu Planning Department **REVISED DATE** 01/07/2025

PROJECT NUMBER: CDP 23-038

JOB ADDRESS: 31870 SEA LEVEL DR

APPLICANT / CONTACT: Karen Hau, Burdge & Associates Architects

APPLICANT ADDRESS: 24911 Pacific Coast Hwy
Malibu, CA 90265

APPLICANT PHONE #: (310)456-5905

APPLICANT FAX #:

APPLICANT EMAIL: karen@buaia.com

PROJECT DESCRIPTION: NSFR

TO: Malibu Planning Department and/or Applicant

FROM: City of Malibu Environmental Health Reviewer

✓ **Conformance Review Complete** for project submittals reviewed with respect to the City of Malibu Local Coastal Plan/Local Implementation Plan (LCP/LIP) and Malibu Municipal Code (MMC). The Conditions of Planning conformance review and plan check review comments listed on the attached review sheet(s) (or else handwritten below) shall be addressed prior to plan check approval.

Building Plan Check (BPC) Required ☑ Yes ☐ No BPC Fees Req'd $_____

_____ **Conformance Review Incomplete** for the City of Malibu LCP/LIP and MMC. The Planning stage review comments listed on the City of Malibu Environmental Health review sheet(s) shall be addressed prior to conformance review completion.

OWTS Plot Plan: ☐ **NOT REQUIRED**

☑ **REQUIRED (attached hereto)** ☐ **REQUIRED (not attached)**

Matthew Pfeuntk 1/20/2025

Signature **Date**

The applicant must submit to the City of Malibu Environmental Health Specialist to determine whether or not an onsite wastewater treatment system (OWTS) Plot Plan approval is required.

The Environmental Health Specialist may be contacted Tuesday and Thursday from 8:00 am to 11:00 am, or by calling (310) 456-2489, extension 364.

City of Malibu

Environmental Health ● Environmental Sustainability Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-7650 · www.malibucity.org

ENVIRONMENTAL HEALTH REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email address)	Karen Hau, Burdge & Associates Architects karen@buaia.com		
Project Address:	**31870 Sea Level Lane** Malibu, California 90265		
Planning Case No.:	CDP 23-038		
Project Description:	NSFR, NOWTS		
Date of Review:	January 20, 2025		
Reviewer:	Matt Janousek	Signature:	
Contact Information:	Phone: (310) 456-2489	Email:	mjanousek@malibucity.org

SUBMITTAL INFORMATION

Architectural Plans:	Burdge & Associates Architects: Plans dated 12-22-2015; revised plans dated 5-18-2023, 10-7-2024
Grading Plans:	AHSIRT Engineering: Plans dated 12-21-2015; revised plans dated 4-18-2023. Larry Pearson: Topo map dated 12-18-2015.
OWTS Plan:	Ensitu: OWTS plan dated 12-11-2015, 8-24-2016, 10-31-2022, 5-30-2023, 11-15-2024
OWTS Report:	Ensitu: OWTS report dated 8-24-2016, 5-30-2023, 11-15-2024
Geology Report:	GeoSystems Inc: Preliminary soils report dated 6-27-2005; Updated soils report dated 12-21-2015; Updated Report dated 3-13-2023, 11-13-2024
Miscellaneous:	TEG: Reduction in Setback Letter dated 9-17-2024. Burdge & Associates Architects: Variance ESHA letter dated 6-5-2023. Larry Young; Percolation Test Report; dated 2015 and 2006 (Referenced only and not submitted).
Previous Reviews:	9-27-2016, 1-14-2016, 6-22-2023

REVIEW FINDINGS

Planning Stage:	☒	**CONFORMANCE REVIEW COMPLETE** for the City of Malibu Local Coastal Program (LCP)/Local Implementation Plan (LIP) and Malibu Municipal Code (MMC). The listed conditions of Planning stage conformance review and plan check review comments shall be addressed prior to plan check approval.
	☐	**CONFORMANCE REVIEW INCOMPLETE** for the City of Malibu LCP/LIP and MMC. The listed Planning stage review comments shall be addressed prior to conformance review completion.
OWTS Plot Plan:	☐	**NOT REQUIRED**
	☒	**REQUIRED (attached hereto)** ☐ **REQUIRED (not attached)**

Based upon the project description and submittal information noted above, a **conformance review** was completed for a new advanced onsite wastewater treatment system (OWTS) proposed to serve the onsite wastewater treatment and disposal needs of the subject property. The proposed advanced OWTS meets the minimum requirements of the Malibu Municipal Code (MMC) and the City of Malibu Local Coastal Program (LCP)/Local Implementation Plan (LIP). Please distribute this review sheet to all of the project consultants and, prior to final approval, provide a coordinated submittal addressing all conditions for final approval and plan check items.

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The conditional conformance findings hereby transmitted complete the Planning stage Environmental Health review of the subject development project. In order to obtain Environmental Health final approval of the project OWTS Plot Plan and associated construction drawings (during Building Safety plan check), all conditions and plan check items listed below must be addressed through submittals to the Environmental Health office.

Conditions of Planning Conformance Review for Building Plan Check Approval:

1) **OWTS on Architectural and Grading Plans:** The final architectural site plan and grading plans must show the proposed onsite wastewater treatment system (OWTS), including the treatment tank, present/future dispersal area(s), and all lines of connection to the residence.

    - The proposed OWTS must be shown on all final architectural, retaining wall, and structural cross-sections as applicable.

2) **Building Plans:** All project plans shall be submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

    Architectural Plans:

    - The final architectural plans must show 3 bedrooms and 37 drainage fixture units (DFU).

    - Show and label all drainage fixtures on the final floor plans including clothes washers and dishwashers.

    - **Outdoor Shower:** The proposed outdoor shower must be covered and protected at all times to prevent stormwater from entering into the drain and OWTS. Please show the limits proposed roof overhang and provide a detail/call out of a shower berm on the final architectural plans.

    - **Proof of 1.6 Gallon or Less Flushometer Water Closet:** The 2022 California Plumbing Code permits water closets to be computed as 3 DFU if the proposed water closet is categorized as a flushometer tank with a 1.6 gallon per flush or less and is ANSI approved. Specifications of the flushometer tank shall be submitted.

      The OWTS Designer references water closets to be computed as 3 DFU. Please provide the make and model number of the water closet that is ANSI approved and incorporate the low flow specification sheet into the final architectural plan set.

3) **Final Onsite Wastewater Treatment System (OWTS) Plot Plan:** A final plot plan prepared by a City Registered OWTS Designer shall be submitted showing an OWTS design meeting the minimum requirements of the Malibu Municipal Code (MMC) and the Local Coastal Program (LCP)/Local Implementation Plan (LIP). The plans must include all necessary construction details, the proposed drainage plan for the developed property, and the proposed landscape plan for the developed property. The OWTS Plot Plan shall show essential features of the OWTS, existing improvements, and proposed/new improvements. The plot plan must fit on an 11” x 17” sheet leaving a 5” left margin clear to provide space for a City-applied legend.

Recycled Paper

4) **Final OWTS Design Report, Plans, and System Specifications:** A final OWTS design report and large set of construction drawings with system specifications (four sets) shall be submitted to describe the OWTS design basis and all components proposed for use in the construction of the OWTS. All plans and reports must be signed by a City Registered OWTS Designer, and the plans stamped by the project Geologist, Coastal Engineer, and Structural Engineer as applicable. The final OWTS design report and construction drawings shall be submitted with the designer's signature, professional registration number, and stamp (if applicable).

   The final OWTS design submittal shall contain the following information (in addition to the items listed above).

   a. Required treatment capacity for wastewater treatment and disinfection systems. The treatment capacity shall be specified in terms of flow rate, gallons per day (gpd), and shall be supported by calculations relating the treatment capacity to the number of bedroom equivalents, plumbing drainage fixture units, and the subsurface effluent dispersal system acceptance rate. The drainage fixture unit count must be clearly identified in association with the design treatment capacity, even if the design is based on the number of bedrooms. Average and peak rates of hydraulic loading to the treatment system shall be specified in the final design.

   b. Sewage and effluent pump design calculations (as applicable).

   c. Description of proposed wastewater treatment and/or disinfection system equipment. State the proposed type of treatment system(s) (e.g., aerobic treatment, textile filter, ultraviolet disinfection, etc.); major components, manufacturers, and model numbers for "package" systems; and the design basis for engineered systems.

   d. Specifications, supporting geology information, and percolation test results for the subsurface effluent dispersal portion of the onsite wastewater disposal system. This must include the proposed type of effluent dispersal system (drainfield, trench, seepage pit, subsurface drip, etc.) as well as the system's geometric dimensions and basic construction features. Supporting calculations shall be presented that relate the results of soils analysis or percolation/infiltration tests to the projected subsurface effluent acceptance rate, including any unit conversions or safety factors. Average and peak rates of hydraulic loading to the effluent dispersal system shall be specified in the final design. The projected subsurface effluent acceptance rate shall be reported in units of total gallons per day (gpd) and gallons per square foot per day (gpsf). Specifications for the subsurface effluent dispersal system shall be shown to accommodate the design hydraulic loading rate (i.e., average and peak OWTS effluent flow, reported in units of gpd). The subsurface effluent dispersal system design must take into account the number of bedrooms, fixture units, and building occupancy characteristics.

   e. All OWTS design drawings shall be submitted with the wet signature and typed name of the OWTS designer. If the plan scale is such that more space than is available on the 11" x 17" plot plan is needed to clearly show construction details, larger sheets may also be provided (up to a maximum size of 18" x 22" for review by Environmental Health). [Note: For OWTS final designs, full-size plans for are also required for review by Building & Safety and Planning.]

5) **Building Plans:** All project architectural plans and grading/drainage plans shall be submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

Recycled Paper

6) **Traffic-Rated Slab Plan(s):** All project traffic rated slab plans shall be prepared by a California licensed civil engineer and submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

7) **Architect / Engineer Certification for Reduction in Setbacks to Buildings or Structures:** All proposed reductions in setbacks from the OWTS to structures or other features less than those shown in Malibu Municipal Code (MMC) Section 15.42 must be supported by letters from the project consultants. The wastewater plans and the construction plans must be specifically referenced in all certification letters. The construction plans for all structures and/or buildings with reduced setback must be approved by City of Malibu Building Safety prior to Environmental Health final approval. The architectural and/or structural plans submitted for Building Safety plan check must detail methods of construction that will compensate for the reduction in setback (e.g., waterproofing, concrete additives). For complex waterproofing installations, submittal of a separate waterproofing plan may be required. All plans must show the location of OWTS components in relation to those structures from which the setback is reduced, and the plans must be signed and stamped by the architect, structural engineer, and geotechnical consultants (as applicable).

   - Structures – All proposed reductions in setback from the OWTS to structures (i.e., setbacks less than those shown in MMC Section 15.42) must be supported by a letter from the project Structural Engineer and a letter from the project Soils Engineer (i.e., a Geotechnical Engineer or Civil Engineer practicing in the area of soils engineering). Both engineers must certify unequivocally that the proposed reduction in setbacks from the treatment tank and effluent dispersal area will not adversely affect the structural integrity of the OWTS, and will not adversely affect the structural integrity of the structures for which the setback is reduced.

   - Buildings – All proposed reductions in setback from the OWTS to buildings (i.e., setbacks less than those shown in MMC Section 15.42) also must be supported by a letter from the project Architect, who must certify unequivocally that the proposed reduction in setbacks will not produce a moisture intrusion problem for the proposed building(s). If the building designer is not a California licensed architect, then the required Architect's certification may be supplied by an Engineer who is responsible for the building design with respect to mitigation of potential moisture intrusion from reduced setback to the OWTS; in this case the Engineer must include in the letter an explicit statement of responsibility for mitigation of potential moisture intrusion. If any specific construction features are proposed as part of a moisture intrusion mitigation system in connection with the reduced setback(s), then the Architect (or Engineer) must provide associated construction documents for review and approval during Building Plan Check.

   - **OWTS Designer Reductions in Setback Acknowledgement**: The OWTS Designer must acknowledge and provide recommendations for proposed reductions in setback from the OWTS to the existing site conditions and proposed development.

8) **Waterproofing Plan:** A waterproofing plan in conformance with the project consultants' recommendations shall be submitted to Building Safety and Environmental Health for review. This plan should be incorporated into the architectural/structural/foundation plans as applicable.

Recycled Paper

9) **OWTS Monitoring Plan:** A monitoring and maintenance plan must be submitted to the Environmental Health Administrator for approval. The plan must adhere to the recommendations of the OWTS designer and include a monitoring plan, maintenance schedule, sampling program and corrective actions if the OWTS fails to function as designed or meet the prescribed standards outlined in the monitoring plan.

10) **Proof of Ownership:** Proof of ownership of subject property shall be submitted.

11) **Operations & Maintenance Manual:** An operations and maintenance manual specified by the OWTS designer shall be submitted to the property owner and maintenance provider of the proposed advanced OWTS.

12) **Maintenance Contract:** A maintenance contract executed between the owner of subject property and an entity qualified in the opinion of the City of Malibu to maintain the proposed advanced onsite wastewater treatment system shall be submitted prior to Environmental Health approval. ***Please note only original "wet* signature" documents are acceptable**.

13) **Advanced Onsite Wastewater Treatment System (OWTS) Covenant:** A covenant running with the land shall be executed between the City of Malibu and the holder of the fee simple absolute as to subject real property and recorded with the City of Malibu Recorder's Office. Said covenant shall serve as constructive notice to any future purchaser for value that the OWTS serving subject property is an advanced method of sewage disposal pursuant to the City of Malibu Municipal Code. Said covenant shall be provided by the City of Malibu Environmental Health Administrator. ***Please submit a certified* copy issued by the City of Malibu Recorder**.

14) **Covenant to Forfeit 100% Expansion Effluent Disposal Area:** A covenant running with the land shall be executed by the property owner and recorded with the City of Malibu Recorder's Office. Said covenant shall serve as constructive notice to any successors in interest that (1) the private sewage disposal system serving the development on the property does not have a 100% expansion effluent dispersal area (i.e., replacement disposal field(s) or seepage pit(s)) and (2) if the primary effluent dispersal area fails to drain adequately, the City of Malibu may require remedial measures including, but not limited to, limitations on water use enforced through an operating permit and/or repairs, upgrades or modifications to the private sewage disposal system. The recorded covenant shall state and acknowledge that future maintenance and/or repair of the private sewage disposal system may necessitate interruption in use of the private sewage disposal system and, therefore, any building(s) served by the private sewage disposal system may become non-habitable during any required future maintenance and/or repair. Said covenant shall be in a form acceptable to the City Attorney and approved by the Environmental Sustainability Department. ***Please submit a certified copy issued by* the City of Malibu Recorder.**

15) **Storm Water Pollution Prevention Plan (S.W.P.P. Plan):** A S.W.P.P. Plan shall be submitted during the building plan check stage review. The plan must show the proposed OWTS components.

16) **Project Geologist/Geotechnical Consultant Approval:** Project Geologist/Geotechnical Consultant final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

17) **City of Malibu Geologist/Geotechnical Approval:** City of Malibu geotechnical staff final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

Recycled Paper

18) **City of Malibu Public Works Approval:** City of Malibu Public Works final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

19) **City of Malibu Planning Approval:** City of Malibu Planning Department final approval of the OWTS plan shall be obtained.

20) **Environmental Health Final Review Fee:** A final fee in accordance with the adopted fee schedule at the time of final approval shall be paid to the City of Malibu for Environmental Health review of the OWTS design and system specifications.

21) **Operating Permit Application and Fee:** In accordance with Malibu Municipal Code, an application shall be made to the Environmental Health office for an Onsite Wastewater Treatment System operating permit. An operating permit fee in accordance with the adopted fee schedule at the time of final approval shall be submitted with the application.

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If you have any questions regarding the above requirements, please contact the Environmental Health office at your earliest convenience.

cc: Environmental Health file
Planning Department

Recycled Paper

31882 SEA LEVEL DRIVE (CDP 23-037)
MALIBU, CA 90265

S.F.D.:	3 Bedrooms/37 Fixture Units (N)
TREATMENT TANK:	3634 Gallon MicroSepTec ES12 w/2 - UV Disinfection Units (N)
ACTIVE:	1 - 520 ft2 Drip Dispersal Field (N)
FUTURE:	N/A
PERC RATE:	1.15 gpsf/d
DESIGNER:	John Yaroslaski, RCE (60149)
REFERENCE:	Ensitu: OWTS report dated 5-31-2023, OWTS plan dated 5-30-2023, 11-15-2024
	GeoSystems: Preliminary soils report dated 6-27-2005; Updated soils report dated 12-21-2015; Updated soils report 3-13-2023, 11-13-2024

NOTES:

1. This conformance review is for a new single-family dwelling and advanced onsite wastewater treatment system (OWTS). The new advanced OWTS conforms to the requirements of the Malibu Municipal Code (MMC) and the Local Coastal Program (LCP).

2. The OWTS must be operated, monitored and maintained in accordance with the Monitoring Plan prepared by the OWTS designer.

3. The Operating Permit must be renewed on an annual basis in accordance with the monitoring plan and terms of the operating permit unless modified by the City.

4. This review only relates to the minimum requirements of the MMC and LCP, and does not include an evaluation of any geological, or other potential problems, which may require an alternative method of wastewater treatment.

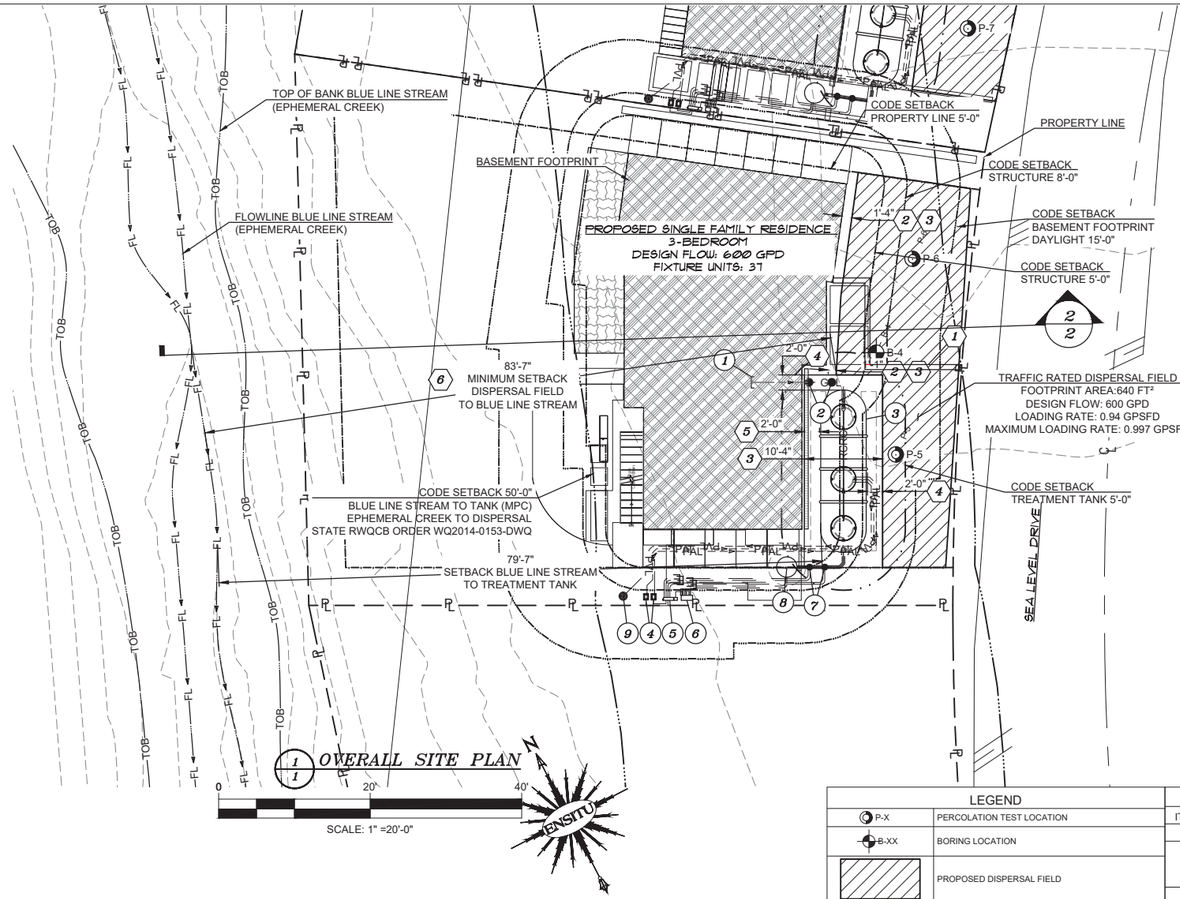
5. This review is valid for one year, or until the MMC and LCP, and/or Administrative Policy changes render it noncomplying.

CITY OF MALIBU
ENVIRONMENTAL SUSTAINABILITY DEPT.
ENVIRONMENTAL HEALTH

CONFORMANCE REVIEW

SIGNATURE: ..... DATE: 1/20/2025

THIS IS NOT AN APPROVAL. FINAL APPROVAL IS REQUIRED PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMITS



GENERAL NOTES:

1. EXISTING OWTS COMPONENTS LOCATION AND ABANDONMENT:
   - 1.1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS. THE LOCATIONS ON THE ENGINEERING PLANS ARE INFORMATIONAL AND MAY NOT INCLUDE ALL COMPONENTS OF THE OWTS. MANY ITEMS, SUCH AS TANKS, PIPING, DISTRIBUTION DEVICES, SEEPAGE PITS, DISPERSAL FIELDS, AND OTHER APPURTENANCES ARE BURIED AND NOT LOCATABLE BY THE SURVEYOR OR UTILITIES LOCATOR .
   - 1.2. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS AN "OWTS ABANDONMENT PERMIT" SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWTS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REGULATORY REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THIS SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
   - 1.3. THE EXISTING OWTS COMPONENTS INCLUDING; SEPTIC TANK(S), PIPING, CLEANOUT(S) SEEPAGE PIT(S), DISPERSAL FIELD(S), AND ALL OTHER APPURTENANCES SHALL BE PROPERLY ABANDONED PURSUANT TO CITY OF MALIBU ORDINANCE 435, SECTION 15.40.170 C. AND SECTION 15.40.170 D. TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES. METHOD OF ABANDONMENT SHALL BE DETERMINED BY THE ENGINEER AND/OR THE OWNER'S REPRESENTATIVE
2. SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH SPECIFICATIONS AND TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND ORDINANCES.
3. SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS, VENTS, BACKWATER VALVES, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
4. ELECTRICAL COMPONENTS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 27 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA ELECTRICAL CODE, LOCAL ELECTRICAL CODE, AND ORDINANCES.
5. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. ENSITU ENGINEERING INC., IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
6. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE INSTALLATION OF THE TANK AND DISPERSAL SYSTEM COMPONENTS OF THE AOWTS (INCLUDING BUT NOT LIMITED TO; (A) TANK EXCAVATION, BEDDING, AND BACKFILL (B) SEEPAGE PITS EXCAVATION, CONSTRUCTION, AND BACKFILL (C) SUBSURFACE DISPERSAL SYSTEM BEDDING, FILL MATERIAL, CONSTRUCTION, AND BACKFILL) AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE TANK AND DISPERSAL SYSTEM COMPONENTS WERE INSTALLED PER APPROVED AOWTS PLANS.
7. LEACH FIELDS AND DISPERSAL SYSTEMS DESIGNATED AS SAND CATEGORY: ANY REMAINING FILL MATERIAL AND ANY BEACH SAND SEDIMENT THAT MIGHT HAVE REDUCED PERMEABILITY FROM EXISTING LEACH FIELD OPERATIONS ENCOUNTERED BELOW THE BOTTOM OF THE PROPOSED LEACH FIELD OR ANY MATERIAL ENCOUNTERED IN THE CONSTRUCTION OF THE LEACH FIELD THAT IS NOT CATEGORIZED AS BEACH SAND DEPOSITS SHALL BE EXCAVATED TO THE LEVEL OF THE NATIVE BEACH SAND DEPOSITS AND REPLACED WITH DOUBLE- WASHED SAND. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE EXCAVATION OF THE LEACH FIELD AND CONFIRM IN WRITING THAT ALL THE DELETERIOUS FILL AND NON-BEACH SAND MATERIALS BELOW THE LEACH FIELD HAVE BEEN REMOVED AND REPLACED WITH CLEAN SAND AND THE LEACH FIELD WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED OWTS PLANS.
8. SUBSURFACE DRIP LINE SHALL BE PLACED IN UNCOMPACTED NATIVE SOILS RIPPED AND TILLED A MINIMUM OF 18 INCHES. SOIL SHALL BE AMENDED TO BE 30% SAND, 30% MULCH, 40% NATIVE OR LANDSCAPE DESIGNER SHALL BE CONTACTED TO ADVISE CONTRACTOR ON TYPE OF TOPSOIL TO IMPORT FOR MINIMUM BURIAL DEPTH. DISPERSAL FIELD SHALL BE PLANTED AND ESTABLISHED PRIOR TO OCCUPANCY (ENGINEER TO VERIFY)
9. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SYSTEM INSTALLATION, BUILDING SEWER DEPTH OR CONNECTION POINT WAS NOT PROVIDED AND SHALL BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION
10. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF BUILDING SEWER CONNECTION, MINIMUM 2% SLOPE FROM STRUCTURE TO CONNECTION POINT.
11. ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE VENTED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.

LEGEND

P-X	PERCOLATION TEST LOCATION
B-XX	BORING LOCATION
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT
	DECK

EQUIPMENT SCHEDULE

ITEM	QTY	DESCRIPTION	MFG/PART NUMBER
1	1	CONNECTION TO BUILDING SEWER[1]	
2	1	GRAVITY CLEAN-OUT AND BACKWATER VALVE[1]	INDUSTRIAL BACKWATER VALVE (SPEARS MODEL S475P FOR 4") 8" I.D. VALVE BOX (CHRISTY MODEL F08)
3	1	TREATMENT TANK[1][2]	MICROSEPTEC ES12
4	2	AIR COMPRESSOR[1][2]	MICROSEPTEC
5	1	REMOTE TELEMETRY CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES[1][2]	MICROSEPTEC
6	1	CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES[1][2]	GEOFLOW
7	2	GRAVITY UV DISINFECTION UNIT (2 IN SERIES 100% REDUNDANCY)	SALCOR
8	1	DUPLEX PUMP SYSTEM WITH 30" DIAMTER VAULT[1][2]	MICROSEPTEC
9	1	VENT ASSEMBLY[1][2]	ORENCO

[1] ALL PLUMBING APPURTENANCES AND WORK SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE PLUMBING CODES. APPURTENANCES AND WORK INCLUDE, BUT ARE NOT LIMITED TO; CONNECTION TO BUILDING PLUMBING, VENTILATION, ISOLATION, BACKWATER VALVES, CLEANOUTS, AND FITTINGS.

[2] ALL ELECTRICAL APPURTENANCES INCLUDING BUT NOT LIMITED TO; CONDUIT, CONDUCTOR, CONTROL PANELS, CONTACTORS, FLOATS, PUMPS, DISCONNECTS, AND COMMUNICATION DEVICES SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE ELECTRICAL CODE AND CURRENT NATIONAL ELECTRIC CODE. CONDUIT AND CONDUCTOR RUNS AND SIZING SHOWN ON PLAN ARE FOR ALIGNMENT AND COST ESTIMATION. ELECTRICAL CONTRACTOR SHALL SPECIFY ALL ELECTRICAL APPURTENANCES. CONTROL AND POWER CONDUCTORS SHALL BE PLACED IN SEPARATE CONDUIT

PIPING SCHEDULE

TAG	DESCRIPTION	SPECIFICATION
GSL	PROPOSED GRAVITY SEWER LINE	4" SCH40 PVC
PEL	PROPOSED PUMPED EFFLUENT LINE	2" SCH80 PVC
PVL	PROPOSED AIR VENT LINE	4" SCH40 PVC
RCRC	RECIRCULATION RETURN LINE	1½" SCH80 PVC
LFH	DISPERSAL FIELD HEADER	1½" SCH80 PVC
LFL	DISPERSAL FIELD LATERAL	1½" SCH80 PVC
FL	FLOWLINE	
TOB	TOP OF BANK	

OWTS Capacity (Design and Maximum)

Component	Description	Size/Capacity	Design Capacity	Max Capacity
Treatment Volume (Fixture Unit Capacity)	1-MicroSepTec ES12	3,634 gallons	37 fixture units	105 fixture units
Treatment (Organic Capacity)	1-MicroSepTec ES12	2,00 lb BOD5/day	600 gpd at 220 mg/L BOD5	1200 gpd at 220 mg/L BOD5
Disinfection	2-Salcor Gravity UV	1,200 gpd	600 gpd	1,200 gpd
Subsurface Irrigation Dispersal	Subsurface Irrigation	640 square feet at 0.938 gallons per square foot per day	600 gpd	638 gpd

Septic Tank (ST) Calculations

Total Existing Fixture Units		
Total Proposed Fixture Units	37	
Total Fixture Units	37	
Minimum Septic Tank Size based on Fixtures	2000	gal
Number of Dwelling Units	1	
Number of Bedrooms	3	bedrooms
Minimum Septic Tank Size based on Bedrooms	1500	gal
Design Septic Tank Size	3634	gal
Flow Calculations (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Leaching Field Design Flow, Q	600	gpd
Drip Distribution Calculations		
Design Subsurface Irrigation Loading (Application) Rate, I	0.997	gpsfd
Minimum Square Feet of Leaching Area Required, Q/I	602	ft²
Design Square Feet of leaching Area from Site Plan,A	640	ft²
Actual Loading Rate (Application), L_A=Q/A	0.938	gpsfd
Maximum Effluent Capacity, Q_{Max}=AxI	638	gpsfd
Design Safety Factor, H	1.0	

Fixture Units Summary

Total Proposed Fixture Units	37	
Total Fixture Units	37	
Dwelling Units Summary		
Total Proposed Dwelling Units	1	
Proposed Bedroom Summary		
Total Proposed Bedrooms	3	bedrooms
Number of Proposed Master Bedrooms	1	bedrooms
Number of Proposed Standard Bedrooms	2	bedrooms
Flow Calculations (Q)		
Peak Flow per Master Bedroom	300	gpd
Peak Flow per Standard Bedroom	150	gpd
Average Flow per Master Bedroom	200	gpd
Average Flow per Standard Bedroom	100	gpd
Flow Calculations Proposed (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Design Flow, Q_I	600	gpd
Influent Characteristics		
BOD5 (mg/l)	220	
TSS (mg/l)	220	
TN (mg/l)	35	
Effluent Characteristics		
BOD5 (mg/l)	20	
TSS (mg/l)	20	
TN (mg/l)	17.5	

MicroSepTec Design

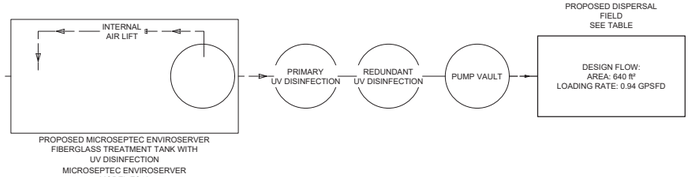
Design Flow	600	gpd
Design Influent BOD	220	mg/L
Design Effluent BOD	20	mg/L
Design Organic Loading BOD	1.00	lb BOD_5
MicroSepTec Model Specified	ES12	
MicroSepTec Tank Volume	3634	gal
MicroSepTec ES12 Base Organic Removal (1)	2.00	lb BOD_5
Minimum Number of MicroSepTec ES12 Required	1	units
Design Organic Removal	2.00	lb BOD_5
Design Tank Volume	3634	gal
Maximum Effluent Flow Based on Organic loading	1200	gpd
Maximum Effluent Flow Based on Hydraulic Loading	1200	gpd
Maximum Fixtures Based on Design Tank Volume	105	

Ryons Tvalue to Subsurface Irrigation Conversion Calculations

Test Pit Number	Test Depth	Percolation Rate from Ryon's Test Method Converted to Gal/day					Percolation Area (FIGURE)	Infiltration rate	Safety Factor	Application Rate
		A	B=1/A	C=Bx1440	D=C/12	E=D x7.481	F	G=E/F	H	I=G/H
	ft	min/inch	inch/min	in/day	ft/day	gal/day	ft²	gal/ft²-day		gal/ft²-day
P-5	7	30	0.033	48.00	4.00	29.92	3	9.97	10	0.997
P-6	7	25	0.040	57.60	4.80	35.91	3	11.97	10	1.197
T Average		27.5							Application Rate Average	1.1
T Max		30							Application Rate Max	1.20
T Ryon (T$_R$)		30							Design Application Rate	0.997

SETBACK REDUCTIONS

	COMPONENT	SITE ELEMENT	CODE REQUIREMENT	ACTUAL
1	DISPERSAL FIELD	SITE WALL	8'	0
2	DISPERSAL FIELD	STRUCTURE	8'	1'-4"±
3	DISPERSAL FIELD	BASEMENT	15' DAYLIGHT	1'-4"± 10'-4"±
4	DISPERSAL FIELD	TREATMENT TANK	5'	2'-0"
5	TREATMENT TANK	STRUCTURE	5'	2'-0"±
6	DISPERSAL FIELD	BLUE LINE STREAM	100'-0" (MPC) 50'-0" SRWQCB	83'-7"±



PROPOSED MICROSEPTEC ENVIROSERVER
FIBERGLASS TREATMENT TANK WITH
UV DISINFECTION
MICROSEPTEC ENVIROSERVER
MODEL ES12

FINAL FOR APPROVAL ISSUED 11/15/2024

JOHN N. YAROSLASKI
PRINCIPAL ENGINEER

ENSITU
7479 CAMELITA AVE.
ATASCADERO, CA 93422
Tel: 805.772.0150
ENSITU@ensitu.com

ENSITU ENGINEERING, INC.
"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."

REVISIONS

NO.	DATE	BY

REGISTERED PROFESSIONAL ENGINEER
JOHN N. YAROSLASKI
60149
EXP. 06-2026
CIVIL
STATE OF CALIFORNIA

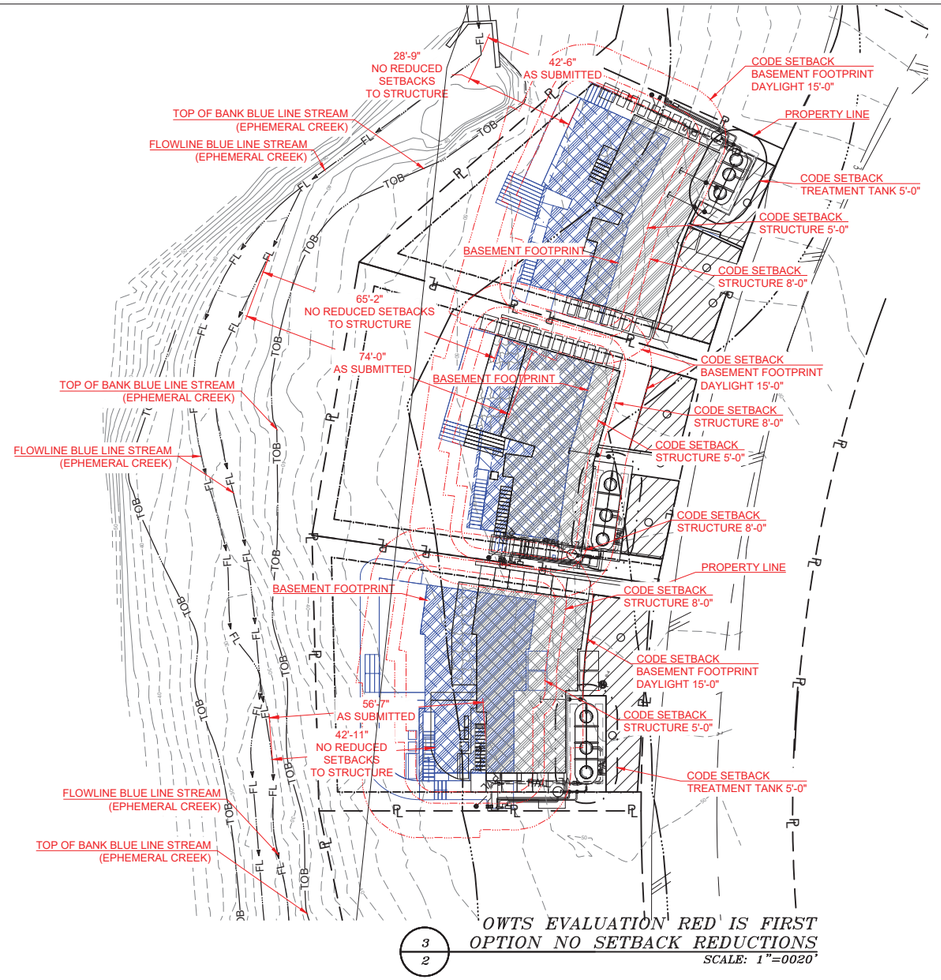
DATE: 11/15/2024
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: KCY

JOB NO. 144-118

SHEET 1 OF 2

31870 SEA LEVEL DRIVE
CONFORMANCE REVIEW DESIGN PLANS
CR-144-118 SITE PLANS AND TABLES 11X17
MALIBU, CALIFORNIA

Project Engineer: John N Yaroslaski PE # 60149
Date Last Edited: Thursday, November 21, 2024 8:52:14 PM
CREATION TIME: Friday, November 15, 2024 2:19:20 PM
MOD. TIME: Thursday, November 21, 2024 8:16:22 PM
PLOT TIME: Thursday, November 21, 2024 8:52:14 PM
Project Path: C:\Users\Public\Documents\Ensitu\144-118 31870 Sea Level Drive PMCR\144-118.010 31870 Sea Level Drive\Engineering\Cad Design\144-118.010 31870 Sea Level Drive PMCR-04.dwg



3/2 OWTS EVALUATION RED IS FIRST OPTION NO SETBACK REDUCTIONS

SCALE: 1"=0020'

LEGEND	
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT
	DECK
	BASEMENT NO REDUCED SETBACKS FROM BUILDING TO DISPERSAL FIELD

ENSITU

ENSITU ENGINEERING, INC.
7420 CARMELITA AVE.
ATASCADERO, CA 93422
Tel: 805.772.0150
ENSITU@ensitu.com

"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."

REVISIONS

NO.	DATE	BY

31870 SEA LEVEL DRIVE
CONFORMANCE REVIEW DESIGN PLANS
CR-114-118 SITE SECTION AND ALTERNATIVE
11X17
MALIBU, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN Y. YAROSLAVSKI
60149
EXP 06/2026
CIVIL
STATE OF CALIFORNIA

DATE: 05/30/2023
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: KCY

JOB NO.
144-118

SHEET
2 OF 2

Project Engineer: John Y Yaroslavski PE# 60149
Drawing File Name: Malibu Residence 144-118 31870 Sea Level Drive\Engineering\Cad Design\144-118.010 31870 Sea Level Drive PWCR-04.dwg
CREATION TIME: Friday, November 15, 2024 2:19:20 PM
MOD. TIME: Thursday, November 21, 2024 5:16:22 PM
PLOT TIME: Thursday, November 21, 2024 5:21:16 PM

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4804
(310) 456-2489 FAX (310) 456-7650

FIRE DEPARTMENT REVIEW
REFERRAL SHEET

TO: Los Angeles County Fire Department

FROM: City of Malibu Planning Department **DATE:** 06/13/2023

PROJECT NUMBER:	CDP 23-038
JOB ADDRESS:	31870 SEA LEVEL DR
APPLICANT / CONTACT:	Karen Hau, Burdge & Associates Architects
APPLICANT ADDRESS:	24911 Pacific Coast Hwy Malibu, CA 90265
APPLICANT PHONE #:	(310)456-5905
APPLICANT FAX #:	
PROJECT DESCRIPTION:	NSFR FEPC2024-1226

TO: Malibu Planning Department and/or Applicant
FROM: Fire Prevention Engineering Assistant

Compliance with the conditions checked below is required prior to Fire Department approval.

The project DOES require Fire Department Plan Review and Developer Fee payment	✓
The project DOES NOT require Fire Department Plan Review	—
The required fire flow for this project is 1,250 gallons per minute at 20 pounds per square inch for a 1 hour duration. (Provide flow information from the water dept.)	✓
The project is required to have an interior automatic fire sprinkler system.	✓
Final Fuel Modification Plan Approval is required prior to Fire Department Approval	✓

Conditions below marked "not approved" shall be corrected on the site plan and resubmitted for Fire Department approval.

	App'd	N/app'd
Required Fire Department vehicular access (including width and grade %) as shown from the public street to the proposed project.	✓	
Required and/or proposed Fire Department Vehicular Turnaround	✓	
Required 5 foot wide Fire Department Walking Access (including grade %)	✓	
Width of proposed driveway/access roadway gates	✓	

*County of Los Angeles Fire Department Approval Expires with City Planning permits expiration, revisions to the County of Los Angeles Fire Code or revisions to Fire Department regulations and standards.

**Minor changes may be approved by Fire Prevention Engineering, provided such changes achieve substantially the same results and the project maintains compliance with the County of Los Angeles Fire Code valid at the time revised plans are submitted. Applicable review fees shall be required.

SIGNATURE 11/18/2025 DATE

Additional requirements/conditions may be imposed upon review of complete architectural plans.
The Fire Prevention Engineering may be contacted by phone at (818) 880-0341or at the Fire Department Counter:
26600 Agoura Road, Suite 110, Calabasas, CA 91302; Hours: Monday – Thursday between 7:00 AM and 11:00 AM

Rev 04/21/10 mr

NEW SINGLE FAMILY RESIDENCE

31870 SEA LEVEL DRIVE
MALIBU, CA 92605

February 12 2025

ABBREVIATIONS

ADDITIONAL	ADD'L.
ADJUSTABLE	ADJ.
ABOVE FINISHED FLOOR	A.F.F.
ABOVE RAISED FLOOR	A.R.F.
AIR CONDITIONING	A/C
ALTERNATE	ALT.
ARCHITECT (URAL)	ARCH.
AREA DRAIN	A.D.
BLOCKING	BLKG.
BOARD	BD.
BUILDING	BLDG.
CABINET	CAB.
CEILING	CLG.
CENTER	CTR.
CENTER LINE	C.L.
CERAMIC TILE	C.T.
CLEAR	CLR.
CONCRETE	CONC.
CONCRETE MASONRY UNIT	C.M.U.
CONSTRUCTION	CONST.
CONTINUOUS	CONT.
CONTROL JOINT	C.J.
DIAMETER	D.I.A..
DIMENSION	DIM.
DOUBLE	DBL.
DOUBLE HUNG	D.H.
DOWN	DN.
DRAWING	DWG.
ELECTRIC	ELECT.
ELECTRIC PANEL	ELECT. PNL.
ELEVATOR	ELEV.
ENCLOSURE	ENCL.
ENGINEER	ENGR.
EQUAL	EQ.
EQUIPMENT	EQUIP.
EXISTING	EXIST.
EXTRUDE OR EXTRUSION	EXTR.
FABRICATE(ED)	FAB.
FINISH	FIN.
FIXTURE	FIXT.
FLOOR	FL.
FLUORESCENT	FLUOR.
FOOT	FT.
FRESH AIR INTAKE (OR INLET)	F.A.I.
FURNISH(ED)	FURN.
FURRING	FUR.
GALVANIZED	GALV.
GAUGE	GA.
GROUND	GRND.
GYPSUM BOARD	GYP. BD.
HEIGHT	HT.
HOLLOW METAL	H.M.
HORIZONTAL	HORIZ.
HOT WATER	H.W.
INSIDE DIAMETER	I.D.
JOINT	JT.
MANUFACTURE	MFR.
MANUFACTURER'S	MFR'S.
MATERIAL	MATL.
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MTL.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
NORTH	N
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR #
ON CENTER	O.C.
OUTSIDE DIAMETER	O.D.
OPENING	OPG.
PAIR	PR.
PERFORATED(ED)	PERF.
PIECE/PIECES	PC./PCS.
PLANTER AREA	P.A.
QUANTITY	QTY.
RADIUS	RAD.
REFERENCE	REF.
REFRIGERATOR	REFRIG.
REINFORCE/REINFORCING	REINF.
REQUIRED	REQ.
RETURN AIR	R.A.
ROUGH OPENING	R.O.
SHEET	SHT.
SIMILAR	SIM.
SOUTH	S
SMOKE DETECTOR	S.D.
SPEAKER	SPKR.
SPECIFICATIONS	SPECS.
SPRINKLER HEAD	S.H.
SQUARE	SQ.
STAINLESS STEEL	S.S.
STANDARD	STD.
STEEL	STL.
STRUCTURAL	STRUCT.
TELEPHONE	TEL.
TELEVISION	TV
TEMPORARY	TEMP.
TONGUE AND GROOVE	T. & G.
TYPICAL	TYP.
UNLESS OTHERWISE NOTED	U.O.N.
VERTICAL	VERT.
VINYL COMPOSITION TILE	V.C.T.
WITH	W/
WITHOUT	W/O
WOOD	WD.

UNDER SEPARATED PERMIT

Deferred submittal documents shall be submitted to the architect- or engineer-of-record, who shall review them and forward them to the building official with a notation that they have been reviewed and have been found to be in general conformance with the design of the building or structure. The deferred items shall not be installed until their design and submittal documents have been reviewed and approved by the building official.

DEFERRED SUBMITTAL ITEMS:

- TBD

PROJECT TEAM

•Architect:
Douglas W. Burdge, A.I.A.
Burdge Architects, Inc.
24911 Pacific Coast Hwy
Malibu, CA 90265
P: (310) 456-5905
www.buaia.com

•Surveyor:
Land and Air Surveying, Inc.
22741 Pacific Coast Hwy.
Suite: 400A
Malibu, CA 90265
P: (310) - 456-9381
Fax: (310) - 456-9821

•Geology & Soil Engineer:
GeoConcepts Inc
14428 Hamlin St, #200
Van Nuys, CA 91401
T 818 994 8895
F 818 994 8599

•CIVIL:
Ahsirt Engineering INC.
360 Miller Way.
Arroyo Grande, CA 93420
P: 805-474-4008
Trisha Coffey

•Landscape Architect
+Seed Design Collaborative
311 N. Robertson Blvd, #672.
Beverly Hills CA 90211
P: (213) 675 3067
Louisa Relia

• Percolation Testing & Septic system design:
Ensitu Engineering Inc.
7475 Carmelita Ave
Atascadero, CA 93422
Tel: (805) 772-0150
John N Yaroslasky, PE
Eml: jyaroslaski@ensitu.com

•Biologist:
Forde Biological Consultants
10664 Presilla Road
Santa Rosa Valley, CA 93012
P: (805) 402-3310
Andrew Forde, PE, QSD

•M.E.P. and TITLE 24:
TBD

•STRUCTURAL:
TBD

SYMBOL LEGEND

NORTH ARROW

INTERIOR ELEVATION FLAG

TYP. DOOR SCHEDULE SYMB.

TYP. WINDOW SCHEDULE SYMB.

ELEVATION DATUM

GRID LINE SYMB.

WOOD FRAME

CONCRETE

TRUE NORTH ARROW

BUILDING ELEVATION/ SECTION

WALL SECTION

TYP. ELEVATION VIEW DETAIL CALL OUT

TYP. CUT DETAIL CALL OUT

CMU

STONE

PROJECT DATA

•ADDRESS: **31870 SEA LEVEL DRIVE**, Malibu, CA 90265

•OWNER: Jon Nakano

•LEGAL DESCR.: See Survey

•A.P.N: 4470-027-010

•ZONING: SFM

•FIRE HAZARD SEVERITY ZONE: VHFHSZ

•SPRINKLERS : Required (Sprinklers per LACo. Fire Department's Requirement)

•OCCUPANCY GROUP: R3 / U1

•TYPE OF CONSTRUCTION: V-B

•NUMBER OF STORIES: 2 + Basement

•SCOPE OF WORK: Proposed New Two-Story, Single Family Residence w/attached Garage and Basement. Outdoor roof deck. New Driveway access and associated Retaining walls.
New OWTS. The proposed max flat roof height is 24ft and the max pitched roof is 24ft.
NEW LANDSCAPE, NEW EXTERIOR LIGHTING

•DISCRETIONARY REQUESTS:

-Site Plan review for increase of height for flat roof above 18ft not to exceed 24ft and for pitched roof not exceed 28ft.
-No Minor MOD
-Variance for construction within ESHA setback

•LOT INFO.:
Area:
Gross: **5,800** Sq.Ft. (0.75 Acres) Net: **5,800** Sq.Ft.

Width/Depth:
Depth: 87.22' Width: 66.27'

•MINIMUM SETBACKS: Required Proposed
Front : 17.44' 17.46'
(The front yard setback shall be at least 20 percent of the lot depth or 65 feet, whichever is less)
Side 10% : 6.27' 6.64'
Side 15% : 9.94' 9.95'
(The side yard setbacks shall be cumulatively at least 25 percent of the lot width; in no event, shall a single side yard setback be less than 10 percent of the lot width or five feet, whichever is greater)
Rear : 15.00' 41.45'
(The rear yard setback shall be at least 15 percent of the lot depth or 15 feet whichever is greater)

•MAX. AMOUNT OF SQUARE FOOTAGE

5,800 x .177 = 1,027 + 1,000= 2,027 SF

•AREA SUMMARY:

FIRST FLOOR: 720 SQ.FT. +
GARAGE: 486 SQ.FT. +
SECOND FLOOR: 794 SQ.FT. =

TOTAL: 2,000 SQ.FT. < 2,027 SQ.FT.

BASEMENT: 896 SQ.FT < 1,000 SQ.FT. (NOT COUNTED TOWARD TDSF)

•ALLOWABLE DEVELOPMENT AREA:

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
5,800 SF X 25% = 1,450 SF

1,449 SF < 1,450 SF (MAX)

•BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,206 SF
MAXIMUM ALLOWED OVER 18' = (1,206 x 0.67) = 804 SF
AREA OVER 18' = 794 SF < 804 SF

ADD'L PROJECT DATA

•BUILDING HEIGHT:
Allowed* max: 28' for pitched roof and 24' for Flat roof
Proposed max: 24' for pitched roof and 24' for Flat roof

NOTES:
Slope 3:1 or greater shall conform to Sections R403.1.7.1 through R403.1.7.4. (CRC 2016)
See Grading plans Sheet 2. and note on structural foundation plans.

•PARKING:
Required: Four (4) Parking Spaces of which min (2) enclosed
Proposed: Enclosed: Two (2) Unenclosed: Three (3)

•RETAINING WALLS HEIGHT:
Allowed max height: 6'
Proposed: in compliance with code

•FENCE, DRIVEWAY GATE:
Required: Max height 6' with 42" upper portion visually permeable.
Proposed: In compliance with code

•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE: 5,800 x 45% = 2,610 SF

•PROPOSED IMPERMEABLE COVERAGE:

BUILDING FOOTPRINT	1,268 SF
CONCRETE SLABS	471 SF
TOTAL	1,739 SF < 2,610 SF

APPLICABLE CODES

•2022 California Building Code (CBC) (Volume 1 & 2)
•2022 California Residential Code (CRC) and Title 24
•2022 California Electrical, Mechanical & Plumbing Code, (CMC), (CPC), (CEC)
•2022 CA Energy Code (2013 Building Energy Efficiency Standards), (CEnC) [§ R106.1.1 CRC]
•2022 CGBSC (California Green Building Code Standards)
•2023 County of LA Building, Mechanical, Electrical, Plumbing Code

VICINITY MAP



SHEET INDEX

COVER SHEET / PROJECT INFO		
	T-1	COVER SHEET / PROJECT INFO
	T-2	SURVEY
	T-3	CR-SITE PLANS AND TABLES
	T-4	COLOR CODED SLOPE ANALYSIS
Site Plans		
	A-0.1	SITE PLAN WITH COLOR CODED SLOPE
	A-0.2	SITE PLAN
	A-0.3	AREA DIAGRAMS
	A-0.4	2/3RD'S CALCULATIONS DIAGRAM
	A-0.5	FIRE DEPARTMENT PLAN
	F-1.1	BROADWAY IMPROVEMENT ACCESS PLAN
	A-0.6	STORY POLE PLAN
Plans		
	A-1.1	PROPOSED BASEMENT PLAN
	A-1.2	PROPOSED FIRST FLOOR PLAN
	A-1.3	PROPOSED SECOND FLOOR PLAN
	A-1.4	PROPOSED ROOF PLAN
Elevations		
	A-2.1	PROPOSED ELEVATIONS NORTH AND SOUTH
	A-2.2	PROPOSED ELEVATIONS EAST AND WEST
Sections		
	A-3.1	PROPOSED SECTIONS A AND B
	A-3.2	PROPOSED SECTIONS C AND D
	A-3.3	PROPOSED SECTIONS E, F AND G
Civil		
	G1 OF 3	PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN
	G2 OF 3	COSTAL DEVELOPMENT PERMIT GRADING AND DRAINAGE PLAN
	G3 OF 3	EROON CONTROL PLAN AND LOCAL SWPPP
Landscape		
	L0.00	COVER SHEET
	L1.00	HARDSCAPE & LIGHTING PLAN
	L2.00	IRRIGATION PLAN
	L2.01	IRRIGATION DETAILS
	L3.00	PLANTING PLAN
	L3.01	PLANTING DETAILS

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
ACCESS REQUIREMENTS ONLY
By _____
Fire Prevention Engineer
Date 07/01/2025

FEPC2024-1226

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
FIRE HYDRANT LOCATION ONLY
By _____
Fire Prevention Engineer
Date 07/01/2025

To schedule an inspection, please email Fire-FPCalabasas@fire.lacounty.gov
Provide at least one set of the approved plans to them prior to the inspection.

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.
WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION

BURDGE ARCHITECTS

24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

COVER SHEET / PROJECT INFO

DRAWING NO.
T-1

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	
DRAWN BY	D.W.B.,

FIRE DEPARTMENT NOTES

1. PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 20 FEET, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6 AND AN UNOBSTRUCTED VERTICAL CLEARANCE "CLEAR TO SKY" FIRE DEPARTMENT VEHICULAR ACCESS TO WITHIN 150 FEET OF ALL PORTIONS OF THE EXTERIOR BUILDING WALLS. FIRE CODE 503.2.1

2. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED FIRE DEPARTMENT TURNAROUND. FIRE CODE 503.2.5

3. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE PROVIDED WITH A 32 FOOT CENTERLINE TURNING RADIUS. FIRE CODE 503.2.4

4. THE GRADIENT OF FIRE DEPARTMENT VEHICLE ACCESS ROADS SHALL NOT EXCEED 15% UNLESS APPROVED BY THE FIRE CODE OFFICIAL. FIRE CODE 503.2.7

5. A MINIMUM 5 FOOT WIDE APPROVED FIREFIGHTER ACCESS WALKWAY LEADING FROM THE FIRE APPARATUS ACCESS ROAD TO THE BUILDINGS EXTERIOR OPENINGS SHALL BE PROVIDED FOR FIREFIGHTING AND RESCUE PURPOSES. FIRE CODE 504.1

6. GRADE BREAKS SHALL NOT EXCEED THE MAXIMUM ANGLE OF APPROACH OR DEPARTURE FOR FIRE DEPARTMENT APPARATUS.

7. THE INSPECTION, HYDROSTATIC TEST AND FLUSHING OF THE FIRE SPRINKLER PIPING SHALL BE WITNESSED BY AN AUTHORIZED FIRE DEPARTMENT REPRESENTATIVE. FIRE CODE 901.6

8. PROVIDE AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM AS SET FORTH BY BUILDING CODE 903. AND FIRE CODE 903. PLANS SHALL BE SUBMITTED TO THE SPRINKLER PLAN CHECK UNIT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

REASON : FIRE CODE 903.2.8 AND 903.2.11.7
LOCATION : MAIN HOUSE, GUEST HOUSE, AND DETACHED GARAGE
TYPE OF FIRE SPRINKLER SYSTEM : FIRE CODE 903.3.1.3 - NFPA 13D

9. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE HARDSCAPE ALL WEATHER ACCESS IN ACCORDANCE WITH THE DEPARTMENT'S ALL WEATHER ACCESS REQUIREMENTS. FIRE CODE 503.2.3

10. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. FIRE CODE 505.1

11. FIRE APPARATUS ACCESS ROADS SHALL BE IDENTIFIED WITH APPROVED SIGNS. TEMPORARY SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS. FIRE CODE 505.2

12. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. BUILDING CODE 1008.1.9

13. ALL ROOF COVERINGS SHALL BE CLASS "A" AS SPECIFIED IN BUILDING CODE 1505.1.1 (RESIDENTIAL CODE R327.5.2 & R902)

14. ROOF VALLEY FLASHINGS SHALL BE NOT LESS THAN 0.0019-INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36-INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF NO. 72 ASTM CAP SHEET MEETING RUNNING THE FULL LENGTH OF THE VALLEY. (RESIDENTIAL CODE R327.5.3 AND BUILDING CODE 705A.3)

15. ROOF GUTTERS SHALL BE PROVIDED WITH A MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER. (RESIDENTIAL CODE R327.534 AND BUILDING CODE 705A.4)

16. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

17. FIRE DEPARTMENT VEHICULAR ACCESS ROADS MUST BE INSTALLED AND MAINTAINED IN A SERVICEABLE MANNER PRIOR TO AND DURING THE TIME OF CONSTRUCTION. FIRE CODE 501.4

18. PROVIDE APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS NO PARKING - FIRE LANE. SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE BY 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS, TO CLEARLY INDICATE THE ENTRANCE TO SUCH ROAD, OR PROHIBIT THE OBSTRUCTION THEROF AND AT INTERVALS, AS REQUIRED BY THE FIRE INSPECTOR. FIRE CODE 503.3.

19. AN APPROVED KEY BOX, LISTED IN ACCORDANCE WITH UL 1037 SHALL BE PROVIDED AS REQUIRED BY FIRE CODE 506. THE LOCATION OF EACH KEY BOX SHALL BE DETERMINED BY THE FIRE INSPECTOR.

20. THE ELECTRIC SECURITY GATE SHALL PROVIDE AN APPROVED MEANS OF EMERGENCY OPERATION, AND SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES AND REPLACED OR REPAIRED WHEN DEFECTIVE. ELECTRIC GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F220. GATES SHALL BE OF THE SWINGING OR SLIDING TYPE. CONSTRUCTION OF GATES SHALL BE OF MATERIALS THAT ALLOW MANUAL OPERATION BY ONE PERSON. FIRE CODE 503.6.

21. ALL FIRE HYDRANTS SHALL MEASURE 6" X 4" X 2-1/2", BRASS OR BRONZE, CONFORMING TO AMERICAN WATER WORKS ASSOCIATION STANDARD C503, OR APPROVED EQUAL, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE COUNTY OF LOS ANGELES FIRE DEPARTMENT REGULATION 8.

22. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. RESIDENTIAL CODE R314.4

23. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. REQUIRED CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. RESIDENTIAL CODE R315.1.2, BUILDING CODE 420.4.1

24. VENTS SHALL RESIST THE INTRUSION OF FLAME AND EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS. VENT OPENINGS SHALL BE PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH A MINIMUM 1/16TH INCH OPENINGS AND SHALL NOT EXCEED 1/8TH INCH. VENTS SHALL NOT BE INSTALLED IN EAVES OR CORNICES. (RESIDENTIAL CODE R327.6.1 AND BUILDING CODE 706A.1)

25. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

FIRE FLOW AVAILABILITY

THE REQUIRED FIRE FLOW FOR FIRE HYDRANTS AT THIS LOCATION IS 1,250 GPM, AT 20 PSI RESIDUAL PRESSURE, FOR A DURATION OF 2 HOURS OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND. FIRE CODE 507.3 AND APPENDIX B105.1 APPENDIX B.

THE REQUIRED FIRE FLOW IS BASED ON THE FOLLOWING CALCULATION:

TYPE OF CONSTRUCTION PER THE BUILDING CODE:	TYPE VB
VHFHSZ	YES
SIZE OF LOT (ACRES)	0.14 AC
FIRE FLOW BASED ON THE FIRE-FLOW CALCULATION AREA	1,250 GPM
REDUCTION FOR FIRE SPRINKLERS (MAXIMUM 50%):	750 GPM
TOTAL FIRE FLOW REQUIRED:	1,250 GPM (MIN.)
HOUSE SQUARE FOOTAGE = 2,896 SF	FLOW DURATION HOUR = 1 HOUR

FIREFIGHTER WALKING ACCESS HOSE PULL DISTANCE

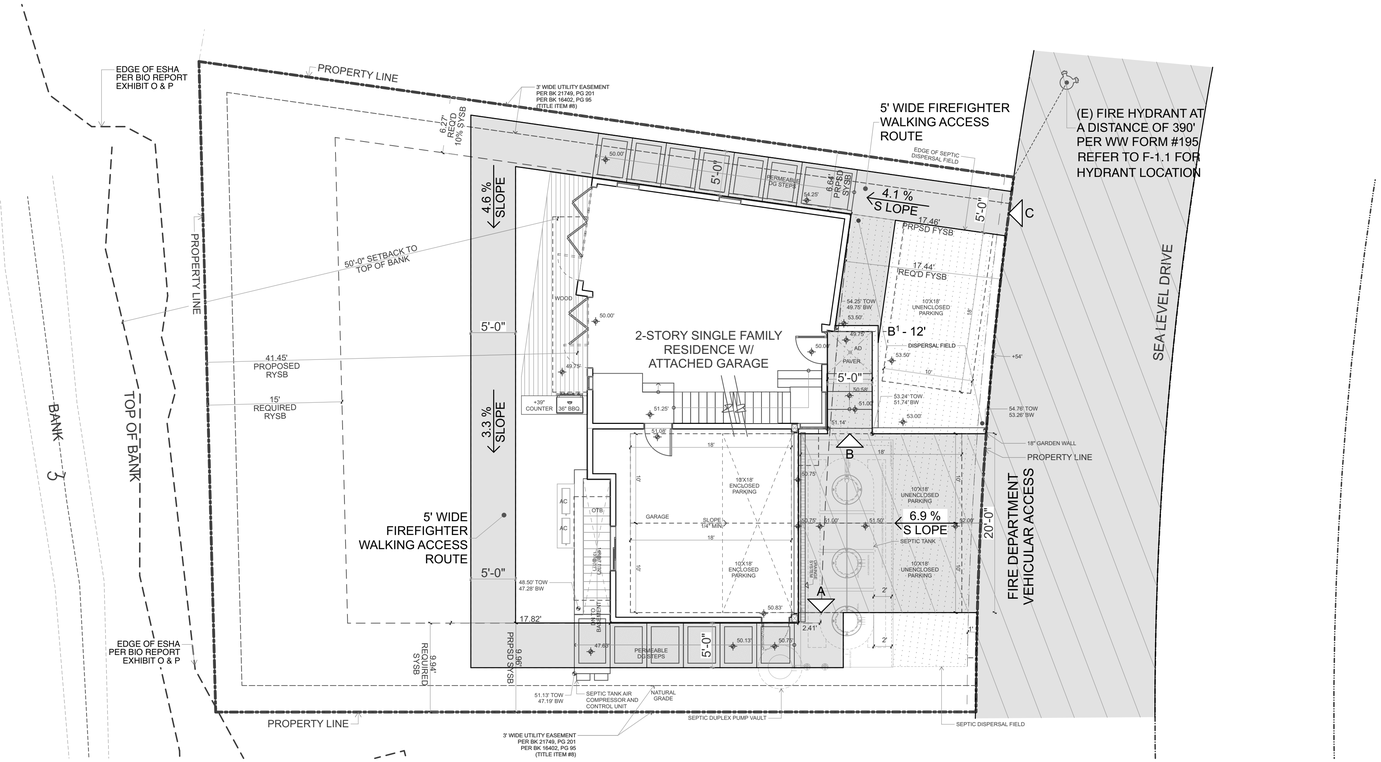
31870 SEA LEVEL
A-C = 142'
B-B¹ = 12'

FIRE DEPT. LEGEND

FIRE DEPT. VEHICULAR AND WALKING ACCESS

ROAD DETAIL

(N) 4" THK CONC O/ 4" THK CLASS 2 BASE MAT DRIVEWAY



SITE PLAN

SCALE: 1/8" = 1'-0"

1

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING

APPROVED

ACCESS REQUIREMENTS ONLY

By _____
Fire Prevention Engineer

Date 07/01/2025

FEPC2024-1226

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING

APPROVED

FIRE HYDRANT LOCATION ONLY

By _____
Fire Prevention Engineer

Date 07/01/2025

To schedule an inspection, please email Fire-FPCalabasas@fire.lacounty.gov
Provide at least one set of the approved plans to them prior to the inspection.

NAKANO RESIDENCE

31870 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/25
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

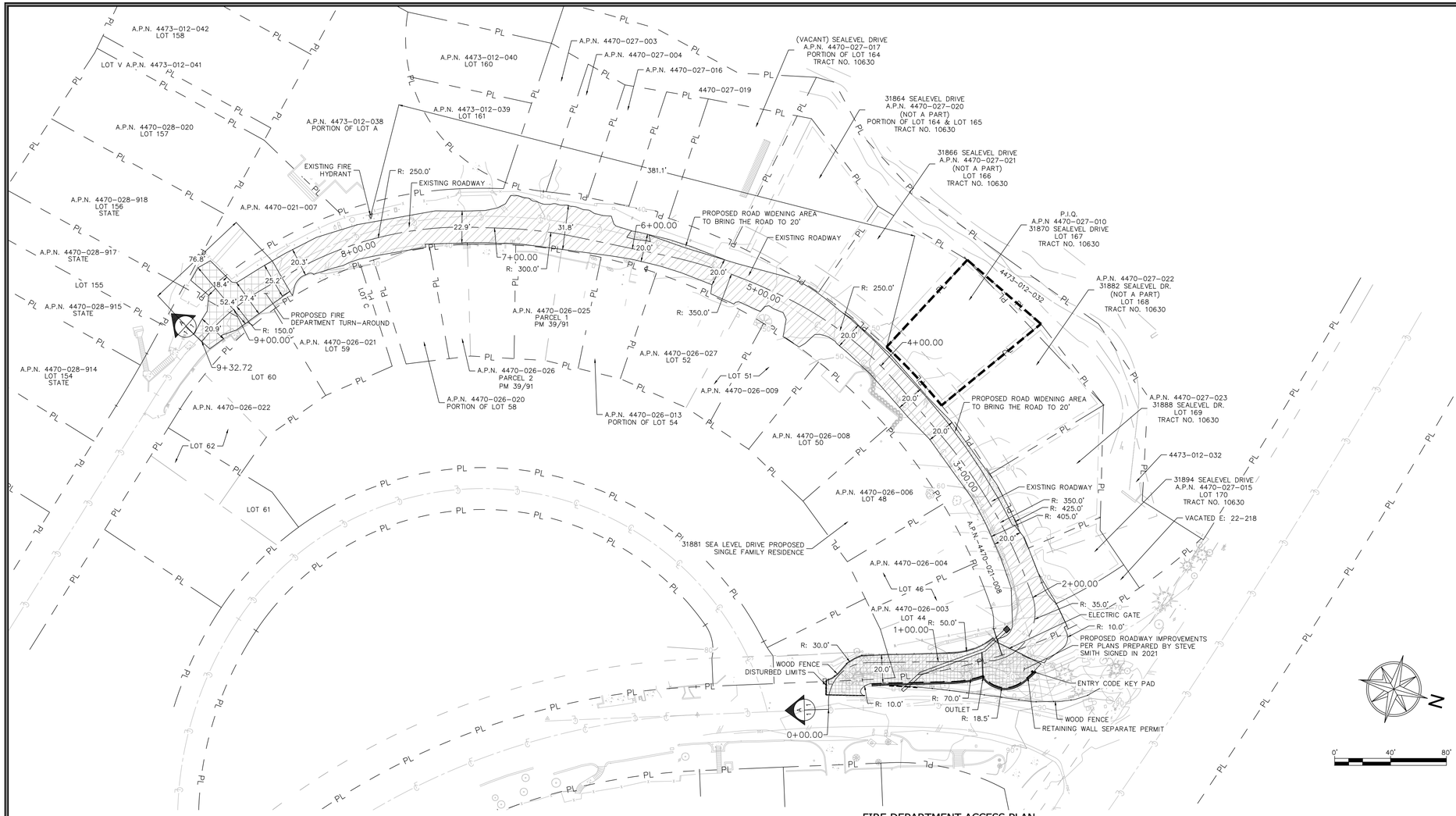
SHEET TITLE

FIRE DEPARTMENT PLAN

DRAWING NO.

A-0.5

PROJECT NO:	Project No. 1575-6
PROJECT	NAKANO RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.,



FIRE DEPARTMENT ACCESS PLAN

LINETYPE	DESCRIPTION
— — — PL —	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
— — —	PROPOSED MAJOR CONTOURS
— — —	PROPOSED MINOR CONTOURS
—℄—	ROAD CENTERLINE
— — —	EASEMENT LINE

PROPOSED ON GRADE ROAD WIDENING AREA TO BRING THE ROAD TO 20'

EXISTING FIRE DEPARTMENT ACCESS ROAD PER TYPICAL DRIVEWAY DETAIL HEREON

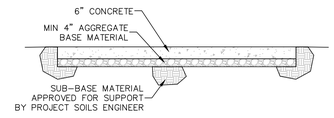
EXISTING FIRE DEPARTMENT TURN-AROUND

PROPOSED ROADWAY IMPROVEMENTS PER PLANS PREPARED BY STEVE SMITH SIGNED IN 2021

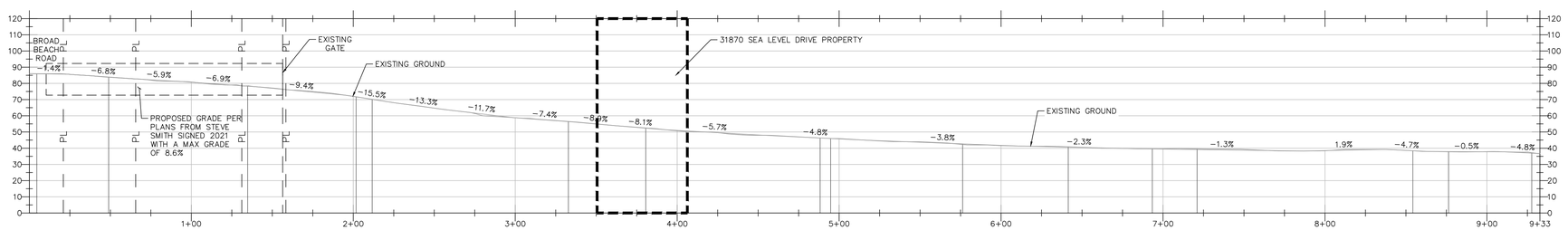
GENERAL NOTES:

THE DRIVEWAY SHALL BE FLUSH WITH EXISTING GRADES WITH NO CURBS.

THE DRIVEWAY MAY ALSO BE CONSTRUCTED OF MIN 4" ASPHALT CONCRETE OVER MIN 6" OF AGGREGATE BASE.



TYPICAL DRIVEWAY SECTION DETAIL (NTS)



CROSS SECTION A
DRIVEWAY PROFILE
(SCALE: 1" = 40')

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
ACCESS REQUIREMENTS ONLY
By _____
Fire Prevention Engineer
Date 07/01/2025

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
FIRE HYDRANT LOCATION ONLY
By _____
Fire Prevention Engineer
Date 07/01/2025

To schedule an inspection, please email Fire-FPCalabasas@fire.lacounty.gov
Provide at least one set of the approved plans to them prior to the inspection.

REVISIONS

REV	BY	DATE
1	HN	2025-02-28
ADDED ROADWAY IMPROVEMENTS TO PLAN		

AHSIRT ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

ROADWAY IMPROVEMENT ACCESS PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31870 SEA LEVEL DRIVE
MALIBU, CA 90265

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
Exp06/2023
CIVIL
STATE OF CALIFORNIA

JOB #	104-13
DATE	12/24
DRAWN BY	HN
CHECKED BY	TAC
SHEET NUMBER	F1.1

DRAWING NAME: D:\19\104 PROJECTS\SEA LEVEL DR\VC\01-CAD\02-DESIGN\ROADWAY IMPROVEMENT ACCESS PLAN - 31870.DWG
XREF NAME: 0-TOPO-104-13.DWG
SAVE DATE: 7/1/2025 5:13:07 PM
PLOT DATE: 7/1/2025 5:14 PM
PLOTTED BY: VICTOR



Plant Palette:

Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs				
Prunus ilicifolia	Hollyleaf Cherry	15g	13	col.
Cercis occidentalis	Western Redbud	36" Box	1	multi.

Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials				
Carex tumulicola	Foothill Sedge	1g	42	1'-0"
Muhlenbergia rigens	Deer Grass	1g	17	4-5"-0"
Salvia leucophylla	Purple Sage	5g	6	6'-0"
Groundcover				
Agrostis pallens	Native Bentgrass (GrassPave)		210 sf	

12182

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
COMMUNITY RISK REDUCTION BUREAU
FINAL
FUEL MODIFICATION PLAN
APPROVED
By Sean C Haynes Date
Digitally signed by Sean Haynes
DN: C=US, E=Sean.Haynes@fire.lacounty.gov, O=LACoFD, OU=Fuel Modification Unit, CN=Sean Haynes
Date: 2026.05.26 11:09:05 -07'00'
FUEL MODIFICATION UNIT
The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County/City or State law

3 BAREFOOT DESIGN

SUBMITTALS

REGISTERED LANDSCAPE ARCHITECT No.6808 STATE OF CALIFORNIA

PROJECT:
Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS
Planting Plan

DATE 3/27/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16

SHEET
L3.00
6 OF 9 SHEETS



COUNTY OF LOS ANGELES FIRE DEPARTMENT

FUEL MODIFICATION UNIT
605 NORTH ANGELENO AVENUE
AZUSA, CA 91702
(626) 969-5205
Email: forestryfuelmodification@fire.lacounty.gov
Website: https://fire.lacounty.gov/forestry-fuel-modification/

"Proud Protectors of Life, Property, and the Environment"

ANTHONY C. MARRONE
FIRE CHIEF FORESTER &
FIRE WARDEN

BOARD OF SUPERVISORS

HILDA L. SOLIS
FIRST DISTRICT

HOLLY J. MITCHELL
SECOND DISTRICT

LINDSEY P. HORVATH
THIRD DISTRICT

JANICE HAHN
FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

Fuel Modification Plan Notes

Ember Resistant Zone (Pending State Fire Marshal Approval)

- Extends 5 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. The areas beneath eaves, overhangs or parts of structures including attached decks and pergolas shall be included in the ember resistant zone.
- This area shall be free of materials or landscaping known to be receptive to flying embers.
- **Disclaimer:** Please be advised, plants approved within the first five feet of the structure today, may not be compliant when the occupancy inspection or future defensible space inspections take place. Once the State Fire Code PRC 4291 and/or the LA County Fire Code Section 325 are updated to reflect the requirements of AB3074, they will take precedent. Defensible space is a year-round requirement and structures in a fire hazard severity zone must comply with the most current defensible space fire codes.

Zone 1

- Extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Plant species selected for Zone 1 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.
- Vines and climbing plants are not allowed on any combustible structure requiring review.

Zone 2

- Extends from the outer edge of Zone 1 an additional 70 feet for a total of 100 feet from the structure.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone 1 but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained.
- Plant species selected for Zone 2 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees in Zone 2 may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel ladders. Tree selections are subject to denial upon review.

Zone 3

- Extends from the outer edge of Zone 2 an additional 100 feet for a total of 200 feet from the structure.
- Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2).

Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private road, driveways and turnarounds used by firefighting resources.
- Clear and remove flammable vegetation on each side of access roads (Fire Code 325.10).
- Fire access roads shall have an unobstructed vertical clearance a minimum width of 20' and vertically clear to the sky (Fire Code 503.2.1).
- Additional clearance beyond 10 feet may be required upon an on-site inspection.
- All proposed plantings, unless otherwise approved, shall be positioned so they do not obstruct access at maturity. Pruning will not be considered as an alternative to plant selection.

Maintenance

Routine maintenance shall be regularly performed in all zones. Above all else, regular maintenance is paramount to the fire resistance of a well-planned fire-resistant landscape. Critical items are outlined below. Additional information may be found on our website listed in the header of this document.

- Start with the structure. Remove leaf litter and other combustible debris from roofs, eaves, rain gutters etc.
- Ensure the ember resistant zone is maintained free of any material known to be receptive to flying embers.
- Remove any plant or portion of a plant that is dead or dying throughout all zones.
- Remove downed, accumulated plant litter and dead wood throughout all zones.
- Prune to reduce the overall amount and continuity of fuels. Eliminate horizontal and vertical fuel ladders throughout all zones.
- All invasive species and their parts should be removed from the site.
- Ensure irrigation systems are functioning properly.
- Compliance with the fire code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of fine fuels between the months of April and June depending on the geographic region each dwelling exists.
- Inspection for compliance with an approved fuel modification plan may occur at any time.
- All future planting shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation.

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

BAREFOOT DESIGN
1187 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805/687-7466
WEB www.barefoot-design.net

SUBMITTALS

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE BAREFOOT DESIGN AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE BAREFOOT DESIGN. WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BAREFOOT DESIGN PRIOR TO THE COMMENCEMENT OF ANY WORK.

REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HANSEN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Nakano Residence
31870 Sea Level Drive

SHEET CONTENTS: **Fuel Modification Plan**

DATE 12/2/24
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-16
SHEET **L4.01**
9 OF 9 SHEETS

LOS ANGELES COUNTY WATERWORKS DISTRICTS *

P. O. Box 1460
Alhambra, CA 91802
Telephone: (626) 300-3306

260 East Avenue K-8
Lancaster, CA 93535
Telephone: (661) 942-1157

23533 Civic Center Way
Malibu, CA 90265
Telephone: (310) 317-1389

TO:

☐ Los Angeles County
Department of Public Health
Environmental Health:
Drinking Water / Land Use Program
5050 Commerce Drive
Baldwin Park, CA 91706-1423

☐ Los Angeles County
Department of Public Works
Building & Safety Division

☐ Los Angeles County
Fire Department

☐ City of Lancaster
Building Department
44933 N. Fern Ave.
Lancaster, CA 93534

☒ City of Malibu
Building Department
23815 W. Stuart Ranch Rd.
Malibu, CA 90265

☐ City of Palmdale
Building Department
38300 N. Sierra Hwy.
Palmdale, CA 93550

RE: **31870 Sea Level Drive** (Address) **MALIBU** (City) **90265** (Zip Code)

APN # 4470-027-010

Los Angeles County Waterworks District No. 29

***Will serve* water to the above *single lot* property subject to the following conditions:**

☐	Annexation of the property into Los Angeles County Waterworks District is required. **Water service to this property will not be issued until the annexation is completed.**
☒	The appropriate fees must be paid to the District and other related water agencies.
☐	The appropriate service connection fees have been paid to Waterworks Districts for the existing service connection.
☐	The property has an existing water meter. Meter and service upgrade may be required to comply with WWD Rules and Regulations 1-H-16d.
☐	The appropriate connection fees have been paid to Waterworks Districts for the proposed service.
☐	Water system improvements will be required to be installed by the developer subject to the requirements set by the Fire Department and the District.
☒	Water meter serving the property must be installed in accordance with Waterworks' District standards.
☒	Public water system and sewage disposal system must be in compliance with Health Department separation requirements.
☒	A portion of the existing fronting water main may be required to be replaced or upgraded if the water service tap cannot be made or if damage occurs to the water main.
☒	Property may experience low water pressure and / or shortage in high demand periods.
☐	The District **CAN NOT** serve water to this property at this time.
☒	Must comply with and satisfy City of Malibu requirements in order to obtain Water Service.
☒	A USC approved backflow device is required for this property and is to be installed and maintained by the property owner and tested annually.
☒	This Will Serve Letter is for a 2,000 sq. ft. NSFR with 1,000 sq. ft. basement only. FEPC2024-1226.

By: _____ (Signature) | William Johnson (Print Name) | Senior Civil Engineer | (310) 317-0209 (Phone Number) | 8-29-2025 (Date)

**** THIS WILL SERVE LETTER WILL EXPIRE ONE YEAR AFTER THE DATE OF ISSUANCE.***

Biological Assessment

Jonathan Nakano
31870 Sea Level Drive (APN 4470-027-010)
Malibu, Los Angeles County, California

FORDE
BIOLOGICAL CONSULTANTS

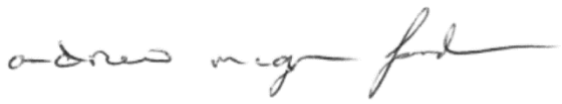
Date Prepared: 8/05/2025

Prepared By:

FORDE BIOLOGICAL CONSULTANTS
10664 Presilla Road
Santa Rosa Valley, CA 93012
Tel: (805) 302-7165
Email: info@fordebio.com

EXHIBIT 4

This report is a true and accurate statement regarding biological resources located on the property commonly known as 31870 Sea Level Drive (APN 4470-027-010), Malibu, Los Angeles County, California. This report complies with the requirements of Chapter 4 of the City of Malibu Local Coastal Program, Local Implementation Plan (2002).



8/05/2025

Signature *Date*

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REPORT PREPARATION 17

INTRODUCTION

Forde Biological Consultants (Forde) visited the property commonly known as 31870 Sea Level Drive (APN 4470-027-010), City of Malibu, Los Angeles County, California, to conduct a Biological Assessment. The property is in Central Malibu, west of Point Dume, approximately 1.5 miles east from the intersection of Highway 23 and Pacific Coast Highway and about 525 feet north of the Pacific Ocean. The location of the property is depicted in Exhibit A.

PROJECT DESCRIPTION

The proposed project includes construction of a 1,449 sq. ft. single-family residence (SFR), septic system, fire department walkway, and other associated infrastructure. The site plan is included as Exhibit B.

PURPOSE

The City of Malibu Local Coastal Plan (City of Malibu LCP) requires a Biological Assessment (BA) for new development proposed within 200 feet of Environmentally sensitive Habitat Areas (ESHA). Furthermore, the City of Malibu's staff determined that fuel-modification is development; therefore, staff also requires a BA for new development within 300 feet of stream or wetland ESHA. The City GIS ESHA and Marine Resources Overlay depicts ESHA ~313 feet southwest of the property and the National Wetlands Inventory (NWI) depicts a stream immediately adjacent the property; therefore, a BA is required for this site. The City GIS ESHA and Marine Resource Overlay is included as Exhibit C.

DESKTOP REVIEW

In addition to aerial photographs and topographic maps, the biologists reviewed the following resources before visiting the property –

1. The US. Fish and Wildlife Services (USFWS), NWI,[1]

2. The U.S. Department of Agriculture Soil Conservation Service's Web Soil Survey,

3. The California Department of Fish and Wildlife's (CDFW) Special Animals,[2] Fully Protected Animals,[3] State and Federally Endangered and Threatened Animals of California,[4] lists,

4. The CDFW Special Vascular Plants, Bryophytes, and Lichens,[5] and State and Federally Listed Endangered, Threatened, and Rare Plants of California,[6] lists,

5. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (IREP),[7]

1 http://www.fws.gov/wetlands/Data/Mapper.html
2 CAL. Fish & Wildlife, Special Animals, July 2024
3 CAL. Fish & Wildlife, Fully Protected Animals, May 2003
4 CAL. Fish & Wildlife, State & Federally Endangered & Threatened Animals of California, July 2024
5 CAL. Fish & Wildlife, Special Vascular Plants, Bryophytes, & Lichens, July 2024
6 CAL. Fish & Wildlife, State & Federally Listed Endangered, Threatened, & Rare Plants of California, July 2024
7 California Native Plant Society, Inventory of Rare and Endangered Plants, Accessed July 2024

6. The CDFW's California Natural Diversity Database (CNDDB) and the Biogeographic and Observation System (BIOS),[8] and

7. The USFWS Proposed and Candidate Species System.[9]

The CNPS IREP tracks the status of hundreds of plant species and includes information on the distribution, ecology, and conservation status of California's rare, threatened, and endangered plants and is widely accepted as the standard for information on the status of the flora of California. The CNPS recognizes more than 1600 plant taxa (species, subspecies, and varieties) as rare, threatened, or endangered in California, more than 500 additional species that have limited distribution, and approximately 55 additional species for which more information is needed. The CNDDB is part of a nationwide network overseen by NatureServe. The CNDDB includes locations and natural history information on special-status plants and animals and natural communities throughout California. The data help drive conservation decisions, aid in the environmental review of projects and land use changes, and provide baseline data helpful in recovering rare, threatened, and endangered species. The goal of the CNDDB is to provide the most current information available on the state's most imperiled elements of natural diversity and to provide tools to analyze these data. BIOS is the system used to visualize and interpret data.

The biologists conducted the CNDDB, BIOS, and IREP reviews by searching the U.S. Geological Service's 7.5-minute quadrangles of Calabasas, Canoga Park, Malibu Beach, Moorpark, Newbury Park, Oak Mountain, Point Dume, Santa Susana, Simi, Thousand Oaks, Topanga, and Triunfo Pass. These 12 quadrangles cover the entire Simi Hills and the Santa Monica Mountains and parts of the Santa Susana Mountains. The species on the CDFW lists referenced above are those of greatest conservation need and are commonly called special-status species. Special-status species include those protected by the State Endangered Species Act,[10] the Federal Endangered Species Act,[11] the California Fish and Game Code,[12] as well as all other species that appear on the lists. Because the CDFW considers the species on these lists to be those of greatest conservation need, the biologists include an analysis of all special-status species that are known to occur in the Santa Monica Mountains. Biologists also rely on these lists for current species designations.

SURVEY METHODOLOGY

Biologist and GIS technician Mira Falicki loaded the USFWS NWI, the CNPS IREP, and CNDDB BIOS data into ESRI's GIS Collector App for in-field use. Biologists, Mason Townley and Thomas O'Cooney conducted field surveys at the property on December 17, 2021, and March 24, 2022, respectively. Andrew Forde visited the property on August 6, 2024. Rebecca Clarke visited the property to perform a wetland delineation on July 8, 2025. The biologists conducted botanical surveys across the entire property per CNPS guidelines and compiled a plant inventory.[13] They also mapped plant communities and the locations of native trees, streams, and wetlands if present. The biologists conducted the wildlife

8 CAL. Fish & Wildlife, Wildlife & Habitat Data Analysis Branch, California Natural Diversity Database, Accessed April 2024

9 US Fish and Wildlife Service, Sacramento Fish & Wildlife Office, Proposed & Candidate Species, Threatened & Endangered Species System, Accessed April 2024

10 CAL. Fish & Game Code §§ 2050-2097

11 16 U.S.C. §§ 1531-1544

12 CAL. Fish & Game Code §§ 3511, 4700, 5050, & 5515

13 CNPS Botanical Survey Guidelines, California Native Plant Society, June 2, 2001

surveys by searching in and around trees and shrubs for wildlife, signs of wildlife, burrows, dens, cavities, and bird nests, looked under rocks, wood, and other surface debris, and used binoculars to identify wildlife on and adjacent the property. The biologists also mapped the locations of special-status species; if present, and any resources that could potentially be used by them, and compiled lists of species observed or otherwise detected. The survey area included the property and a 200-foot buffer.

PARKLANDS

The nearest parkland is Cold Creek Valley Preserve 544 feet southeast of the property. Robert H. Meyer Memorial State Beach is about 1000 feet west of the property. A map depicting the property's location in relation to parklands is included as Exhibit D.

WATERSHED

The United States is divided and sub-divided into successively smaller hydrologic units, which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrological units are arranged or nested within each other, from the largest geographic area (regions) to the smallest geographic area (cataloging units). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrological unit system. The property and survey area are within the Big Sycamore Canyon-Frontal Santa Monica Bay Watershed. A map depicting the property's location within the watershed is included as Exhibit E.

STREAMS & WETLANDS

The Code of Federal Regulations defines "waters of the U.S." as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.[14] The code defines wetlands as "areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The 1987 Wetland Delineation Manual provides technical guidance and procedures for identifying and delineating wetlands that may be subject to regulatory authority under Section 404 of the Clean Water Act.[15] In the arid west, the ACOE uses the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region." The supplement is designed for use with the 1987 manual and provides guidance and information specific to the Arid West Region.[16] Where differences occur, the supplement takes precedence. The manual and supplement recommend use of the "National List of Plant Species that Occur in Wetlands" for hydrophytic classification of plants and refer to the Natural Resources Conservation Service (NRCS) for hydric soil classifications.[17] The ACOE revised the plant list and renamed it the National Wetland Plant List in 2018.[18] The methodology in the manual and the supplement is a three-parameter test that defines wetlands by hydrophytic vegetation, hydric soils, and hydrology. In the Coastal Zone, the California Coastal Commission requires that only one parameter be met.

14 33 C.F.R. §§ 320 – 330

15 Environmental Lab., 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1

16 U.S. Army Corps of Engineers, 2008. Regional Supplement to Corp of Engineers Wetland Delineation Manual: Arid West Region. Vicksburg, MS

17 Reed, P. B. 1988. National List of Plant Species that Occur in Wetlands: 1988 National Summary, Biological Report 88(24), USFWS, Washington, DC

18 U.S. Army Corps of Engineers, 2020. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/, U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes under the authority of the California Fish and Game Code.[19] The CDFW has adopted the USFWS definition and classification system of wetlands. The USFWS defines wetlands as "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly non-drained hydric soil; and (3) the substrate is saturated with water or covered by shallow water at some time during the growing season of each year." The definition includes swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated salt flats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers, and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric. The Code of Regulations defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel with banks and supports fish and other aquatic life including watercourses with surface or sub surface flow that supports or has supported riparian vegetation."[20] This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW authority extends between the top of each bank and to the outer edge of contiguous riparian vegetation and sometimes floodplains. Bank is defined as the "slope or elevation that bounds the bed of the stream in a permanent or long-standing way, and that confines the stream water up to its highest level."[21] Riparian vegetation includes species listed on the "National Wetland Plant List" defined as OBL, FACW, or FAC.

The USFWS NWI depicts Encinal Canon Creek adjacent the property's west boundary. The NWI is based on the analysis of high-altitude imagery and states "a margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection may result in revision of the wetland boundaries or classification established through image analysis." The NWI is included as Exhibit F. Rebecca Clarke visited site on July 8th, 2025 to perform a wetland delineation and assess the location of the stream on site. She performed an ACOE three-parameter test and determined that the stream does not cross the parcel boundaries. The stream has well-defined banks, a well-defined bed, flowing water, and supports native riparian vegetation. The location of the stream, per site-specific study, is depicted in Exhibit G

PLANT COMMUNITIES

Plant communities are typically dependent on or affected by such factors as geographical location, elevation, soil/substrate types and chemistry, precipitation rates, and many other factors and often drastically through human disturbance and development. Using the alliance classification system outlined in the Manual of California Vegetation, Second Edition (MCV),[22] it was determined that two plant communities occur on the property and another 5 within the survey area.
Non-native Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) and Ruderal communities dominate the property and the vacant parcels to the north and south. Native plant communities, associated with Encinal Canyon Creek, occur immediately west, adjacent the property. These native plant communities include California Sycamore – Coast Live

19 CA. Fish & Game Code §§ 1600 – 1616
20 14 C.C. R. § 1.72
21 People v. Osborn, 116 Cal. App. 4th 764, 11 Cal. Rptr. 3d 14 (2004)
22 *Manual of California Vegetation, Second Edition (Sawyer et. al, 2009)*

Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance) and Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). A small patch of Laurel Sumac Scrub (*Malosma laurina* Shrubland Alliance) also occurs within the survey area. The rest of the survey area is developed. The extents of the native and non-native plant communities are depicted in Exhibit G. Photographs depicting the alliances and condition of the property are included as Exhibit H. The Plant Inventory is included as Exhibit I. The communities are described below.

Ruderal

This community does not conform to any alliances described in the MCV; rather, it refers to the often-herbaceous species that are first to colonize land disturbed by natural or human causes, or species adapted to negatively altered growing conditions, such as compacted soils. The property and the vacant parcels to the north and south, appear to have been cleared as far back as 1947 before the first housing tracts occurred along the coastal bluff area and is currently cleared for fuel modification purposes. Ruderal species dominate the eastern side of the parcel outside of the riparian corridor, and include native and non-native grasses and forbs, such as annual brome (*Bromus* sp.), red brome (*Bromus madritensis*), short pod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), carnation spurge (*Euphorbia terracina*), cliff aster (*Malacothrix saxatilis*), Bermuda buttercup (*Oxalis pescaprae*), and common stork's-bill (*Erodium cicutarium*). This community dominates the property and covers approximately 0.4 acres of land within the survey area. This alliance falls within existing fuel modification zones and is cleared on an annual basis.

Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance)

This alliance has eucalyptus (*Eucalyptus* spp.) as dominant in the tree layer which is sparse to open to continuous with sparse to intermittent shrub and herbaceous layers. Requires >80% relative cover in the tree layer. Introduced species planted as individuals or as windrows or groves. Found equally in upland and bottomland areas. Within the survey area, blue gum eucalyptus (*Eucalyptus globulus*), which may have been planted as a windrow or naturally recruited from plantings elsewhere. This alliance covers approximately 0.38 acres of land within the survey area. This alliance falls within existing fuel modification zones; its understory is cleared on an annual basis.

Mustard - Thistle (*Brassica nigra – Salsola tragus* Herbaceous Semi Natural Alliance)

This alliance is primarily dominated by carnation spurge in the herb layer which is nearly continuous; it forms a mosaic in places with other species trading in dominance, such as black mustard and Russian thistle. This alliance also falls within existing fuel modification zones and is cleared on an annual basis.

California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance)

This alliance is dominated/co-dominated by California sycamore and coast live oak (>30%) with an open to intermittent canopy and an herbaceous layer that is sparse or grassy. It occurs along the banks of Encinal Canyon Creek. Native and non-native component species include blue gum eucalyptus, poison oak (*Toxicodendron diversilobum*), mousehole tree (*myoporum laetum*), toyon (*Heteromeles arbutifolia*), arroyo willow (*Salix lasiolepis*), Mexican fan palm (*Washingtonia robusta*),

umbrella palm (*Cyperus involucratus*), ice plant (*Carpobrotus edulis*), and red brome. This community covers approximately 0.88 acres of land within the survey area.

Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance)

Sandbar willow (*Salix exigua*) dominant or co-dominant in the tall shrub/low tree canopy. Component species include elderberry (*Sambucas nigra*), poison oak, and California sycamore. In places, poison oak is dominant at total low cover. willows are less than 30 ft. high, and the canopy is open to continuous. The herbaceous layer is variable. This community covers approximately 0.04 acres of land within the survey area.

Laurel Sumac Scrub (*Malosma laurina* Shrubland Alliance)

Laurel sumac is dominant or co-dominant in the shrub canopy. Emergent trees or tall shrubs may be present at low cover and are less than 15 feet. The association is >50% absolute cover of laurel sumac or > 30% relative cover if co-dominant with California buckwheat or black sage in the shrub canopy. It often occurs on steep slopes with shallow, fine-textured soils. This community is limited within the survey area to a small dense patch adjacent an SFR north of the subject property and covers approximately 0.01 acres of land.

Developed/Ornamental

Parts of the survey area are developed and included SFR, landscaped areas, parking areas, and paved residential street. Man-made structures and landscaped areas provide habitat for a variety of wildlife, including nesting birds.

NATIVE TREE PROTECTION ORDINANCE

The Native Tree Protection Ordinance outlined in the City of Malibu LCP is designed to preserve and protect native trees including alder (*Alnus rhombifolia*), preserve oak (*Quercus* sp.), California bay (*Umbellularia californica*), southern California black walnut, California sycamore (*Platanus racemose*), and toyon. Trees protected by this ordinance must have at least one trunk with a diameter measuring 6 inches or more or a combination of two trunks with diameters totaling 8 inches or more as measured four and one ½ foot above natural grade. The biologist's observed California sycamore and coast live oak trees within the area dominated by California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) that meet the protected tree definition. There are no protected trees on the property. The nearest protected trees are on the property to the south. The two trees are depicted in Exhibit J.

COMMON WILDLIFE

The plant communities associated with Encinal Canyon Creek provides cover and foraging habitat for a variety of common wildlife species including hawks, owls and bats. The mature trees also provide opportunities for nesting birds and roosting bats. The plant communities on the property provide little cover and limited foraging habitat. Species observed or otherwise detected within the survey area included monarch (*Danaus plexippus*), California treefrog (*Pseudacris cadaverina* Great Basin fence lizard (*Sceloporus occidentalis longipes*), side-blotched lizard (*Uta stansburiana elegans*), black phoebe (*Sayornis nigricans*), California towhee (*Melozone crissalis*), acorn woodpecker (*Melanerpes formicivorus*), common raven (*Corvus corax*), Allen's hummingbird (*Selasphorus sasin*), song sparrow (*Melospiza melodia*), lesser goldfinch (*Spinus psaltria*), oak titmouse

(*Baeolophus inornatus*), Cassin's kingbird (*Tyrannus vociferans*), and California ground squirrel (*Otospermophilus beecheyi*), among others. Other common species are likely to occur, especially birds and bats during spring and fall migration. The Wildlife Inventory is included as Exhibit K.

SPECIAL-STATUS SPECIES

Special-status species include those protected by the State Endangered Species Act,[23] the Federal Endangered Species Act,[24] fully protected species, and others protected by the California Fish and Game Code.[25] The CNDDB BIOS and the CNPS IREP revealed that several special-status species are documented as occurring within 2 miles of the property including Santa Susana tarplant (*Deinandra minthornii*), Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*), Plummer's mariposa-lily (*Calochortus plummerae*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Busck's gallmoth (*Carolella busckana*), American bumblebee (*Bombus pensylvanicus*), Crotch's bumble bee (*Bombus crotchii*), monarch (*Danaus plexippus*) - California Overwintering Population 1, and southwestern pond turtle (*Actinemys pallida*). The monarch overwintering site is depicted as occurring at Encinal Canyon Creek, south of the property. According to the databases, there are no records of special-status species on the property. The BIOS map is included as Exhibit L. Exhibit M includes all the special-status species returned by the databases, a brief description of habitat associations and requirements, and statements regarding potential for occurrence based on known habitat associations and other factors.[26]

Special-Status Vascular Plants, Bryophytes, & Lichens

Key factors to consider when evaluating potential for special-status vascular plants, bryophytes, and lichens to occur are geographic location, elevation, vegetation, vegetation structure, and microhabitats. Another key factor is soil types and chemistry. The U.S. Department of Agriculture Soil Conservation Service produces soil maps and reports for most areas in the U.S. including the Santa Monica Mountains National Recreation Area. The Santa Monica Mountains National Recreation Area map depicts Pachic Argixerolls (coastal) and Lockwood-Urban land complex on the property. The typical profile of Pachic Argixerolls is described as gravelly loam (A - 0 to 9 inches), gravelly clay loam (Bt - 9 to 24 inches), overlying unweathered bedrock (Crt - 24 to 33 inches). Parent material is colluvium and/or residuum derived from shale. It is moderately well drained and has surface pH 6.5. Minor components include Gullied Land and Elder, and Coastal. This soil type is mostly associated with Encinal Canyon Creek and extends onto the property. The Lockwood series is described as gravelly loam (A – 0 to 4 inches), gravelly clay loam (Bt - 4 to 13 inches), and gravelly sandy clay loam (Btk - 13 to 82 inches). It is well drained, and the parent material is alluvium derived from shale. It has a surface pH 7.4. Urban Land is described as areas with structures, streets, parking lots, and associated landscaped areas. This soil type dominates the property. A soil map is included as Exhibit N.

Based on the geographic location, elevation, plant communities, soils, soil chemistry, and site-specific surveys, the biologists determined that the special-status vascular plants, bryophytes, and lichens returned by the databases and others considered in this assessment are not expected to occur on the property and only have low potential to occur elsewhere

23 CAL. Fish & Game Code §§ 2050-2097

24 U.S.C. §§ 1531-1544

25 CAL. Fish & Game Code §§ 3511, 4700, 5050, & 5515

26 Transient and vagrant species are not addressed. Transients are species that pass through a geographical area and vagrants are species that are recognized as being outside their normal range.

within the survey area. Santa Susana tarplant is not expected because there are no sandstone outcrops. The biologists determined that Sonoran maiden fern and mesa horkelia had potential to occur within the survey area during desktop review; however, they did not observe these species during surveys. Plummer's mariposa lily is not a CNPS list 1 or 2 species and not protected by the City of Malibu LCP, regardless, it's not expected to occur due lack of suitable substrates.

Special-Status Wildlife

Based on the geographic location, elevation, plant communities, soils, soil chemistry, and site-specific surveys, the biologists determined that the majority special-status wildlife species returned by the databases and others considered in this assessment are not expected to occur on the property or have low potential to occur elsewhere within the survey area. Busck's gallmoth and American bumblebee are also not protected by the City of Malibu LCP. These species are not expected to occur at the property but could occur within the survey area. Crotch's bumble bee is a federal candidate for listing. This species is not expected to occur on the property or within the survey area due to lack of food plants. During desktop review, the biologists determined that monarch had high potential to occur at the property due the overwintering site to the south. The biologists observed them flying near the property during the surveys. The monarch is a candidate for federal listing as endangered. They are diurnal insects in the order Lepidoptera which, like many other insects, undergo multiple life stages. Eggs are laid exclusively on milkweed (*Asclepias* spp.) which then provides food for the larvae. The final life stage consists of metamorphosis into butterflies. Mature monarchs disperse through a wide variety of habitats and produce multiple breeding generations throughout the spring and summer months. The last annual generation does not become sexually mature, however, until after they have finished migrating to overwintering grounds in Mexico or the Southern California coast (generally October through March) and begun returning north (excluding some resident populations).[27] Historically, conifers, such as Monterey pine, were preferred as overwintering habitat on the west coast (*Pinus radiata*), but introduced eucalyptus species are now mostly favored, particularly blue gum (*Eucalyptus globulus*). Microclimate elements are important for overwintering habitat selection, however, and not all scattered or individual trees of these species are used. Elements such as filtered light, wind speeds of less than four miles per hour (mph), and nearby freshwater sources appear to be important criteria for selection. There is some evidence that they will also switch tree species mid-season based on climatic conditions and may prefer mixed species groves.[28] It is unlikely that monarchs would use the Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) on the subject property as an overwintering site due the fact that the trees are in a row and are somewhat relatively exposed. Southwestern pond turtle is not known to occur in Encinal Canyon Creek. The creek where it occurs south of Pacific Coast Highway appears to lack ponds, that are necessary to survive when flows cease. The biologists determined that the species has low potential to occur within the survey area.

NESTING BIRDS

The Migratory Bird Treaty Act protects most migratory birds breeding in the US. The Act specifically states that it is illegal "...for anyone to take... any migratory bird... nests, or eggs." "Take" means to harass, harm, pursue, hunt, shoot, wound,

27 Jepsen, S.; Schweitzer, D.F.; Young, B.; Sears, N.; Ormes, M.; Black, S.H. 2015. Conservation status and ecology of the Monarch butterfly in the United States. Arlington, VA: NatureServe and Portland, OR: The Xerces Society for Invertebrate Conservation.

28 Griffiths J., Villablanca, F. 2015. Managing monarch butterfly overwintering groves: making room among the eucalyptus. California Fish and Game 101(1):40-50; 2015

kill, trap, capture, or collect, or attempt to engage in any such conduct.[29] The California Fish & Game Code protects the nest or eggs of all birds and specifically states, "that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird."[30] The Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill".[31]

The CDFW recognizes the breeding season in southern California as occurring between February and September; however, several species can nest outside of that timeframe.[32] For example, Anna's hummingbird nests mid-December to mid-August and mourning doves typically nest February to September but can nest year-round.[33] The plant communities that occur on and adjacent the property are suitable for nesting birds, especially passerines. The mature eucalyptus trees could also be potentially used by raptors. Adjacent structures can also be used by certain species

CONNECTIVITY - LINKAGES & CORRIDORS

The National Park Service, CDFW, and the Santa Monica Mountains Conservancy have expressed concerns about the adverse effects of urbanization on wildlife, particularly the fragmentation of habitat areas, which prevents the freedom of movement that species need. Preservation of linkages between large blocks of core habitat is of the utmost importance in the Santa Monica Mountains and preservation through linkages is a major concern. In general, a linkage is a feature that connects at least two blocks of habitat.[34] The assumed function of a linkage is to facilitate dispersal of individuals between blocks of habitat, allowing for long-term genetic interchange and for re-colonization of blocks of habitat from which populations have been locally extirpated.[35] There are two types of linkages, Landscape Linkages and Connectivity Choke Point Corridors. A Landscape Linkage may or may not be constricted, but it is essential to maintain the connectivity function of a particular region. A Connectivity Choke Point Corridor is a narrow, often short, and impacted corridor between blocks of habitat. This type of linkage typically requires that wildlife move through a choke point structure. Choke point structures include culverts, underpasses, overpasses, or tunnels that were not specifically designed for movement, but incidentally provide movement opportunities through otherwise impenetrable barriers.[36] The property is located south of Pacific Coast Highway with SFR's to the west and east. There are no corridors or choke point corridors that connect the property to larger blocks of habitat. The culvert under Pacific Coast Highway is not suitable for movement.

ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The City of Malibu LCP defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem." ESHA includes native habitats, which contribute to the viability of species protected by the State and Federal endangered species acts or those that are "fully protected" or recognized as "species of special concern" by the State. Any habitats with plant species on list 1B or list 2

29 U.S.C. §§ 703-712, Migratory Bird Treaty Act of 1918 as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989.

30 CAL. Fish & Game Code § 3503

31 CAL. Fish & Game Code § 86

32 CAL. Fish & Wildlife, Personal Communication, 2023

33 CAL. Fish & Game, Wildlife & Habitat Data Analysis Branch, California's Wildlife, Volume II: Birds, 1988 – 1990, Paul J. Baicich and J. O. Harrison. A Guide to the Nests, Eggs, and Nestlings of North American Birds, 1997.

34 Harris, L.D., & P. Gallagher, 1989. New Initiatives For Wildlife Conservation: The Need For Movement Corridors, In Preserving Communities and Corridors. Defenders of Wildl., Washington D.C (G. Mackintosh ed.)

35 Rosenberg, D. K., B. R. Noon, and E. C. Meslow, 1997. Biological Corridors: Form, Function, and Efficacy. Bioscience: November: 677

36 Forman, R.T., 2003. Road Ecology: Science and Solutions. Island Press: Washington, D.C.

of the California Native Plant Society's Inventory of Rare and Endangered Plants or habitats that are rare or valuable from a local, regional, or statewide basis including wetlands and streams are ESHA.[37]

The property and survey area falls entirely within the fuel modification zones of legally existing SFR. With exception of streams and wetlands, areas within the fuel modification zones of legally existing SFR do not meet the ESHA definition. Encinal Canyon Creek and the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) and Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance) that dominate it, meet the ESHA definition. The true extent of ESHA occurring within the survey area is depicted in Exhibit O.

IMPACT ANALYSIS

The proposed project includes construction of a 1,449 sq. ft. single-family residence (SFR), septic system, fire department walkway, other associated infrastructure, and fuel modification. Construction of the SFR is not expected to directly affect ESHA (including stream and wetlands,) special-status species, or protected trees. Construction could indirectly impact these resources, and it could directly affect nesting birds. Fuel modification for the proposed SFR falls within an area that is already encompassed within fuel modification zones of adjacent SFR; additional adverse impacts are not expected.

ESHA Impacts

A typical fuel-modification zone extending 200 feet from the proposed SFR will extend across 1.19 acres of ESHA. The ESHA consists of Encinal Canyon Creek, the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) and the Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). The ESHA is located within the fuel modification zones of existing SFR. The fuel-modification zone for the proposed SFR will not extend beyond existing fuel modification zones; therefore, additional adverse impacts are not expected. Exhibit P depicts the proposed fuel modification zone and existing fuel modification zones.

Stream Impacts

Construction of the SFR will not directly affect Encinal Canyon Creek, the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance), or the Arroyo Willow Thickets; however, it has potential to affect these resources through stormwater run-off and erosion during the construction phase. Without appropriate control measures in place, sediment, debris, and pollutants can be transported to the creek and have wide-ranging detrimental impacts. Recommendations are included below that will reduce this potential.

Protected Tree Impacts

There are two trees south of the subject property and others associated with Encinal Canyon Creek that meet the protected tree definition. Construction of the proposed SFR will not affect these trees or those associated with Encinal Canyon Creek. The fuel-modification zone for the proposed SFR will encompass these protected trees and those associated with the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance);

37 City of Malibu Local Coastal Plan, Local Implementation Plan, Chapter 4.1; City of Malibu Local Coastal Plan, Land Use Plan, Chapter 3.1

however, the trees are already located within the fuel modification zones of existing SFR. Exhibit P depicts the proposed fuel modification zone and existing fuel modification zones. Recommendations are included below to ensure their protection.

Special-Status Plant Species Impacts

The biologists determined that the special-status vascular plants, bryophytes, and lichens returned by the databases and others considered in this assessment are not expected to occur on the property and have low potential to occur elsewhere within the survey area at best. The proposed project is not expected to affect special-status plant species.

Special-Status Wildlife Species Impacts

The biologists determined that the majority of the special-status wildlife species returned by the databases and others considered in this assessment are not expected to occur on the property and have low potential to occur elsewhere within the survey area at best. The biologists observed monarchs flying near the property and determined that San Diegan tiger whiptail had moderate potential to occur during desktop review but did not observe any during the site visits. The Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) where it occurs downstream of the survey area is used by monarch as overwintering sites, but overwintering is unlikely at the edge of the grove that occurs on the subject property due linearity and exposure of the trees in that area. The fuel-modification zone for the proposed SFR will not extend beyond existing fuel modification zones; therefore, additional adverse impacts are not expected. The proposed project is not expected to affect special-status wildlife species.

Nesting Bird Impacts

The potential for birds to nest within the survey area throughout much of the year is high; however, take of bird nests can be avoided by scheduling the work activities to occur outside the CDFW-defined breeding season, preceded by a nest survey or surveys. Avoidance recommendations are provided below.

ALTERNATIVES

An alternatives analysis for any project should consider both impact avoidance/reduction, as well as the feasibility for beneficial use of the property. Economic viability, site geology, availability of infrastructure and utilities, jurisdictional boundaries, location of natural resources, consistency with general plans and local coastal plans are all factors that must be considered when addressing alternatives. Because the proposed project is located within an ESHA buffer, the development envelope is limited to 10,000 sq. ft. or 25% of the parcel size. A previous proposal development proposal exceeded the 25% and has now been redesigned. The proposed development is less than 25% of the size of the parcel. The site plans are included as Exhibit Q for comparison.

RECOMENDATIONS, AVOIDANCE STRATEGIES, & MITIGATION MEASURES

This section includes recommendations, avoidance strategies, and mitigation measures that if included as part of the proposed Project, will eliminate or reduce the potential for adverse impacts on the ESHA, Encinal Canyon Creek, protected trees, special-status species, and nesting birds.

1. Erosion Control and Best Management Practices Plan

a. A licensed professional shall prepare an Erosion Control and Best Management Practices Plan and be submitted to the City of Malibu certifying that the plan as in conformance with all necessary requirements. The plan should ensure that there are no direct or indirect impacts to Encinal Canyon Creek using appropriate devices, including but not limited to, silt fence, straw wattles, and/or sandbags. A long-term run-off and treatment plan should also be prepared and included as part of the project.

2. Fuel-Modification Plan

a. A Fire Department stamp-approved Fuel Modification Plan shall be submitted to the City of Malibu as part of the proposed project. The plan shall include, but not limited to, fire hydrants, in-house, roof top, eave sprinkler systems, and other fire suppression devices.

b. The Fire Department does not typically require fuel modification of riparian vegetation; however, a note on the plan shall exclude the California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) and the Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance).

c. If fuel modification within the California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) is required, it shall be limited to dead-wooding and pruning of eucalyptus trees and removal of non-native species.

3. Nesting Bird Survey & Protection Plan

a. Initial vegetation clearance shall be scheduled to occur outside the nesting season of birds as defined by the CDFW (February 15 through August 30), if feasible. Regardless of timing, a qualified biologist should conduct a nesting bird survey or surveys before any work activities are scheduled to occur.

b. If work activities are scheduled to occur outside of the nesting season, a biologist who is familiar with nesting ecology and chronology of southern California species should conduct a survey seven (7) days and again three (3) days before the activities are scheduled to begin. The biologist should survey a 300-ft radius around the work area to account for nesting raptors.

c. If work activities cannot be scheduled outside of nesting season, a series of general nesting surveys should also be conducted, which begin 31 days before any scheduled activities, then one week apart with the final survey being conducted two (2) days before work commencement.

d. If the biologist determines that there are active nests within or adjacent the work area, they should establish a clearly marked 100-ft. exclusion buffer for passerine nests and a 300-ft. buffer for raptor nests. Exclusion buffers may be reduced at the consulting biologist's discretion.

4. Stream & Tree Protection Plan

a. A fence shall be placed at the limits of the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance).

A sign shall be attached to the fence that states –

Environmentally Sensitive Habitat Area – Access Prohibited

b. A sign shall also be placed at the southern boundary of the property or 5 feet from the canopies of the trees, if permission is granted by the adjacent property owner.

The sign shall state -

Protected Trees – No Access or Storage Allowed within 5 feet of Oak Tree Canopies.

c. A biologist shall direct and monitor the installation of the fence and signs to ensure that it is done in an appropriate manner.

5. Pre-Construction Biological Survey

a. A pre-construction biological survey shall be conducted within 24 hours of scheduled work activities, including site preparation, vegetation removal, and grubbing.

6. Vegetation Removal, Grubbing, & Grading of Construction Site

a. Laborers shall use hand-held tools to remove vegetation from the construction site. This will provide wildlife a chance to escape and reduce the potential of direct mortality from heavy equipment.

b. A biologist shall monitor vegetation removal so that they can capture and relocate wildlife as necessary.

c. Initial grubbing and grading shall occur three (3) to seven (7) days after vegetation has been cleared from the construction site. The delay between vegetation clearance and grubbing and grading activities will allow wildlife a chance to escape and reduce the potential of them being crushed by heavy machinery.

d. A biologist shall monitor initial grading and grubbing so that they can capture and relocate wildlife as necessary.

7. Initial Fuel-Modification

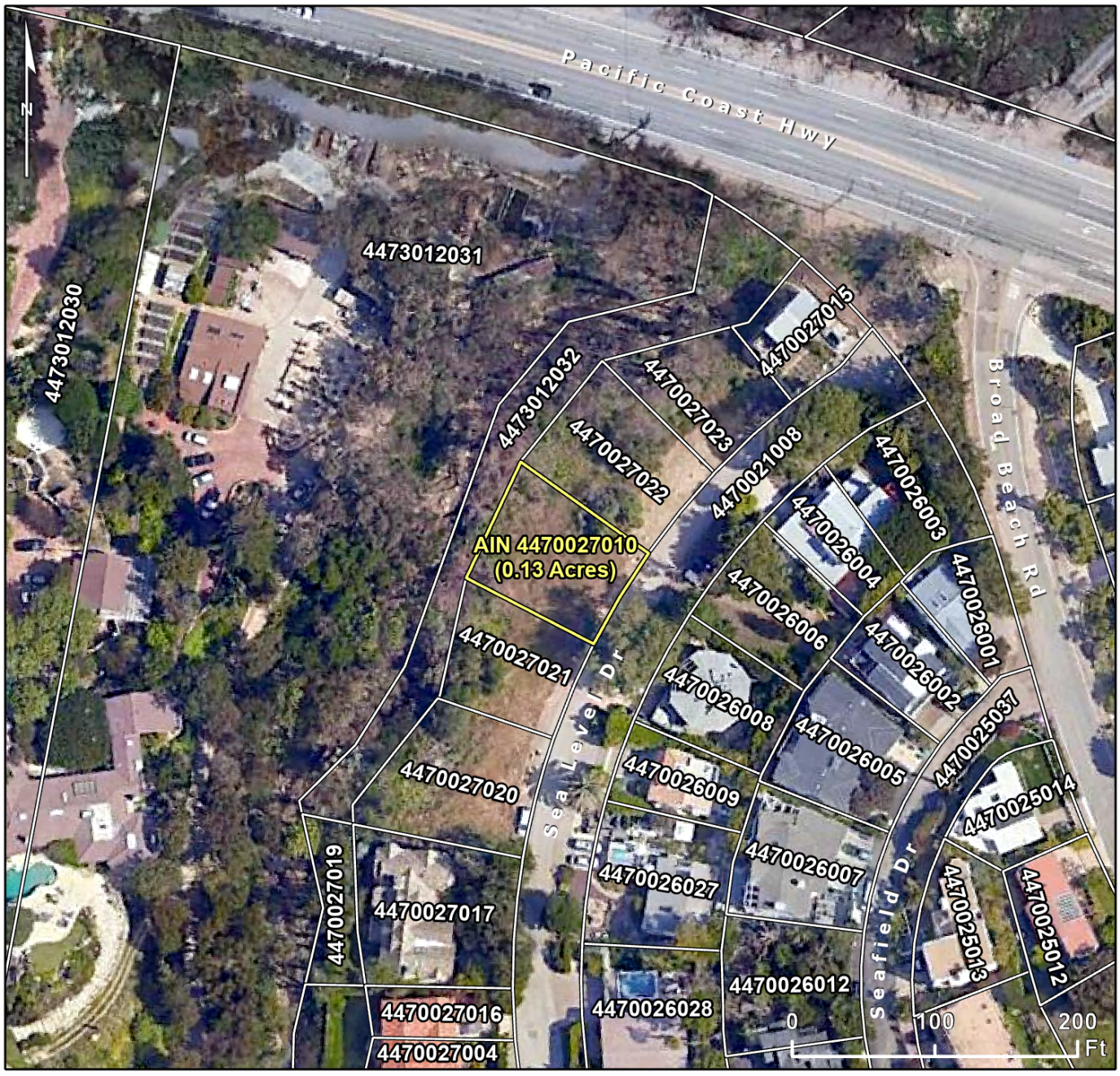
a. Initial fuel modification shall only be implemented after the construction phase of the project is completed or as directed by the Fire Department.

b. Initial fuel modification activities shall be conducted using hand-held tools and per the specifications of the Fire Department, to avoid injury/mortality of wildlife.

c. A biologist shall monitor initial fuel modification activities so that they can capture and relocate wildlife as necessary.

REPORT PREPARATION

This report was prepared by Andrew McGinn Forde and reviewed by Monica Moreno and Miranda Anocibar. Biologist and GIS technician Mira Falicki prepared all exhibits containing maps and any acreage calculations.

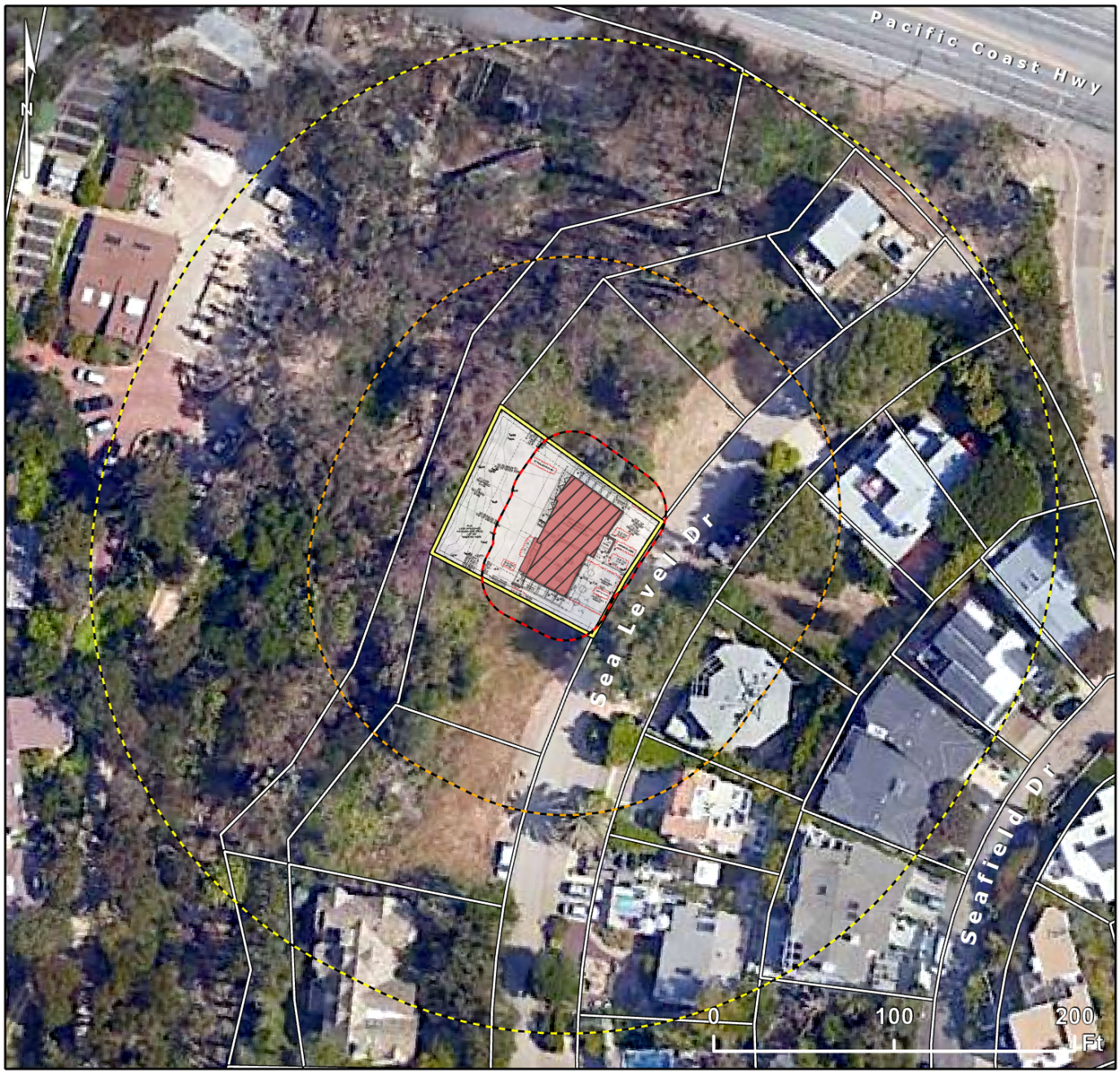


Project Parcel

LA County Parcels



Exhibit A - Project Location



Project Parcel

LA County Parcels

Proposed Development

Main Building

Total Development Area (1,449 sq. ft)

Proposed Fuel Modification Zones

Zone A (20')

Zone B (100')

Zone C (200')

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*Note that entirety of parcel falls within existing fuel modification zones.

Exhibit B - Site Plan



Project Parcel

LA County Parcels

ESHA

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Biological Consultants

Exhibit C - City GIS. ESHA, and Marine Resources Overlay



Project Parcel

Parklands

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Biological Consultants

Exhibit D - Parklands



Project Parcel

Watershed Boundary

Streams



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Exhibit E - Watersheds



The USFWS objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

Project Parcel

NWI Wetland Type

Estuarine and Marine Wetland

Freshwater Forested/Shrub Wetland

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Exhibit F - National Wetlands Inventory



Project Parcel

LA County Parcels

CDFW Jurisdictional Stream Top of Bank

Soil Test Point

Vegetation Communities

Arroyo willow thicket (0.04 acres)

Developed/Ornamental (1.82 acres)

Eucalyptus groves (0.38 acres)

Upland mustard fields (0.06 acres)

Laurel sumac scrub (0.01 acres)

California sycamore-Coast live oak riparian woodlands (0.88 acres)

Ruderal (0.40 acres)

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Exhibit G - Natural Resources



California sycamore-coast live oak riparian woodland



Arroyo willow thickets



Arroyo willow (F), woodland (B)



Ruderal (F), developed (B)



Ruderal (F), ornamental (B)



Drainage



Coast live oak



Protected coast live oak (off-site)

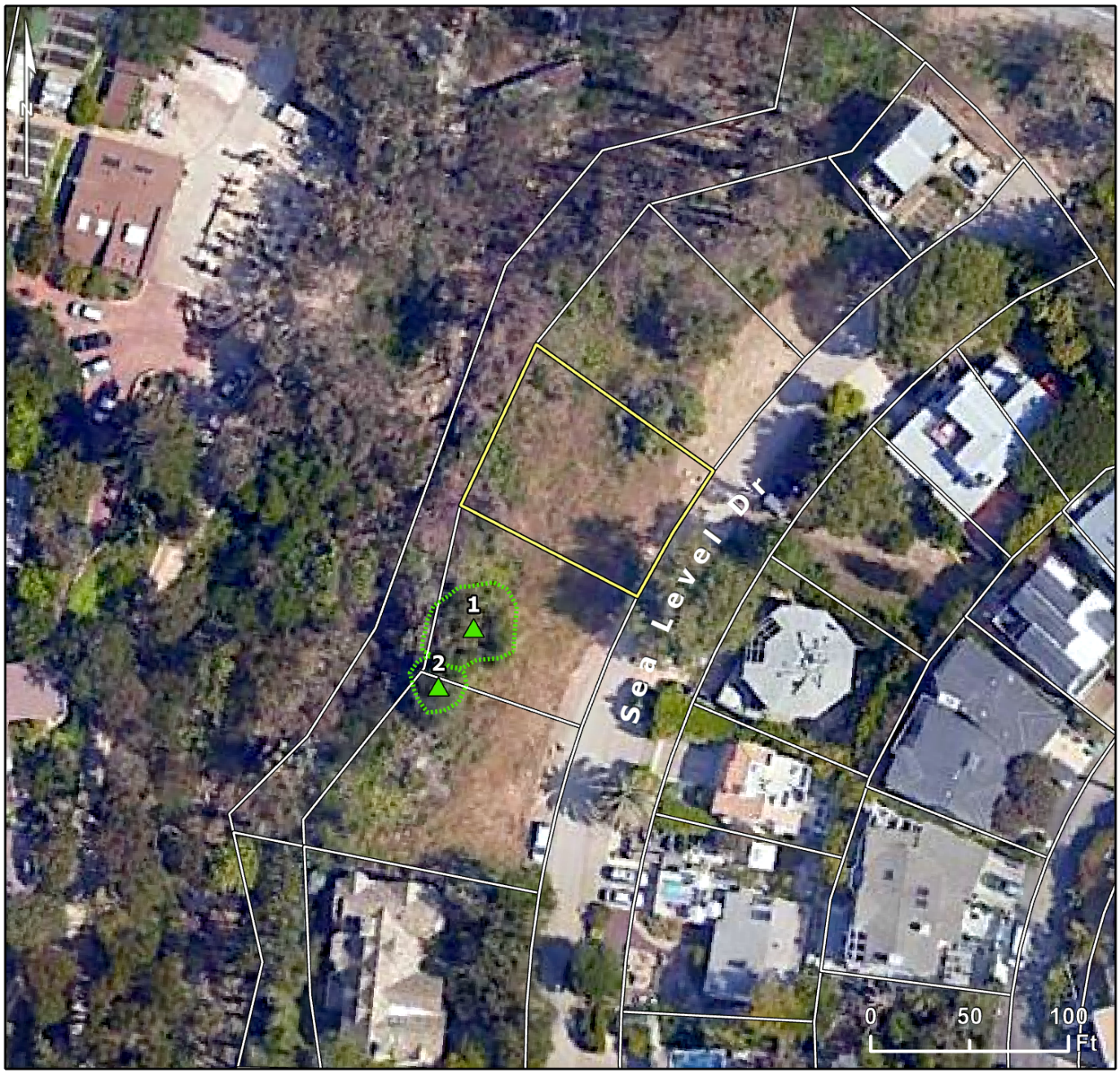
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Plant Inventory

Survey dates December 17, 2021 & March 24, 2022. Asterisk (*) indicates species not native to California

Latin Name	Common Name
Eudicots	**Flowering Plants**
Aizoaceae	**Fig-marigold family**
Drosanthemum floribundum (Haw.) Schwantes *	Ice plant
Amaranthaceae	**Amaranth family**
Amaranthus albus L. *	Tumbleweed
Anacardiaceae	**Sumac family**
Malosma laurina (Nutt.) Nutt. ex Abrams	Laurel sumac
Toxicodendron diversilobum (Torrey & A. Gray) E. Greene	Poison oak
Arecaceae	**Palm family**
Washingtonia robusta H. Wendl. *	Mexican fan palm
Asteraceae	**Sunflower family**
Malacothrix saxatilis (Nutt.) Torr. & A. Gray	Cliff aster
Venegasia carpesioides DC.	Canyon sunflower
Brassicaceae	**Mustard family**
Hirschfeldia incana (L.) Lagr.-Fossat *	Wild mustard, Shortpod mustard
Cyperaceae	**Sedge family**
Cyperus involucratus Rottb. *	Umbrella palm
Euphorbiaceae	**Spurge family**
Euphorbia terracina L. *	Geraldton carnation weed
Fagaceae	**Beech/Oak family**
Quercus agrifolia Née var. *agrifolia*	Coast live oak
Lamiaceae	**Sage family**
Salvia leucophylla Greene	San Luis purple sage
Myrtaceae	**Myrtle family**
Eucalyptus globulus Labill *	Blue gum eucalyptus
Oxalidaceae	**Wood sorrel family**
Oxalis pes-caprae L. *	Bermuda buttercup
Platanaceae	**Plane-tree family**
Platanus racemosa Nutt.	California sycamore
Rosaceae	**Rose family**

Heteromeles arbutifolia (Lindl.) M. Roem.	Toyon
Salicaceae	**Willow family**
Salix lasiolepis Benth.	Arroyo willow
Scrophulariaceae	**Figwort family**
Myoporum laetum G. Forst. *	Ngaio tree
Solanaceae	**Nightshade family**
Nicotiana glauca Graham *	Tree tobacco
Monocots	**Grasses And Allies**
Poaceae	**Grass family**
Bromus madritensis L. ssp. *rubens* (L.) Husn. *	Red brome
Elymus condensatus J. Presl	Giant wild rye



Project Parcel

LA County Parcels

Protected Trees

Protected Tree Canopy

Tree Number	Species	Trunk(s) (Single/Multiple)	Cumulative DBH (in.)	Protected (Yes/No)	Status
1	Coast live oak	Multiple	58	Yes	Healthy
2	Coast live oak	Multiple	21	Yes	Heathy

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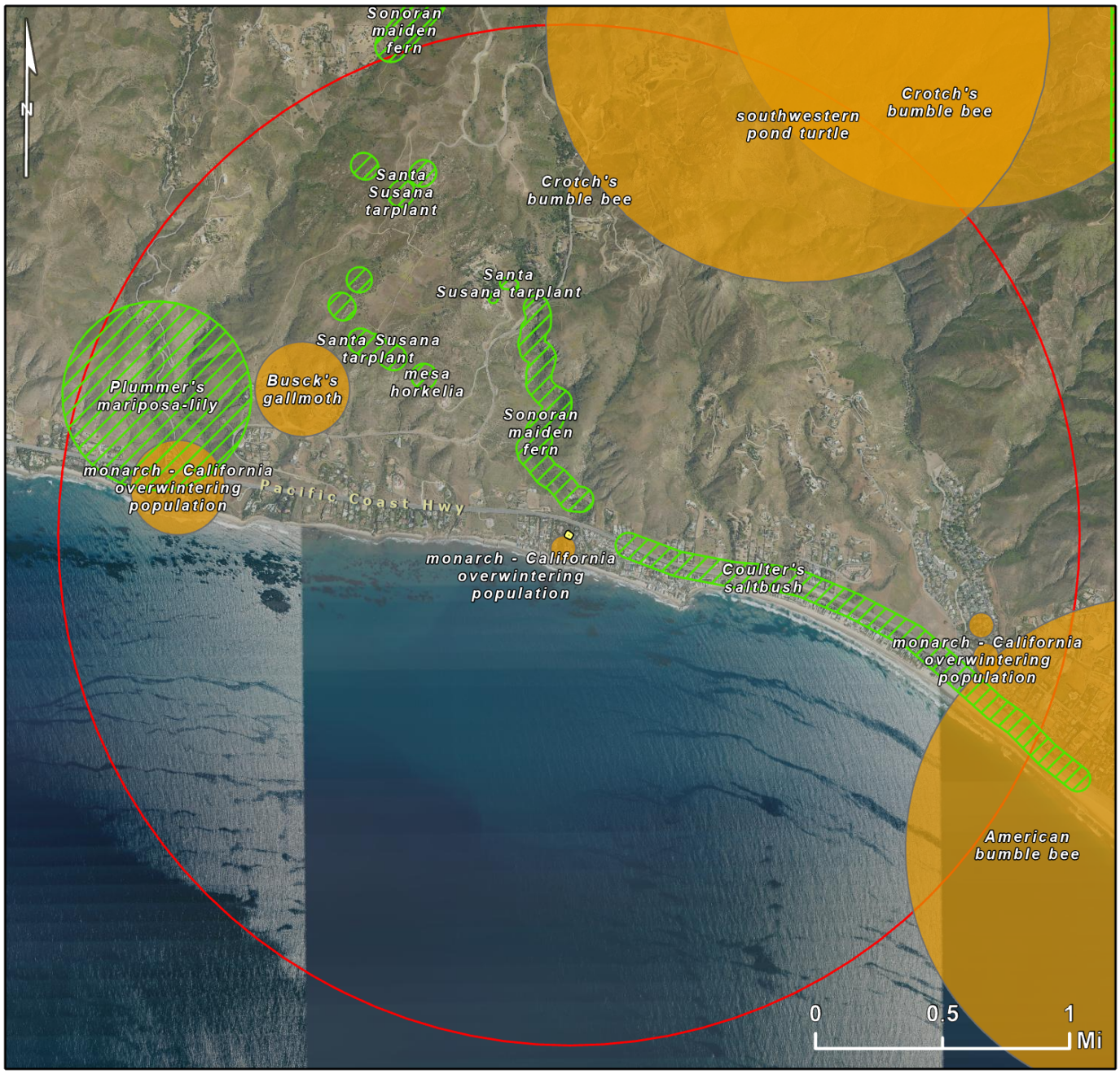
Exhibit J - Tree Map

Wildlife Inventory

INVERTEBRATES		
Mymphalidae	Monarch	*Danaus plexippus*
	Painted lady	*Vanessa cardui*
Vespidae	Yellow jacket	*Vespula sp.*
REPTILES		
Phrynosomatidae	*Uta stansburiana elegans*	Western side-blotched lizard
	Sceloporus occidentalis longipes	Great Basin fence lizard
AMPHIBIANS		
Hylidae	*Pseudacris cadaverina*	California treefrog
BIRDS		
Laridae	*Larus californicus**	California gull*
Accipitridae	*Buteo jamaicensis**	Red-tailed hawk*
	*Buteo lineatus**	Red-shouldered hawk*
Columbidae	*Zenaida macroura*	Mourning dove
Trochilidae	*Calypte anna*	Anna's hummingbird
	Selasphorus sasin	Allen's hummingbird
Tyrannidae	*Sayornis nigricans*	Black phoebe
	Tyrannus vociferans	Cassin's kingbird
Corvidae	*Aphelocoma californica*	California scrub-jay
	Corvus brachyrinchous	American crow
	Corus corax	Common raven
Hirundinidae	*Tachycineta bicolor*	Tree swallow
Picidae	*Melanerpes formicivorus*	Acorn woodpecker
Paridae	*Baeolophus inornatus*	Oak titmouse
Aegithalidae	*Psaltriparus minimus*	Bushtit
Troglodytidae	*Thryomanes bewickii*	Bewick's wren
	Troglodytes aedon	House wren
Turidae	*Sialia mexicana*	Western bluebird
Mimidae	*Mimus polyglottos*	Northern mockingbird
Sturnidae	*Sturnus vulgaris***	European starling**
Parulidae	*Setophaga coronata*	Yellow-rumped warbler
Emberizidae	*Melozone crissalis*	California towhee
	Zonotrichia leucophrys	White-crowned sparrow
	Junco hyemalis	Dark-eyed junco
	Melospiza melodia	Song sparrow
Icteridae	*Icterus bullockii*	Bullock's oriole
Fringillidae	*Carpodacus mexicanus*	House finch
	Spinus psaltria	Lesser goldfinch

Passeridae	*Passer domesticus***	House sparrow**
MAMMALS		
Geomyidae	*Thomomys bottae*****	Valley pocket gopher*****
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel

* = Flyovers (species observed flying over property or within the immediate vicinity)
** = Non-Native Species
*** = Scat Detections
**** = Mound, hole, burrow, den, stick house, (as appropriate to species)



Project Parcel

California Natural Diversity Database

Fauna

Flora

Search Radius (2 Miles)

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SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Astragalus brauntonii Parish Braunton's milk-vetch	FE January 1997	--	1B.1 G2/S2	4 m - 640 m Perennial Herb January - August	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED It occurs in closed-cone coniferous forest, chaparral, coastal sage, valley and foothill grasslands, and recent burn or disturbed areas usually in association with sandstone with carbonate layers or down-wash sites (into which the seeds have drifted). Carbonate outcrops are extremely rare within its current range, and as a result, are naturally rare. The property and survey area appear to lack suitable habitat elements.
Astragalus pycnostachyus Gray var. *lanosissimus* (Rydb.) Munz & McBurn. Ventura marsh milk-vetch	FE May 2001	SE April 2000	1B.1 G2T12/S1	1 m - 35 m Perennial Herb June - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Rediscovered near Oxnard in 1997 and known from only one natural occurrence composed of 30-50 reproductive plants. It occurs in coastal dunes and edges of salt or brackish marshes and swamps. The property and survey area appear to lack suitable habitat elements.
Astragalus tener Gray var. *titi* (Eastw.) Barneby Coastal dunes milk-vetch	FE August 1998	SE February 1982	1B.1 G2T1/S1	1 m - 50 m Annual Herb March - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal bluff scrub with sandy soils, coastal dune, and mesic coastal prairie habitats. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Atriplex coulteri (Moq.) D. Dietr. Coulter's saltbush	--	--	1B.2 G2/S2	3 m - 460 m Perennial Herb March-October	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with coastal dune, coastal scrub, coastal bluff scrub, and valley and foothill grasslands with alkaline or clay soils. The property and survey area appear to lack suitable habitat elements.
Atriplex parishii Wats. Parish's brittlescale	--	--	1B.1 G1G2/S1	25 m - 1900 m Annual Herb June - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in chenopod scrub, playas, and vernal pool habitats on alkaline soils. The property and survey area appear to lack suitable habitat elements.
Atriplex serenana A. Nels. var. *davidsonii* (Standl.) Munz Davidson's saltscale	--	--	1B.2 G5T1/S1	10 m - 200 m Annual Herb April - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal bluff and coastal scrub on alkaline soils. The property and survey area appear to lack suitable habitat elements.
Atriplex pacifica A. Nels. South coast saltscale	--	--	1B.2 G4/S2	0 m - 140 m Annual Herb March - October	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal bluff scrub, coastal dunes, costal scrub, and playas. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Baccharis malibuensis Beauchamp & Henrickson Malibu baccharis	--	--	1B.1 G1/S1	150 m - 305 m Perennial Shrub (Deciduous) August	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with coastal scrub, chaparral, cismontane woodland, and riparian woodland on Conejo Volcanic exposures.[1] The property and survey area appear to lack suitable habitat elements.
California macrophylla (Hook.&Arn.) Aldas, Navarro, Vargas, Saez & Aedo Round-leaved filaree	--	--	1B.1 G2/S2	10 m - 1220 m Annual Herb March - May	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is associated with clay soils in cismontane woodland and grassland. Grass cover is generally low. The property and survey area appear to lack suitable habitat elements.
Calochortus clavatus S. Watson var. *gracilis* Ownbey Slender mariposa lily	--	--	1B.2 G4T2T3/S2S3	320 m - 1000 m Perennial Herb (Bulbiferous) March - June	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs in shaded canyons and grassy slopes in chaparral and oak woodlands habitats, often associated with serpentine soils. The property and survey area appear to lack suitable habitat elements.

[1] Conejo Volcanics occur in western Simi Valley from Big Mountain south through Mountclef Ridge in Santa Rosa Valley, the Conejo Hills, and the western Santa Monica Mountains to the ocean and west through the Malibu Creek watershed and upper Topanga Creek watershed. Skeletal limestone occurs as interbeds and neptunian dikes within the sequence of submarine andesitic / basaltic flows and hyalobreccias of the Conejo Volcanics. The Calabasas Formation, which overlies it, is made up of alternating layers of clayey to silty sandstone and silty shale with some areas having layers of breccia and lenses of chert in the shale.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Centromadia parryi (Greene) Greene ssp. *australis* (Keck) B.G. Baldwin Southern tarplant	--	--	1B.1 G3T2/S2	0 m - 425 m Annual Herb May - November	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs along margins of salt marsh and swamps, vernal pools, and vernally mesic valley and foothill grasslands. The property and survey area appear to lack suitable habitat elements.
Chaenactis glabriuscula DC var. *orcuttiana* (Greene) H.M. Hall Orcutt's pincushion	--	--	1B.1 G5T1/S1	< 100 m Annual Herb January - August	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs on coastal dunes and in sandy coastal bluff scrub. The property and survey area appear to lack suitable habitat elements. There are no coastal dune or coastal bluff scrub habitats.
Chloropyron maritimum (Benth.) A. Heller ssp. *maritimum* Salt marsh bird's-beak	FE September 1978	SE July 1979	1B.2 G4?T1/S1	0 m - 30 m Annual Herb (Hemiparasitic) May - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal dunes, salt marshes, and swamps. The property and survey area appear to lack suitable habitat elements. There are no coastal dunes, salt marshes, or swamps.
Chorizanthe parryi Wats. var. *fernandina* (Wats.) Jeps. San Fernando Valley spineflower	FC May 2004	SE August 2001	1B.1 G2T1/S3	150 m - 1035 m Annual Herb April - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Occurs in open coastal scrub and grassland on sandy soil. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Chorizanthe parryi S. Watson var. *parryi* Parry's spineflower	--	--	1B.1 G3T3/S3	Wide Elevation Range Annual Herb May - June	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs on dry slopes and flats in sandy soil, typically in coastal scrub, chaparral, grassland, and oak woodland or in edges between these habitats. The property and survey area appear to lack suitable habitat elements.
Deinandra minthornii (Jeps.) B.G. Baldwin Santa Susana tarplant	--	SR November 1978	1B.2 G2/S2	280 m - 760 m Shrub (Deciduous) July - October	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs in chaparral and coastal scrub habitats in association with sandstone outcroppings and rocky areas. The property and survey area appear to lack suitable habitat elements.
Didymodon norrisii Norris' beard moss	--	--	2.2 G2G3/S2/S3	600 m - 1973 m Bryophyte	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPEXTED Occurs in seasonally wet sheet drainages within cismontane woodland and lower montane coniferous forest. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Delphinium parryi Gray ssp. *blochmaniae* (Greene) Lewis & Epl. Dune larkspur	--	--	1B.2 G4T2/S2	0 m - 200 m Perennial Herb April - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with maritime chaparral and coastal dune habitats. The property and survey area appear to lack suitable habitat elements. Maritime chaparral and coastal dune habitats are lacking
Dithyrea maritima A. Davids. Beach spectaclepod	--	ST February 1990	1B.1 G2/S1	3 m - 50 m Perennial Herb (Rhizomatous) March - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal dune and coastal scrub habitats with sandy soils. The property and survey area appear to lack suitable habitat elements.
Dudleya blochmaniae (Eastw.) Moran ssp. *blochmaniae* Blochman's dudleya	--	--	1B.1 G2T2/S2	5 m - 450 m Perennial Herb April - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It mostly occurs in coastal bluff scrub, coastal scrub, and grasslands on open, rocky slopes in shallow clays derived from ultramafic rocks, over serpentine. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Dudleya cymosa (Lemaire) Britton & Rose ssp. *agourensis* K. Nakai Agoura Hills dudleya	FT January 1997	--	1B.2 G5T1/S2	200 m - 500 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is restricted to a band of late Pleistocene dissected gravels at road level, east of Kanan Rd, which climbs in elevation west to ~405 meters near Reyes Adobe Rd in an area dominated by chaparral and cismontane woodland habitat. The property and survey area appear to lack suitable habitat elements.
Dudleya cymosa (Lem.) Britt. & Rose ssp. *marcescens* Moran Marcescent dudleya	FT January 1997	SR November 1978	1B.2 G5T2/S2	150 m - 520 m Perennial Herb April - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with chaparral on lower reaches of sheer volcanic rock surfaces and canyon walls adjacent perennial streams dominated by live oak woodland, often with California Bay. In most locations, topographic relief has prevented deep soil formation; therefore, this dudleya may be the only flowering plant occurring in microhabitat otherwise dominated by mosses, lichens, and ferns The property and survey area appear to lack suitable habitat elements. There are no sheer volcanic surfaces.
Dudleya cymosa (Lem.) Britt. & Rose ssp. *ovatifolia* (Britt.) Moran Santa Monica Mountains dudleya	FT January 1997	--	1B.2 G5T1/S1	150 m - 1675 m Perennial Herb March - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs on shaded slopes and canyon bottoms on volcanic and sedimentary conglomerate rock on exposed north-facing slopes from near Westlake Village to Agoura Hills and deep canyon bottoms along lower Malibu Creek and Topanga Creek. The property and survey area appear to lack suitable habitat elements. There are no volcanic or sedimentary conglomerates exposures.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Dudleya multicaulis (Rose) Moran Many-stemmed dudleya	--	--	1B.2 G2/S2	15 m - 790 m Perennial Herb April - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with clay soils in chaparral, coastal scrub, and valley and foothill grassland habitats. The property and survey area appear to lack suitable habitat elements.
Dudleya parva Rose & Davids. Conejo dudleya	FT January 1997	--	1B.2 G2/S2	60 m - 450 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Found in coastal scrub and valley and foothill grassland habitats, most commonly in cactus-dominated coastal sage scrub in association with rocky, gravelly, clay, and volcanic substrates derived from the Conejo volcanics and has a limited, discontinuous distribution from the western Simi Hills, along the Mountclef Ridge north to the Conejo Grade, about 10 miles. It has not been found south of Highway 101. The property and survey area appear to lack suitable habitat elements.
Dudleya verityi K. Nakai Verity's dudleya	FT January 1997	--	1B.1 G1/S1	60 m - 120 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on exposures of Conejo Volcanics in chaparral, cismontane woodland, and coastal scrub. Its known distribution is confined to Conejo Mountain. The property and survey area appear to lack suitable habitat elements.

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	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Horkelia cuneata Lindl. var. *puberula* (Rydb.) Ertter & Reveal Mesa horkelia	--	--	1B.1 G4T1/S1	70 m - 810 m Perennial Herb February - September	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Found in maritime chaparral, cismontane woodland, and coastal scrub habitats with sandy or gravelly soils. The property and survey area appear to lack suitable habitat elements.
Isocoma menziesii (H. & A.) G. Nesom var. *decumbens* (Greene) G. Nesom Decumbent goldenbush	--	--	1B.2 G3G5T2T3/S2	10 m - 135 m Shrub April - November	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is associated with openings in chaparral and coastal scrub with sandy soils and in disturbed areas. The property and survey area appear to lack suitable habitat elements.
Lasthenia glabrata Lindl. ssp. *coulteri* (Gray) Ornduff Coulter's goldfields	--	--	1B.1 G4T2/S2	1 m - 1220 m Annual Herb February - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal salt marshes and swamps, playas, grasslands, and vernal pools, usually on alkaline soils. The property and survey area appear to lack suitable habitat elements.
Lupinus paynei Payne's bush lupine	--	--	1B.1 G1Q/S1	185 m - 855 m Perennial Shrub March – April (May – July)	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with sandy soils in coastal scrub, riparian scrub, and valley and foothill grasslands. The property and survey area appear to lack suitable habitat elements.

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	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Monardella hypoleuca A. Gray ssp. *hypoleuca* White-veined monardella	--	--	1B.3 G4T2T3/S2S3	50 m - 1525 m Herb April - December	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species typically occurs in chaparral and cismontane woodland in rich soil of shady canyon bottoms of the southern Santa Monica Mountains often growing with *Lonicera subspicata*, *Baccharis plummerae*, and *Artemisia douglasiana*. It also occurs on sandy soils on slopes and bluffs on the southern facing slopes of the Las Posas Hills in Santa Rosa Valley. A population in fact occurs on property owned by Forde Biological Consultants. There are no shady canyon bottoms or sandy slopes or bluffs.
Monardella sinuata Elvin & A.C. Sanders ssp. *sinuata* Southern curly-leaved monardella	--	--	1B.2 G3T2/S2	< 300 m Annual Herb April - September	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs on sandy soil in chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub. The property and survey area appear to lack suitable habitat elements.
Nama stenocarpum Gray Mud nama	--	--	2B.2 G4G5/S1S2	5 m - 500 m Annual/Perennial Herb January - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in muddy margins of freshwater marshes, swamps, lakes, and rivers. The property and survey area appear to lack suitable habitat elements.

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	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Navarretia ojaiensis Elvin, J.M. Porter & L.M. Johnson Ojai navarretia	--	--	1B.1 G1/S1	275 m - 620 m Annual Herb May - July	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is associated with openings in chaparral and coastal scrub, and in valley and foothill grassland habitats. The property and survey area appear to lack suitable habitat elements.
Nolina cismontana Dice Chaparral nolina	--	--	1B.2 G2/S2	140 m - 1275 m Perennial Shrub (Evergreen) March - July	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is found in coastal sage scrub and chaparral habitats on sandstone and gabbro substrates. The property and survey area appear to lack suitable habitat elements.
Orcuttia californica Vasey California Orcutt grass	FE August 1993	SE September 1979	1B.1 G1/S1	15 m - 660 m Annual Herb April - August	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in vernal pools. The property and survey area appear to lack suitable habitat elements. There are vernal pools.
Pentachaeta lyonii Gray Lyon's pentachaeta	FE January 1997	SE January 1990	1B.1 G2/S2	30 m - 630 m Annual Herb March - August	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs mostly in pocket grassland in chaparral, coastal sage scrub, road/trail edges and sites transitional to shrublands with rocky and clay soils of volcanic origin. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Quercus dumosa Nutt. Nuttall's scrub oak	--	--	1B.1 G3/S3	15 m - 400 m Shrub February - August	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on sandy soil and clay loam in closed-cone coniferous forest, chaparral, and coastal scrub. The property and survey area appear to lack suitable habitat elements.
Senecio aphanactis Greene Chaparral ragwort	--	--	2B.2 G3?/S2	15 m - 800 m Annual Herb January - April	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on drying alkaline flats within woodland, chaparral, and coastal scrub habitats. The property and survey area appear to lack suitable habitat elements.
Sidalcea neomexicana Gray Salt spring checkerbloom	--	--	2B.2 G4?/S2S3	15 m -1530 m Perennial Herb March - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is associated with mesic chaparral, coastal scrub, low montane coniferous forest, Mojavean desert scrub, and playas on alkaline substrates. The property and survey area appear to lack suitable habitat elements.
Spermolepis lateriflora G.L. Nesom Western bristly scaleseed	--	--	2A G5/SH	0 m - 5 m Annual Herb March - April	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in Sonoran Desert scrub in rocky or sandy soils. Presumed extirpated in California. CNDDB and CNPS records are historical occurrences.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Suaeda esteroa Ferren & Whitmore Estuary seablite	--	--	1B.2 G3/S2	0 m - 5 m Perennial Herb May - January	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs in coastal salt marshes and swamps. The property and survey area appear to lack suitable habitat elements.
Thelypteris puberula (Baker) C. Morton var. *sonorensis* A.R. Smith Sonoran maiden fern	--	--	2B.2 G5T3/S2	50 m - 610 m Perennial Herb (Rhizomatous) N/A	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY - LOW This species is associated with meadows, seeps, and streams. The property lacks suitable habitat elements. Encinal Canyon Creek is suitable but not observed by the biologists.
Tortula californica Bartr. California screw moss	--	--	1B.2 G2?/S2	10 m - 1460 m Moss N/A	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW This species is associated with sandy soil in chenopod scrub and grassland. The property and survey area appear to lack suitable habitat elements.

STATUS KEY:

Federal	State	CNPS California Rare Plant Rank
FE - Federally Endangered	SE - State Endangered	
FT - Federally Threatened	ST - State Threatened	
FC - Federal Candidate	SR - State Rare	Rank 1A - Plants Presumed Extinct in California
	SC - State Candidate	Rank 1B - Plants Rare, Threatened, or Endangered in California and Elsewhere
		Rank 2 - Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
		Rank 3 - Plants About Which We Need More Information - A Review List
		Rank 4 - Plants of Limited Distribution - A Watch List

.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Potential for Occurrence is based on professional experience, what is known about habitat associations and requirements of the species and known occurrences in the region. Sources of information consisted of the California Natural Diversity Database and California Native Plant Society Inventory of Rare and Endangered Plants.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present, and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present, and species is known to occur frequently in the region
Moderate Potential = Suitable habitat is limited, and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out)
Not Expected = Suitable habitat and substrate absent and/or area of interest is located outside known geographical and elevation ranges.

Global Rank (G Rank) reflects the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct, or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure - Common; widespread and abundant.
G? = Inexact Numeric Rank
GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
SX = Presumed Extirpated
SH = Possibly Extirpated

S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [1]
	Federal Status	**State Status**	**CDFW (Season/Region Global Rank/State Rank**	
INVERTEBRATES				
Streptocephalus woottoni Riverside fairy shrimp	FE August 1993	--	-- G1G2/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is only found in deep, cool lowland vernal pools that retain water through the warmer weather of late spring and in ditches and road ruts. The property and survey area lack suitable habitat elements. There are no vernal pools.
Danaus plexippus **Monarch** **(Overwintering Population)**	**FC** **December 2020**	**--**	**--** **G5/S3**	**BASED ON DESKTOP REVIEW – HIGH** **BASED ON SITE-SPECIFIC STUDY – OBSERVED** **Critical features of winter sites are conifer and eucalyptus groves.** **The property lacks suitable habitat elements. The survey area has suitable habitat elements.**
Bombus crotchii Crotch bumble bee	--	SC (Endangered) June 2019	-- G3G4/S1S2	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW Open grassland and scrub habitats. Food plants include Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia. The property and survey area lack suitable habitat elements, food plants are lacking.

[1] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

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	Federal Status	**State Status**	**CDFW (Season/Region) Global Rank/State Rank**	
FISH				
Oncorhynchus mykiss irideus Southern steelhead	FE August 1997	--	SSC G5T1Q/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Young hatch and typically remain in fresh water for 1 - 3 years then swim to the ocean, staying 1 - 2 years before returning to their native streams. The species is not known to occur in Encinal Canyon Creek.
Gila orcutti Arroyo chub	--	--	SSC G2/S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers, and Malibu and San Juan creeks and introduced to other rivers and creeks. The species is not known to occur in Encinal Canyon Creek.
Eucyclogobius newberryi Tidewater goby	FE February 1994	--	SSC G3/S2S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in cool brackish water of lagoons; favoring salinities less than 10 ppt. Favorable habitat includes shallow open water with emergent vegetation. The species is not known to occur in Encinal Canyon Creek.

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REPTILES				
Actinemys pallida Southwestern pond turtle	--	--	SSC G3G4/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with permanent or nearly permanent water bodies. May be active year-round. Most often seen basking above the water line. The species is not known to occur in Encinal Canyon Creek.
Phrynosoma blainvillii Coast horned lizard	--	--	SSC G3G4/S3S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW The species occurs throughout the foothills and coastal plains from Los Angeles area to northern Baja California. It frequents areas with open vegetation such as chaparral or coastal sage scrub. The property and survey area lack suitable habitat elements. The biologists did not observe this species at the site, but the species is very cryptic.
Aspidoscelis tigris stejnegeri San Diegan tiger whiptail	--	--	SSC G5T5/S3	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY - LOW Occurs in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chaparral, desert scrub, desert wash, alkali scrub, and annual grassland. The property and survey area consists of marginally suitable habitat elements.

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	Federal Status	**State Status**	**CDFW (Season/Region) Global Rank/State Rank**	
Anniella stebbensi Southern California legless lizard	--	--	SSC G3/S3	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in sparsely vegetated areas of dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks in loose soil and leaf litter. Lives mostly underground. Most active during the morning and evening. The property and survey area lack suitable habitat elements. The biologists did not observe the species at the property or within the survey area, but it lives mostly underground or under leaf litter and other surface objects.
Arizona elegans occidentalis California glossy snake	--	--	SSC G5T2/S2	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Inhabits arid scrub, rocky washes, grasslands, chaparral. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing. The property and survey area lack suitable habitat elements.
Salvadora hexalepis virgultea Coast patch-nosed snake	--	--	SSC G5T4/S2S3	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in semi-arid brush and chapparal in canyons, rocky hillsides, and plains. The property and survey area lack suitable habitat elements.

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Thamnophis hammondii Two-striped garter snake	--	--	SSC G4/S3S4	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY – LOW Found in streams & pools often in rocky areas in oak woodland, chaparral, brushland, and coniferous forest. The property lacks suitable habitat elements. The survey area consists of marginally suitable habitat elements.
Thamnophis sirtalis ssp. South coast garter snake	--	--	SSC (From Ventura to San Diego) G5T1T2/S1S2	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW Associated with permanent or semi-permanent bodies of water. The property lacks suitable habitat elements. The survey area consists of marginally suitable habitat elements.

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	Federal Status	**State Status**	**CDFW (Season/Region) Global Rank/State Rank**	
AMPHIBIANS				
Anaxyrus californicus Arroyo toad	FE August 1995	--	SSC G2G3/S2S3 --	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in washes, arroyos and riparian areas with willows, sycamores, oaks, and cottonwoods along exposed sandy substrates. Tadpoles sift fine sediments for food and are extremely dependent on this specialized habitat. The species is not known to occur in Encinal Canyon Creek.
Rana aurora draytonii California red-legged frog	FT May 1996	--	SSC G2G3/S2S3 --	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in many habitats, including aquatic, riparian, and upland habitats. They prefer slow moving or deep standing ponds, pools, and streams. They are active all year but will in dry years estivate in moist refuges until the late fall rains. The species is not known to occur in Encinal Canyon Creek.
Taricha torosa torosa Coast Range newt	--	--	SSC (Monterey County to South) G4/S4 --	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW It occurs in wet valley-foothill hardwood, hardwood-conifer, mixed conifer, oak woodlands, coastal scrub, chaparral, and annual grasslands. They summer in moist habitats under woody debris, or in rock crevices and animal burrows. Adults migrate in large numbers from terrestrial locations to ponds, reservoirs, and sluggish pools in streams to breed. The species is not known to occur in Encinal Canyon Creek.

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	Federal Status	**State Status**	**CDFW (Season/Region) Global Rank/State Rank**	
Spea hammondii Western spadefoot	--	--	SSC G3/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in grasslands, chaparral, and pine-oak woodlands preferring open areas with sandy or gravelly soils. Species require vernal or pools of intermittent streams for breeding. They are typically active October to May. Breeding occurs August - May about 1 - 2 days after heavy rains. The species is not known to occur in Encinal Canyon Creek.

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	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
BIRDS				
Elanus leucurus White-tailed kite	--	--	FP (Nesting) G5/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Inhabits grassland, pastures and other herbaceous habitat mostly in cismontane California. For breeding, requires dense clumps of trees or tall shrubs, surrounded by grassland and other open habitats. The property and survey area lack suitable habitat elements.
Aquila chrysaetos Golden eagle	--	--	FP/WL (Nesting) G5/S3	POTENTIAL NEST SITES ABSENT – MAY FORAGE OVER SITE Rolling foothills, mountain areas, sage-juniper flats, and desert habitats with secluded cliffs and overhanging ledges and large trees used for cover. The property and survey area lack suitable habitat elements.
Haliaeetus leucocephalus Bald eagle	Delisted August 2007 FT (Rev.) August 1995 FE March 1967	SE (Rev.) October 1980 SE June 1971	FP (Nesting & Wintering) G5/S2	NOT EXPECTED Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. About half of the wintering population is in the Klamath Basin. More common at lower elevations; not found in the high Sierra Nevada. Fairly common as a local winter migrant at a few favored inland waters in southern California. Largest numbers occur at Big Bear Lake, Cachuma Lake, Lake Mathews, Nacimiento Reservoir, San Antonio Reservoir, and along the Colorado River. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Circus cyaneus Northern harrier	--	--	SSC (Nesting) G5/S3	NOT EXPECTED Frequents meadows, grasslands, open rangelands, desert sinks, and both fresh and saltwater wetlands. More widespread in winter, foraging in sparse scrub and agricultural areas including fallow fields. The property and survey area lack suitable habitat elements.
Buteo swainsoni Swainson's hawk	--	ST April 1983	-- G5/S3	POTENTIAL NEST SITES ABSENT Breeds in isolated stands of trees in juniper-sage flats, riparian areas, and in oak savannah, forages in grasslands, suitable grain fields, alfalfa fields, and livestock pastures.
Falco peregrinus anatum Peregrine falcon	Delisted August 1999 FE June 1970	Delisted November 2009 SE June 1971	FP (Nesting) G4T4/S3S4 --	POTENTIAL NEST SITES ABSENT Breeds mostly in woodland, forest, and coastal habitats. Migrants occur along the coast in spring and fall.
Laterallus jamaicensis coturniculus California black rail	--	ST June 1971	FP G3G4T1/S1	NOT EXPECTED It occurs in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass.
Rallus longirostris obsoletus California clapper rail	FE October 1970	SE June 1971	-- G5T1/S1	NOT EXPECTED Locally common yearlong in coastal wetlands and brackish areas around San Francisco, Monterey, and Morro bays. Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Rallus longirostris levipes Light-footed clapper rail	FE October 1970	SE June 1971	FP G5T1T2/S1	NOT EXPECTED Requires emergent or brackish emergent wetlands and tidal sloughs dominated by pickleweed, cord grass and bulrush.
Rallus longirostris yumanensis Yuma clapper rail	FE March 1967	ST February 1978 SE June 1971	-- G5T3/S1	NOT EXPECTED In coastal saline emergent wetlands along southern California from Santa Barbara Co. to San Diego Co. Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.
Charadrius alexandrinus nivosus Western snowy plover	FT April 1993	--	SSC (Nesting) G3T3/S2	NOT EXPECTED Primarily occurs and nests on coastal beaches, sand spits, dune-backed beaches, sparse dunes, beaches at creek and river mouths, saltpans at lagoons and estuaries. Less commonly, on bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars.
Rynchops niger Black skimmer			SSC (Nesting Colony) G5/S2	NOT EXPECTED A common summer resident at the Salton Sea. Usually arrives by late April and departs by October, breeding in most recent years. Increasingly frequent visitor to coastal estuaries and river mouths of southern California, and accidental at a few other interior locations.
Sterna antillarum browni California least tern	FE October 1970	SE June 1971	FP (Nesting Colony) G4T2T3Q/S2S3	NOT EXPECTED A summer resident, it arrives at breeding grounds along marine and estuarine shores late April in southern California. Feeds in shallow estuaries or lagoons where small fish are abundant.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT November 2014	SE March 1988 ST June 1971	-- (Nesting) G5T3Q/S1	NOT EXPECTED Nearly extirpated in southern California, now a rare summer resident of extensive valley, foothill and desert riparian habitats along river bottoms. Requires densely foliaged deciduous trees and shrubs, especially willows, for nesting and mature cottonwoods for foraging.
Asio otis Long-eared owl	--	--	SSC (Nesting) G5/S3?	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in the state year-round, although seasonal status varies regionally, breeds from February through July. Uncommon yearlong resident throughout the state except the Central Valley and Southern California deserts where it is an uncommon winter visitor. Riparian habitat required; also uses live oak thickets and other dense stands of trees. The property and survey area lack suitable habitat elements.
Asio flammeus Short-eared owl	--	--	SSC (Nesting) G5/S3	MAY FORAGE OVER SITE DURING MIGRATION & WINTER A rare winter resident found in open areas with few trees, such as annual and non-native grasslands, irrigated pasture, and both estuarine and freshwater emergent wetlands. Does not nest in Southern California.
Athene cunicularia hypugea Western burrowing owl	--	--	SSC (Burrow Sites & Winter Sites) G4/S3	NOT EXPECTED Year-round resident throughout much of the state in open dry grassland and desert habitats, and in forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Breeding season is March to August but can begin February and extend into December. Usually nests in mammal burrows that they modify. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Empidonax traillii extimus Southwestern willow flycatcher[2]	FE March 1995	SE August 1991	SSC (Nesting) G5T1T2/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Summer resident. Breeds in dense riparian vegetation near surface water or saturated soil. Riparian patches used vary in size and shape, and may be a relatively dense, linear contiguous stand or an irregularly shaped mosaic with open areas. The property and survey area lack suitable habitat elements.
Lanius ludovicianus Loggerhead shrike	--	--	SSC (Nesting) G4/S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Found in arid grassland, open savannah, agricultural areas, and both coastal and desert scrub, often near areas of barren soil, including overgrazed land. Requires scattered thorny shrubs for nest placement and for hanging prey. The property and survey area lack suitable habitat elements.
Vireo bellii pusillus Least Bell's vireo[3]	FE May 1986	SE October 1980	SSC (Nesting) G5T2/S2	NOT EXPECTED Frequents riparian habitats and require dense thickets of willow and other low shrubs for nesting. The dense riparian thickets they occupy are usually impenetrable, with ground cover in the shrub layer being nearly 100%.

[2] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for southwestern willow flycatcher and is very familiar with its habitat requirements and life history.*
[3] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for least Bell's vireo and is very familiar with its habitat requirements and life history.*

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Progne subis arboricola Purple martin	--	--	SSC (Nesting) G5/S3	NOT EXPECTED An uncommon to rare, local summer resident in a variety of wooded, low-elevation habitats throughout the state; a rare migrant in spring and fall, absent in winter. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas fir, and redwood. The property consists of elements suitable for the occurrence of this species; however, in southern California it is now only a rare and local breeder on the coast and in interior mountain ranges.
Riparia riparia Bank swallow	--	SE June 1989	-- (Nesting) G5/S2S3	MAY FORAGE OVER SITE DURING MIGRATION Restricted to riparian habitats during summer and open habitats during migration. Requires vertical banks, bluffs, or cliffs with fine-textured or sandy soils for nesting. It nests along a small section of the Sacramento and Feather rivers and other isolated areas. Species not known to nest in the region.
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	--	--	SSC (San Diego & Orange counties) G5T3Q/S3	NOT EXPECTED Coastal race found in arid parts of westward-draining slopes of southern California; numbers reduced in recent decades. Frequents desert succulent shrub, Joshua tree, and desert wash habitats. Nest usually built in cholla or other large, branching cactus, in yucca, or in stiff-twigged, thorny shrub or small tree.
Polioptila californica California gnatcatcher[4]	FT March 1993	--	SSC G3T2/S2	NOT EXPECTED Obligate resident of arid coastal scrub. California buckwheat, coastal sage, and patches of prickly pear cactus are favored.

[4] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for California gnatcatcher and is very familiar with its habitat requirements and life history.*

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Setophaga petechia Yellow warbler	--	--	SSC G5/S3S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs as a migrant and summer resident from late March through early October; breeds from April to late July in riparian woodlands from coastal and desert lowlands up to 2500 m in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. The property and survey area lack suitable habitat elements.
Icteria virens Yellow-breasted chat	--	--	SSC G5/S3	NOT EXPECTED Occurs as a migrant and in summer primarily from late March to late September in coastal California and in foothills of the Sierra Nevada. Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. In migration, may be found in lower elevations of mountains in riparian habitat. Breeds late April through early August.
Passerculus sandwichensis beldingi Belding's savannah sparrow	--	SE August 1974	-- G5T3/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs year-round in salt marsh usually in the upper littoral zone. It nests in dense pickleweed. The property and survey area lack suitable habitat elements.
Ammodramus savannarum Grasshopper sparrow	--	--	SSC (Nesting) G5/S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs nearly year-round in extensive, dense grasslands, especially those with a variety of grasses and tall forbs and scattered low shrubs for singing perches. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Agelaius tricolor Tricolored blackbird	--	ST March 2019	SSC (Nesting Colony) G2G3/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Feeds in grassland and cropland habitats and breeds near fresh water in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs March through November. The property and survey area lack suitable habitat elements.
Xanthocephalus xanthocephalus Yellow-headed blackbird	--	--	SSC (Nesting) G5/S3	NOT EXPECTED Breeds commonly, but locally, east of Cascade Range and Sierra Nevada, in Imperial and Colorado River valleys, in the Central Valley, and at selected locations in the coast ranges west of the Central Valley. Occurs as a migrant and local breeder in deserts and along the Orange County coast. Nests in fresh emergent wetland with dense vegetation and deep water, often along borders of lakes or ponds. Forages in emergent wetland and moist, open areas, especially cropland and muddy shores of lacustrine habitat. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
MAMMALS[6]				
Sorex ornatus salicornicus Southern California saltmarsh shrew	--	--	SSC G5T1?/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED The Southern California salt marsh shrew is confined to coastal salt marshes in Los Angeles, Orange, and Ventura counties. The property and survey area lack suitable habitat elements.
Macrotus californicus California leaf-nosed bat	--	--	SSC G4/S3 --	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Preferred habitats are caves, mines, and rock shelters, mostly in Sonoran Desert scrub. It does not hibernate. Winter roosts are geothermically heated. Mating takes place in the fall. Pups born June. The property and survey area lack suitable habitat elements.

[5] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*
[6] *Andrew McGinn Forde holds a CDFW MOU authorizing capture of bats using a variety of techniques including hand-held nets, mist nets, and harp traps. He is familiar with the life history and habitat requirements of bats.*

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Antrozous pallidus Pallid bat	--	--	SSC G5/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – LOW BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES LIKELY ABSENT - LOW Throughout California except high Sierra Nevada. Habitat includes grassland, shrubland, woodland, and conifer forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, under bridges, bird and bat boxes, and occasionally hollow trees and buildings. Non-migratory. Birth occurs late June, nursing continues into August. The property lacks suitable habitat elements but could potentially roost within the survey area.
Euderma maculatum Spotted bat	--	--	SSC G4/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Occupied habitats include arid deserts, grasslands, and mixed conifer forests. Prefers sites with adequate roosting habitat, such as cliffs. Feeds over water and along washes. Pups are born late May to early June. Nursing continues into August. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Lasiurus blossevillii Western red bat	--	--	SSC G5/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Occurs from Shasta Co. south to Mexico, west of Sierra Nevada/Cascade crest and deserts. Feeds over scrublands, grasslands, open woodlands, and croplands. Roosts in foliage of forest and woodland trees. Pups born June. Nursing into August. Migrates to south of range to hibernate. The property and survey area lack suitable habitat elements.
Corynorhinus townsendii Townsend's big-eared bat	--	SC December 2013	SSC G3G4/S2	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Found throughout California except subalpine and alpine habitats. Roosts in caves, mines, tunnels, buildings, and other human-made structures. It prefers mesic habitats where it gleans vegetation or captures moths and beetles in flight. Pups are born in May or June, nursing continues into August. The property and survey area lack suitable habitat elements.
Eumops perotis californicus Greater bonneted bat	--	--	SSC G5T4/S3S4	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Prefers open arid areas. Crevices, high buildings, trees, and tunnels required for roosting and maternal sites. Pups are born late June through September. Nursing continues into early November. Does not migrate or hibernate. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Nyctinomops femorosaccus Pocketed free-tailed bat	--	--	SSC G4/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Prefers rocky desert areas with high cliffs or rock outcrops. Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Prefers rock crevices in cliffs as roosting sites. Maternity sites include rock crevices, caverns, or buildings. Pup usually born early July. The property and survey area lack suitable habitat elements.
Bassariscus astutus Ringtail	--	--	FP G5/S3S4	BASED ON DESKTOP REVIEW - POTENTIAL DEN SITES LIKELY ABSENT - LOW BASED ON SITE-SPECIFIC STUDY - DEN SITES ABSENT – NOT EXPECTED Ideal habitat consists of a mix of forest and shrub land associated with rocky or riparian habitats. Its principal habitat requirements seem to be den sites among boulders or in hollows of trees with sufficient food in the form of rodents and other small animals. The property and survey area lack suitable habitat elements.
Taxidea taxus American badger	--	--	SSC G5/S3	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - DEN SITES ABSENT – NOT EXPECTED Prefers dry open stages of most shrub, forest, and herbaceous habitats, with friable soils. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Perognathus longimembris brevinasus Los Angeles pocket mouse	--	--	SSC G5T1T2/S1S2	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Occurs in lower elevation grassland, alluvial sage scrub, and coastal sage scrub. The property and survey area lack suitable habitat elements.
Neotoma lepida intermedia San Diego desert woodrat	--	--	SSC G5T3T$/S3S4	BASED ON DESKTOP REVIEW - EXPECTED BASED ON SITE-SPECIFIC STUDY - PRESUMED PRESENT Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats with rocky outcrops and substrates. Houses are constructed with twigs, sticks, cactus parts, and rocks, and are used for nesting, food caching, and predator escape. The site/survey area consists of suitable habitat elements and the biologists observed woodrat houses in the rock outcrops, presume present.
Microtus californicus stephensi South coast marsh vole	--	--	SSC G5T1T2/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This subspecies occurs from Santa Barbara County south to Orange County in coastal salt marshes dominated by pickleweed. The property and survey area lack suitable habitat elements.
Lepus californicus bennetti San Diego black-tailed jackrabbit	--	--	SSC G5T3T$/S3S4	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Abundant at lower elevations in herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (July 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Puma concolor Mountain lion	--	SC (Endangered) February 2020	--	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED The property and survey area lack suitable habitat elements. The property is south of Pacific Coast Highway between existing SFR.

Status Key:

Federal	State	California Department of Fish and Wildlife
FE - Federally Endangered	SE - State Endangered	FP - Fully Protected
FT - Federally Threatened	ST - State Threatened	SSC - Species of Special Concern
FC - Federal Candidate	SC - State Candidate	WL - Watch List

Potential for Occurrence: Based on professional experience, knowledge of habitat associations, and known occurrences in the region.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present and species is known to occurs frequently in the region
Moderate Potential = Suitable habitat is limited and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out)
Not Expected = Suitable habitat is absent or species is not expected to occur during the "season of concern"

The official federal listing of Endangered and Threatened animals is published in the Federal Register, 50 CFR 17.11. The official state Endangered and Threatened animals list is contained in the California Code of Regulations, Title 14, Section 670.5. A state candidate species is one that the Fish and Game commission had formally noticed as being under review by the Department for addition to the State list. A federal candidate species is one for which a proposed regulation has been published in the Federal Register.

Fully Protected: This classification was the State's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts; white-tailed kite, golden eagle, trumpeter swan, northern elephant seal and ring-tailed cat are the exceptions. The white-tailed kite and the golden eagle are tracked in the CNDDB; the trumpeter swan, northern elephant seal and ringtail cat are not. The Fish and Game Code sections dealing with Fully Protected species state that these species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003 the code sections dealing with fully protected species were amended to allow the Department to authorize take resulting from recovery activities for state-listed species. More information on Fully Protected species and the take provisions can be found in the Fish and Game Code, (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93. The category of Protected Amphibians and Reptiles in Title 14 has been repealed.

California Species of Special Concern: It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long term viability. Not all "Species of Special Concern" have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a "Threatened" or "Endangered" species under the State and/or Federal Endangered Species Acts.

Global Rank (G Rank) is a reflection of the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

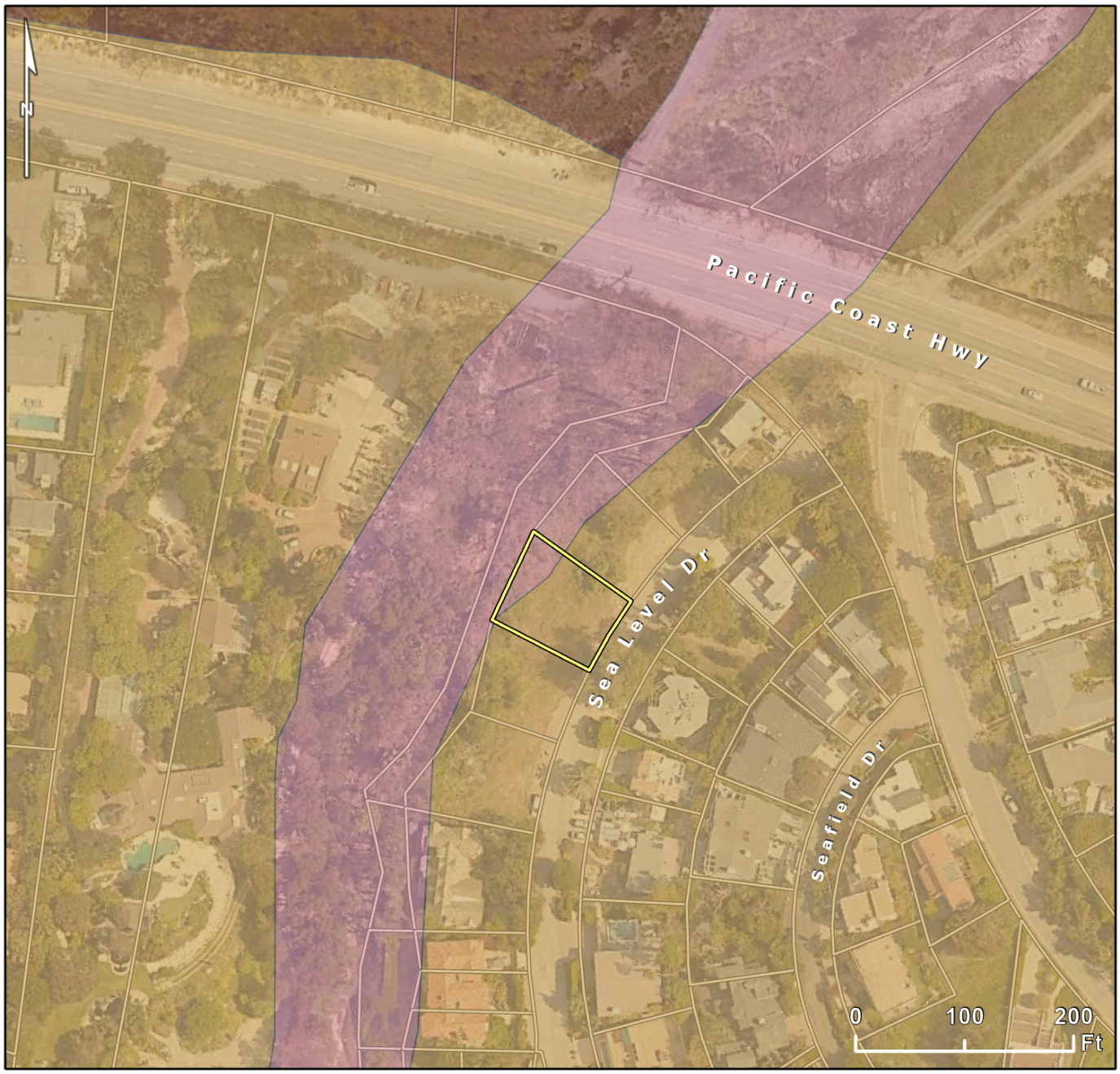
GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure - Common; widespread and abundant.
G? = Inexact Numeric Rank

GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
SX = Presumed Extirpated
SH = Possibly Extirpated
S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

LA County SBS = Los Angeles County Sensitive Bird Species (Season/Region of concern)



Project Parcel

LA County Parcels

NRCS Soil Type

Pachic Argixerolls, coastal, 30 to 75 percent slopes

Lockwood-Urban land complex, 0 to 15 percent slopes

Calcic Argixerolls, 30 to 75 percent slopes

Forde Biological Consultants

Exhibit N - NRCS Soils



Project Parcel

LA County Parcels

CDFW Jurisdictional Stream Top of Bank

Habitat Type

ESHA

Non-ESHA

ESHA Buffer (100')

Habitat Type	Area (Acres | Sq. Ft.)	
	On-Parcel	Off-Parcel
ESHA	0.03 | 1,433	1.26 | 54,743
Non-ESHA	.11 | 4,399	2.20 | 95,728

Forde Biological Consultants

Exhibit O - Site-specific ESHA



- Project Parcel
- LA County Parcels
- CDFW Jurisdictional Stream Top of Bank
- Protected Trees
- Protected Tree Canopy

Habitat Type

- ESHA
- Non-ESHA
- ESHA Buffer (100')

Proposed Development

- Main Building
- Total Development Area

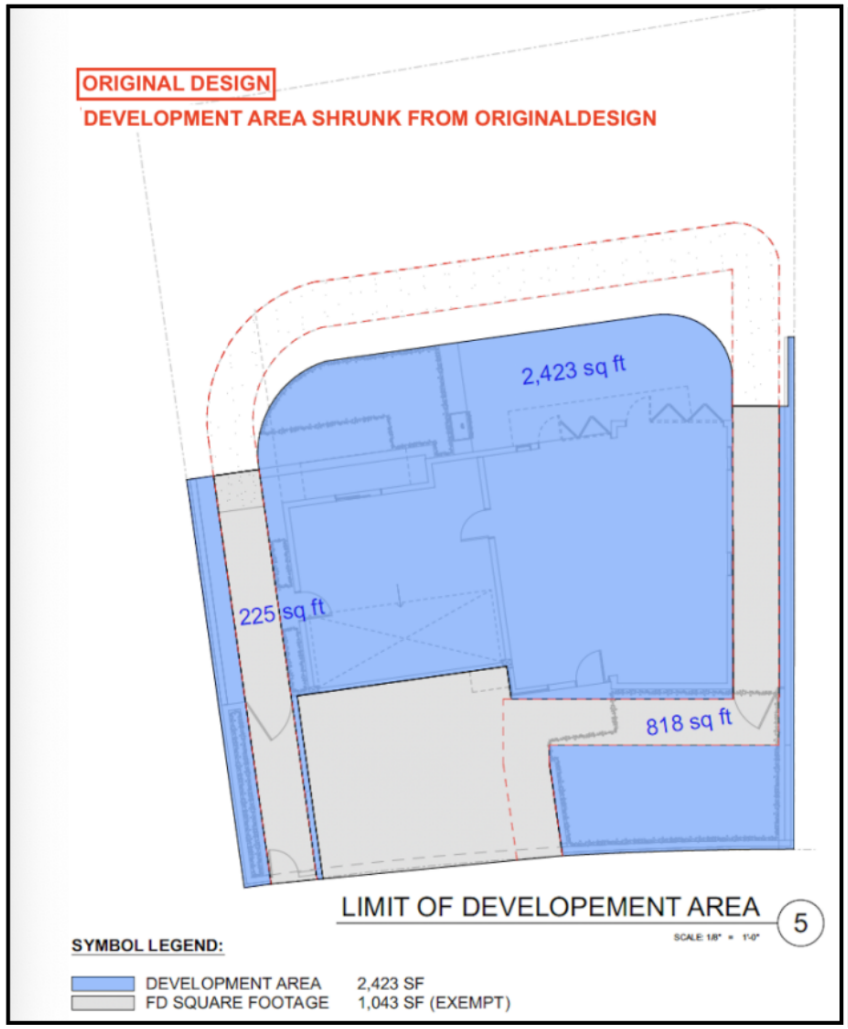
Proposed Fuel Modification Zones

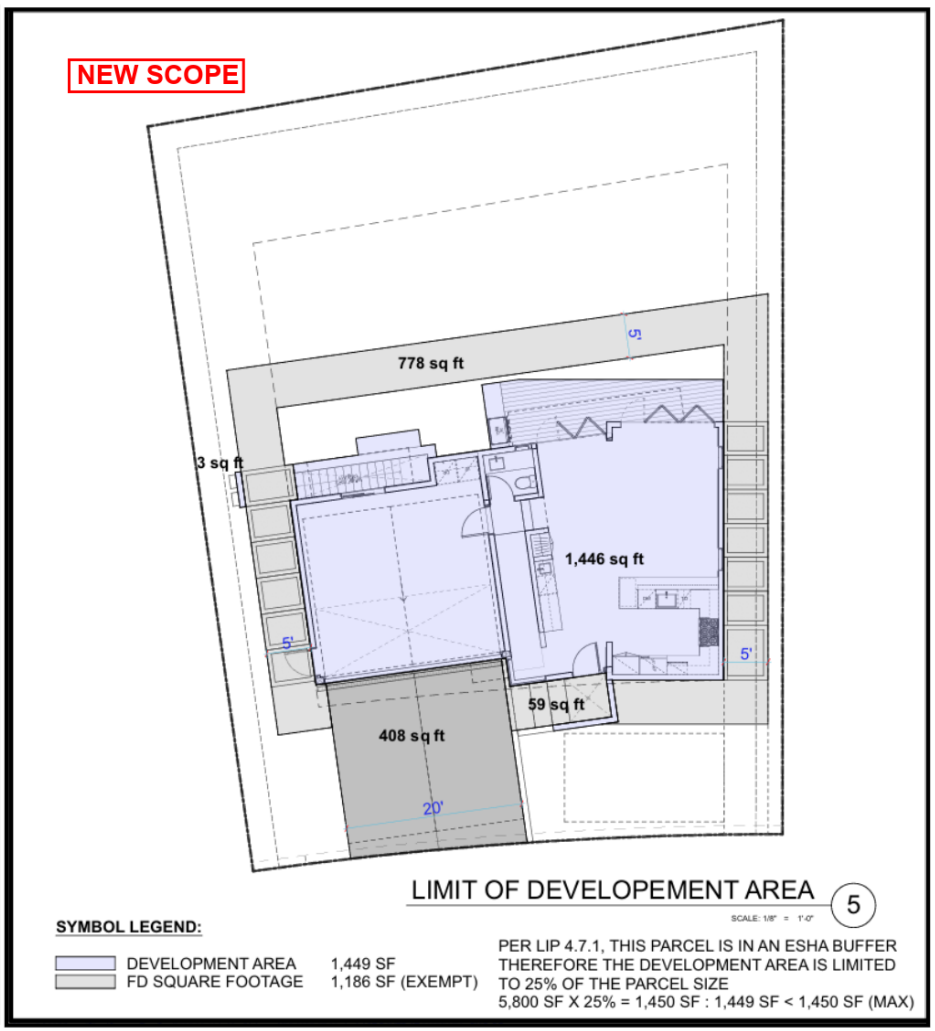
- Zone A (20')
- Zone B (100')
- Zone C (200')

Disturbance Type	Impact (Acres | Sq. Ft.)			
	ESHA		Non-ESHA	
	On-Parcel	*Off-Parcel*	*On-Parcel*	*Off-Parcel*
Zone A + Footprint	.001 | 50	-	0.10 | 4,146	0.03 | 1,258
Zone B	0.03 | 1,383	0.38 | 16,471	0.01 | 253	0.55 | 23,847
Zone C	-	0.88 | 38,272	-	1.62 | 70,623

Forde Biological Consultants

*Note that entirety of parcel falls within existing fuel modification zones.


ORIGINAL DESIGN
DEVELOPMENT AREA SHRUNK FROM ORIGINALDESIGN
2,423 sq ft
225 sq ft
818 sq ft
LIMIT OF DEVELOPEMENT AREA
5
SYMBOL LEGEND:
DEVELOPMENT AREA 2,423 SF
FD SQUARE FOOTAGE 1,043 SF (EXEMPT)


NEW SCOPE
778 sq ft
3 sq ft
1,446 sq ft
59 sq ft
408 sq ft
5'
20'
LIMIT OF DEVELOPEMENT AREA
5
SYMBOL LEGEND:
DEVELOPMENT AREA 1,449 SF
FD SQUARE FOOTAGE 1,186 SF (EXEMPT)
PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER
THEREFORE THE DEVELOPMENT AREA IS LIMITED
TO 25% OF THE PARCEL SIZE
5,800 SF X 25% = 1,450 SF : 1,449 SF < 1,450 SF (MAX)



Project Parcel
LA County Parcels
CDFW Jurisdictional Stream Top of Bank
Protected Trees
Protected Tree Canopy

Proposed Fuel Modification Zones
Zone A (20')
Zone B (100')
Zone C (200')

Proposed Development
Main Building
Total Development Area

Habitat Type
ESHA within Fuel Modification Zones (1.29 Acres | 54,176 sq. ft.)
Non-ESHA
ESHA Buffer (100')
Fuel Modification Overlap in ESHA Buffer (2.54 Acres | 110,821 Sq. Ft.)

Forde Biological Consultants

*Note that entirety of parcel falls within existing fuel modification zones.

Exhibit R - ESHA Buffer Overlap

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level Drive City/County: Malibu/Los Angeles County Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loam	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level Drive City/County: Malibu/Los Angeles County Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loam	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level Drive City/County: Malibu/Los Angeles County Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loam	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level Drive City/County: Malibu/Los Angeles County Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loam	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Environmental Review Board
Agenda Report

ERB Meeting
09-23-26
Item 3.B.

To: Members of the Environmental Review Board

Prepared by: Rick Casswell, Contract Planner

Reviewed and Approved by: Courtney McCammon, City Biologist

Date prepared: September 16, 2026 Meeting date: September 23, 2026

Subject: Coastal Development Permit No. 23-037, Variance 23-013, Minor Modification No. 23-005, and Site Plan Review No. 23-017 – An application for construction of a new 1,435 square foot two-story single-family residence, with a 464 square foot attached garage, and a 859 square foot basement, deck, onsite wastewater treatment system, and associated development; including a variance for encroachment within a 100-foot environmentally sensitive habitat area buffer, a minor modification for a 15 percent reduction to the north side yard setback, and a site plan review for construction above 18 feet, up to 27 feet 2 inches

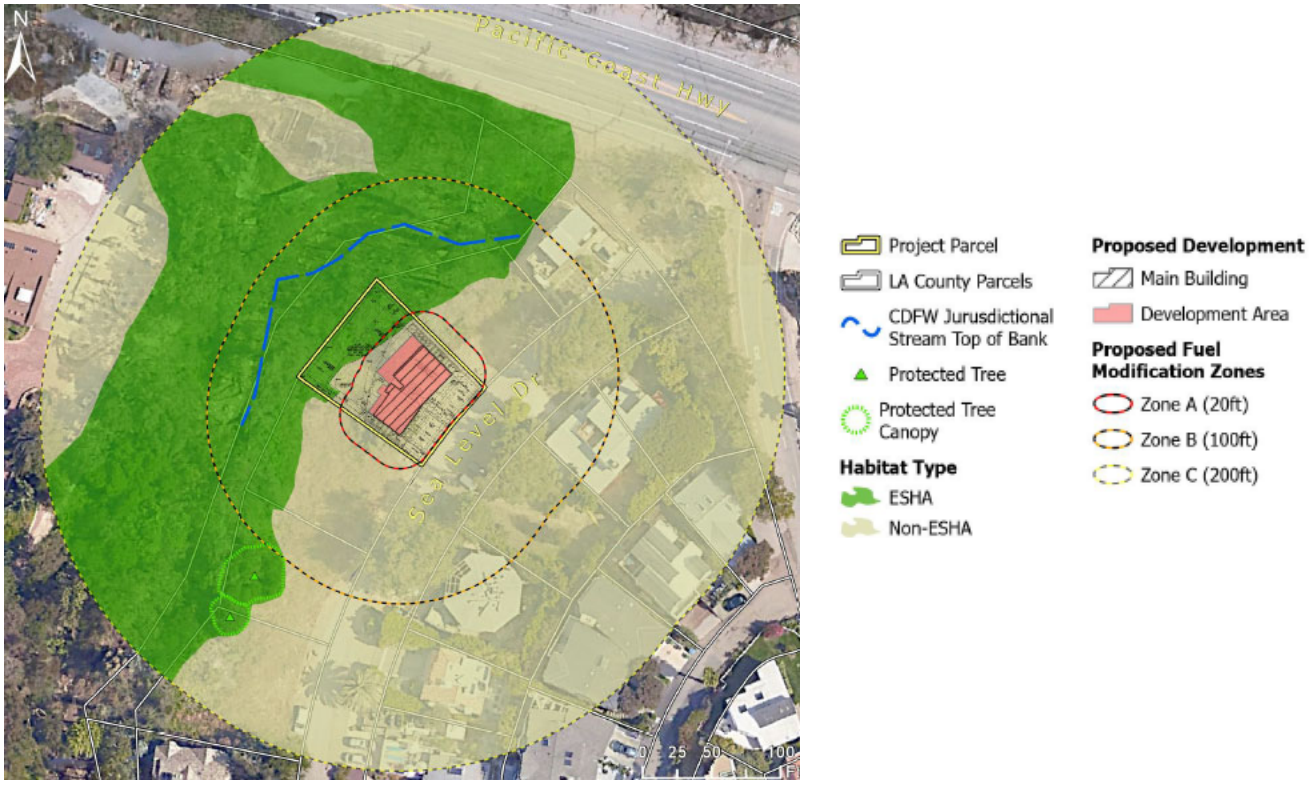
Application Filing Date:	June 13, 2023
Project Applicant:	Burdge & Associates Architects
Property Owner:	Kell-Surprenant Family Trust
Location:	31882 Sea Level Drive
APN:	4470-027-022
Zoning:	Single-Family Medium

RECOMMENDED ACTION: Review the proposed project and provide recommendations for the Planning Commission's consideration.

DISCUSSION: The subject property – which is currently vacant – lies entirely within the required 100-foot buffer from mapped stream and wetland environmentally sensitive habitat area (ESHA) to the west, in the form of Encinal Canyon Creek. Furthermore, a 0.027-acre (1,173 square feet [sq. ft.]) portion of mapped ESHA encroaches onto the rear third of the property, as established within the biological assessment prepared by the project biologist and dated August 5, 2025. Although, it should be noted that the

proposed structural development will be located outside of this mapped ESHA area that overlaps the subject property (Figure 1). Per the Malibu Local Coastal Program's (LCP) Local Implementation Plan (LIP) Sections 4.6.1.A and C no development – including the fuel modification area – shall be within 100 feet of stream or wetland ESHA. The biological assessment asserts that the proposed project, which involves a 1,435 sq. ft. two-story single-family residence, 464 sq. ft. attached garage, with a 859 sq. ft. basement, deck, and onsite wastewater treatment system (OWTS) is not anticipated to result in permanent impacts to the adjacent ESHA, special-status species, or protected trees. However, the fuel modification plan subsequently approved by the L.A. County Fire Department, which shows fuel modification will be contained within the subject parcel's property lines, will result in both permanent and temporary impacts to the 0.027-acre portion of ESHA (which contains Arroyo Willow Thickets, noted in Figure 2) that lies to the rear of the property. Consequently, the project requires a variance for fuel modification encroachment into ESHA, as well as development (inclusive of both structural and fuel modification) encroachment within the related 100-foot ESHA buffer. The Community Development Department is seeking recommendations from the Environmental Review Board (ERB) on how to mitigate the impact to ESHA.

Figure 1 – Project Aerial with Mapped ESHA



Source: Biological Resources Assessment, August 5, 2025

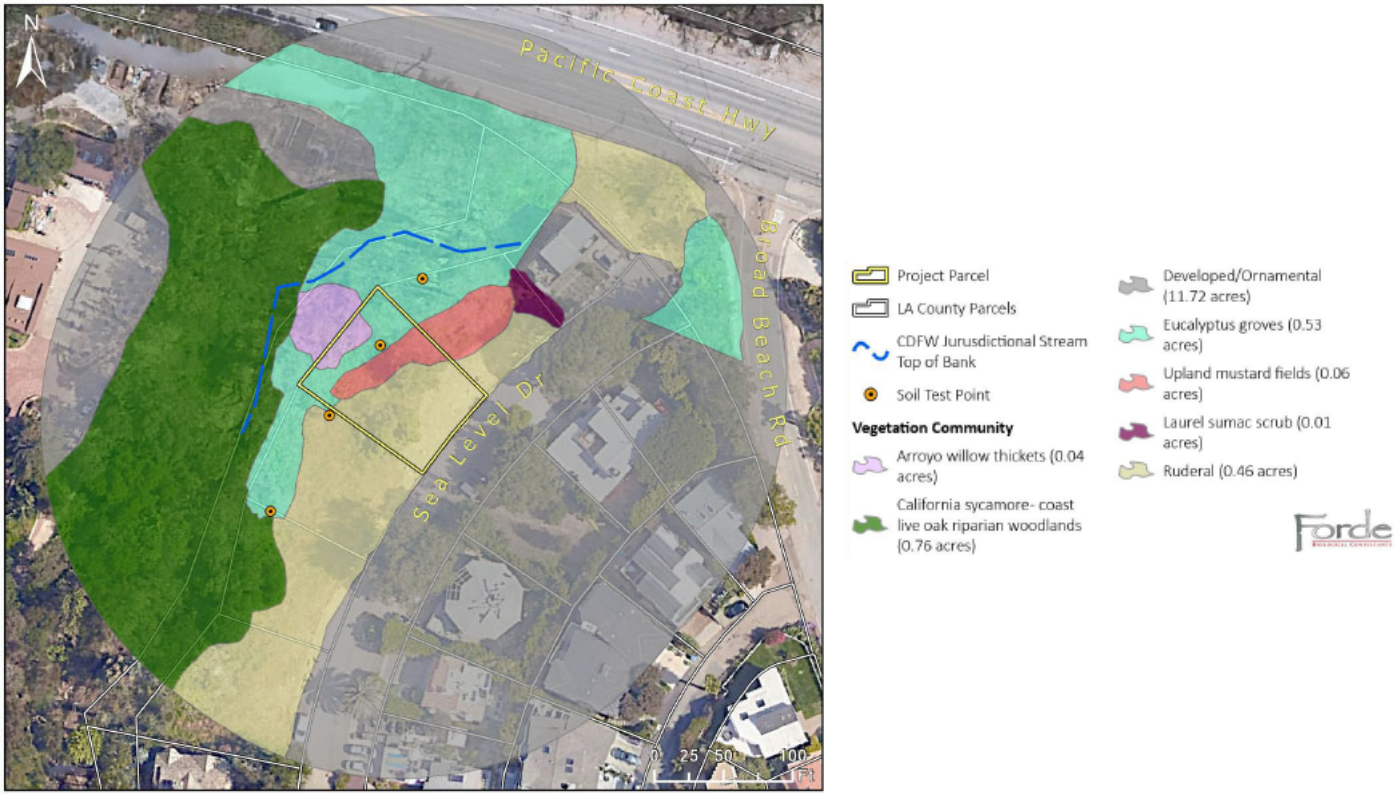
Setting

The subject property is located on the west side of Sea Level Drive in the single-family medium zoning district and approximately half a mile northwest of Broad Beach. The

project includes construction of a new two-story residence and associated development on a vacant lot. Overall, the property is relatively flat, with a narrow sliver of steeper slopes located at the southwest corner of the property, at the rear. The surrounding area contains both developed and undeveloped residential properties, with the adjacent developed properties subject to existing fuel modification.

The biological resources assessment, prepared by Forde Biological Consultants (Exhibit 4), was required for the project pursuant to LIP Section 4.4.2 due to the proximity of mapped ESHA and the potential for native protected trees to be impacted. Said report identifies the subject property as being dominated by ruderal vegetation and non-native eucalyptus groves. Native riparian plant communities, along with California Sycamore-Coast Live Oak Riparian Woodlands and Arroyo Willow Thickets, occur along Encinal Canyon Creek and are identified as ESHA immediately west of and adjacent to the property, with a portion of the Arroyo Thicket ESHA encroaching onto the subject property (Figure 2). However, the biological assessment concluded that there are no protected native trees on the subject property.

Figure 2 – Vegetation and Trees



Source: Biological Resources Assessment, August 5, 2025

Figure 3 – Development Impacts (Site Plan)



Source: Biological Resources Assessment, August 5, 2025

Analysis

The applicant is proposing to construct a 1,435 sq. ft. two-story single-family residence, 464 sq. ft. attached garage, with a 859 sq. ft. basement, deck, and OWTS. The proposed total development square footage (TDSF) will total 1,899 sq. ft., since 1,000 square feet of basement area is exempt from TDSF per LIP Section 3.6.K.3. The maximum allowable TDSF for the 0.14-acre (6,164 sq. ft.) subject property is 2,091 square feet, in accordance with LIP Section LIP 3.6.K.

Per LIP Section 4.7.1, given that the subject property is located within ESHA and the 100-foot ESHA buffer (and all feasible building sites are ESHA or ESHA buffer), the proposed development area (as defined in LIP Section 2.1) is limited to 25 percent of the parcel size. Consequently, the resulting allowable development area is 1,541 sq. ft. In this case, the applicant is proposing a development area of 1,527 sq. ft.

Inclusive of a minor modification for a 15 percent reduction to the north side yard setback (reducing it from 9.9 feet to 8.5 feet) the proposed house will meet the required setbacks established in LIP Section 3.6.F. As previously described, the reason for the minor modification is due to the substandard size of the lot and existence of steeper slopes at the rear of the property, which makes it difficult to adhere to all of the required setbacks.

The primary impact to ESHA (in the form of Arroyo Willow Thickets) will be from fuel modification Zones A and B, as demonstrated in Figures 1 and 3. This required development, per L.A. County Fire Department, will result in onsite ESHA impacts of 0.027-acres (1,173 sq. ft.), with 0.0017-acres (75 sq. ft.) of that resulting in permanent impacts to ESHA (i.e. the ESHA located within Zone A of the fuel modification). The remaining area of onsite ESHA would be subject to temporary impacts, since that portion of ESHA would be located within fuel modification Zone B.

Pursuant to LIP Section 4.8.1, all new development shall include mitigation for unavoidable impacts to ESHA from the removal, conversion, or modification of natural habitat for new development, including required fuel modification and brush clearance. As previously noted, the proposed project would result in unavoidable impacts to ESHA as a result of the fuel modification. LIP Section 4.8.1 requires that, under such conditions, one (1) of the following three (3) Habitat Impact Mitigation methods shall be required: (1) habitat restoration; (2) habitat conservation; or (3) in-lieu fee for habitat conservation. To that end, the CDP shall include conditions setting forth the requirements for habitat mitigation. Prior to final plan check the applicant shall provide either a detailed restoration plan, a habitat conservation plan, or evidence of payment of in lieu fees to the Santa Monica Mountains Conservancy.

Archaeology

Based on historical records, there is a high probability of cultural resources being discovered within the project area, although none were found during a phase two archaeological survey conducted by C.A. Singer and Associates in January 2005. As such, conditions will be included in the resolution for this project which state that in the event that potentially important cultural resources are found in the course of geologic testing or construction, work shall immediately cease until a qualified archaeologist can provide an evaluation of the nature and significance of the resources and until the Community Development Director can review this information.

Department Reviews

The project was reviewed and approved by the City Biologist, City geotechnical consultant reviewers, the City Environmental Health Department, and the City Public Works Department, along with the Los Angeles County Fire Department and Los Angeles County Waterworks District 29. All conditions of approval from the various departments are included as Exhibit 3.

ENVIRONMENTAL REVIEW: Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the Community Development Department has analyzed the proposal as described above. The Community Development Department has found that this project is listed among the classes of projects that have been determined not to have a significant adverse effect on the environment; and therefore, is exempt from the provisions of CEQA. The Community Development

Department has further determined that none of the six exceptions to the use of a categorical exemption applies to this project (CEQA Guidelines Section 15300.2). Accordingly, a categorical exemption will be prepared pursuant to CEQA Guidelines Section 15303(a) and (e) – New Construction – and Section 15304(a) and (b) – Minor Alterations to Land.

SUMMARY: The project has been reviewed and conditionally approved for conformance with the LCP by staff and appropriate City and County agencies. The ERB can recommend additional mitigation measures for the Planning Commission to consider.

STAFF FOLLOW-UP: Recommendations of the ERB will be incorporated into the agenda report for the Planning Commission's review and consideration.

EXHIBITS:

1. Project Plans
2. Fuel Modification Plan
3. Department Review Sheets
4. Biological Resources Assessment, dated August 5, 2025

ABBREVIATIONS

ADDITIONAL	ADD'L.
ADJUSTABLE	ADJ.
ABOVE FINISHED FLOOR	A.F.F.
ABOVE RAISED FLOOR	A.R.F.
AIR CONDITIONING	A/C.
ALTERNATE	ALT.
ARCHITECT (URAL)	ARCH.
AREA DRAIN	A.D.
BLOCKING	BLKG.
BOARD	BD.
BUILDING	BLDG.
CABINET	CAB.
CEILING	CLG.
CENTER	CTR.
CENTER LINE	C.L.
CERAMIC TILE	C.T.
CLEAR	CLR.
CONCRETE	CONC.
CONCRETE MASONRY UNIT	C.M.U.
CONSTRUCTION	CONST.
CONTINUOUS	CONT.
CONTROL JOINT	C.J.
DIAMETER	D.I.A..
DIMENSION	DIM.
DOUBLE	DBL.
DOUBLE HUNG	D.H.
DOWN	DN.
DRAWING	DWG.
ELECTRIC	ELECT.
ELECTRIC PANEL	ELECT. PNL.
ELEVATOR	ELEV.
ENCLOSURE	ENCL.
ENGINEER	ENGR.
EQUAL	EQ.
EQUIPMENT	EQUIP.
EXISTING	EXIST.
EXTRUDE OR EXTRUSION	EXTR.
FABRICATE(ED)	FAB.
FINISH	FIN.
FIXTURE	FIXT.
FLOOR	FL.
FLUORESCENT	FLUOR.
FOOT	FT.
FRESH AIR INTAKE (OR INLET)	F.A.I.
FURNISH(ED)	FURN.
FURRING	FUR.
GALVANIZED	GALV.
GAUGE	GA.
GROUND	GRND.
GYPSUM BOARD	GYP. BD.
HEIGHT	HT.
HOLLOW METAL	H.M.
HORIZONTAL	HORIZ.
HOT WATER	H.W.
INSIDE DIAMETER	I.D.
JOINT	JT.
MANUFACTURE	MFR.
MANUFACTURER'S	MFR'S.
MATERIAL	MATL.
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MTL.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
NORTH	N
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR X
ON CENTER	O.C.
OUTSIDE DIAMETER	O.D.
OPENING	OPG.
PAIR	PR.
PERFORATED(ED)	PERF.
PIECE/PIECES	PC./PCS.
PLANTER AREA	P.A.
QUANTITY	QTY.
RADIUS	RAD.
REFERENCE	REF.
REFRIGERATOR	REFRIG.
REINFORCE/REINFORCING	REINF.
REQUIRED	REQ.
RETURN AIR	R.A.
ROUGH OPENING	R.O.
SHEET	SHT.
SIMILAR	SIM.
SOUTH	S
SMOKE DETECTOR	S.D.
SPEAKER	SPKR.
SPECIFICATIONS	SPECS.
SPRINKLER HEAD	S.H.
SQUARE	SQ.
STAINLESS STEEL	S.S.
STANDARD	STD.
STEEL	STL.
STRUCTURAL	STRUCT.
TELEPHONE	TEL.
TELEVISION	TV
TEMPORARY	TEMP.
TONGUE AND GROOVE	T. & G.
TYPICAL	TYP.
UNLESS OTHERWISE NOTED	U.O.N.
VERTICAL	VERT.
VINYL COMPOSITION TILE	V.C.T.
WITH	W/
WITHOUT	W/O
WOOD	WD.

UNDER SEPARATED PERMIT

Deferred submittal documents shall be submitted to the architect- or engineer-of-record, who shall review them and forward them to the building official with a notation that they have been reviewed and have been found to be in general conformance with the design of the building or structure. The deferred items shall not be installed until their design and submittal documents have been reviewed and approved by the building official.

DEFERRED SUBMITTAL ITEMS:

- TBD

APPROVAL STAMPS

NEW SINGLE FAMILY RESIDENCE

31882 SEA LEVEL DRIVE
MALIBU, CA 92605

February 26 2026

PROJECT TEAM

•Architect:
Douglas W. Burdge, A.I.A.
Burdge Architects, Inc.
24911 Pacific Coast Hwy
Malibu, CA 90265
P: (310) 456-5905
www.buaia.com

• Percolation Testing & Septic system design:
Ensitu Engineering Inc.
7475 Carmelita Ave
Atascadero, CA 93422
Tel: (805) 772-0150
John N Yaroslasky, PE
Eml: jyaroslaski@ensitu.com

•Surveyor:
Land and Air Surveying, Inc.
22741 Pacific Coast Hwy.
Suite: 400A
Malibu, CA 90265
P: (310) - 456-9381
Fax: (310) - 456-9821

•Biologist:
Forde Biological Consultants
10664 Presilla Road
Santa Rosa Valley, CA 93012
P: (805) 402-3310
Andrew Forde, PE, QSD

•Geology & Soil Engineer:
GeoConcepts Inc
14428 Hamlin St, #200
Van Nuys, CA 91401
T 818 994 8895
F 818 994 8599

•M.E.P. and TITLE 24:
TBD

•STRUCTURAL:
TBD

•CIVIL:
Ahsirt Engineering INC.
360 Miller Way.
Arroyo Grande, CA 93420
P: 805-474-4008
Trisha Coffey

•Landscape Architect
+Seed Design Collaborative
311 N. Robertson Blvd, #672.
Beverly Hills CA 90211
P: (213) 675 3067
Louisa Relia

SYMBOL LEGEND

NORTH ARROW

INTERIOR ELEVATION FLAG

TYP. DOOR SCHEDULE SYMB.

TYP. WINDOW SCHEDULE SYMB.

ELEVATION DATUM

GRID LINE SYMB.

WOOD FRAME

CONCRETE

TRUE NORTH ARROW

BUILDING ELEVATION/ SECTION

WALL SECTION

TYP. ELEVATION VIEW DETAIL CALL OUT

TYP. CUT DETAIL CALL OUT

CMU

STONE

PROJECT DATA

•ADDRESS:	**31882 SEA LEVEL DRIVE**, Malibu, CA 90265
•OWNER:	Jeff Peterson
•LEGAL DESCR.:	See Survey
•A.P.N:	4470-027-022
•ZONING:	SFM
•FIRE HAZARD SEVERITY ZONE:	VHFHSZ
•SPRINKLERS :	Required (Sprinklers per LACo. Fire Department's Requirement)
•OCCUPANCY GROUP:	R3 / U1
•TYPE OF CONSTRUCTION:	V-B
•NUMBER OF STORIES:	2 + Basement

•SCOPE OF WORK: New Two-Story, Single Family Residence w/attached Garage and Basement. Outdoor roof deck. New Driveway access. New OWTS.

•DISCRETIONARY REQUESTS:

-SPR for height above 18' up to 28' for pitched roof
-Minor Modification for 12.75% reduction side yard setback.
-Variance for construction within ESHA setback

•LOT INFO.:
Area:
Gross: **6,164** Sq.Ft. (Acres) Net: **6,164** Sq.Ft.

Width/Depth:
Depth: 92.23' Width: 66.63'

•MINIMUM SETBACKS:	Required	Proposed
Front (East) :	18.45'	20.91'
Side 10% (South) :	6.66'	6.83'
Side 15% (North) :	9.99'	*8.50'
Rear (West) :	15.00'	44.63'

*Minor Modification for 15% reduction side-yard setback.

•MAX. ALLOWABLE SQUARE FOOTAGE:

6,164 x .177 = 1,091 + 1,000= **2,091 SF**

•PROPOSED SQUARE FOOTAGE TABULATION:

First Floor.....	676	Sq.Ft.+
Garage at First Floor.....	464	Sq.Ft.+
Second Floor	759	Sq.Ft.=
Total Enclosed area	1,899	Sq.Ft. < 2,091 Sq.Ft.

Basement 859 Sq. Ft. sf < 1,000 Sq. Ft.

•ALLOWABLE DEVELOPMENT AREA:

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
6,164 SF X 25% = 1,541 SF

1,527 SF < 1,541 SF (MAX)

•BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,140 SF
MAXIMUM ALLOWED OVER 18' = (1,140 x .667) = 760 SF
AREA OVER 18' = 759 SF

ADD'L PROJECT DATA

•BUILDING HEIGHT:
Allowed* max: 28' for pitched roof and 24' for Flat roof
Proposed max: 28' for pitched roof and 24' for Flat roof

*With Discretionary submittal for height above 18'

NOTES:
Slope 3:1 or greater shall conform to Sections R403.1.7.1 through R403.1.7.4. (CRC 2016)
See Grading plans Sheet 2. and note on structural foundation plans.

•PARKING:
Required: Four (4) Parking Spaces of which min (2) enclosed
Proposed: Enclosed: Two (2) Unenclosed: Two (2)

•RETAINING WALLS HEIGHT:
Allowed max height: 6'
Proposed: in compliance with code

•FENCE, DRIVEWAY GATE:
Required: Max height 6' with 42" upper portion visually permeable.
Proposed: NONE

•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE: 6,164 x 45% = 2,773 SF

•PROPOSED IMPERMEABLE COVERAGE:

BUILDING FOOTPRINT	1,139 SF
CONCRETE SLABS	542 SF
TOTAL	1,681 SF < 2,773 SF

APPLICABLE CODES

•2022 California Building Code (CBC) (Volume 1 & 2)
•2022 California Residential Code (CRC) and Title 24
•2022 California Electrical, Mechanical & Plumbing Code, (CMC), (CPC), (CEC)
•2022 CA Energy Code (2013 Building Energy Efficiency Standards), (CEnC) [§ R106.1.1 CRC]
•2022 CGBSC (California Green Building Code Standards)
•2023 County of LA Building, Mechanical, Electrical, Plumbing Code

VICINITY MAP



SHEET INDEX

COVER SHEET / PROJECT INFO		
	T-1	COVER SHEET/ PROJECT INFO
	T-2	SURVEY
	T-3	CR-SITE PLANS AND TABLES
	T-4	COLOR CODED SLOPE ANALYSIS
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	A-0.2	SITE PLAN
	A-0.3	AREA DIAGRAMS
	A-0.4	2/3RD'S CALCULATIONS DIAGRAM
	A-0.5	FIRE DEPARTMENT PLAN
	F-1.1	BROADWAY IMPROVEMENT ACCESS PLAN
	A-0.6	STORY POLE PLAN
Plans		
	A-1.1	PROPOSED BASEMENT PLAN
	A-1.2	PROPOSED FIRST FLOOR PLAN
	A-1.3	PROPOSED SECOND FLOOR PLAN
	A-1.4	PROPOSED ROOF PLAN
Elevations		
	A-2.1	PROPOSED ELEVATIONS WEST
	A-2.2	PROPOSED ELEVATIONS EAST
	A-2.3	PROPOSED ELEVATIONS NORTH AND SOUTH
Sections		
	A-3.1	PROPOSED SECTIONS A AND B
	A-3.2	PROPOSED SECTION C
	A-3.3	PROPOSED SECTION D
Civil		
	G1	PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN
	G2	COASTAL DEVELOPMENT PERMIT, GRADING AND DRAINAGE PLAN
	G3	EROSION CONTROL PLAN AND LOCAL SWPPP
Landscape		
	L0.00	COVER SHEET
	L1.00	HARDSCAPE & LIGHTING PLAN
	L2.00	IRRIGATION PLAN
	L2.01	IRRIGATION DETAILS
	L3.00	PLANTING PLAN
	L3.01	PLANTING DETAILS

PETERSON RESIDENCE

31882 SEA LEVEL DR MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

COVER SHEET/ PROJECT INFO

DRAWING NO.
T-1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2/26/26
SCALE	
DRAWN BY	D.W.B.,

EXHIBIT 1

2026-02-04/31882-8SeaLevel_V25_2025-07-30.pln

PROPERTY ADDRESS:

31882 & 31888 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-022 (LOS ANGELES COUNTY)
4470-027-023 (LOS ANGELES COUNTY)

LEGAL DESCRIPTION:

LOTS 168 AND 169 OF TRACT NO. 10630, IN THE CITY OF MALIBU, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 181 PAGES 6 THROUGH 11, IN THE OFFICE OF THE RECORDER OF SAID COUNTY.

EXCEPT ALL OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES, IN AND UNDER SAID SAID LAND BUT WITHOUT THE RIGHT TO ENTER UPON THE SURFACE THEREOF FOR THE PURPOSE OF EXPLORING FOR OR EXTRACTING SUCH OIL, GAS OR OTHER HYDROCARBON SUBSTANCES AND MINERALS

BASIS OF BEARINGS:

THE BASIS OF BEARINGS WAS DERIVED FROM THE INVERSE MEASUREMENT OF FOUND MONUMENTS AS SHOWN ON TRACT MAP NO. 10630 AS FILED IN BOOK 181 PAGES 6-11 OF MAPS, IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, STATE OF CALIFORNIA.

LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.):
WOOD FENCE:
WIRE FENCE:
WROUGHT IRON-FENCE
MANHOLE (M.H.):
TREES: PINE, PALM, EUC, OAK, TREE, SYC, PEPPER, CORK, OLIVE

BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MIE/O DECKER RD 33FT W/O DR TO HSE •31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N (2008) DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

NOTES:

1) THIS SURVEY WAS PERFORMED WITHOUR BENEFIT OF TITLE REPORT. EASEMENTS AS SHOWN ARE FROM INFORMATION OBTAINED FROM NEIGHBORING PROPERTY REPORT.

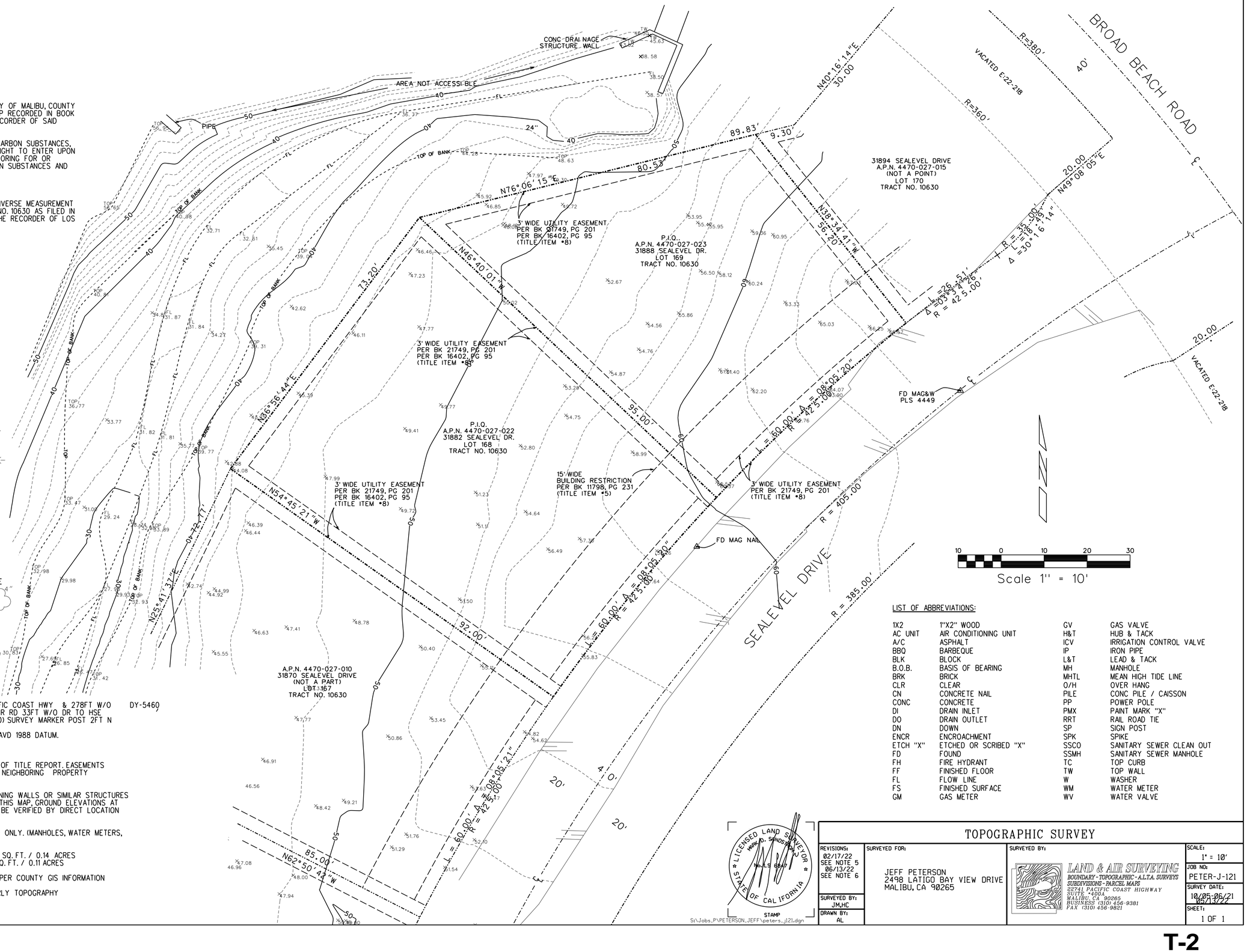
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4) GROSS PARCEL AREA APN:4470-027-022 = 6,164 SQ. FT. / 0.14 ACRES
GROSS PARCEL AREA APN:4470-027-023 = 4,854 SQ. FT. / 0.11 ACRES

5) 02/17/22 EXTENDED TOPO TO THE NORTHWEST PER COUNTY GIS INFORMATION

6) 05/13/22 EXTENDED AND UPDATED NORTHWESTERLY TOPOGRAPHY



Scale 1" = 10'

LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
AC UNIT	AIR CONDITIONING UNIT	H&T	HUB & TACK
A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

LICENSED LAND SURVEYOR — MARK D. SANDS — No. LS 6845 — STATE OF CALIFORNIA

STAMP

S:\Jobs_P\PETERSON, JEFF\peters_jl21.dgn

TOPOGRAPHIC SURVEY

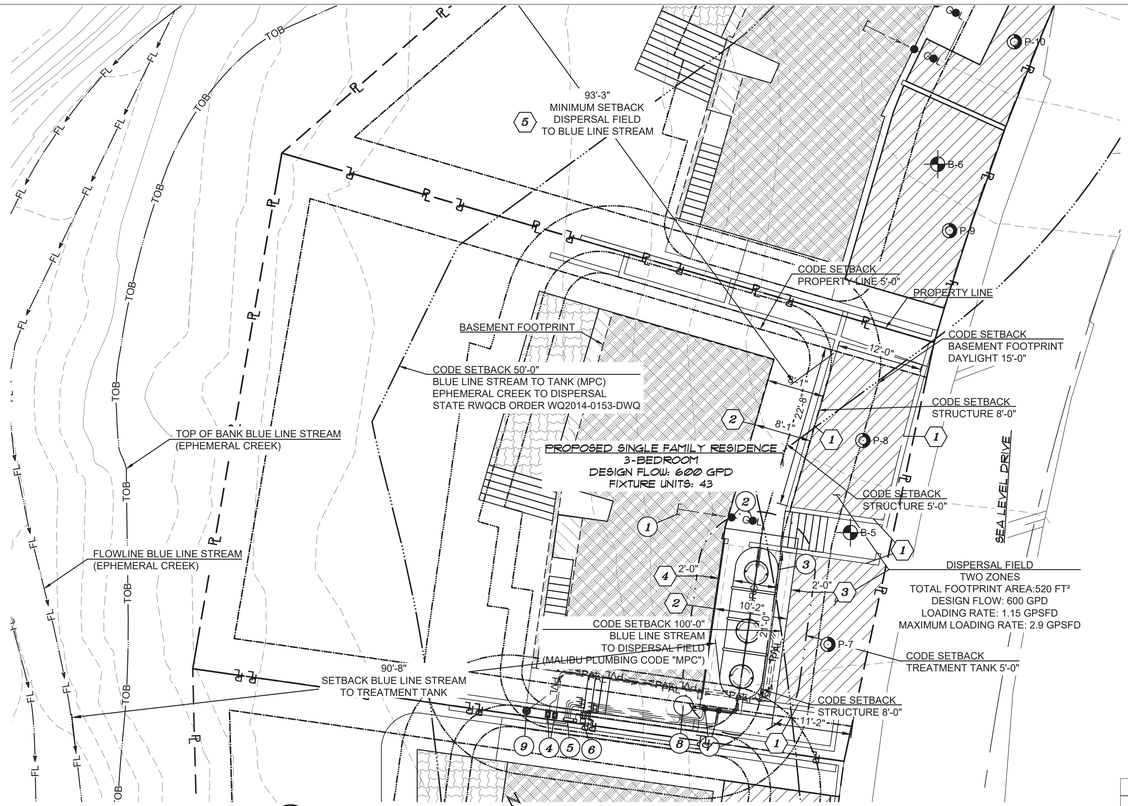
REVISIONS: 02/17/22 SEE NOTE 5; 06/13/22 SEE NOTE 6
SURVEYED BY: JM,HC
DRAWN BY: AL

SURVEYED FOR:
JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY - TOPOGRAPHIC - A.L.T.A. SURVEYS
SUBDIVISIONS - PARCEL MAPS
22741 PACIFIC COAST HIGHWAY
SUITE •400A
MALIBU, CA 90265
BUSINESS (310) 456-9381
FAX (310) 456-9821

SCALE: 1" = 10'
JOB NO: PETER-J-121
SURVEY DATE: 10/05-06/21 05/13/22
SHEET: 1 OF 1

T-2



1/1 OVERALL SITE PLAN

GENERAL NOTES:

1. EXISTING OWTS COMPONENTS LOCATION AND ABANDONMENT:
   - 1.1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS. THE LOCATIONS ON THE ENGINEERING PLANS ARE INFORMATIONAL AND MAY NOT INCLUDE ALL COMPONENTS OF THE OWTS. MANY ITEMS, SUCH AS TANKS, PIPING, DISTRIBUTION DEVICES, SEEPAGE PITS, DISPERSAL FIELDS, AND OTHER APPURTENANCES ARE BURIED AND NOT LOCATABLE BY THE SURVEYOR OR UTILITIES LOCATOR.
   - 1.2. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS AN "OWTS ABANDONMENT PERMIT" SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWTS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REGULATORY REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THIS SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
   - 1.3. THE EXISTING OWTS COMPONENTS INCLUDING; SEPTIC TANK(S), PIPING, CLEANOUT(S) SEEPAGE PIT(S), DISPERSAL FIELD(S), AND ALL OTHER APPURTENANCES SHALL BE PROPERLY ABANDONED PURSUANT TO CITY OF MALIBU ORDINANCE 435, SECTION 15.40.170 C, AND SECTION 15.40.170 D, TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES. METHOD OF ABANDONMENT SHALL BE DETERMINED BY THE ENGINEER AND/OR THE OWNER'S REPRESENTATIVE
2. SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH SPECIFICATIONS AND TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND ORDINANCES.
3. SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS, VENTS, BACKWATER VALVES, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
4. ELECTRICAL COMPONENTS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 27 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA ELECTRICAL CODE, LOCAL ELECTRICAL CODE, AND ORDINANCES.
5. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. ENSITU ENGINEERING INC., IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
6. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE INSTALLATION OF THE TANK AND DISPERSAL SYSTEM COMPONENTS OF THE AOWTS (INCLUDING BUT NOT LIMITED TO; (A) TANK EXCAVATION, BEDDING, AND BACKFILL (B) SEEPAGE PITS EXCAVATION, CONSTRUCTION, AND BACKFILL (C) SUBSURFACE DISPERSAL SYSTEM BEDDING, FILL MATERIAL, CONSTRUCTION, AND BACKFILL) AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE TANK AND DISPERSAL SYSTEM COMPONENTS WERE INSTALLED PER APPROVED AOWTS PLANS.
7. LEACH FIELDS AND DISPERSAL SYSTEMS DESIGNATED AS SAND CATEGORY: ANY REMAINING FILL MATERIAL AND ANY BEACH SAND SEDIMENT THAT MIGHT HAVE REDUCED PERMEABILITY FROM EXISTING LEACH FIELD OPERATIONS ENCOUNTERED BELOW THE BOTTOM OF THE PROPOSED LEACH FIELD OR ANY MATERIAL ENCOUNTERED IN THE CONSTRUCTION OF THE LEACH FIELD THAT IS NOT CATEGORIZED AS BEACH SAND DEPOSITS SHALL BE EXCAVATED TO THE LEVEL OF THE NATIVE BEACH SAND DEPOSITS AND REPLACED WITH DOUBLE- WASHED SAND. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE EXCAVATION OF THE LEACH FIELD AND CONFIRM IN WRITING THAT ALL THE DELETERIOUS FILL AND NON-BEACH SAND MATERIALS BELOW THE LEACH FIELD HAVE BEEN REMOVED AND REPLACED WITH CLEAN SAND AND THE LEACH FIELD WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED OWTS PLANS.
8. SUBSURFACE DRIP LINE SHALL BE PLACED IN UNCOMPACTED NATIVE SOILS RIPPED AND TILLED A MINIMUM OF 18 INCHES. SOIL SHALL BE AMENDED TO BE 30% SAND, 30% MULCH, 40% NATIVE OR LANDSCAPE DESIGNER SHALL BE CONTACTED TO ADVISE CONTRACTOR ON TYPE OF TOPSOIL TO IMPORT FOR MINIMUM BURIAL DEPTH. DISPERSAL FIELD SHALL BE PLANTED AND ESTABLISHED PRIOR TO OCCUPANCY (ENGINEER TO VERIFY)
9. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SYSTEM INSTALLATION, BUILDING SEWER DEPTH OR CONNECTION POINT WAS NOT PROVIDED AND SHALL BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION
10. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF BUILDING SEWER CONNECTION, MINIMUM 2% SLOPE FROM STRUCTURE TO CONNECTION POINT.
11. ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE VENTED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
12. THE OWTS IS SITED AS FAR LANDWARD AS FEASIBLE.

EQUIPMENT SCHEDULE

ITEM	QTY	DESCRIPTION	MFG/PART NUMBER
1	1	CONNECTION TO BUILDING SEWER[1]	
2	1	GRAVITY CLEAN-OUT AND BACKWATER VALVE[1]	INDUSTRIAL BACKWATER VALVE (SPEARS MODEL S475P FOR 4") 8" I.D. VALVE BOX (CHRISTY MODEL F08)
3	1	TREATMENT TANK[1][2]	MICROSEPTEC ES12
4	2	AIR COMPRESSOR[1][2]	MICROSEPTEC
5	1	REMOTE TELEMETRY CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	MICROSEPTEC
6	1	CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	GEOFLOW
7	2	GRAVITY UV DISINFECTION UNIT (2 IN SERIES 100% REDUNDANCY)	SALCOR
8	1	DUPLEX PUMP SYSTEM WITH 30" DIAMTER VAULT[1][2]	MICROSEPTEC
9	1	VENT ASSEMBLY[1][2]	ORENCO

[1] ALL PLUMBING APPURTENANCES AND WORK SHALL COMPLY WITH CURRENT LOCAL, COUNTY AND STATE PLUMBING CODES. APPURTENANCES AND WORK INCLUDE, BUT ARE NOT LIMITED TO; CONNECTION TO BUILDING PLUMBING, VENTILATION, ISOLATION, BACKWATER VALVES, CLEANOUTS, AND FITTINGS.

[2] ALL ELECTRICAL APPURTENANCES INCLUDING BUT NOT LIMITED TO; CONDUIT, CONDUCTOR, CONTROL PANELS, CONTACTORS, FLOATS, PUMPS, DISCONNECTS, AND COMMUNICATION DEVICES SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE ELECTRICAL CODE AND CURRENT NATIONAL ELECTRIC CODE. CONDUIT AND CONDUCTOR RUNS AND SIZING SHOWN ON PLAN ARE FOR ALIGNMENT AND COST ESTIMATION. ELECTRICAL CONTRACTOR SHALL SPECIFY ALL ELECTRICAL APPURTENANCES. CONTROL AND POWER CONDUCTORS SHALL BE PLACED IN SEPARATE CONDUIT

LEGEND

P-X	PERCOLATION TEST LOCATION
B-XX	BORING LOCATION
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT

OWTS Capacity (Design and Maximum)

Component	Description	Size/Capacity	Design Capacity	Max Capacity
Treatment Volume (Fixture Unit Capacity)	1-MicroSepTec ES12	3,634 gallons	49 fixture units	105 fixture units
Treatment (Organic Capacity)	1-MicroSepTec ES12	2.00 lb BOD5/day	600 gpd at 220 mg/L BOD5	1200 gpd at 220 mg/L BOD5
Disinfection	2-Salcor Gravity UV	1,200 gpd	600 gpd	1,200 gpd
Subsurface Irrigation Dispersal	Subsurface Irrigation	520 square feet at 1.154 gallons per square foot per day	600 gpd	1,556 gpd

Fixture Units Summary

Total Proposed Fixture Units	49	
Total Fixture Units	49	
Dwelling Units Summary		
Total Proposed Dwelling Units	1	
Proposed Bedroom Summary		
Total Proposed Bedrooms	3	bedrooms
Number of Proposed Master Bedrooms	1	bedrooms
Number of Proposed Standard Bedrooms	2	bedrooms
Flow Calculations (Q)		
Peak Flow per Master Bedroom	300	gpd
Peak Flow per Standard Bedroom	150	gpd
Average Flow per Master Bedroom	200	gpd
Average Flow per Standard Bedroom	100	gpd
Flow Calculations Proposed (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Design Flow, Q_P	600	gpd
Influent Characteristics		
BOD5 (mg/l)	220	
TSS (mg/l)	220	
TN (mg/l)	35	
Effluent Characteristics		
BOD5 (mg/l)	20	
TSS (mg/l)	20	
TN (mg/l)	17.5	

MicroSepTec Design

Design Flow	600	gpd
Design Influent BOD	220	mg/L
Design Effluent BOD	20	mg/L
Design Organic Loading BOD	1.00	lb BOD_5
MicroSepTec Model Specified	ES12	
MicroSepTec Tank Volume	3634	gal
MicroSepTec ES12 Base Organic Removal (1)	2.00	lb BOD_5
Minimum Number of MicroSepTec ES12 Required	1	units
Design Organic Removal	2.00	lb BOD_5
Design Tank Volume	3634	gal
Maximum Effluent Flow Based on Organic loading	1200	gpd
Maximum Effluent Flow Based on Hydraulic Loading	1200	gpd
Maximum Fixtures Based on Design Tank Volume	105	

Septic Tank (ST) Calculations

Total Existing Fixture Units		
Total Proposed Fixture Units	49	
Total Fixture Units	49	
Minimum Septic Tank Size based on Fixtures	2250	gal
Number of Dwelling Units	1	
Number of Bedrooms	3	bedrooms
Minimum Septic Tank Size based on Bedrooms	1500	gal
Design Septic Tank Size	3634	gal
Flow Calculations (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Leaching Field Design Flow, Q_L	600	gpd
Drip Distribution Calculations		
Design Subsurface Irrigation Loading (Application) Rate, I_L	2.992	gpsfd
Minimum Square Feet of Leaching Area Required, Q_L/I_L	201	ft^2
Design Square Feet of leaching Area from Site Plan, A	520	ft^2
Actual Loading Rate (Application), $L_R = Q/A$	1.154	gpsfd
Maximum Effluent Capacity, $Q_{MAX} = A \times I_L$	1556	gpsfd
Minimum Design Safety Factor, SF	1.0	

Ryons T value to Subsurface Irrigation Conversion Calculations

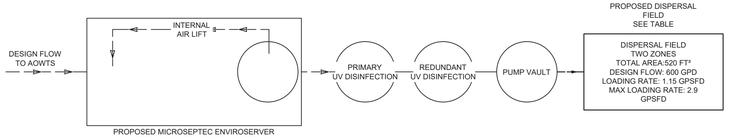
Test Pit Number	Test Depth	Percolation Rate from Ryons T test Method Converted to Gal/day					Percolation Area F (SEE FIGURE)	Infiltration rate	Safety Factor	Application Rate
		A	B= 1/A	C=Bx1440	D=C/12	E=Dx7.481		G=E/F	H	I=G/H
	ft	min/inch	inch/min	in/day	ft/day	gal/day	ft^2	gal/ft^2-day		gal/ft^2-day
P-7	7	8	0.125	180.00	15.00	112.22	3	37.41	10	3.741
P-8	7	10	0.100	144.00	12.00	89.77	3	29.92	10	2.993
T Average		9							Application Rate Average	3.37
T Max		10							Application Rate Max	3.74
T Ryon (T_R)		**10**							Design Application Rate	**2.99**

SETBACK REDUCTIONS

	COMPONENT	SITE ELEMENT	CODE REQUIREMENT	ACTUAL
1	DISPERSAL FIELD	SITE WALL	8'	0
2	DISPERSAL FIELD	BASEMENT	15' DAYLIGHT	8'-1"± 10'-2"±
3	DISPERSAL FIELD	TREATMENT TANK	5'	2'-0"
4	TREATMENT TANK	STRUCTURE	5'	2'-0"±
5	DISPERSAL FIELD	BLUE LINE STREAM	100'-0" (MPC) 50'-0" SRWQCB	93'-3"±

PIPING SCHEDULE

TAG	DESCRIPTION	SPECIFICATION
GSL	PROPOSED GRAVITY SEWER LINE	4" SCH40 PVC
PEL	PROPOSED PUMPED EFFLUENT LINE	2" SCH80 PVC
PVL	PROPOSED AIR VENT LINE	4" SCH40 PVC
RCRC	RECIRCULATION RETURN LINE	1½" SCH80 PVC
LFH	DISPERSAL FIELD HEADER	1½" SCH80 PVC
LFL	DISPERSAL FIELD LATERAL	1" SCH40 PVC
FL	FLOWLINE	
TOB	TOP OF BANK	



PROPOSED MICROSEPTEC ENVIROSERVER
FIBERGLASS TREATMENT TANK WITH
UV DISINFECTION
MICROSEPTEC ENVIROSERVER
MODEL ES12

PLANNER APPROVAL
ISSUED
10/31/2022

JOHN N. YAROSLASKI
PRINCIPAL ENGINEER

ENSITU
ENSITU ENGINEERING, INC.
"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."
7476 CARMELITA AVE.
ATASCADERO, CA. 93422
(805) 466-1225
Fax: 805.772.0513
ENSITU@ensitu.com

NO.	REVISIONS	DATE	BY

31882 SEA LEVEL DRIVE, CONFORMANCE REVIEW
DESIGN PLANS
CR-SITE PLANS AND TABLES 31882
MALIBU, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN N. YAROSLASKI
No. 60149
EXP 06-2024
CIVIL
STATE OF CALIFORNIA

DATE: 10/31/2022
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: JNY

JOB NO.
114-116

SHEET
1 OF 1

Project Engineer: John N Yaroslaski PE # 60149
DWG NAME: D:\Ensitu Engineering Inc\EBF - PV\144-118 31870 Sea Level Drive\Engineering\Cad Design\144-118.010 31870 Sea Level Drive PWCR-01.dwg
CREATION TIME: Friday, November 4, 2022 10:42:10 AM
LAST SAVED: Friday, November 4, 2022 10:56:02 AM
PLOT TIME: Friday, November 4, 2022 10:56:02 AM

PROPERTY ADDRESS:

31882 & 31888 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-022 (LOS ANGELES COUNTY)
4470-027-023 (LOS ANGELES COUNTY)

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BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MI E/O DECKER RD 33FT W/O DR TO HSE •31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N (2008) DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

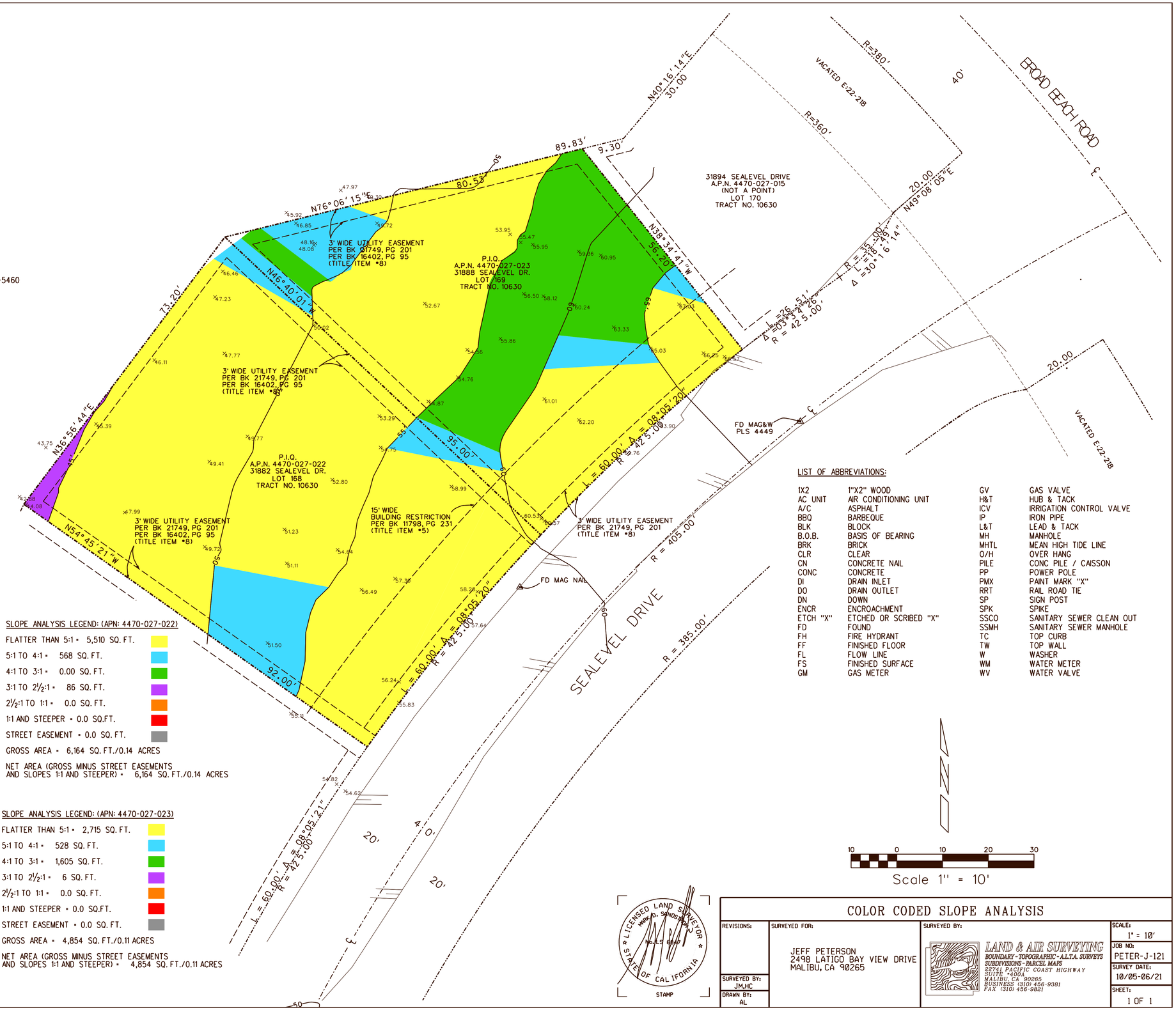
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GROSS PARCEL AREA APN:4470-027-023 = 4,854 SQ. FT. / 0.11 ACRES
TOTAL GROSS PARCEL AREA = 11,018 SQ. FT./0.25 ACRES
NET AREA = 11,018 SQ. FT./0.25 ACRES



LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
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A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.): X
WOOD FENCE: W
WIRE FENCE:
WROUGHT IRON-FENCE: WIF
CONCRETE (CONC.):
TILE:
SLATE/FLAGSTONE:
DIRT/GRAVEL:
BRICK (BRK):
MANHOLE (M.H.):
TREES: PINE PALM EUC OAK TREE
SYC PEPPER CORK OLIVE

SLOPE ANALYSIS LEGEND: (APN: 4470-027-022)

FLATTER THAN 5:1 •	5,510 SQ. FT.
5:1 TO 4:1 •	568 SQ. FT.
4:1 TO 3:1 •	0.00 SQ. FT.
3:1 TO 2½:1 •	86 SQ. FT.
2½:1 TO 1:1 •	0.0 SQ. FT.
1:1 AND STEEPER •	0.0 SQ.FT.
STREET EASEMENT •	0.0 SQ. FT.
GROSS AREA •	6,164 SQ. FT./0.14 ACRES
NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) •	6,164 SQ. FT./0.14 ACRES

SLOPE ANALYSIS LEGEND: (APN: 4470-027-023)

FLATTER THAN 5:1 •	2,715 SQ. FT.
5:1 TO 4:1 •	528 SQ. FT.
4:1 TO 3:1 •	1,605 SQ. FT.
3:1 TO 2½:1 •	6 SQ. FT.
2½:1 TO 1:1 •	0.0 SQ. FT.
1:1 AND STEEPER •	0.0 SQ.FT.
STREET EASEMENT •	0.0 SQ. FT.
GROSS AREA •	4,854 SQ. FT./0.11 ACRES
NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) •	4,854 SQ. FT./0.11 ACRES

N

10 0 10 20 30

Scale 1" = 10'

LICENSED LAND SURVEYOR
MARK O. SANDS
No. LS 6847
STATE OF CALIFORNIA
STAMP

COLOR CODED SLOPE ANALYSIS

REVISIONS:

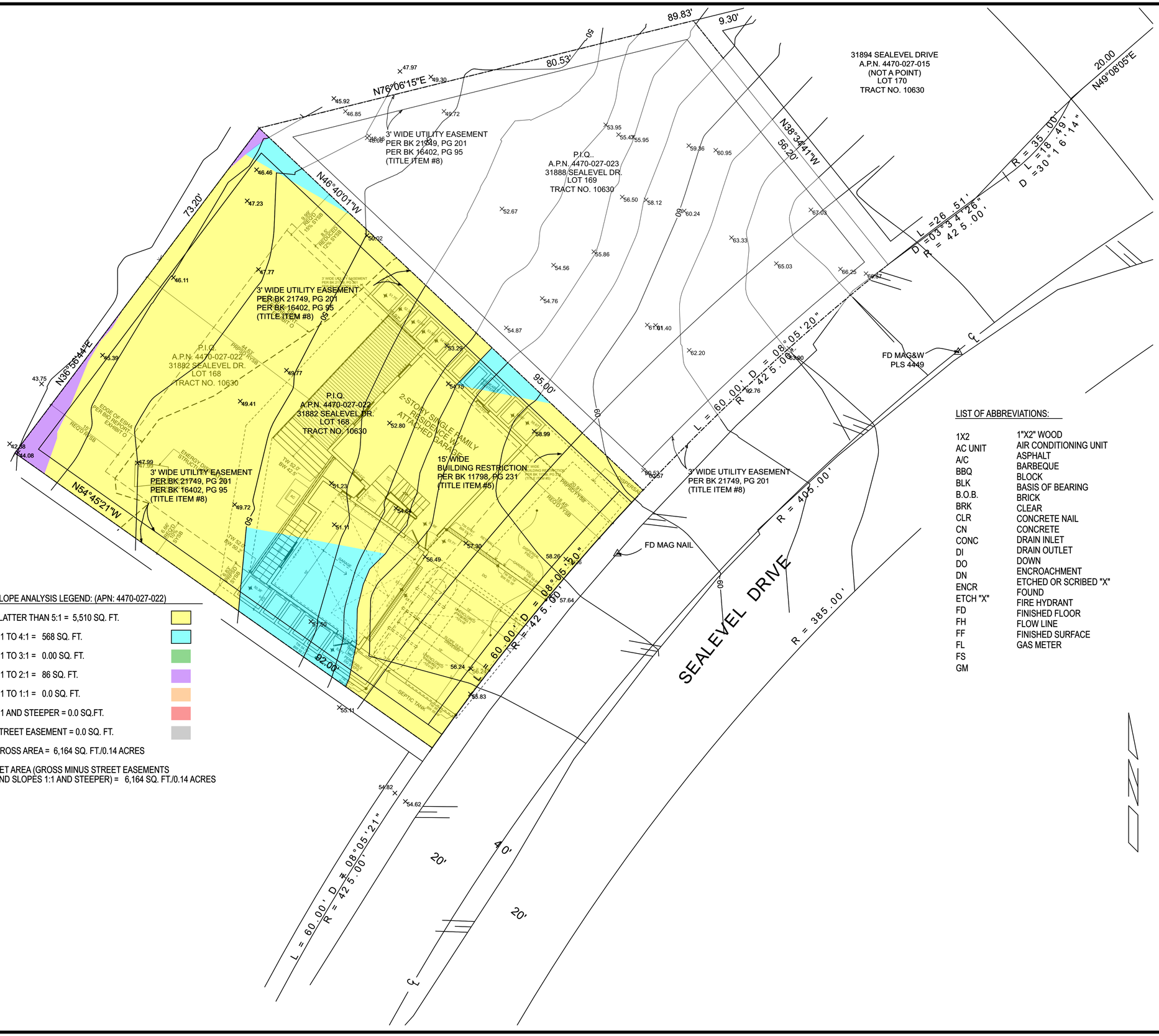
SURVEYED BY: JM,HC
DRAWN BY: AL

SURVEYED FOR:
JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY - TOPOGRAPHIC - A.L.T.A. SURVEYS
SUBDIVISIONS - PARCEL MAPS
22741 PACIFIC COAST HIGHWAY
SUITE #1004
MALIBU, CA 90265
BUSINESS (310) 456-9381
FAX (310) 456-9821

SCALE: 1" = 10'
JOB NO: PETER-J-121
SURVEY DATE: 10/05-06/21
SHEET: 1 OF 1

T-4



LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD
AC UNIT	AIR CONDITIONING UNIT
A/C	ASPHALT
BBQ	BARBEQUE
BLK	BLOCK
B.O.B.	BASIS OF BEARING
BRK	BRICK
CLR	CLEAR
CN	CONCRETE NAIL
CONC	CONCRETE
DI	DRAIN INLET
DO	DRAIN OUTLET
DN	DOWN
ENCR	ENCROACHMENT
ETCH "X"	ETCHED OR SCRIBED "X"
FD	FOUND
FH	FIRE HYDRANT
FF	FINISHED FLOOR
FL	FLOW LINE
FS	FINISHED SURFACE
GM	GAS METER

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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	05/12/22	REVISIONS

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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

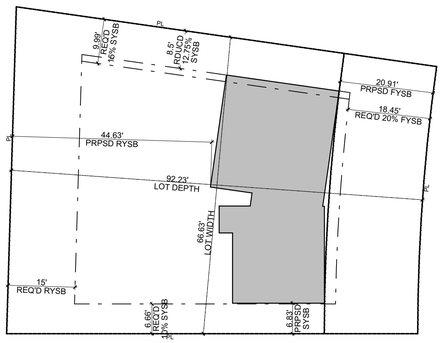
SHEET TITLE

SITE PLAN WITH COLOR CODED SLOPE

DRAWING NO.
A-0.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/8" = 1'-0"
DRAWN BY	D.W.B.,

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SETBACK PLAN
SCALE: 1/16" = 1'-0"

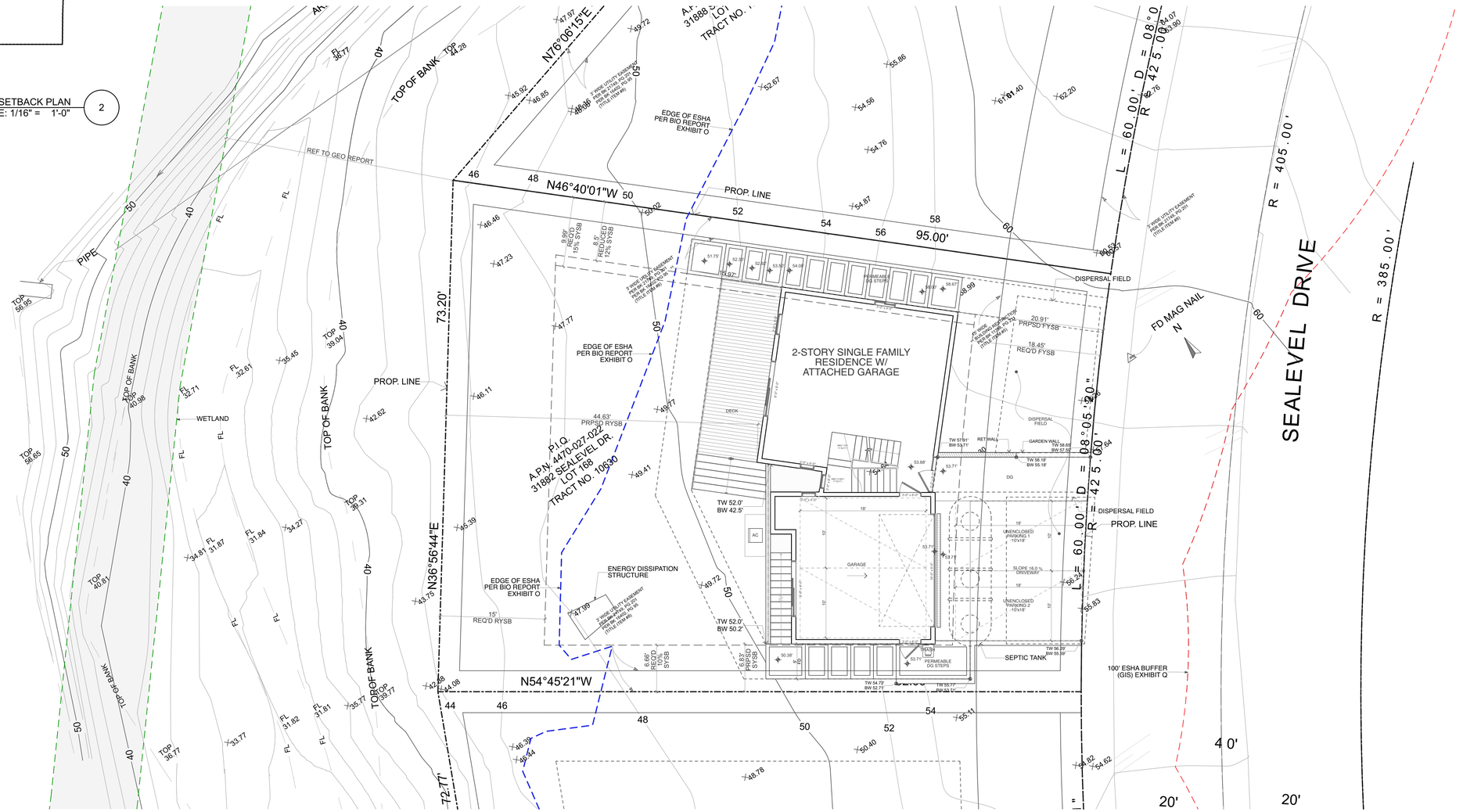
2

Width/Depth:
Depth: 92.23' Width: 66.63'

•MINIMUM SETBACKS:

	Required	Proposed
Front (East) :	18.45'	20.91'
Side 10% (South) :	6.66'	6.83'
Side 15% (North) :	9.99'	*8.50'
Rear (West) :	15.00'	44.63'

*Minor Modification for 15% reduction side-yard setback.



SITE PLAN
SCALE: 1/8" = 1'-0"

1

PETERSON RESIDENCE

31882 SEA LEVEL DR
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	05/12/22	REVISIONS

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TEL. 310-456-5905

SHEET TITLE

SITE PLAN

DRAWING NO.
A-0.2

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

•MAX. ALLOWABLE SQUARE FOOTAGE:

6,164 x .177 = 1,091 + 1,000= **2,091 SF**

•PROPOSED SQUARE FOOTAGE TABULATION:

First Floor.....	676	Sq.Ft.+	
Garage at First Floor.....	464	Sq.Ft.+	
Second Floor	759	Sq.Ft.=	
Total Enclosed area	1,899	Sq.Ft.	< 2,091 Sq.Ft.

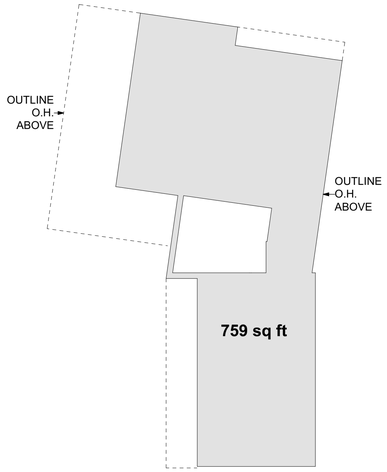
Basement 859 Sq. Ft. sf < 1,000 Sq. Ft.

City of Malibu Planning Division

Total Development Square Footage Calculator

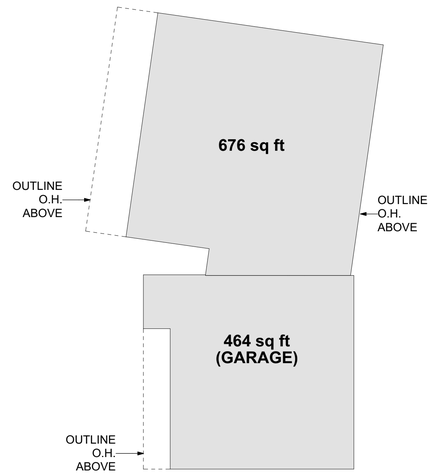
Plug in Net Lot Area* here

>>>>	6164			<<<<
				subtotal
	Up to 0.5 acre	6164	6164	2,091 s.f.
	0.5 to 1 acre	-15616		0 s.f.
	1 to 1.5 acres	0		0 s.f.
	1.5 acres or more	0	0	0 s.f.
				1885
	TDSF -->>>	**2,091**		



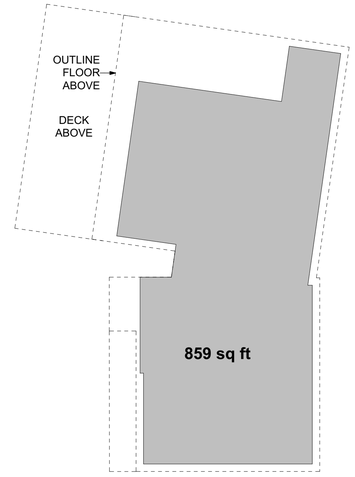
SECOND FLOOR PLAN 3

SCALE: 1/8" = 1'-0"



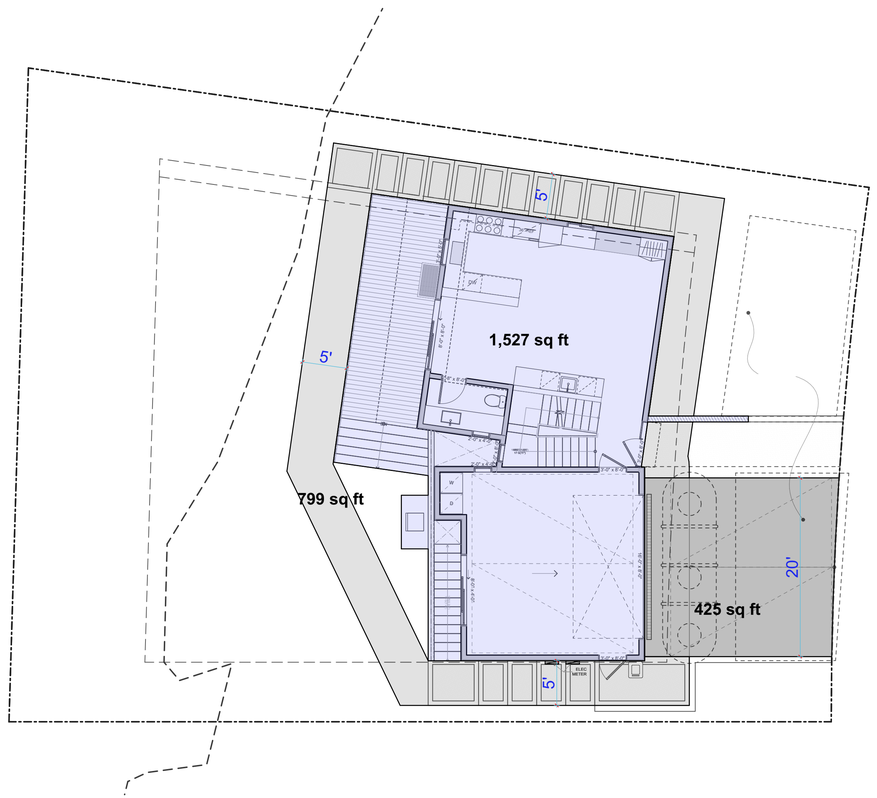
FIRST FLOOR PLAN 2

SCALE: 1/8" = 1'-0"



BASEMENT PLAN 1

SCALE: 1/8" = 1'-0"



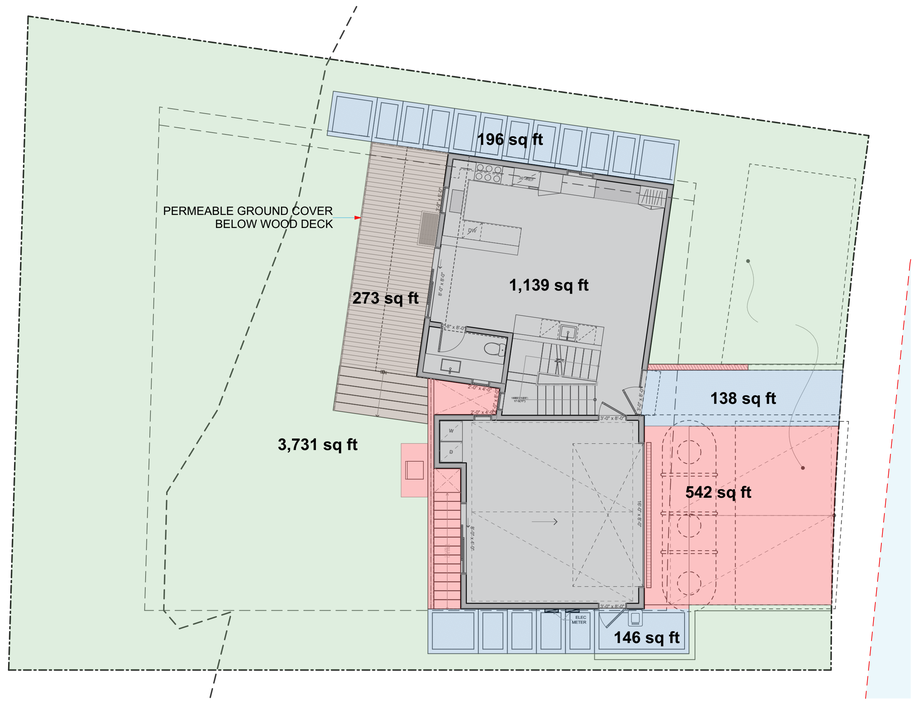
SYMBOL LEGEND:

DEVELOPMENT AREA	1,527 SF
FD SQUARE FOOTAGE	1,224 SF (EXEMPT)

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
6,164 SF X 25% = 1,541 SF : 1,527 SF < 1,541 SF (MAX)

LIMIT OF DEVELOPMENT AREA 5

SCALE: 1/8" = 1'-0"



•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE : 6,164 X 45 = 2,773 Sq.Ft.

•PROPOSED IMPERMEABLE COVERAGE:

Buildings footprint	1,139 sf+
Concrete slabs	542 sf+
TOTAL	1,681 sf < 2,773 sf limit

•**OTHER** PROPOSED PERMEABLE AREAS:

Wooden deck	273 sf
Existing grading to remain	3,731 sf
DG	480 sf

IMPERMEABLE PLAN 4

SCALE: 1/8" = 1'-0"

PLAN NORTH

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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TEL. 310-456-5905

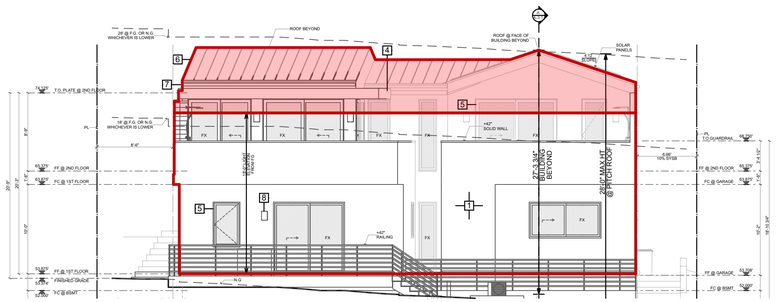
SHEET TITLE

AREA DIAGRAMS

DRAWING NO.
A-0.3

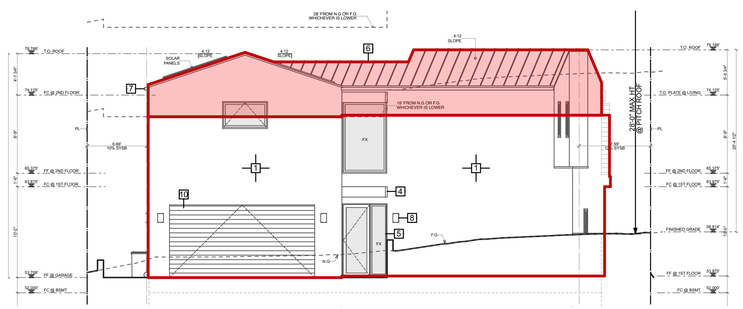
PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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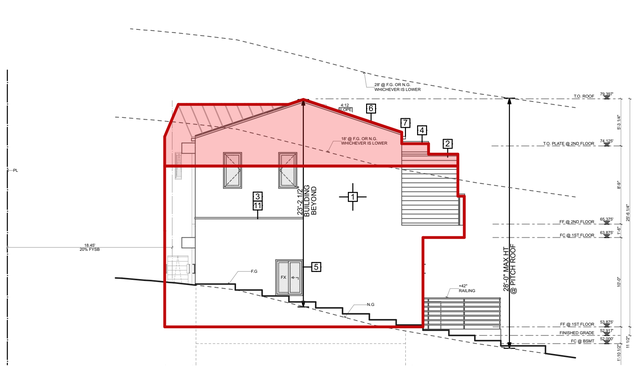
WEST ELEVATION 3

SCALE: 1/8" = 1'-0"



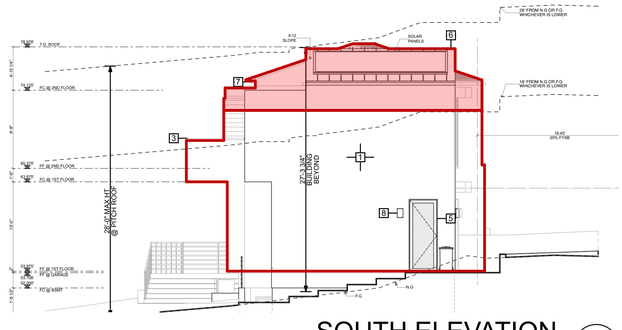
EAST ELEVATION 4

SCALE: 1/8" = 1'-0"



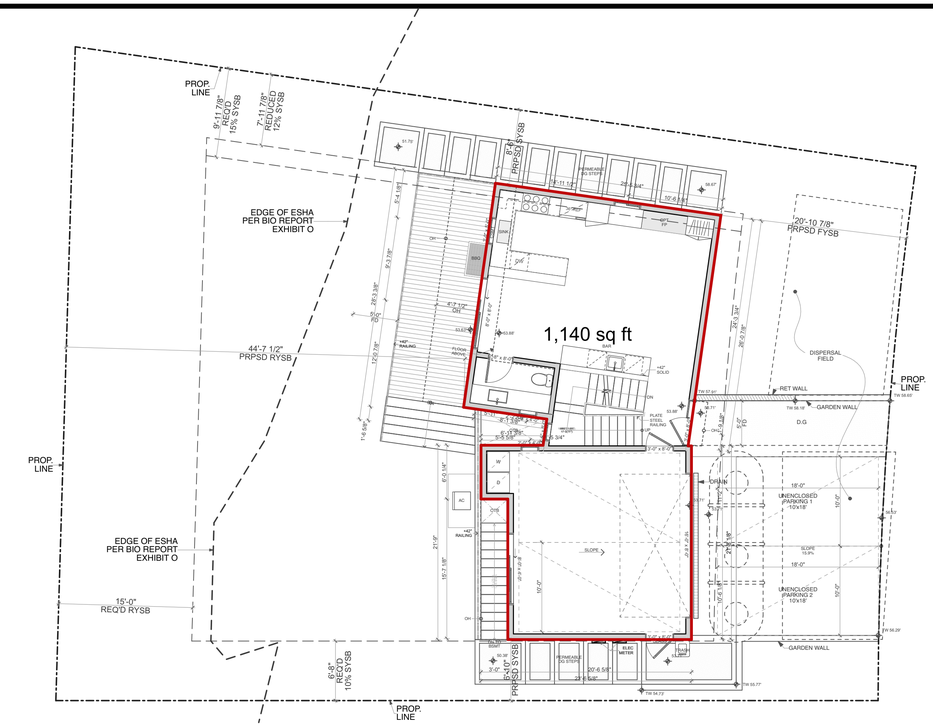
NORTH ELEVATION 5

SCALE: 1/8" = 1'-0"



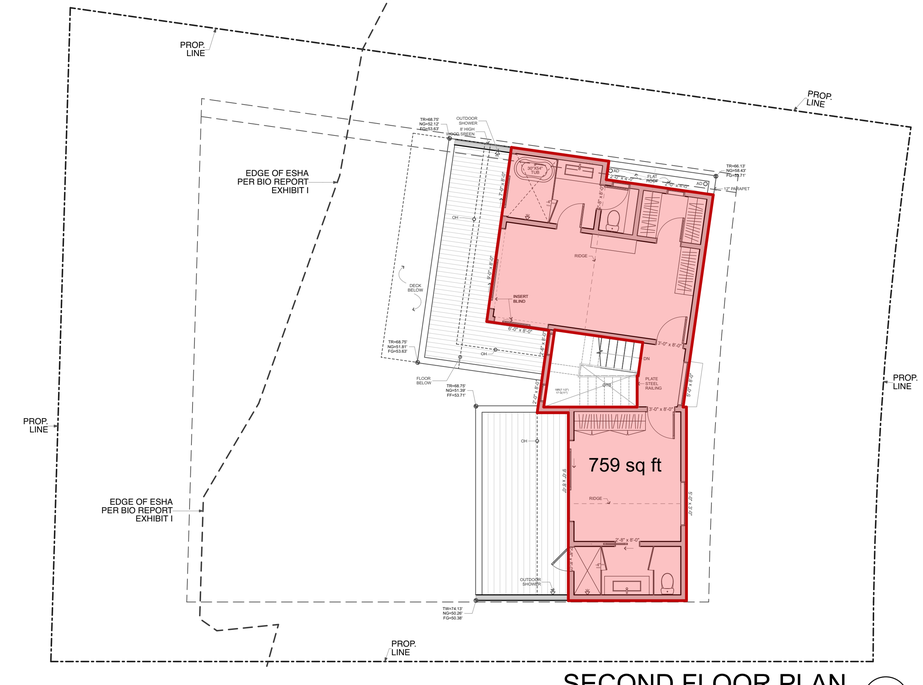
SOUTH ELEVATION 6

SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN 1

SCALE: 1/8" = 1'-0"



SECOND FLOOR PLAN 2

SCALE: 1/8" = 1'-0"

BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,140 SF
MAXIMUM ALLOWED OVER 18' = (1,140 x .667) = 760 SF
AREA OVER 18' = 759 SF

FIRST FLOOR AREA (1,140 SF)

SECOND FLOOR AREA (759 SF)

PETERSON RESIDENCE

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MALIBU, CA 90265

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C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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	05/12/22	REVISIONS

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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

2/3RD'S CALCULATIONS DIAGRAM

DRAWING NO.
A-0.4

PLAN NORTH

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

FIRE DEPARTMENT NOTES

1. PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 20 FEET, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6 AND AN UNOBSTRUCTED VERTICAL CLEARANCE "CLEAR TO SKY" FIRE DEPARTMENT VEHICULAR ACCESS TO WITHIN 150 FEET OF ALL PORTIONS OF THE EXTERIOR BUILDING WALLS. FIRE CODE 503.2.1

2. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED FIRE DEPARTMENT TURNAROUND. FIRE CODE 503.2.5

3. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE PROVIDED WITH A 32 FOOT CENTERLINE TURNING RADIUS. FIRE CODE 503.2.4

4. THE GRADIENT OF FIRE DEPARTMENT VEHICLE ACCESS ROADS SHALL NOT EXCEED 15% UNLESS APPROVED BY THE FIRE CODE OFFICIAL. FIRE CODE 503.2.7

5. A MINIMUM 5 FOOT WIDE APPROVED FIREFIGHTER ACCESS WALKWAY LEADING FROM THE FIRE APPARATUS ACCESS ROAD TO THE BUILDINGS EXTERIOR OPENINGS SHALL BE PROVIDED FOR FIREFIGHTING AND RESCUE PURPOSES. FIRE CODE 504.1

6. GRADE BREAKS SHALL NOT EXCEED THE MAXIMUM ANGLE OF APPROACH OR DEPARTURE FOR FIRE DEPARTMENT APPARATUS.

7. THE INSPECTION, HYDROSTATIC TEST AND FLUSHING OF THE FIRE SPRINKLER PIPING SHALL BE WITNESSED BY AN AUTHORIZED FIRE DEPARTMENT REPRESENTATIVE. FIRE CODE 901.6

8. PROVIDE AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM AS SET FORTH BY BUILDING CODE 903, AND FIRE CODE 903. PLANS SHALL BE SUBMITTED TO THE SPRINKLER PLAN CHECK UNIT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

REASON : FIRE CODE 903.2.8 AND 903.2.11.7
LOCATION : MAIN HOUSE, GUEST HOUSE, AND DETACHED GARAGE
TYPE OF FIRE SPRINKLER SYSTEM : FIRE CODE 903.3.1.3 - NFPA 13D

9. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE HARDSCAPE ALL WEATHER ACCESS IN ACCORDANCE WITH THE DEPARTMENT'S ALL WEATHER ACCESS REQUIREMENTS. FIRE CODE 503.2.3

10. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. FIRE CODE 505.1

11. FIRE APPARATUS ACCESS ROADS SHALL BE IDENTIFIED WITH APPROVED SIGNS. TEMPORARY SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS. FIRE CODE 505.2

12. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. BUILDING CODE 1008.1.9

13. ALL ROOF COVERINGS SHALL BE CLASS "A" AS SPECIFIED IN BUILDING CODE 1505.1.1 (RESIDENTIAL CODE R327.5.2 & R902)

14. ROOF VALLEY FLASHINGS SHALL BE NOT LESS THAN 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36-INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF NO. 72 ASTM CAP SHEET MEETING RUNNING THE FULL LENGTH OF THE VALLEY. (RESIDENTIAL CODE R327.5.3 AND BUILDING CODE 705A.3)

15. ROOF GUTTERS SHALL BE PROVIDED WITH A MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER. (RESIDENTIAL CODE R327.534 AND BUILDING CODE 705A.4)

16. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

17. FIRE DEPARTMENT VEHICULAR ACCESS ROADS MUST BE INSTALLED AND MAINTAINED IN A SERVICEABLE MANNER PRIOR TO AND DURING THE TIME OF CONSTRUCTION. FIRE CODE 503.1.1

18. PROVIDE APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS NO PARKING - FIRE LANE. SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE BY 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS, TO CLEARLY INDICATE THE ENTRANCE TO SUCH ROAD, OR PROHIBIT THE OBSTRUCTION THEROF AND AT INTERVALS, AS REQUIRED BY THE FIRE INSPECTOR. FIRE CODE 503.3.

19. AN APPROVED KEY BOX, LISTED IN ACCORDANCE WITH UL 1037 SHALL BE PROVIDED AS REQUIRED BY FIRE CODE 506. THE LOCATION OF EACH KEY BOX SHALL BE DETERMINED BY THE FIRE INSPECTOR.

20. THE ELECTRIC SECURITY GATE SHALL PROVIDE AN APPROVED MEANS OF EMERGENCY OPERATION, AND SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES AND REPLACED OR REPAIRED WHEN DEFECTIVE. ELECTRIC GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F220. GATES SHALL BE OF THE SWINGING OR SLIDING TYPE. CONSTRUCTION OF GATES SHALL BE OF MATERIALS THAT ALLOW MANUAL OPERATION BY ONE PERSON. FIRE CODE 503.6.

21. ALL FIRE HYDRANTS SHALL MEASURE 6" X 4" X 2-1/2", BRASS OR BRONZE, CONFORMING TO AMERICAN WATER WORKS ASSOCIATION STANDARD C503. OR APPROVED EQUAL, AND SHALL BE INSTALLED, TESTED AND ACCEPTED PRIOR TO BEGINNING CONSTRUCTION. FIRE CODE 501.4.

22. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. RESIDENTIAL CODE R314.4

23. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. REQUIRED CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. RESIDENTIAL CODE R315.1.2, BUILDING CODE 420.4.1

24. VENTS SHALL RESIST THE INTRUSION OF FLAME AND EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS. VENT OPENINGS SHALL BE PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH A MINIMUM 1/16TH INCH OPENINGS AND SHALL NOT EXCEED 1/8TH INCH. VENTS SHALL NOT BE INSTALLED IN EAVES OR CORNICES. (RESIDENTIAL CODE R327.6.1 AND BUILDING CODE 706A.1)

25. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

FIRE FLOW AVAILABILITY

THE REQUIRED FIRE FLOW FOR FIRE HYDRANTS AT THIS LOCATION IS 1,250 GPM, AT 20 PSI RESIDUAL PRESSURE, FOR A DURATION OF 1 HOUR OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND. FIRE CODE 507.3 AND APPENDIX B105.1 APPENDIX B.

THE REQUIRED FIRE FLOW IS BASED ON THE FOLLOWING CALCULATION:

TYPE OF CONSTRUCTION PER THE BUILDING CODE:	TYPE VB
VHFHSZ	YES
SIZE OF LOT (ACRES)	0.14 AC
FIRE FLOW BASED ON THE FIRE-FLOW CALCULATION AREA	1,500 GPM
REDUCTION FOR FIRE SPRINKLERS (MAXIMUM 50%):	750 GPM
TOTAL FIRE FLOW REQUIRED:	1,250 GPM (MIN)

FIREFIGHTER WALKING ACCESS HOSE PULL DISTANCE

A-A[1] = 7'
B-B[1] = 134'

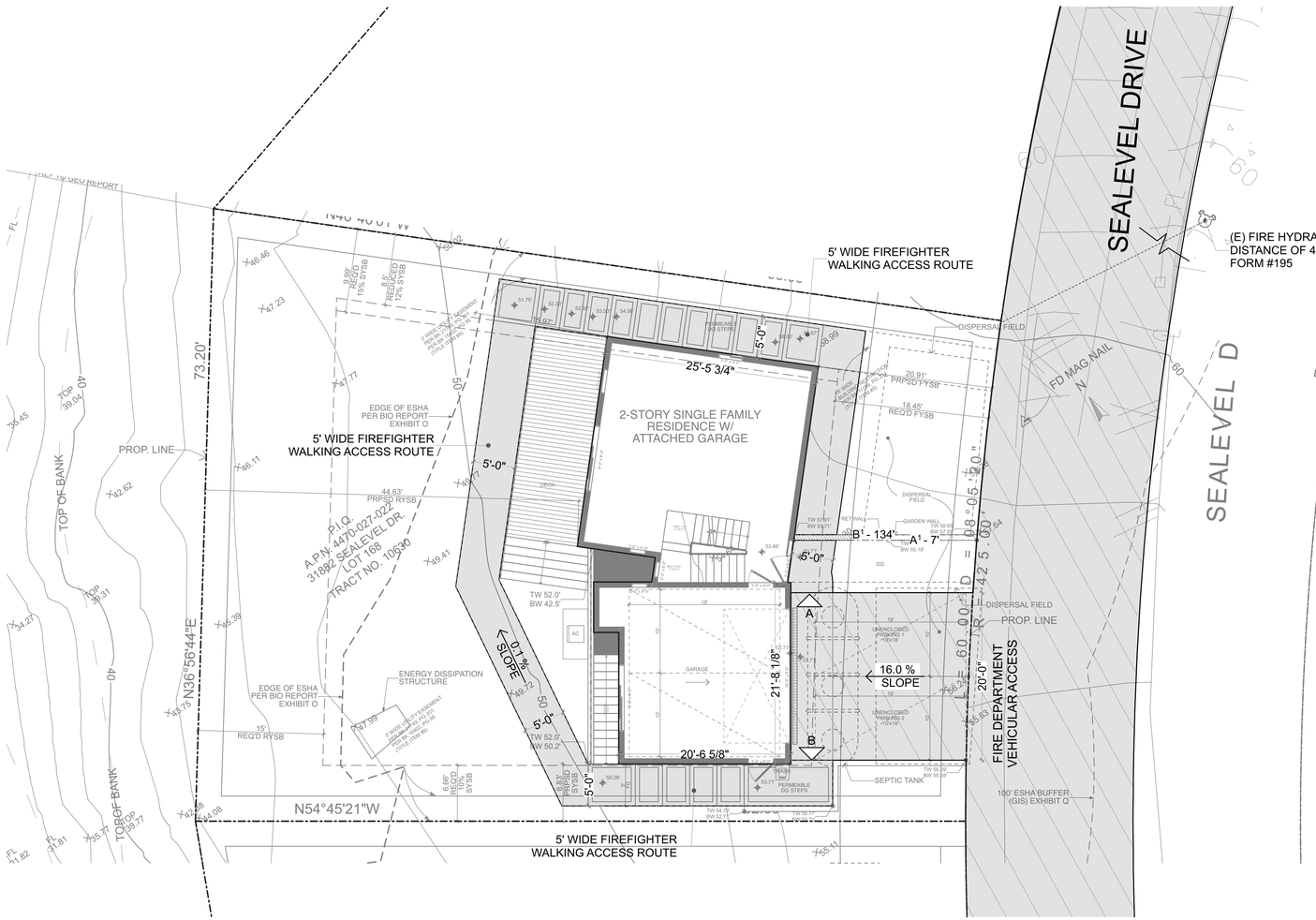
FIRE DEPT. LEGEND

FIRE DEPT. VEHICULAR AND WALKING ACCESS

ROAD DETAIL

(N) 4" THK CONC O/ 4" THK CLASS 2 BASE MAT DRIVEWAY

FIRE FLOW AREA CALCULATION			
HOUSE AREA	TYPE V-B[b]	FIRE FLOW (GALLONS PER MINUTE)	FLOW DURATION (HOURS)
2,758 SF	0 - 3,600	1,500	1



SITE PLAN
SCALE: 1/8" = 1'-0"

1

PETERSON RESIDENCE

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MALIBU, CA 90265

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DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
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	05/12/22	REVISIONS

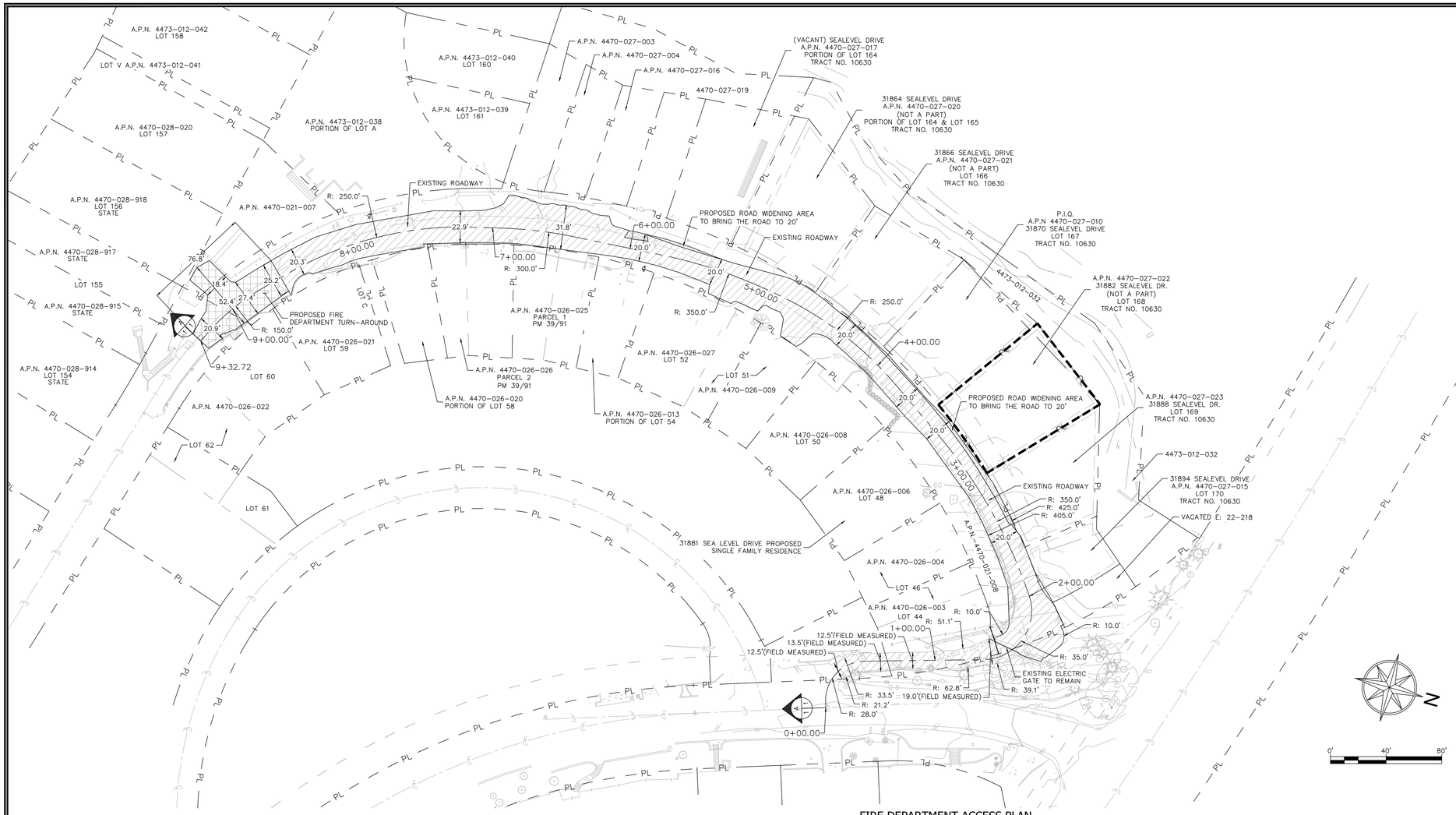
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

FIRE DEPARTMENT PLAN

DRAWING NO.
A-0.5

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,



FIRE DEPARTMENT ACCESS PLAN

LINETYPE	DESCRIPTION
— — — PL —	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
— — —	PROPOSED MAJOR CONTOURS
— — —	PROPOSED MINOR CONTOURS
—℄—	ROAD CENTERLINE
— — —	EASEMENT LINE

PROPOSED ON GRADE ROAD WIDENING AREA TO BRING THE ROAD TO 20'

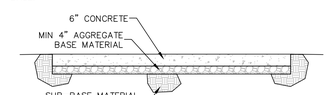
EXISTING FIRE DEPARTMENT ACCESS ROAD PER TYPICAL DRIVEWAY DETAIL HEREON

EXISTING FIRE DEPARTMENT TURN-AROUND

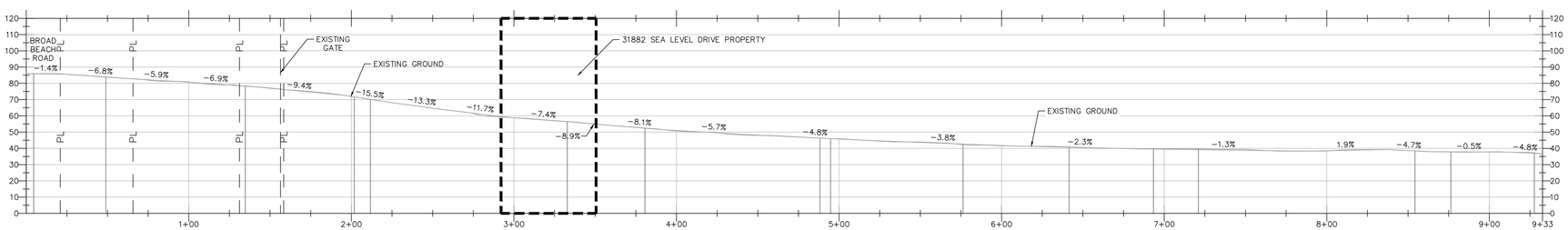
GENERAL NOTES:

THE DRIVEWAY SHALL BE FLUSH WITH EXISTING GRADES WITH NO CURBS.

THE DRIVEWAY MAY ALSO BE CONSTRUCTED OF MIN 4" ASPHALT CONCRETE OVER MIN 6" OF AGGREGATE BASE.



TYPICAL DRIVEWAY SECTION
DETAIL (NTS)



CROSS SECTION A
DRIVEWAY PROFILE
(SCALE: 1" = 40')

REVISIONS

REV	BY	DATE

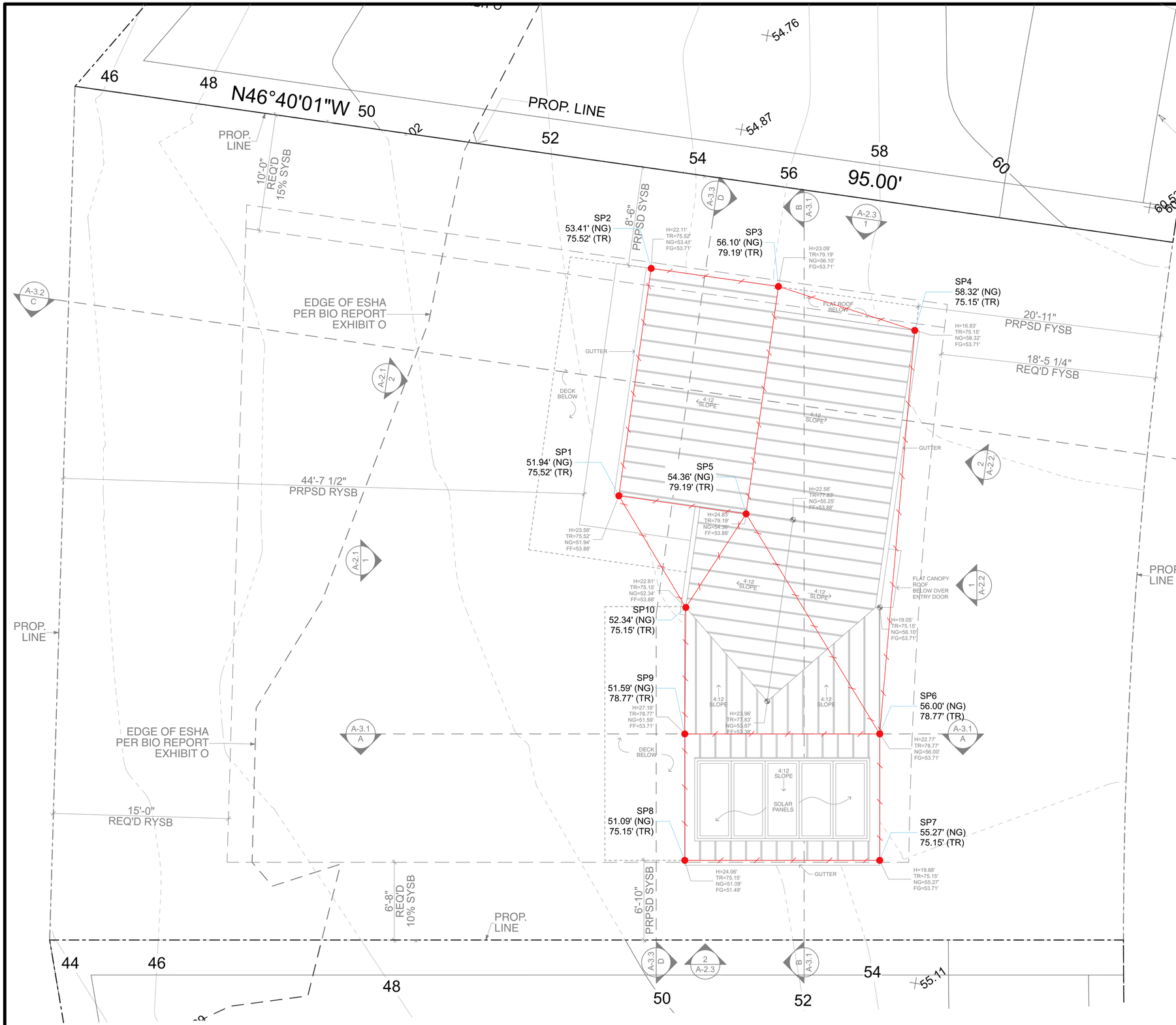
AHSIRT
ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

ROADWAY IMPROVEMENT ACCESS PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA 90265

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
EXP06/2023
CIVIL
STATE OF CALIFORNIA

JOB #	104-11
DATE	12/24
DRAWN BY	HN
CHECKED BY	TAC
SHEET NUMBER	F1.1

DRAWING NAME: D:\TRISHA PROJECTS\SEA LEVEL DR\VC-01-CAD\00-DESIGN\ROADWAY IMPROVEMENT ACCESS PLAN - 31882.DWG
LAYOUT: F1.1 PLOTTED: 12/5/2024 4:36:16 PM
XREF DATE: 12/5/2024 4:36:16 PM
STYLE TABLE: ACAD.CTB LAST SAVED BY: TRISHA



PLAN NOTES:

"The top one-foot (1'-0") of the story pole shall be painted with a clearly visible black paint. Markings shall also be made at 18 feet above finish or natural grade, whichever results in a lower building height, and at one (1) foot increments above 18 feet. Bright orange construction mesh approximately one (1) foot in width shall be placed connecting poles to show all proposed roof and ridgelines.

"If at anytime the story pole becomes unsafe, they shall be repaired and reset immediately. The story poles shall be removed immediately if determined by the City to be a public safety risk."

INSTRUCTIONS:

Indication of story pole Height- The elevation of the height of each story pole and the natural and finish grades shall be indicated on the plans. In addition, the applicant shall provide an Elevation plan showing a typical story pole.

LEGEND:

- Plastic Ribbon
- Story Pole
- SP# XX.XX' XX.XX' — Story pole Number, Datum @ Bottom of Pole, Datum @ Top of Pole
- SP# — Datum @ Top of Pole/ Story Pole Number
- ER/EG# — Datum @ Bottom of Pole

STORY POLE PLAN
APPROVED BY:

I hearby absolve the City of any liability associated with the construction of, or
damage caused by, the placement of the approved story poles.

Project Applicant _____ Date _____

Burdge & Associates Architects, Inc.

STORY POLE			
STORY POLE ID	NG DATUM @ BOTTOM	DATUM @ TOP	STORY POLE HEIGHT
SP1	51.94'	75.52'	23.57'
SP2	53.41'	75.52'	22.1'
SP3	56.10'	79.19'	23.08'
SP4	58.32'	75.15'	16.83'
SP5	54.36'	79.19'	24.82'
SP6	56.00'	78.77'	22.77'
SP7	55.27'	75.15'	19.89'
SP8	51.09'	75.15'	24.07'
SP9	51.59'	78.77'	27.18'
SP10	52.34'	75.15'	22.81'

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

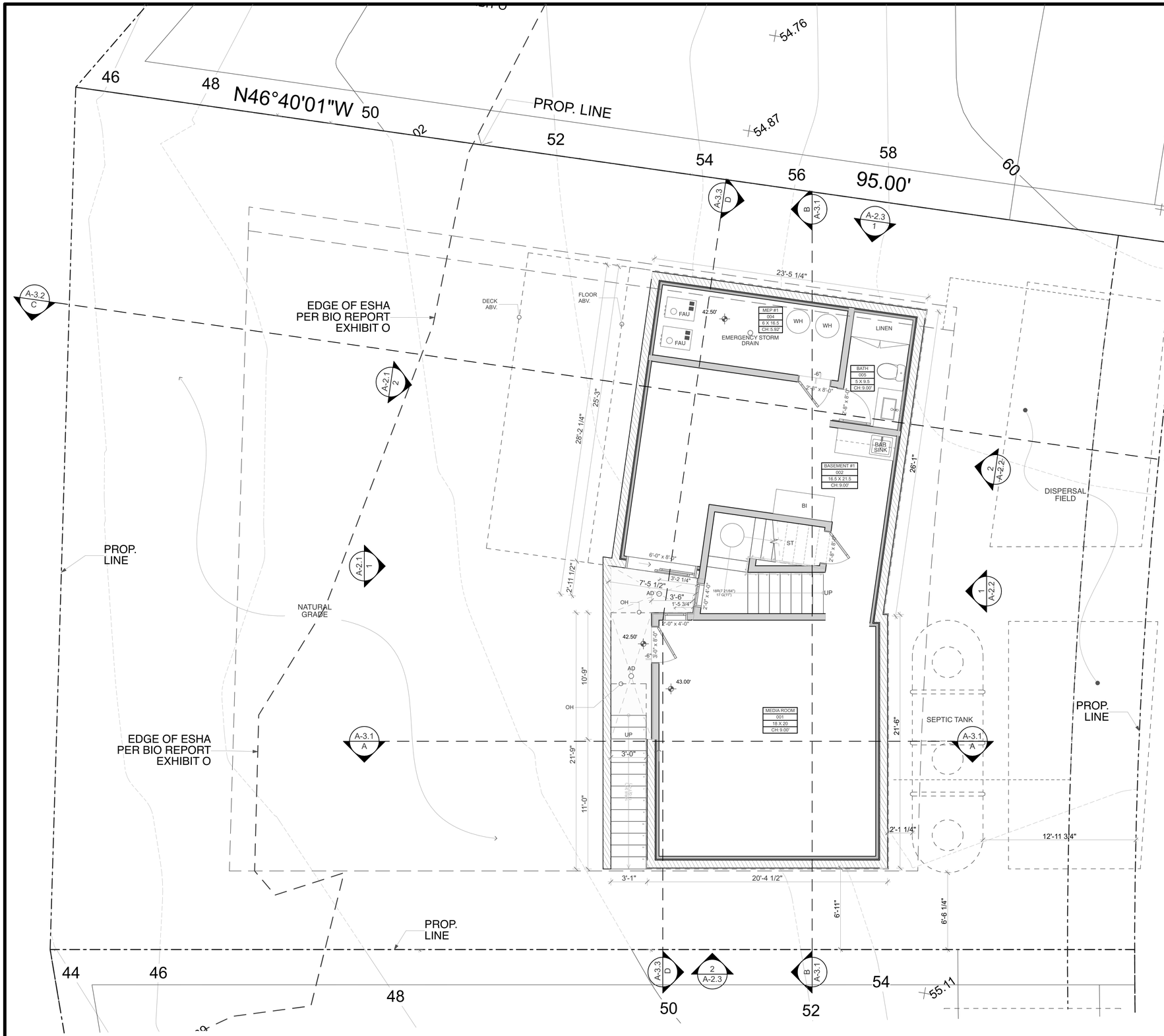
STORY POLE PLAN

PLAN NORTH

DRAWING NO.
A-0.6

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,

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PLAN NORTH

KEYNOTES

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02	SELECTIVE DEMOLITION ONLY
03	ALIGN
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05	GRID LINES @ EXTERIOR WALLS REPRESENT F.O. PLYD/ F.O. CONC. U.O.N
06	+42 GUARDRAIL, ESR-3563. REF; 7/A-5.7
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09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
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43	NOTE: 5' H. POOL FENCING ENCLOSURE W.5' W. X 5' H. SELF CLOSING , SELF LATCHING. RE: A-0.1 FOR POOL BARRIER SURROUND
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NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS)

LIGHTWELL CALCULATION
6.7% < 25% PER LCP POLICY 4

LINEAR FEET OF EXT WALL = 148.81'
LIGHTWELL LENGTH = 9.91'
9.91' / 148.81' = 6.7%

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
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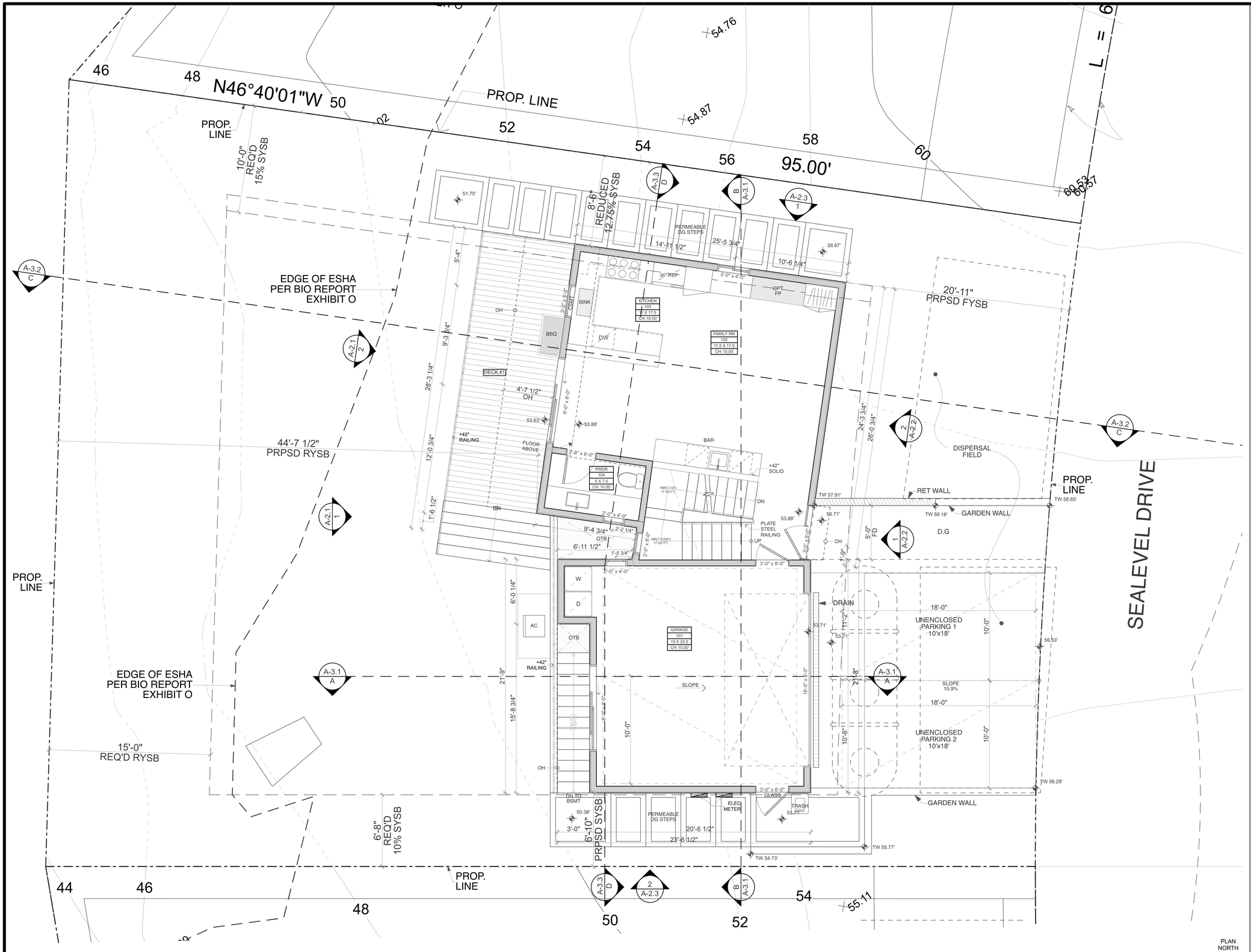
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED
BASEMENT PLAN

DRAWING NO.
A-1.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



KEYNOTES

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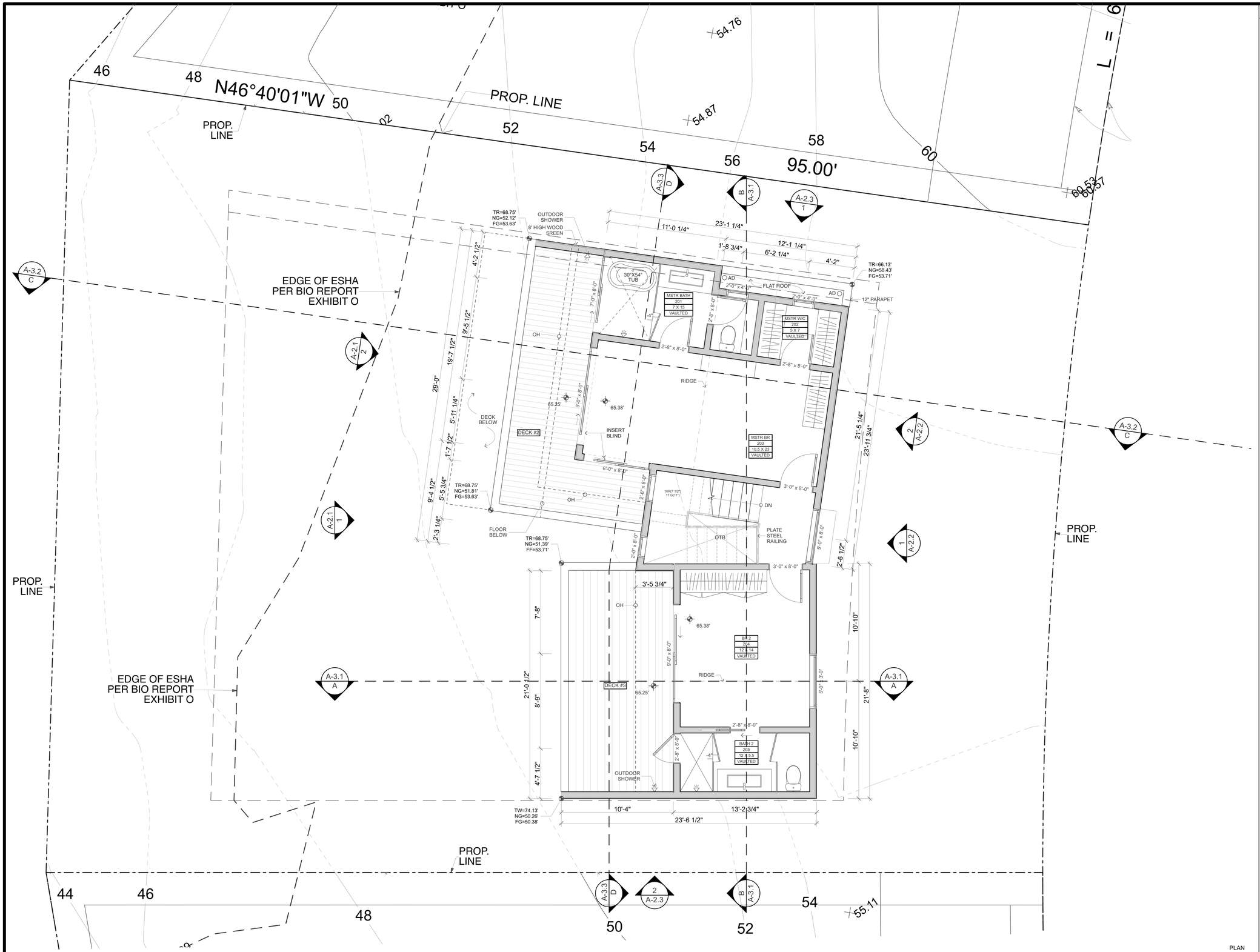
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED FIRST FLOOR PLAN

DRAWING NO.
A-1.2

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



KEYNOTES

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18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
19	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
20	GUTTERS & DOWN SPOUTS
21	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP)
22	FLASHING AND SHEET METAL
23	SEALANTS AND CAULKING
24	ALUMINUM DOORS & FRAMES
25	ALUMINUM WINDOWS
26	FRAMELESS GLASS
27	FINISH HARDWARE
28	METAL WALL CLADDING
29	BOARD FORMED CONCRETE
30	HARDWOOD FLOORING
31	CERAMIC TILE
32	GYPSUM WALLBOARD SYSTEM
33	SHOWER ENCLOSURES
34	PREFABRICATED FIREPLACE 72" MODORE 185 FIREPLACE, ANSI Z21.11.50a-2008
35	BATHROOM ACCESSORIES – REFER TO ACCESSORIES SCHEDULE
36	WINDOW COVERINGS
37	SPECIAL CONSTRUCTION
38	FIRE PROTECTION SPRINKLER SYSTEM
39	TV. ABOVE
40	ELEVATOR- RESIDENTIAL ELEVATOR TO COMPLY WITH ASME A17.1/CAS-B44
41	BUILDING BEYOND
42	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
43	NOTE: 5' H. POOL FENCING ENCLOSURE W.5' W. X 5' H. SELF CLOSING , SELF LATCHING. RE: A-0.1 FOR POOL BARRIER SURROUND
44	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
45	BATHROOM EXHAUST FAN WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP)
46	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 (1506(d) CEnC]
47	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (a) . THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 -FAN CAPACITY TO BE A MINIMUM OF 150 CFM
48	CHIMNEY FLUE FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
49	DRYER VENT EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS , LOUVERS OR GRILLES WITH OPENING OF 1/4" -1/2" IN ANY DIMENSION
50	DRYER VENT PATH EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3'-0" FROM OPENING INTO THE BUILDING [§ 504.5 CMC]
51	HVAC SYSTEM – CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
52	HVAC SYSTEM – DUCT/DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
53	ELECTRICAL – ELECTRICAL METER REFER TO ELECTRICAL ENGINEERING PLANS
54	ELECTRICAL – ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
55	ELECTRICAL – RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
56	ELECTRICAL – LIGHTING FIXTURE/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & RCP/LIGHTING PLANS
57	LOW VOLTAGE COMMUNICATIONS SYSTEM
58	LOW VOLTAGE DATA SYSTEM
59	ELEC. VEHICLE CHARGING STATION
60	MINIMUM OF 1" I.D. LISTED RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED 208/240 VOLT BRANCH CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV CAPABLE. [GBC 4.106.4]
61	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.
62	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY, OR OTHER SIMILAR AREAS [210.11©(1) CEC]
63	All new one- and two-family dwelling units, the service panels and/or sub panels shall have the capacity of an additional load not less than 5 kVA for every 2,000 square feet of living space, designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub panels shall have space(s) reserved/dedicated to permit installation of the branch circuit over-current protective device(s) for the energy storage system. (LACEC 220.41)
64	WP GFCI >6', <20' FROM POOL
65	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP) DOWN CAST, SHIELDED
66	PLUMBING – WATER METER REFER TO PLUMBING ENGINEERING PLANS
67	PLUMBING – SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
68	PLUMBING – WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
69	PLUMBING FIXTURE - REFER TO PLUMBING ENGINEERING PLANS
70	WASTEWATER TREATMENT EQUIPMENT LOCATION – REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS)

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

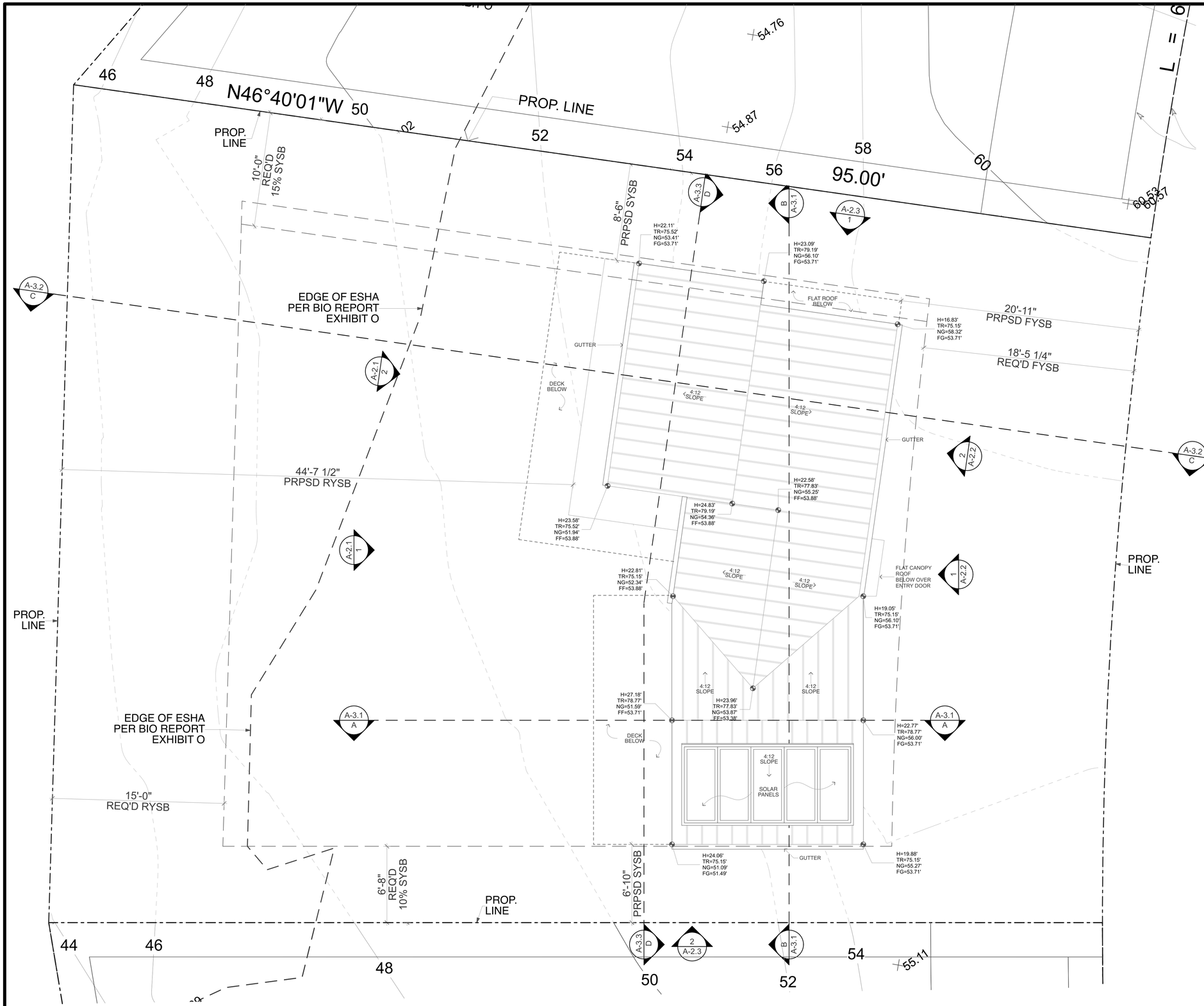
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED SECOND FLOOR PLAN

DRAWING NO.
A-1.3

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



PLAN NORTH

KEYNOTES

01	DEMOLISH
02	SELECTIVE DEMOLITION ONLY
03	ALIGN
04	GRADING – REFER TO GRADING PLANS
05	GRID LINES @ EXTERIOR WALLS REPRESENT F.O. PLYD/ F.O. CONC. U.O.N
06	+42 GUARDRAIL, ESR-3563. REF; 7/A-5.7
07	PLANTER BED/ PLANTER AREA
08	RET. WALL WATERPROOFING
09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
12	1 Hr. FIRE RATED CONSTRUCTION 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS. REF; 8/A-5.9
13	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY 1-HR. FIRE-RESISTANCE RATED CONSTRUCTION OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSURE, WHICHEVER IS GREATER, ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. [CBC 1009.5.3]
14	ROOFING MEMBRANES, CLASS "A" RATED ROOF CARLISLE SYNTEC SYSTEMS, CARLISLE TPO SINGLE-PLY ROOFING MEMBRANES (ESR- 1463) (TYP)
15	ENDURO-KOTE (APAO ER- 483) CLASS "A" WALKING DECK SURFACE OVER 80 MIL 3-COAT LIQ. APPLIED POLYUREA (TYP)
16	R-XX BUILDING INSULATION PER ENERGY REPORT
17	MASONRY NOTES - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING REINF'G & INSTALLATION
18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
19	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
20	GUTTERS & DOWN SPOUTS
21	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP)
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24	ALUMINUM DOORS & FRAMES
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47	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (a). THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 -FAN CAPACITY TO BE A MINIMUM OF 150 CFM
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67	PLUMBING – SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
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70	WASTEWATER TREATMENT EQUIPMENT LOCATION – REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS)

PETERSON RESIDENCE

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MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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	05/12/22	REVISIONS

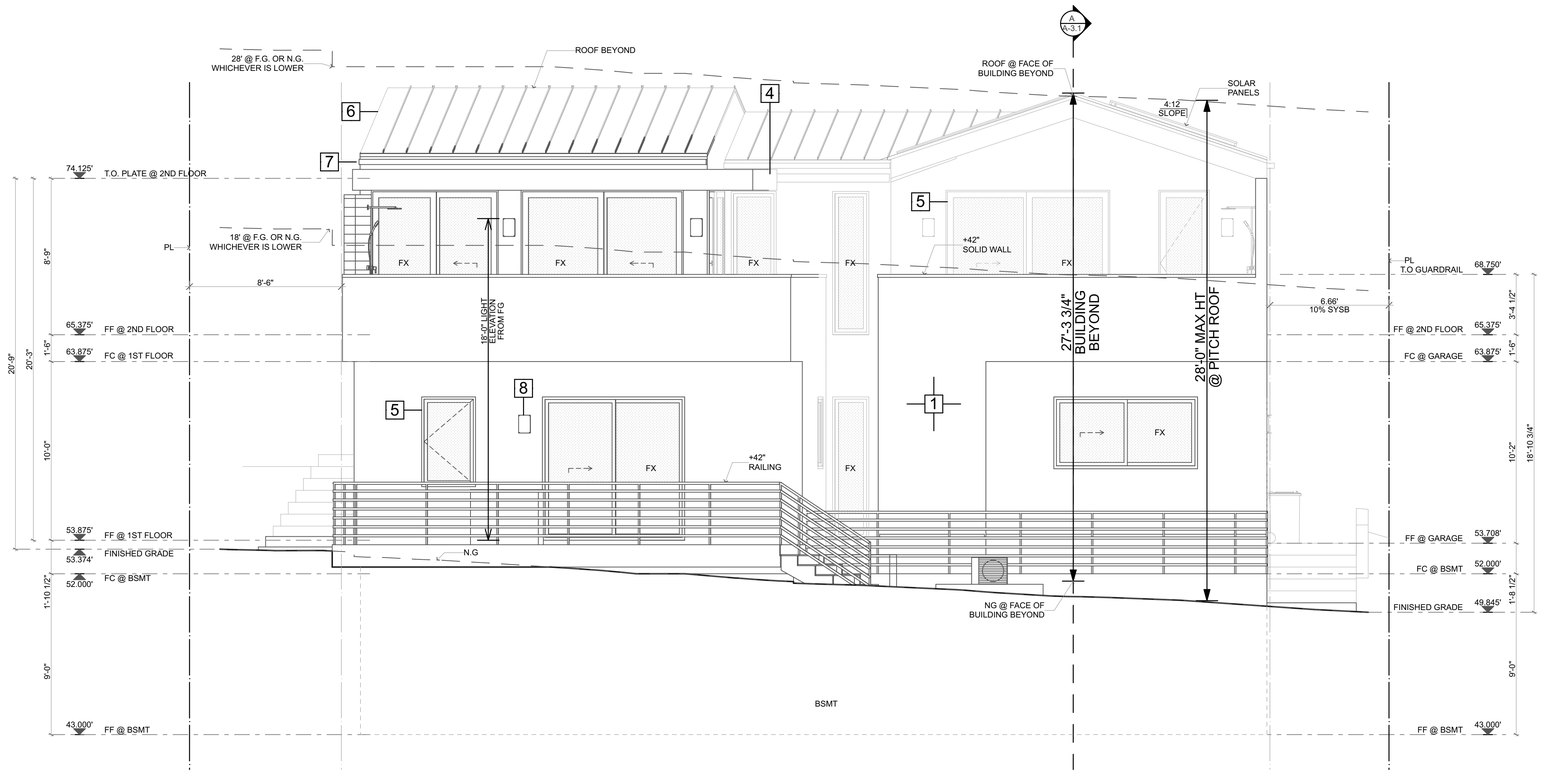
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ROOF PLAN

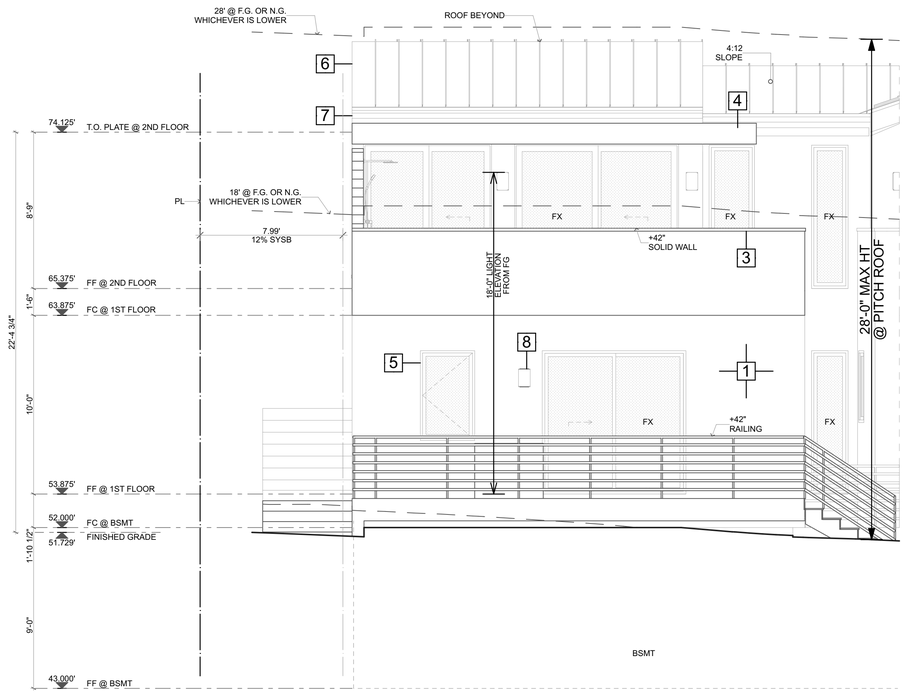
DRAWING NO.
A-1.4

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.,



WEST ELEVATION 1

SCALE: 1/4" = 1'-0"



WEST PARTIAL ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" CEDAL WOOD	TBD
3	FLASHING CAP	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TECH LIGHTING	PITCH SINGLE, 700 WS PIT -S-Z-LED827-277, 823 LUMENS	BRONZE	BRONZE, DARK SKY COMPLIANT
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	80 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

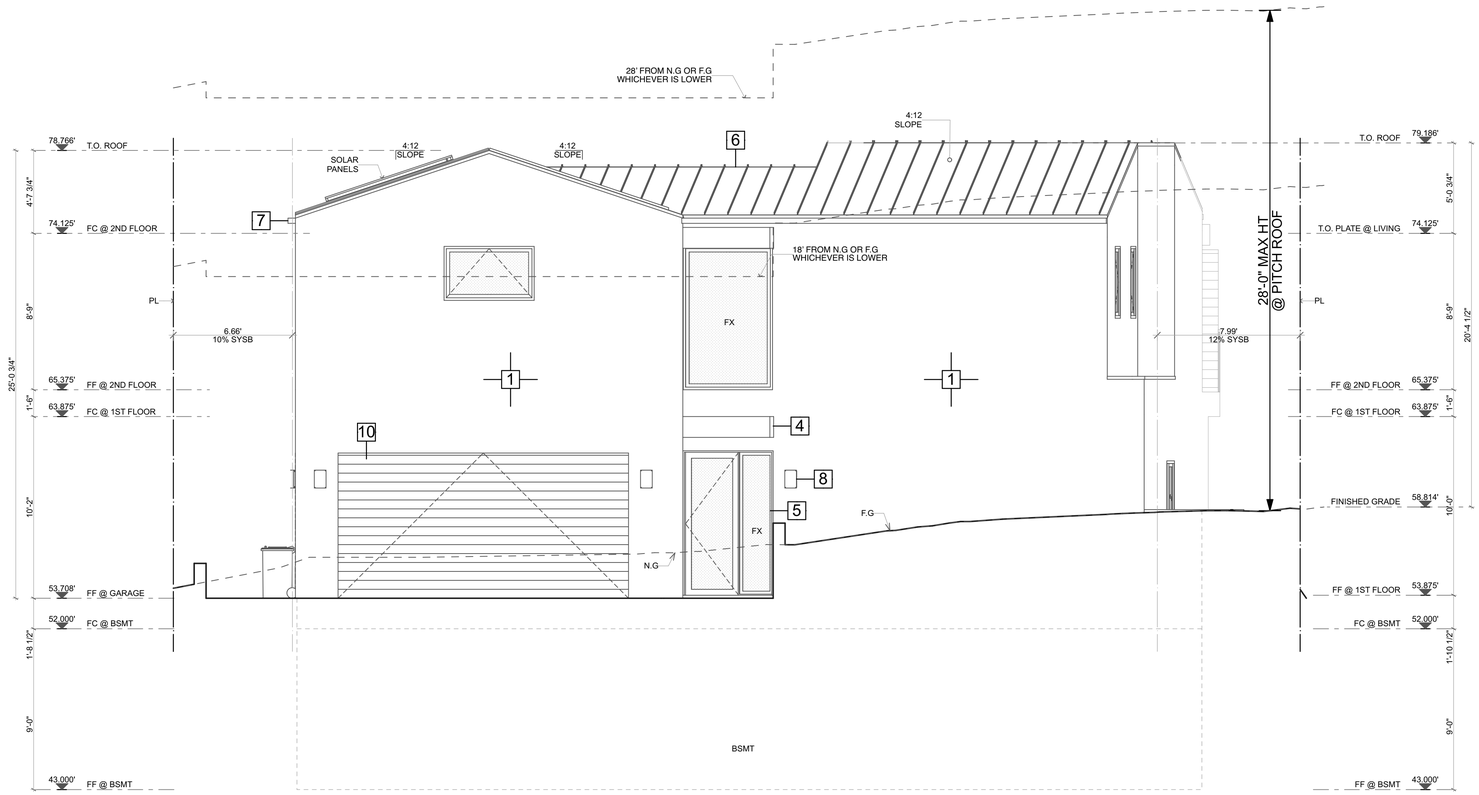
SHEET TITLE

PROPOSED
ELEVATIONS WEST

DRAWING NO.
A-2.1

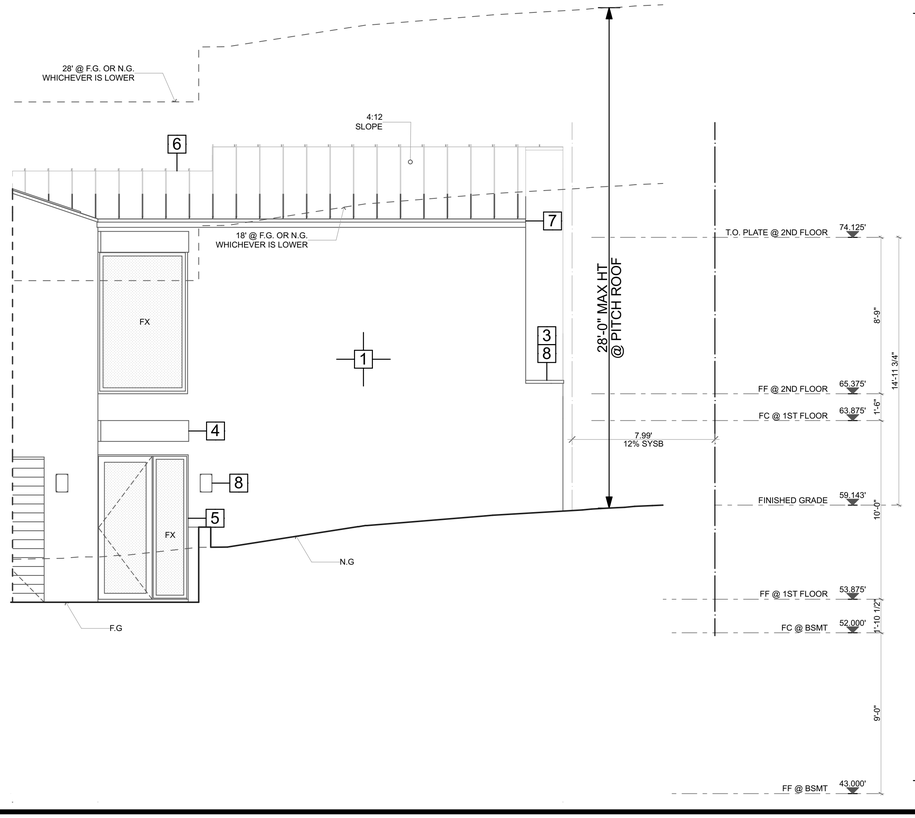
PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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EAST ELEVATION 1

SCALE: 1/4" = 1'-0"



EAST PARTIAL ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" CEDAL WOOD	TBD
3	FLASHING CAP	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TECH LIGHTING	PITCH SINGLE, 700 WS PIT -S-Z-LED827-277, 823 LUMENS	BRONZE	BRONZE, DARK SKY COMPLIANT
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	80 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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MALIBU, CA 90265
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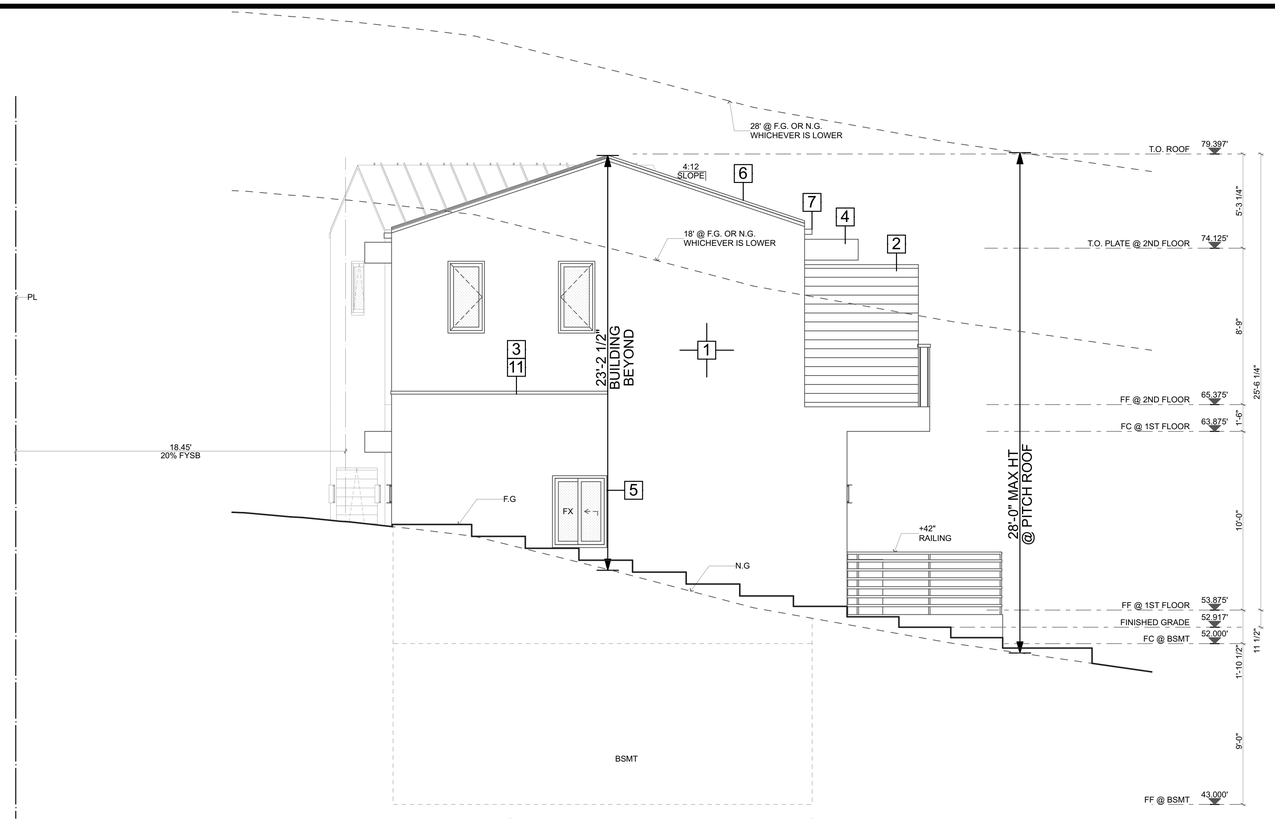
SHEET TITLE

PROPOSED
ELEVATIONS EAST

DRAWING NO.
A-2.2

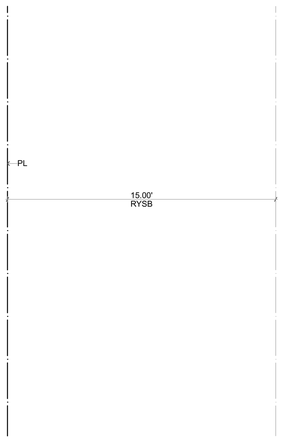
PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

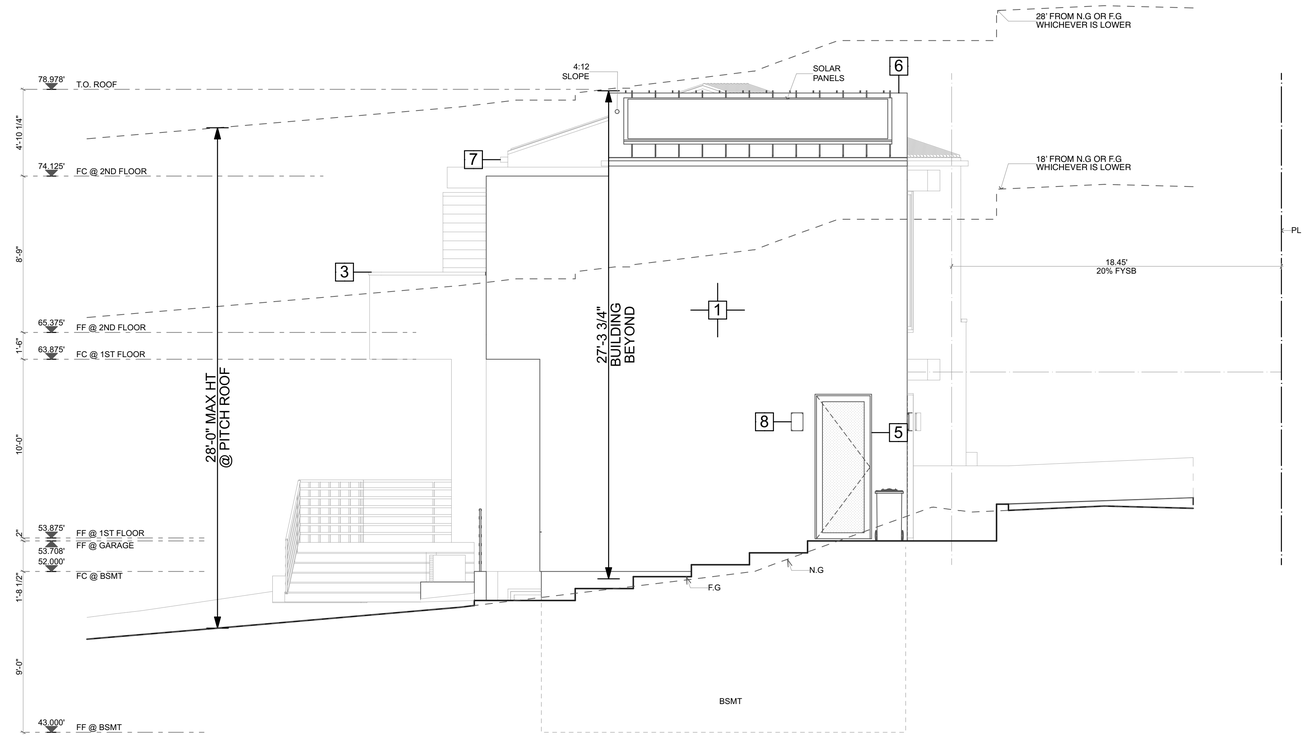
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NORTH ELEVATION 1

SCALE: 1/4" = 1'-0"





SOUTH ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" CEDAL WOOD	TBD
3	FLASHING CAP	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL: SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TECH LIGHTING	PITCH SINGLE, 700 WS PIT -S-Z-LED827-277, 823 LUMENS	BRONZE	BRONZE, DARK SKY COMPLIANT
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	80 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

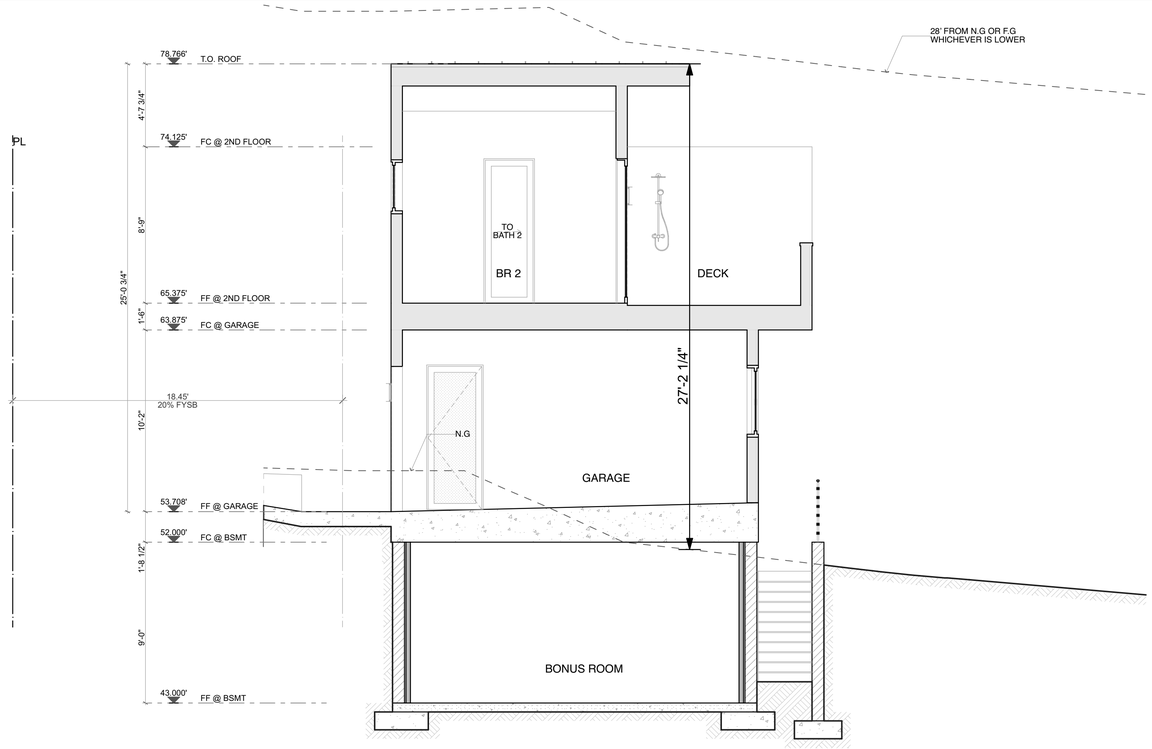
SHEET TITLE

PROPOSED ELEVATIONS NORTH AND SOUTH

DRAWING NO.
A-2.3

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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SECTION A

SCALE: 1/4" = 1'-0"

1



SECTION B

SCALE: 1/4" = 1'-0"

2

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

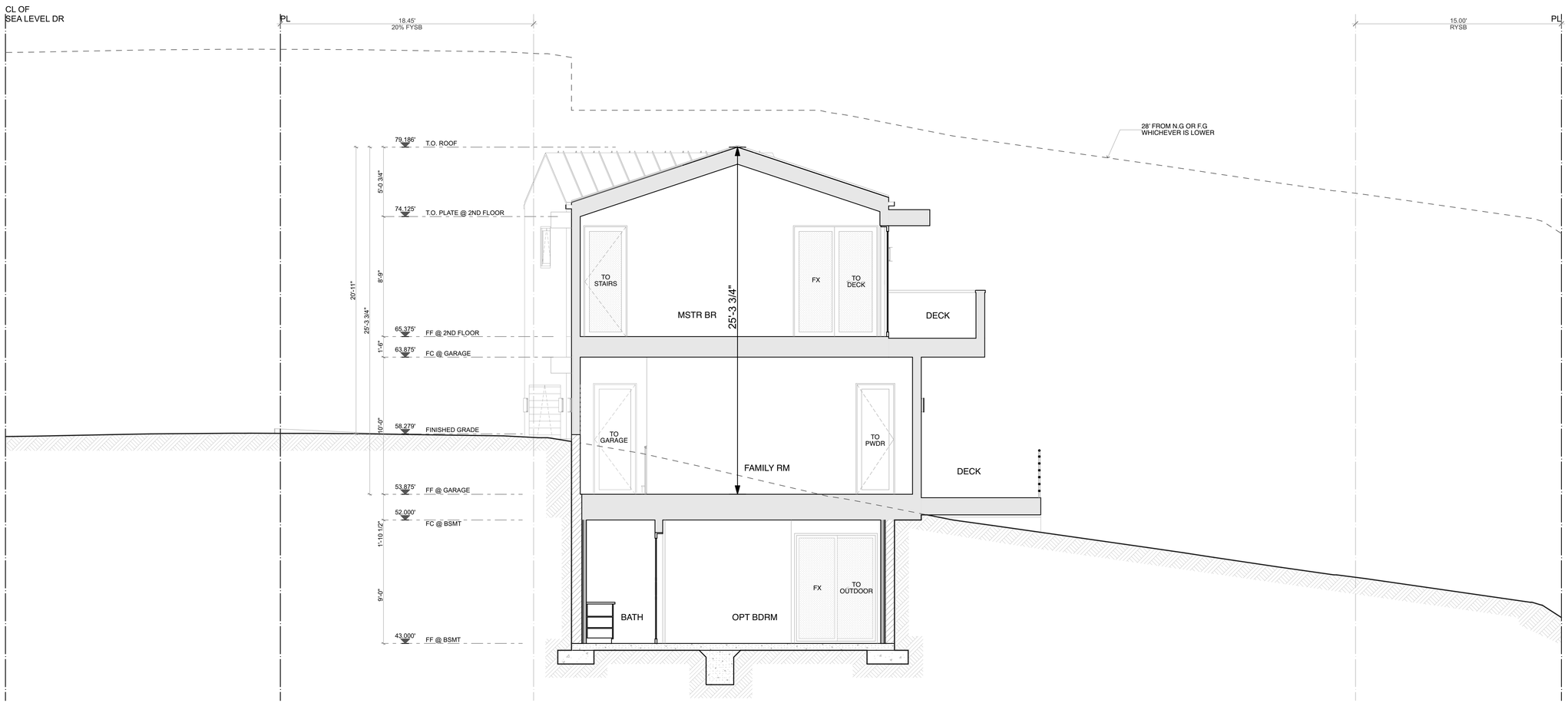
SHEET TITLE

PROPOSED
SECTIONS A AND B

DRAWING NO.
A-3.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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SECTION C 1

SCALE: 1/4" = 1'-0"

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

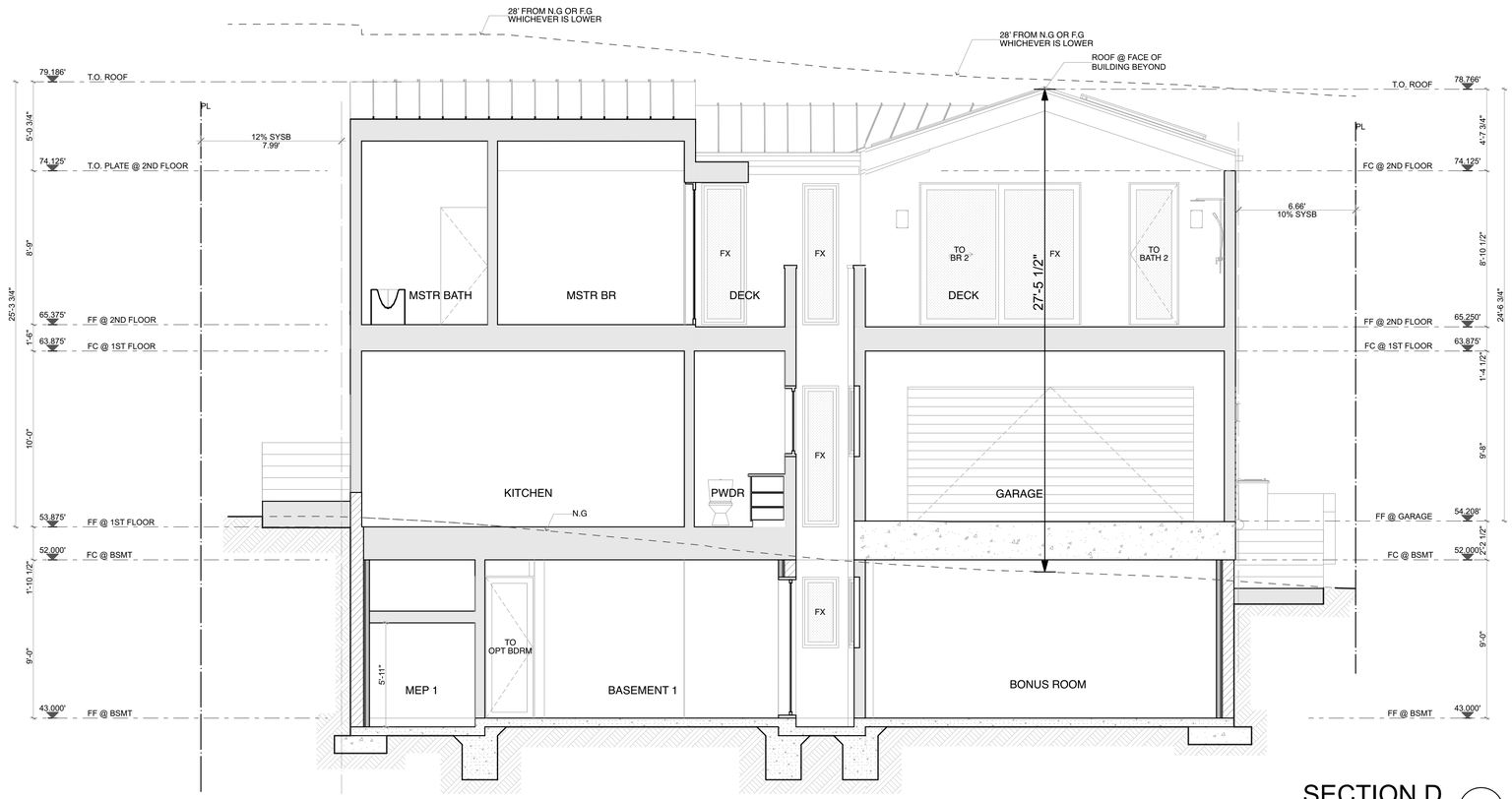
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED SECTION C

DRAWING NO.
A-3.2

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,



SECTION D

SCALE: 1/4" = 1'-0"

1

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

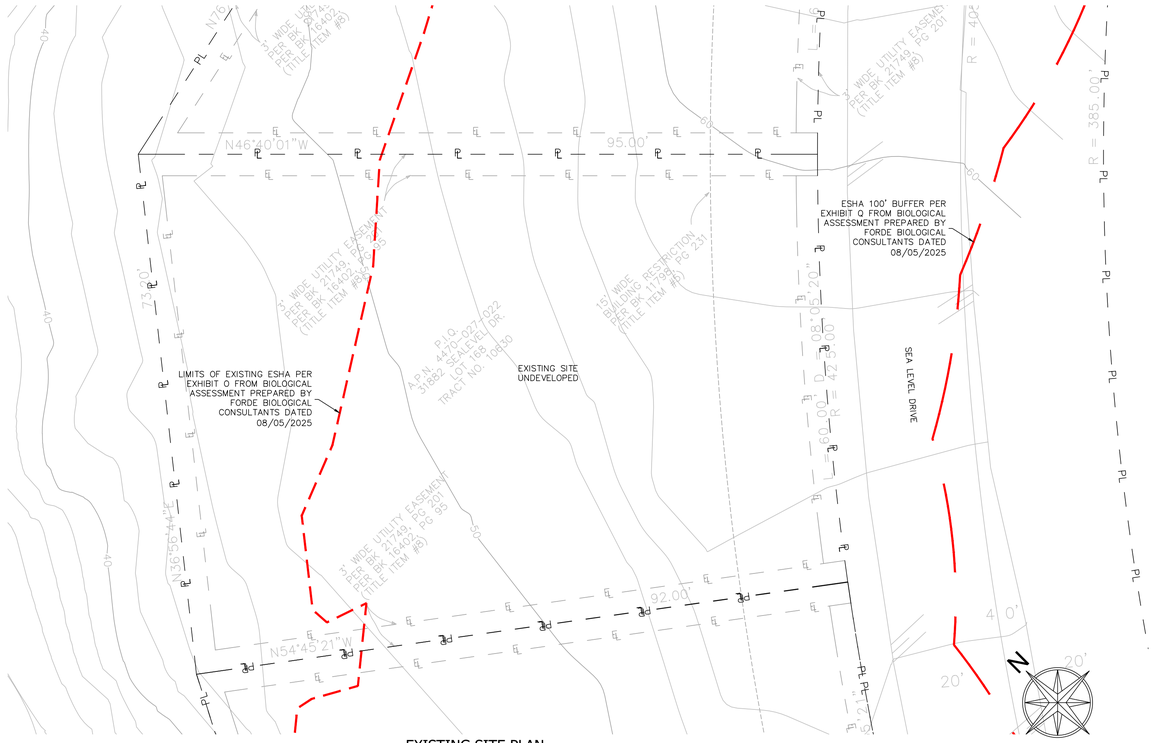
SHEET TITLE

PROPOSED SECTION D

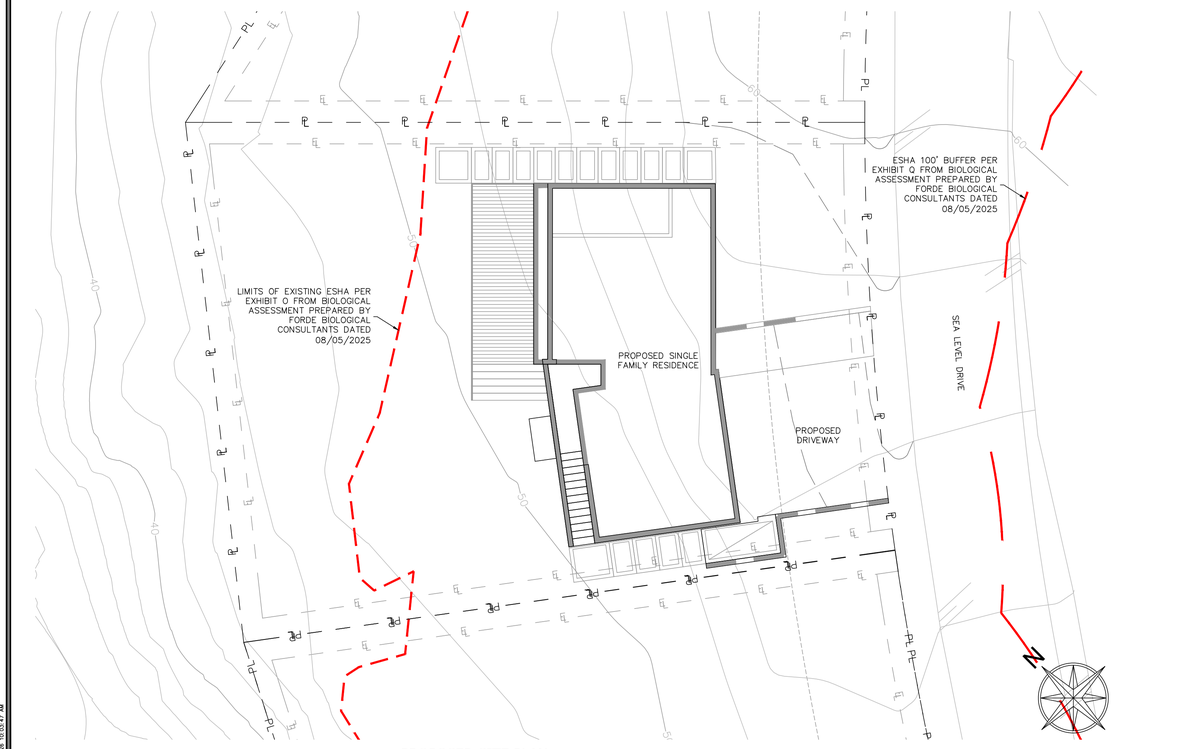
DRAWING NO.
A-3.3

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2026/02/26
SCALE	AS NOTED
DRAWN BY	D.W.B.,

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EXISTING SITE PLAN



PROPOSED SITE PLAN

DRAWING NAME: G:\USERS\TJOHNSON\DESKTOP\100 PROJECTS\104-11 31882 SEA LEVEL (PETERSON)\ENGINEERING\CAD DESIGN\104-11 31882 SEA LEVEL.DWG
DRAWING SCALE: 1/8"=1'-0"
PLOT DATE: 3/13/2026 10:03:13 AM
SAVE DATE: 3/13/2026 10:03:13 AM
XREF FILES: NONE

PUBLIC WORKS DEPARTMENT GENERAL NOTES

1. ALL WORK SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) 'GREEN BOOK'.
2. CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (CAL-OSHA) SAFETY STANDARDS. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM SAID DIVISION.
3. CONTRACTOR SHALL CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 FOR CONSTRUCTION MEETING PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR GRADING OPERATIONS. CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS INSPECTOR 48 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION AND 24 HOURS IN ADVANCE OF SPECIFIC INSPECTION NEEDS DURING THE COURSE OF THE WORK.
4. NO IMPROVEMENTS ARE PROPOSED WITHIN THE PUBLIC RIGHT-OF-WAY.
5. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CITY PUBLIC RIGHT OF WAY SHALL REQUIRE A CITY ENCROACHMENT PERMIT. CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 TO APPLY FOR A PERMIT.
6. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CALTRANS PUBLIC RIGHT OF WAY SHALL REQUIRE A CALTRANS ENCROACHMENT PERMIT. SUBMIT A COPY OF THE CALTRANS ENCROACHMENT PERMIT TO THE PUBLIC WORKS DEPARTMENT.
7. ALL WORK SHALL BE PERFORMED DURING CITY WORKING HOURS AND IN COMPLIANCE WITH THESE PLANS.
8. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
9. CONTRACTOR SHALL LOCATE, PROTECT, AND SAVE ANY AND ALL SURVEY MONUMENTS THAT WILL BE OR MAY BE DAMAGED OR DESTROYED BY THEIR OPERATIONS. ONCE FOUND, THE CONTRACTOR SHALL THEN NOTIFY BOTH THE DEVELOPER'S SUPERVISING CIVIL ENGINEER AND THE PUBLIC WORKS INSPECTOR. THE SUPERVISING CIVIL ENGINEER SHALL RESET ALL SAID MONUMENTS PER THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY INSOFAR AS IT MAY BE AFFECTED BY THESE OPERATIONS.
11. EXISTING TRAFFIC SIGNS ARE NOT TO BE REMOVED WITHOUT PRIOR NOTIFICATION AND APPROVAL OF THE CITY ENGINEER. AS A MINIMUM, CONSTRUCTION WORK ZONE TRAFFIC SIGNS AND STRIPING SHALL BE FURNISHED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (THE "MATCH MANUAL"), PUBLISHED BY BNI BUILDING NEWS, INC. A TRAFFIC CONTROL PLAN, PREPARED BY THE DEVELOPER, MAY BE REQUIRED BY THE CITY.
12. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES.
13. EROSION CONTROL PLANS SHALL BE PROVIDED FOR ALL PROJECTS. GRADING AND CLEARING IS PROHIBITED FROM NOVEMBER 1 TO MARCH 31 FOR ALL DEVELOPMENTS WITHIN OR ADJACENT TO ESHA AND/OR INCLUDING GRADING ON SLOPES GREATER THAN 4:1.
14. ALL UNDERGROUND UTILITIES AND SERVICE LATERALS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS, AND PAVING UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER.
15. THE DEVELOPER SHALL COMPLY WITH NPDES REQUIREMENTS. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES AND SHALL BE KEPT UPDATED.
16. ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL/SOILS ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED), AND CONTAINED IN THE REPORTS REFERENCED HEREON, AS APPROVED OR CONDITIONED BY THE CITY, SHALL BE CONSIDERED A PART OF THE GRADING PLAN.
17. ALL STORM DRAIN PIPE WITHIN THE PUBLIC RIGHT-OF-WAY AND EASEMENTS SHALL BE REINFORCED CONCRETE PIPE (RCP).
18. TERRACE DRAINS, INTERCEPTOR DRAINS, AND DOWN DRAINS SHALL BE CONSTRUCTED OF 3" P.C.C. REINFORCED WITH 6"X6" X #10 W.W.M. AND SHALL BE EITHER SEMICIRCULAR OR TRIANGULAR CROSS SECTION. CONCRETE COLOR SHALL BE "OMAHA TAN" OR APPROVED EQUIVALENT.
19. GRADING QUANTITIES: SEE GRADING YARDAGE VERIFICATION FORM HEREON
20. TOTAL DISTURBED AREA 0.2 ACRES (INCLUDING GRADING, CLEARING, AND LANDSCAPING AREA)
    TOTAL EXISTING IMPERVIOUS SURFACE AREA 0 SQ. FT.
    TOTAL PROPOSED IMPERVIOUS SURFACE AREA 1681 SQ. FT. (PER ARCH)
    FLOOD ZONE ON FIRM: X (FEMA MAP 06037C1511G EFF. APRIL 21, 2021)
    BASE FLOOD ELEVATION: N/A FT.
21. ALL SLOPES ON PRIVATE PROPERTY ADJOINING STREETS, DRAINAGE CHANNELS, OR OTHER PUBLIC FACILITIES SHALL BE GRADED NOT STEEPER THAN 2:1 FOR CUT AND FILL UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER ON RECOMMENDATION OF THE PROJECT'S GEOTECHNICAL/SOILS CONSULTANT.
22. THE APPLICANT SHALL LABEL ALL CITY/COUNTY STORM DRAIN INLETS WITHIN 250 FEET FROM EACH PROPERTY LINE PER THE CITY OF MALIBU'S STANDARD LABEL TEMPLATE.

PROJECT NOTES:

OWNER INFORMATION:

JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

ALL SURVEY DATA OBTAINED FROM:
10/05-06/21
05/13/22
LAND AND AIR SURVEYING
22741 PACIFIC COAST HIGHWAY
SUITE #400A
MALIBU, CA 90265
(310)456-9381

BENCHMARK:

MALIBU 90.567' (2008) — CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O DY-5460 BROAD BEACH RD 1.5MI E/O DECKER RD 33FT W/O DR TO HSE #31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N

PROJECT GEOLOGY/GEOTECHNICAL REPORTS:

GEOSYSTEMS, INC.
1545 VICTORY BLVD. 2ND FLOOR
GLENDALE, CALIFORNIA 91201
(818) 500-9533

REPORT DATE(S): MARCH 13, 2023

GENERAL NOTES:

1. PROTECTION OF SENSITIVE OR ENDANGERED SPECIES PER BIOLOGY STUDY (IF APPLICABLE) SHALL BE MAINTAINED AT ALL TIMES
2. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE STORMWATER APPURTENANCES AND SHEET FLOW WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. AHSIRT ENGINEERING INC. IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
3. ALL DIMENSIONS, GRADES, EXISTING AND PROPOSED UTILITIES, EXISTING AND PROPOSED STRUCTURES, AND EXISTING AND PROPOSED APPURTENANCES SHALL BE VERIFIED AND LOCATED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS SHOWING ANY CONFLICTS LOCATED DURING CONSTRUCTION AND/OR PRE-BID INSPECTIONS.

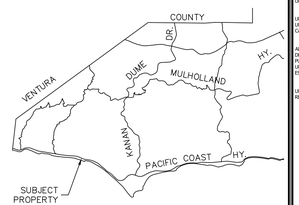
INSPECTION NOTES:

ALL CONSTRUCTION PROJECTS WITHIN THE CITY OF MALIBU WITH A GRADING PERMIT MUST OBTAIN A "ROUGH GRADING APPROVAL" AND "FINAL SUPERVISED GRADING INSPECTION VERIFICATION" AS SPECIFIED IN THE CITY OF MALIBU SITE GRADING POLICY. THE CIVIL ENGINEER IS REQUIRED TO VERIFY THAT THE GRADING HAS BEEN PERFORMED UNDER THEIR SUPERVISION AND IN CONFORMANCE WITH THE PLANS APPROVED BY THE CITY OF MALIBU. THIS VERIFICATION INCLUDES APPROXIMATE ELEVATIONS, PRIMARY DRAINAGE DEVICES, SLOPE VEGETATION, LOCATION AND GRADIENT OF FILL SLOPES, STORMWATER POLLUTION CONTROL DEVICES, AND PROPERTY LINES.

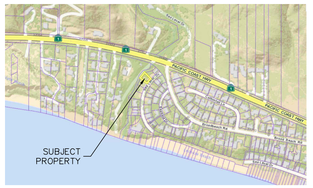
IN ORDER TO BE ABLE TO VERIFY THESE ITEMS, AHSIRT ENGINEERING, INC. NEEDS TO BE INVOLVED IN THE CONSTRUCTION PROCESS, MADE AWARE OF PROJECT SCHEDULES AND PERIODICALLY INSPECT CONSTRUCTION. BELOW IS A LIST OF ABSOLUTE MINIMUM INSPECTIONS THAT WILL BE REQUIRED FOR AHSIRT ENGINEERING INC. TO BE ABLE TO SIGN THE PROJECT ROUGH GRADING APPROVAL REQUIRED BY THE CITY OF MALIBU. WITHOUT THESE INSPECTIONS, AHSIRT ENGINEERING, INC. CANNOT VERIFY THE ITEMS REQUIRED BY THE CITY OF MALIBU.

1. CONSTRUCTION STARTUP
2. PRIMARY STORM DRAIN DEVICE LAYOUT
3. BACKDRAIN AND SUBDRAIN OUTLETS
4. 80% ROUGH GRADING COMPLETION
5. ROUGH GRADING COMPLETION
6. FINAL STORMDRAIN DEVICE LAYOUT
7. 80% TO FINAL COMPLETION
8. FINAL COMPLETION

IN ADDITION TO THESE INSPECTIONS, ANY TIME THERE ARE PROPOSED CHANGES TO THE CIVIL ENGINEER'S APPROVED PLAN SET, THE CIVIL ENGINEER NEEDS TO BE NOTIFIED IMMEDIATELY.



VICINITY MAP (NTS)



LOCATION MAP (NTS)

PUBLIC WORKS COMMENT SHEET NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 EACH YEAR PER LCP SECTION 17.2.1. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER
- EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH LIP, SECTION 8.3.

GEOTECHNICAL COMMENT SHEET NOTE(S)

- PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF ALL DENSITY TESTS, LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACKDRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACKDRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

PLANNING COMMISSION APPROVAL CONDITION NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 OF EACH YEAR FOR PROJECTS WITHIN OR ADJACENT TO ESHA AND FOR PROJECTS THAT INCLUDE GRADING ON SLOPES GREATER THAN 4 TO 1 PER LIP SECTION 8.4. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER 1.

CITY OF MALIBU — Incorporated March 28, 1991

City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-7650 · www.malibucity.org

TOTAL GRADING YARDAGE VERIFICATION CERTIFICATE

PLANNING DEPARTMENT REVIEW LEVEL

PROJECT NUMBER: _____

PROJECT ADDRESS: 31882 SEA LEVEL DRIVE

All projects proposing land form alteration which involves more than 100 cubic yards of grading shall complete this form. The completed form must be provided at the time of Planning Department application for grading approval. All applicable cubic yardages shall be completed in the table. **All calculations utilized to estimate the cubic yardages indicated shall be attached to this form**. This form and the required calculations must be prepared by a State of California Licensed Civil Engineer. The form and the calculations shall be stamped and wet signed by the preparing party.

	EXEMPT			NON EXEMPT	REMEDIAL GRADING	TOTAL
	R&R	UNDERSTRUCTURE	SAFETY			
CUT	30	450	0	100	0	580
FILL	30	0	0	5	0	35
TOTAL	60	450	0	105	0	615
IMPORT	0	0	0	0	0	0
EXPORT	0	450	0	95	0	545

All quantities indicated shall be in cubic yards only.
R&R = Removal and Recompaction – *R&R must be balanced.*
Safety Grading is required grading for L.A. County Fire Department access approval beyond the 15 foot minimum access and may include turnouts, hammerheads, turnarounds, and access roadway widening.
Remedial grading is grading recommended by a full site geotechnical or soils report prepared by a licensed geologist or soils engineer which is necessary to correct physical deficiencies on the site for the construction of a primary residential structure or access to the lot.
Imported means soil that is brought on to the site. Exported means soil that is leaving the site. This information will be used to calculate the number of truck trips required for site preparation.

PREPARED BY: TRISHA A. COFFEY (PRINT NAME)
(SIGNATURE)

DATE: 2012-12-13

REGISTERED PROFESSIONAL ENGINEER — TRISHA A. COFFEY — 67657 — EXP06/2027 — CIVIL — STATE OF CALIFORNIA

Page 1 of 1
P:\forms\COUNTER FORMS\Planning\PLN Grading Verification Certificate_130701.doc

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18
UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES		
2	TJM	2024-12-13
UPDATE SITE PLAN, REMOVE WALLS IN SIDEYARDS, UPDATE ELEVATIONS, DRAINAGE DEVICES, GRADING CALCS, ETC.		
3	TJM	2026-02-17
ADD VELOCITY ENERGY DISSIPATION STRUCTURE DETAIL, ADD ESHA OUTLINE PER BURDGE PLANS, PULL STRUCTURE AS FAR UP THE HILL AS POSSIBLE, UPDATE LSWPPP ELEMENTS OUTSIDE OF LIMITS OF ESHA		
4	TJM	2026-03-19
UPDATE ESHA CALLOUT TO REFERENCE BIOLOGICAL REPORT. ADD ESHA 100' BUFFER.		

AHSIRT ENGINEERING INC
360 MILLER WAY
MALIBU, CA 93420
PH: 805-474-4008

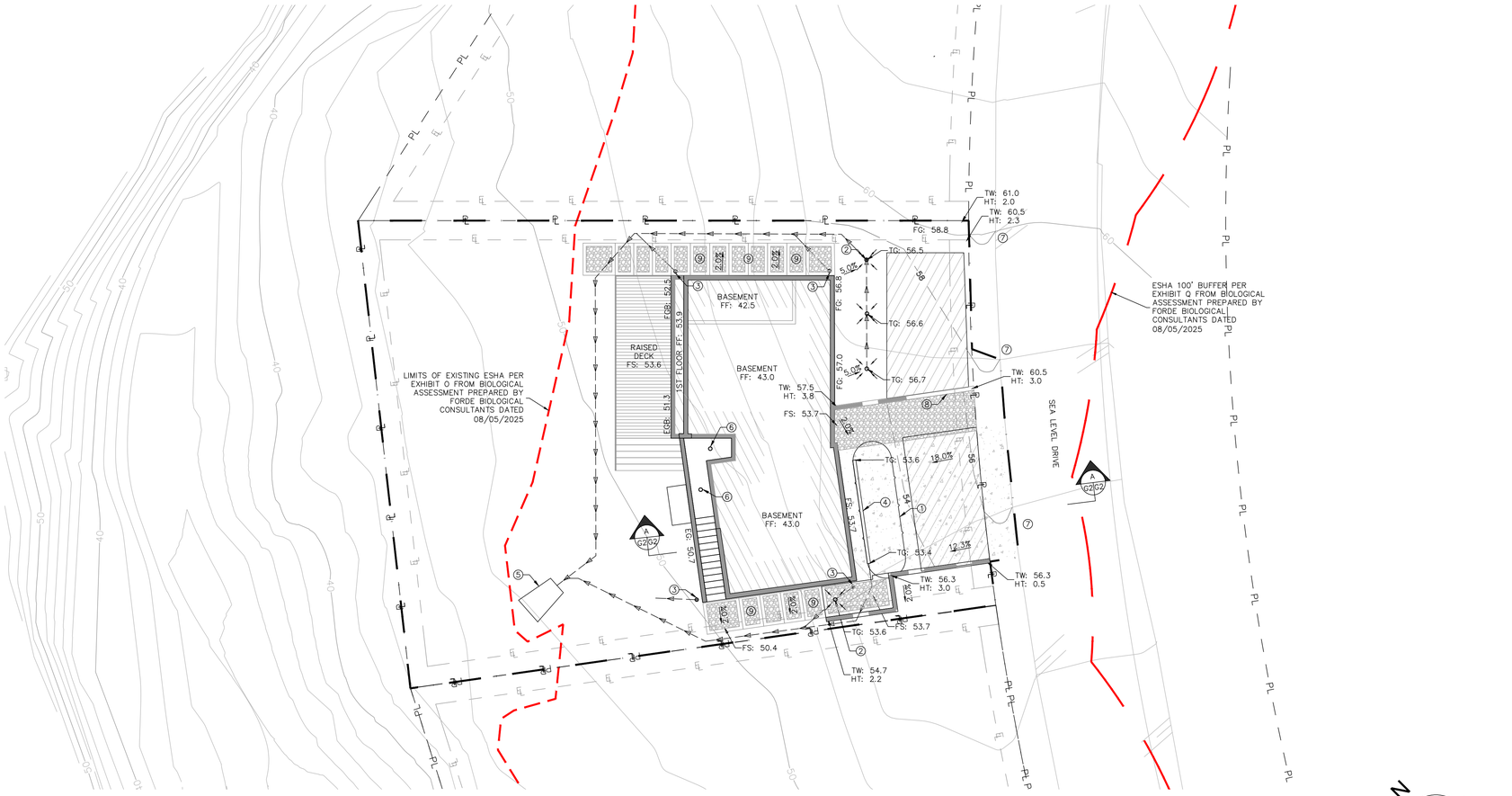
PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN

FOR APPROVAL ONLY - NOT FOR CONSTRUCTION

31882 SEA LEVEL DRIVE
MALIBU, CA

REGISTERED PROFESSIONAL ENGINEER — TRISHA A. COFFEY — 67657 — EXP06/2027 — CIVIL — STATE OF CALIFORNIA

JOB #	104-11
DATE	SEPTEMBER 2022
DRAWN BY	TJM
CHECKED BY	TAC
SHEET NUMBER	G1 OF 3



GRADING AND DRAINAGE PLAN

ABBREVIATION	DESCRIPTION
BOF	BOTTOM OF FOUNDATION ELEVATION
EG	EXISTING GRADE ELEVATION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE ELEVATION
FGB	FINISH GRADE BELOW
FS	FINISHED SURFACE ELEVATION
HP	HIGH POINT ELEVATION
HT	HEIGHT OF WALL FROM FS (DOES NOT INCLUDE HEIGHT OF FOOTING)
INV	INVERT ELEVATION
OC	ON CENTER
R&R	REMOVAL AND RECOMPACTION
SPPWC	CURRENT VERSION OF STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
TW/TOW	TOP OF WALL ELEVATION
TG	TOP OF GRATE ELEVATION
TBD	TO BE DETERMINED BY CONTRACTOR IN FIELD
WW	WASTEWATER

LINETYPE	DESCRIPTION
PL	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
	PROPOSED MINOR CONTOURS
	LIMITS OF DISTURBED SITE AREA
	FLOW LINES
	6" SDR35 PVC PIPE AT 2.0% MIN SLOPE INSTALLED PER THE LATEST VERSION OF CALIFORNIA PLUMBING INCLUDING CLEANOUTS WHEN THE AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDS 135° OR CONTINUOUS PIPE LENGTHS EXCEED 100 FEET.
CL	ROAD CENTERLINE
EL	EASEMENT LINE
	PROPOSED RETAINING WALL (BY OTHERS PER SEPARATE PERMIT)
	AREA DRAIN CAPTURING ROOF DOWNSPOUT
	6" AREA DRAIN WITH 2.0% MIN SLOPE TOWARDS DRAIN
	PERMEABLE SURFACE PER ARCHITECTURAL PLANS
	IMPERMEABLE SURFACE PER ARCHITECTURAL PLANS OVER 12" R&R
	LEACH FIELD PER WW PLANS

#	DESCRIPTION
1.	WASTEWATER APPURTENANCE PER WASTEWATER PLANS BY OTHERS PER SEPARATE PERMIT
2.	6" AREA DRAIN
3.	ROOF DOWNSPOUT CONNECTED DIRECTLY TO STORMWATER COLLECTION SYSTEM OR OUTLETS TO SPLASH PAD AND A 2.0% MINIMUM SLOPE AWAY FROM THE STRUCTURE
4.	TRENCH DRAIN
5.	ENERGY DISSIPATION STRUCTURE
6.	EXTERIOR BASEMENT ENTRY AREA DRAINS CONNECTED TO BUILDING STORMWATER/GROUNDWATER SUMP PUMP OUTLETTING TO ENERGY DISSIPATION STRUCTURE (BY OTHERS)
7.	MAINTAIN EXISTING FLOWLINE AWAY FROM PROPOSED RESIDENCE
8.	PROPOSED GARDEN WALL PER ARCHITECTURAL PLANS – MAX HEIGHT 3.0'
9.	PROPOSED DECOMPOSED GRANITE STEPS ON GRADE ALONG NORTH AND SOUTH SIDE OF RESIDENCE PER ARCHITECTURAL PLANS. SLOPE 2.0% MIN AWAY FROM STRUCTURE.

STORMWATER NOTES:

ALL ROOF DOWNSPOUTS SHALL BE DIRECTLY ROUTED TO A NON-ERODIBLE SURFACE, DOWNSPOUT DISSIPATION STRUCTURE, THE CLOSEST CATCH BASIN OR DRAINAGE SWALE.

ALL STORMWATER APPURTENANCES SHALL BE MONITORED BEFORE, DURING AND AFTER EVERY STORM TO ENSURE THERE ARE NO BLOCKAGES OF THE STORMWATER CONVEYANCE SYSTEM.

SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT APPLICABLE PLUMBING CODE.

RETAINING WALL NOTES:

SITE RETAINING WALLS AND/OR FOUNDATION WALLS ARE BY OTHERS PER SEPARATE PERMIT.

SUBDRAINS BEHIND ALL WALLS SHALL BE INSTALLED PER THE STRUCTURAL PLAN AND GEOTECHNICAL RECOMMENDATIONS.

ALL WALLS WITH A DROP OFF GREATER THAN 30" (OR THE HEIGHT DETERMINED BY THE LOCAL AUTHORITY HAVING JURISDICTION, WHICHEVER IS LESS) SHALL HAVE A RAILING INSTALLED PER THE STRUCTURAL OR ARCHITECT'S PLANS.

SOILS ENGINEER NOTES:

PRIOR TO CONSTRUCTION/GRADING, THE BUILDING AREAS SHOULD BE CLEARED OF ANY LOOSE SLOUGH, ARTIFICIAL FILL, SOIL, VEGETATION, AND/OR MAN-MADE DEBRIS.

IDEALLY, ALL EXTERIOR CONCRETE SLABS AND HARDSCAPE, SUCH AS ON-GRADE DECKING, STEPS, WALKWAYS, ETC., SHOULD BE SUPPORTED ON CERTIFIED COMPACTED FILL OR BEDROCK, OR THEY SHOULD BE DESIGNED AS STRUCTURAL ELEMENTS THAT DERIVE THEIR SUPPORT FROM FOUNDATIONS BEARING IN BEDROCK OR OTHER APPROVED BEARING MATERIAL. HOWEVER, EXTERIOR SLABS AND HARDSCAPE ARE NOT NORMALLY SUBJECT TO BUILDING CODE REQUIREMENTS FOR STRUCTURAL SUPPORT, AND IT MAY BE DESIRABLE TO SUPPORT THESE STRUCTURES ONT HE EXISTING SURFICIAL SOILS. IN ORDER TO REDUCE THE POTENTIAL FOR FUTURE DISTRESS, IT MAY BE DESIRABLE TO PROVIDE ADDITIONAL SUBGRADE PREPARATION AND ADDITIONAL STEEL AND CONCRETE THICKNESS FOR THE PROPOSED SLABS AND HARDSCAPE. AT A MINIMUM, WE RECOMMEND THAT PATIO SLABS AND HARDSCAPE BE REINFORCED WITH MINIMUM OF #4 REBAR PLACED AT 16-INCHES ON CENTER, EACH WAY. THE UPPER 12 INCHES OF EXISTING SURFICIAL SOIL TO BE USED FOR SUPPORT SHOULD BE REMOVED AND RECOMPACTED TO 90 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM METHOD D1557-02E1.

TEMPORARY EXCAVATIONS FOR RETAINING WALLS ARE EXPECTED TO BE UP TO 12-FEET IN TOTAL HEIGHT AND ARE EXPECTED TO EXPOSE ARTIFICIAL FILL AND TERRACE DEPOSITS OVER BEDROCK. THE MAXIMUM RECOMMENDED HEIGHT OF TEMPORARY VERTICAL EXCAVATIONS IN TERRACE DEPOSITS OR BEDROCK IS 5-FEET, AND ANY PORTION EXPOSING ARTIFICIAL FILL OR LOOSE SOILS, SHOULD BE TRIMMED TO A 1:1 SLOPE OR THE EXCAVATION MAY BE SHORED.

PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF DENSITY TESTS, AND LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACK DRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACK DRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

THIS IS NOT AN EXHAUSTIVE LIST OF RECOMMENDATIONS FROM THE SOILS ENGINEER. THE ENTIRE SOILS REPORT SHALL BE REVIEWED BY ALL PARTIES INVOLVED WITH THE GRADING ACTIVITIES AND ALL RECOMMENDATIONS MADE IN THE SOILS REPORT SHALL BE CONSIDERED PART OF THE GRADING AND DRAINAGE PLAN.

GENERAL NOTES:

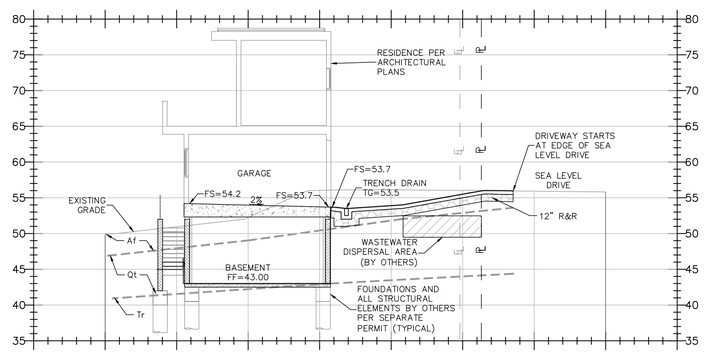
ALL RETAINING WALLS, BASEMENT WALLS, SHORING DESIGN, WATERPROOFING DESIGN AND ALL OTHER DESIGN NOT SPECIFICALLY CALLED OUT ON THIS PLAN ARE BY OTHERS PER SEPARATE PERMIT.

EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH THE CITY'S LOCAL IMPLEMENTATION PLAN (LIP), SECTION 8.3.

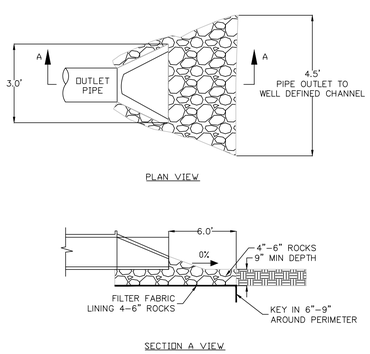
CROSS SECTION NOTES:

SOIL DELINEATIONS SHOWN HEREON ARE FROM THE SOILS REPORT PREPARED BY GEOSYSTMS, INC. DATEDED DECEMBER OF 2022. THE LIMITS OF Af, Qt AND Tr ARE APPROXIMATED BASED ON CROSS SECTION B AND E AND BORINGS 2 AND 5.

Af - ARTIFICIAL FILL
Qt - TERRACE DEPOSITS
Tr - BEDROCK



CROSS SECTION A
(SCALE: 1" = 10')



ENERGY DISSIPATION STRUCTURE DETAIL
NO SCALE

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18
UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES		
2	TJM	2024-12-13
UPDATE SITE PLAN, REMOVE WALLS IN SIDEYARDS, UPDATE ELEVATIONS, DRAINAGE DEVICES, GRADING CALCS, ETC.		
3	TJM	2026-02-17
ADD VELOCITY ENERGY DISSIPATION STRUCTURE DETAIL, ADD ESHA OUTLINE PER BURDGE PLANS, PULL STRUCTURE AS FAR UP THE HILL AS POSSIBLE, UPDATE LSWPPP ELEMENTS OUTSIDE OF LIMITS OF ESHA		
4	TJM	2026-03-19
UPDATE ESHA CALLOUT TO REFERENCE BIOLOGICAL REPORT. ADD ESHA 100' BUFFER.		

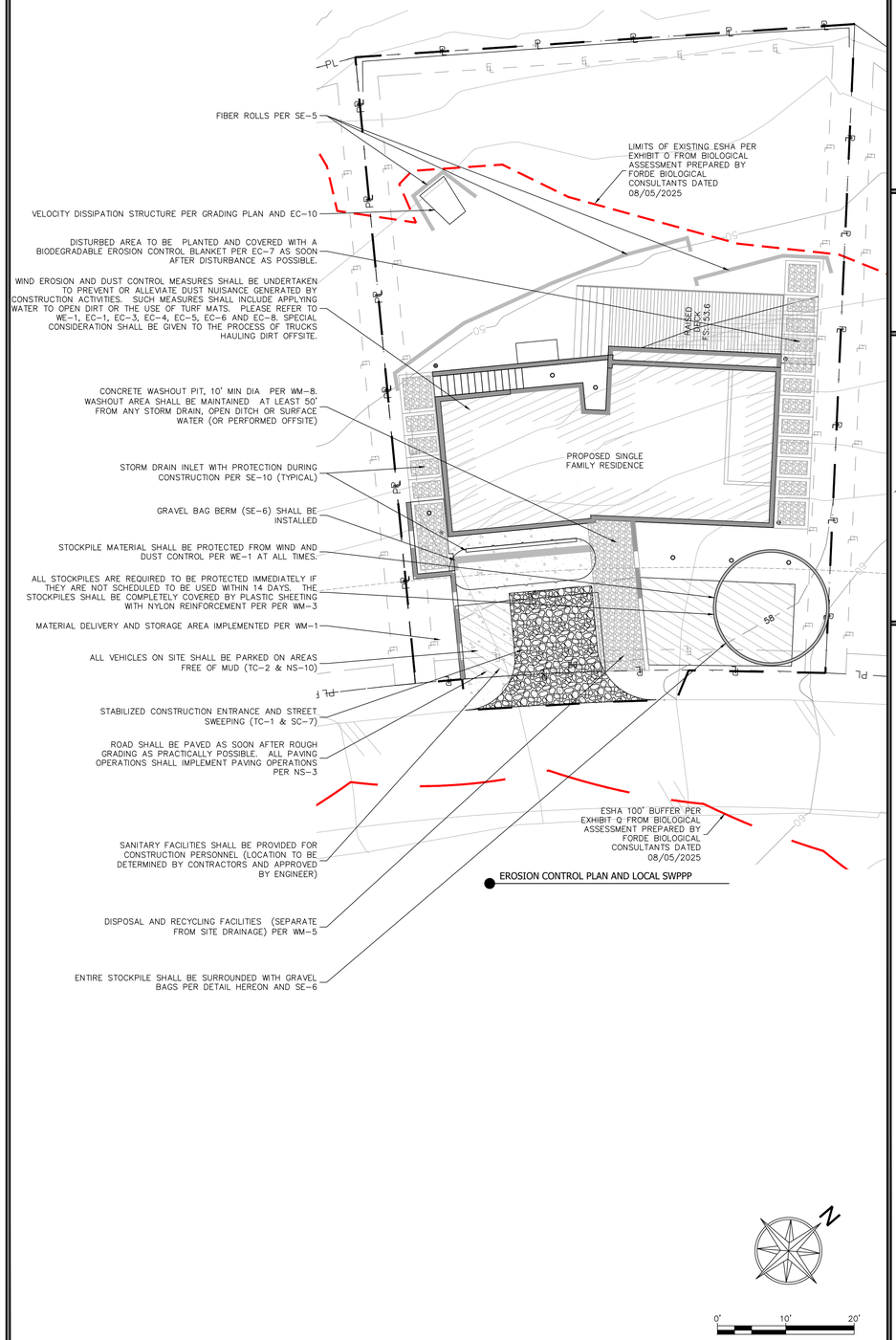
AHSIRT ENGINEERING INC
360 MILLER WAY
THOUSAND OAKS, CA 93420
PH: 805-474-4008

COASTAL DEVELOPMENT PERMIT GRADING AND DRAINAGE PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA

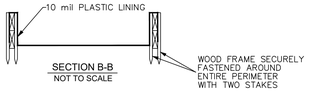
REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
Exp06/2027
CIVIL
STATE OF CALIFORNIA

JOB # 104-11
DATE SEPTEMBER 2022
DRAWN BY TJM
CHECKED BY TAC
SHEET NUMBER G2 OF 3

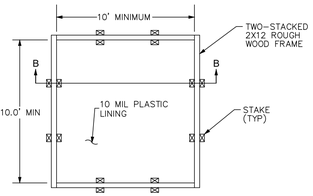
DRAWING NAME: C:\USERS\TJOVA\DESKTOP\104-100 PROJECTS\104-11 31882 SEA LEVEL (PETERSON)\ONGINEERING\CAD DCS\104-11 31882 SEA LEVEL.DWG
LAST SAVED: 3/19/2026 10:03:13 AM
SAVE DATE: 3/19/2026 10:03:13 AM
PLOTTED: 3/19/2026 10:03:58 AM



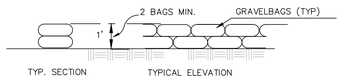
EROSION CONTROL PLAN AND LOCAL SWPPP



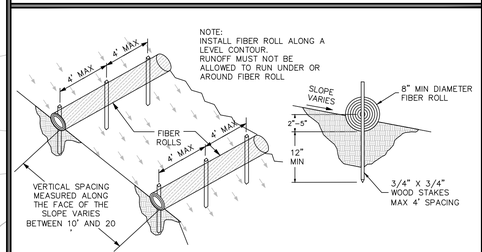
SECTION B-B
NOT TO SCALE



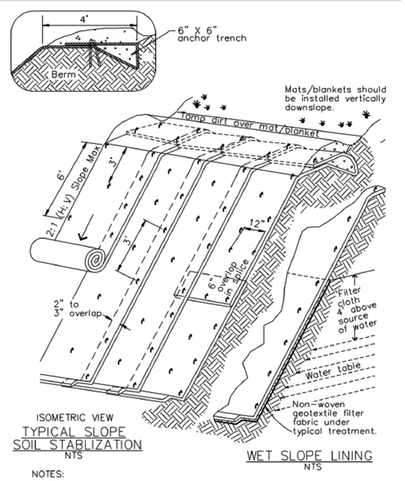
CONCRETE WASHOUT PIT DETAIL (WM-8)
NO SCALE



GRAVEL BAG BERM DETAIL (SE-6)
NO SCALE

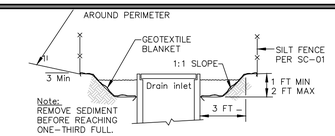


FIBER ROLL DETAIL
NO SCALE

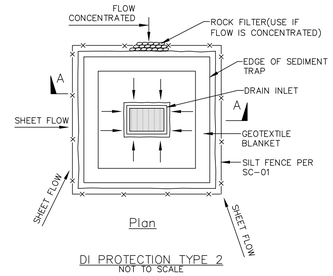


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

EROSION CONTROL BLANKET EC-7
NO SCALE



Section A-A



Plan

DI PROTECTION TYPE 2
NOT TO SCALE

NOTES
1. FOR USE IN CLEARED AND GRUBBED AND IN GRADED AREAS.
2. SHAPE BASIN SO THAT LONGEST INFLOW AREA FACES LONGEST LENGTH OF TRAP.
3. FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

STORM DRAIN INLET PROTECTION DETAIL (SE-10)
NO SCALE



CONCRETE CURING GENERAL NOTES

- AVOID OVER-SPRAY OF CURING COMPOUNDS
- USE PROPER STORAGE AND HANDLING TECHNIQUES FOR CONCRETE CURING COMPOUNDS. REFER TO BMP WM-1.
- PROTECT ANY POTENTIAL DRAIN INLETS PRIOR TO APPLYING OF CURING COMPOUNDS.
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION NS-12

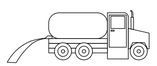
CONCRETE CURING DETAIL (NS-12)
NO SCALE



SWEET SWEEPING GENERAL NOTES

- DURING ACTIVE CONSTRUCTION, ALL POINTS OF INGRESS AND EGRESS SHALL BE MONITORED AT ALL TIMES
- BE CAREFUL NOT TO SWEEP UP ANY UNKNOWN SUBSTANCE OR ANY OBJECT THAT MAY BE POTENTIALLY HAZARDOUS
- AFTER SWEEPING IS FINISHED, PROPERLY DISPOSE OF SWEEPER WASTES AT AN APPROVED DUMPSITER
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION SE-7)

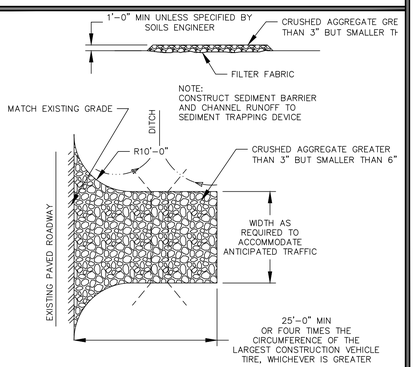
STREET SWEEPING DETAIL (SE-7)
NO SCALE



WIND EROSION CONTROL GENERAL NOTES

- WATERING PREVENTS DUST ONLY FOR A SHORT PERIOD AND SHOULD BE APPLIED DAILY TO BE EFFECTIVE
- DO NOT OVER WATER – THAT MAY LEAD TO EROSION AND TRACKING OFF SITE
- SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE EXPOSURE TO WINDY ACTIVITIES
- WATER SHOULD BE APPLIED USING NOZZLES THAT ENSURE EVEN DISTRIBUTION
- IDENTIFY AND STABILIZE KEY ACCESS POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION
- STABILIZE INACTIVE AREAS OF CONSTRUCTION SITES USING
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS. FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION WE-7)

WIND EROSION CONTROL DETAIL (WE-1)
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

TC	TRACKING CONTROL BMP
SE	SEDIMENT CONTROL BMP
NS	NON-STORMWATER MANAGEMENT CONTROL BMP
WM	WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMP
EC	EROSION CONTROL BMP
SE-#/TC-#/NS-#	ALL PER LATEST CASQA BMP HANDBOOK
WM-#	ALL PER LATEST CASQA BMP HANDBOOK
CASQA	CALIFORNIA STORMWATER QUALITY ASSOCIATION

HATCH	DESCRIPTION
	EXPOSED DISTURBED AREA TO BE PLANTED AND COVERED WITH A BIODEGRADABLE EROSION CONTROL BLANKET PER EC-7 AS SOON AFTER DISTURBANCE AS POSSIBLE.

EROSION AND SEDIMENT CONTROL PLAN (ESCP) GENERAL NOTES:

1. In case of emergency, call TO BE DETERMINED at 24-HOUR TELEPHONE
   i. Please fill in name and number
2. Total Disturbed Area < 0.2 ACRES WDID # N/A
   i. Risk Level 1 2 3 (circle one as determined by State General Permit for sites greater than 1 acre)
3. A stand-by crew for emergency work shall be available at all times during the rainy season (November 1 to April 15). Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
4. Erosion control devices shown on this plan may be removed when approved by the Building Official if the grading operation has progressed to the point where they are no longer required.
5. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of slope at the conclusion of each working day. All loose soils and debris that may create a potential hazard to off-site property shall be stabilized or removed from the site on a daily basis.
6. All silt and debris shall be removed from all devices within 24 hours after each rainstorm and be disposed of properly.
7. A guard shall be posted on the site whenever the depth of water in any device exceeds two feet. The device shall be drained or pumped dry within 24 hours after each rainstorm. Pumping and draining of all basins and drainage devices must comply must comply with the appropriate BMP for dewatering operations.
8. The placement of additional devices to reduce erosion damage and contain pollutants within the site is left to the discretion of the Field Engineer. Additional devices as needed shall be installed to retain sediments and other pollutants on site.
9. Desilting basins may not be removed or made inoperable between November 1 and April 15 of the following year without the approval of the Building Official.
10. Storm Water Pollution and Erosion Control devices are to be modified, as needed, as the project progresses, the design and placement of these devices is the responsibility of the field engineer. Plans representing changes must be submitted for approval if requested by the Building Official.
11. Every effort should be made to eliminate the discharge of non-storm water from the project sites at all times.
12. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
13. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.
14. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
15. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.
16. Developers/contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly if there is a 50% or greater probability of predicted precipitation, and after actual precipitation. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official (copies of the self-inspection check list and inspection logs are available upon request).
17. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
18. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
19. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
20. As the engineer/QSD of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness.

Civil Engineer/QSD Signature — Date

21. The following notes must be on the plan:

    As the project owner or authorized agent of the owner, "I certify that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to ensure that a qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/or adequately implement the ESCP may result in revocation of grading and/or other permits or other sanctions provided by law."

Owner or Authorized Representative (Permittee) — Date

22. Developers/contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly as required by the State Construction General Permit. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official.
23. The following BMPs from the "2009 Construction BMP Handbook/Portal" must be implemented for all construction activities as applicable. As an alternative, details from "Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMP) Manual" may be used. Additional measures may be required if deemed appropriate by the Building Official.

EROSION CONTROL
EC1 – SCHEDULING
EC2 – PRESERVATION OF EXISTING VEGETATION
EC3 – HYDRAULIC MULCH
EC4 – HYDROSEEDING
EC5 – SOIL BINDERS
EC6 – STRAW MULCH
EC7 – GEOTEXTILES & MATS
EC8 – WOOD MULCHING
EC9 – EARTH DIKES AND DRAINAGE SWALES
EC10 – VELOCITY DISSIPATION DEVICES
EC11 – SLOPE DRAINS
EC12 – STREAMBANK STABILIZATION
EC13 – RESERVED
EC14 – COMPOST BLANKETS
EC15 – SOIL PREPARATION/ROUGHENING
EC16 – NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL
SE1 – SILT FENCE
SE2 – SEDIMENT BASIN
SE3 – SEDIMENT TRAP
SE4 – CHECK DAM
SE5 – FIBER ROLLS
SE6 – GRAVEL BAG BERM
SE7 – STREET SWEEPING AND VACUUMING
SE8 – SANDBAG BARRIER
SE9 – STRAW BALE BARRIER
SE10 – STORM DRAIN INLET PROTECTION
SE11 – ACTIVE TREATMENT SYSTEMS
SE12 – TEMPORARY SILT DIKE
SE13 – COMPOST SOCKS & BERMS
SE14 – BIOFILTER BAGS

WIND EROSION CONTROL
WE1 – WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL
TC1 – STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 – STABILIZED CONSTRUCTION ROADWAY
TC3 – ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT
NS1 – WATER CONSERVATION PRACTICES
NS2 – DEWATERING OPERATIONS
NS3 – PAVING AND GRINDING OPERATIONS
NS4 – TEMPORARY STREAM CROSSING
NS5 – CLEAR WATER DIVERSION
NS6 – ILLICIT CONNECTION/DISCHARGE
NS7 – POTABLE WATER/IRRIGATION
NS8 – VEHICLE AND EQUIPMENT CLEANING
NS9 – VEHICLE AND EQUIPMENT FUELING
NS10 – VEHICLE AND EQUIPMENT MAINTENANCE
NS11 – PILE DRIVING OPERATIONS
NS12 – CONCRETE CURING
NS13 – CONCRETE FINISHING
NS14 – MATERIAL AND EQUIPMENT USE
NS15 – DEMOLITION ADJACENT TO WATER
NS16 – TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 – MATERIAL DELIVERY AND STORAGE
WM2 – MATERIAL USE
WM3 – STOCKPILE MANAGEMENT
WM4 – SPILL PREVENTION AND CONTROL
WM5 – SOLID WASTE MANAGEMENT
WM6 – HAZARDOUS WASTE MANAGEMENT
WM7 – CONTAMINATION SOIL MANAGEMENT
WM8 – CONCRETE WASTE MANAGEMENT
WM9 – SANITARY/SEPTIC WASTE MANAGEMENT
WM10 – LIQUID WASTE MANAGEMENT

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18
UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES		
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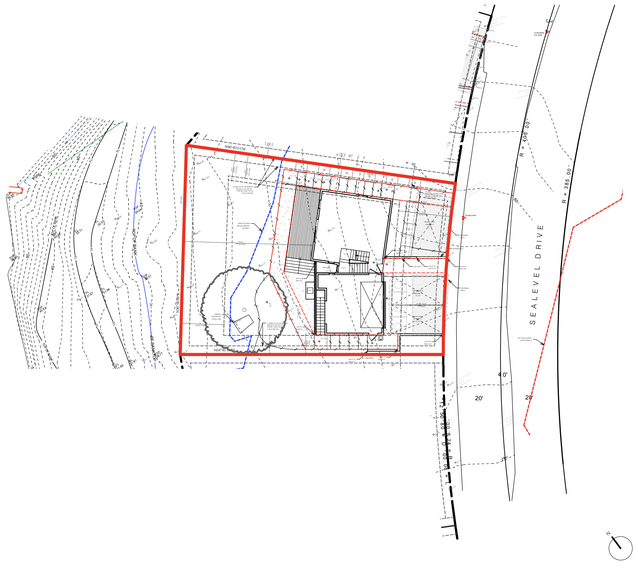
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67657
EXP06/2027
CIVIL
STATE OF CALIFORNIA

JOB #	104-11
DATE	SEPTEMBER 2022
DRAWN BY	TJM
CHECKED BY	TAC
SHEET NUMBER	G3 OF 3

31882 SEA LEVEL DRIVE

Malibu, CA 92605





vicinity map

Project Description

Exterior landscape, lighting and irrigation for Proposed two-story single family residence with attached garage.

Project Details

project address:	31882 Sea Level Drive Malibu, CA 92605
owner:	Jeff Peterson
assessors number:	4470-027-022
zoning:	SFM
total proposed landscape area:	1,310 SF low water use - 263 SF med water use - 1,047 SF high water use - 0 SF
total irrigated landscape:	1,310 SF
water supply type:	potable
water municipality:	Los Angeles Waterworks District 29

Consultants

architect:	Burdge & Associates 24911 PCH Malibu, CA 90265 p: 310.456.5905
landscape:	Barefoot Design, Inc. 1187 Coast Village Road, #287 Santa Barbara, CA 93108 p: 805.697.7466

Sheet Index

sheet #	Title
L0.00	Cover Sheet
L1.00	Hardscape & Lighting Plan
L1.01	Lighting Specifications
L2.00	Irrigation Plan
L2.01	Irrigation Details
L3.00	Planting Plan
L3.01	Planting Details
L4.00	Site Photos
L4.01	Fuel Modification Plan

Statement of Compliance

I have complied with the criteria of the Landscape Water Conservation Ordinance and applies them for the efficient use of water in the landscape design.

Preparer Name: Jessica Harlin

Preparer Signature:

Professional License / Designation: Landscape Architect, #6606

BAREFOOT DESIGN
1187 Coast Village Road, #287
Santa Barbara, CA 93108
TEL 805.697.7466
WEB www.barefoot-design.net

SUBMITTALS

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE BAREFOOT DESIGN AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE BAREFOOT DESIGN. WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BAREFOOT DESIGN PRIOR TO THE COMMENCEMENT OF ANY WORK.

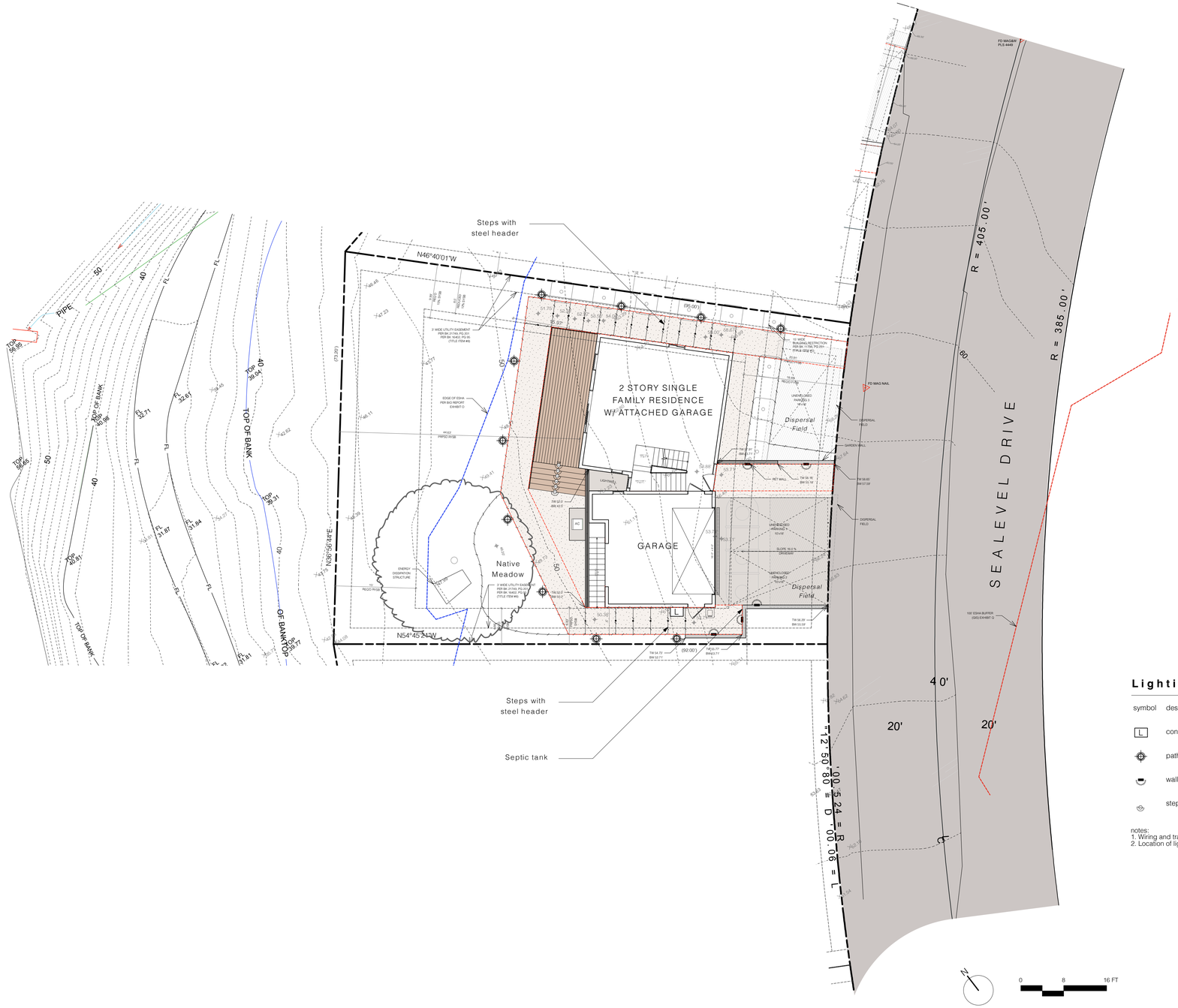
REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HARLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS: **Cover Sheet**

DATE 3/6/26
SCALE as noted
DRAWN KR
JOB 24-17
SHEET **L0.00**
1 OF 9 SHEETS



Materials Legend:

symbol	description
	Gravel
	Concrete
	Wood Deck
	GrassPave
	Garden Wall
	1/4" Steel Landscape Header
	Shovel Cut Edge



Steps with steel header

Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	10	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	5	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700
	step light	6	FX Luminaire	VO-ZD-1LED-GW-180-SS	10	3.1	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light



FX Luminaire - Step Light

BAREFOOT DESIGN
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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE HAMILTON
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Hardscape & Lighting Plan

DATE 3/6/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-17
SHEET **L1.00**
2 OF 9 SHEETS

Lighting Specification Sheets:





ATLANTIS

15014SK-LL

12V SMALL LED PATH LIGHT

Atlantis features a minimalist design with bold, clean lines to complement contemporary architecture with ultimate urban sophistication.

DETAILS	
FINISH:	Satin Black
MATERIAL:	Aluminum
GLASS:	Etched Lens
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY

DIMENSIONS	
WIDTH:	6.5"
HEIGHT:	15.8"
DEPTH:	1.6
WEIGHT:	2lb

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
LED NAME:	EA-LMW-1.5W
WATTAGE:	1-1.5Ow Mini Wedge LED *Included
VOLTAGE:	12v
VOLT AMPS:	2.5
LUMENS:	150
CRI:	80
INCANDESCENT EQUIVALENCY:	1 x 25w
DIMMABLE:	YES - WITH MLV ON TRANSFORMER PRIMARY
TRANSFORMER REQUIRED:	Yes

MOUNTING	
LEAD WIRE:	1 X 36"

SHIPPING	
CARTON LENGTH:	17.5
CARTON WIDTH:	8
CARTON HEIGHT:	4
CARTON WEIGHT:	2.5

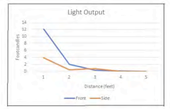
PRODUCT DETAILS:

- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- LED Bulbs carry a 3-year limited warranty
- For more information on how to control your landscape lighting via the Hinkley Home Automation App, click here.
- All trees and shown, landscaper style complement contemporary architecture
- A wiring kit and ground spike are supplied

HINKLEY

15014xx-LL — **Photometric Data**

15014	front	side view
1	12.13	3.95
2	1.98	0.438
3	0.36	0.78
4	0.06	0.05
5	0.01	0





HINKLEY

HINKLEY
20002 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free:1 (800) 446-5039

hinkley.com

FXLuminaire — LED Wall Lights



PROJECT

CATALOG #

TYPE

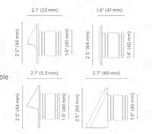
NOTES

PO Wall Light DESIGNER PREMIUM

1 LED recessed wall light available in four brass faceplate styles for any application.

Quick Facts

- Die-cast brass or aluminum
- Natural, powder-coated, or antique brass
- Cree® integrated LEDs
- Color temperature filters
- Compatible with Luxor® technology
- Phase and PWM dimmable
- Input voltage: 10-15V



PO Wall Light SPECIFICATIONS

Output	1LED
Total Lumens†‡	4-39
Input Voltage	10 to 15V
Input Power (W)	2.0
VA	2.4
Efficacy (Lumens/Watt)	8
Color Rendering Index (CRI)	80+
Max Candela‡	24
Dimming	PWM, Phase**
RGBW Available	No
Luxor Compatibility	
Default	Zoning
ZD Option	Zoning/Dimming
ZDC Option	—
Minimum Rated Life (L90/B10)	55,000 Hrs

† *Measured using the 3,900K CCT lens. Multipliers for other CCTs include 0.86 (2,700K), 0.65 (4,500K), and 0.55 (5,200K).*
‡ *Measured using the Round (RD) faceplate. Multipliers for other faceplates include: 1.0 (Square), 2.0 (Spot), and 0.4 (Wall Wash).*
** *For optimal performance, use a trailing-edge, phase-cut dimmer.*

FX Luminaire
FX Luminaire is an industry-leading manufacturer of landscape and architectural lighting products with a focus on the advancement of LED technology and digital lighting control with zoning, dimming, and color adjustment capabilities. We offer a full spectrum of specification-driven lighting fixtures that can be utilized to create elegant, cutting-edge landscape lighting systems for commercial or residential applications. Our products are available exclusively via our extensive professional distributor network.

Materials
Die-cast C360 brass faceplate, A380 aluminum housing, ABS construction conduit sleeve.

Socket
Socket contains MoistureBlock™ technology, preventing moisture from wicking up into sealed areas of the fixture.

Lamp
Integrated module with Cree LEDs. Gold-plated connectors and conformal coated for maximum reliability and corrosion resistance. Proprietary on-board intelligent driver uses firmware-controlled temperature regulation, maximizing LED life. Field upgradeable and replaceable, the LEDs are rated to 50,000 hrs. Maximum drive current 1 A.

Optics
Polycarbonate color temperature adjustment lenses included with fixture; 2,700K (pre-installed), 3,900K (no lens), 4,500K, and 5,200K. Color temperature lenses field serviceable. Beam angle is calculated using LM-79 method for SSL luminaires.

Wiring
18 AWG (1 mm), SPT-1W, 220°F (105°C), 300V, 10' (3 m) length.

Power
Input 10-15 VAC/VDC, 50/60 Hz. Remote transformer required (specify separately).

Housing
Die-cast aluminum housing with capacity for 1LED integrated LEDs.

Faceplate
Die-cast brass faceplate.

Lens
Tempered glass lens with stock resistance and high tolerance for thermal expansion and stress.

Finish
Options of natural brass finish, antique finish with brushed (Antique Bronze) or tumbled (Antique Tumbled) effect, or TGIC powder-coat finish. Antique finishes sealed with a clear TGIC powder-coat layer.

Hardware
Includes: ABS conduit sleeve with ½"-14 (13 mm) NPT female hole for strain relief. Strain relief specified separately. Outer diameter of ABS conduit sleeve: 1.9" (48 mm).

Ambient Operating Temperature
-27°F to 140°F (-18°C to 60°C)

Weight
2.3 lbs. (1.0 kg)

Control
ZD option utilizes Luxor technology to zone light fixtures in up to 250 groups, dim each group in 1% increments between 0% and 100%.

International Compliance
Compliant per IEC 60598-1 and IEC 60598-2-7 when used with International Wall Kit (TSINTWALL).

Sustainability
Innovation meets conservation in the design and manufacturing of our products. Where we can, we use recycled materials while maintaining superior functionality. Our LED products provide high-quality light at optimal energy efficiency, lifespan, and durability.

IES Classification
Type V (RD & SQ), Type V (ST) Type II (WW).

Warranty
10-year limited warranty

Installation Requirements
RD & SQ – Designed for recessed installation in a vertical wall in the down lighting position only.

WW – Designed for recessed installation in a vertical wall in any orientation.

ST – Designed for recessed installation in a vertical or horizontal wall; ensure substantial drainage flow for up-lighting (e.g., decking).

Listings

Cree is a registered trademark of Cree Inc. MoistureBlock is a trademark of DSM&T Co. Inc.

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LANDSCAPE & ARCHITECTURAL LIGHTING

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PO Wall Light PHOTOMETRICS

PO 1LED Illuminance at a Distance — RD/SQ

Feet (Meters)	Center Beam Foot-Candle (Lux)	Beam Width Vertical 35°	Beam Width Horizontal 60°
2.0' (0.6 m)	0.2 fc (2.2 lx)	1.3' (0.4 m)	2.3' (0.7 m)
4.0' (1.2 m)	0.1 fc (1.1 lx)	2.7' (0.8 m)	4.6' (1.4 m)
6.0' (1.8 m)	0.02 fc (0.2 lx)	4.0' (1.2 m)	6.9' (2.1 m)
8.0' (2.4 m)	0.01 fc (0.1 lx)	5.3' (1.6 m)	9.2' (2.8 m)
10.0' (3.1 m)	0.01 fc (0.1 lx)	6.6' (2.0 m)	11.5' (3.5 m)

PO 1LED Illuminance at a Distance — ST

Feet (Meters)	Center Beam Foot-Candle (Lux)	Beam Width Vertical 90°	Beam Width Horizontal 75°
2.0' (0.6 m)	6.1 fc (66 lx)	3.3' (1.0 m)	3.1' (1.0 m)
4.0' (1.2 m)	1.5 fc (16.4 lx)	6.6' (2.0 m)	6.3' (1.9 m)
6.0' (1.8 m)	0.7 fc (7.3 lx)	9.8' (3.0 m)	9.4' (2.9 m)
8.0' (2.4 m)	0.4 fc (4.1 lx)	13.1' (4.0 m)	12.6' (3.8 m)
10.0' (3.1 m)	0.24 fc (2.6 lx)	16.4' (5.0 m)	15.7' (4.8 m)

PO 1LED Illuminance at a Distance — WW

Feet (Meters)	Center Beam Foot-Candle (Lux)	Beam Width Vertical 45°	Beam Width Horizontal 60°
2.0' (0.6 m)	0.9 fc (9.5 lx)	1.6' (0.5 m)	2.2' (0.7 m)
4.0' (1.2 m)	0.2 fc (2.4 lx)	3.2' (1.0 m)	4.5' (1.4 m)
6.0' (1.8 m)	0.1 fc (1.1 lx)	4.9' (1.5 m)	6.7' (2.0 m)
8.0' (2.4 m)	0.1 fc (0.5 lx)	6.5' (2.0 m)	9.0' (2.7 m)
10.0' (3.1 m)	0.04 fc (0.4 lx)	8.1' (2.5 m)	11.2' (3.4 m)

FXLuminaire — VO Wall Light DESIGNER PREMIUM



PROJECT

CATALOG #

TYPE

NOTES

The VO In-Grade/Wall Light includes a sturdy installation sleeve ideal for landscape applications. Premium stainless steel construction ensures long-lasting performance in a range of settings, from concrete hardscapes to subterranean environments.

Quick Facts

- 316 marine-grade stainless steel
- Four faceplate options for maximum design flexibility
- Compatible with Luxor® technology
- Phase and PWM dimmable
- Input voltage: 10-15V



VO Wall Light SPECIFICATIONS

Output	1LED (ST)	1LED (RD)	1LED (GW180)	1LED (GW360)
Total Lumens	178	98	50	30
Input Voltage	10 to 15V	10 to 15V	10 to 15V	10 to 15V
Input Power (W)	3.1	3.1	3.1	3.1
VA	4.2	4.2	4.2	4.2
Efficacy (Lumens/Watt)	64	35	4	8
Color Rendering Index (CRI)	80+	80+	80+	90+
Center Beam Candlepower	431	160	—	—
CCT	2,700K	2,700K	2,700K	2,700K
Max Candela	55	55	17	10
Dimming	PWM, Phase	PWM, Phase	PWM, Phase	PWM, Phase
RGBW Available	No	No	No	No
Luxor Compatibility				
Z Option	—	—	—	—
ZQ-Option (default)	Zoning/Dimming	Zoning/Dimming	Zoning/Dimming	Zoning/Dimming
ZDC Option	—	—	—	—
Minimum Rated Life (L70 B10)	55,000 Hrs	55,000 Hrs	55,000 Hrs	55,000 Hrs

FX Luminaire
FX Luminaire is an industry-leading manufacturer of landscape and architectural lighting products with a focus on the advancement of LED technology and digital lighting control with zoning, dimming, and color adjustment capabilities. We offer a full spectrum of specification-driven lighting fixtures that can be utilized to create elegant, cutting-edge landscape lighting systems for commercial or residential applications. Our products are available exclusively via our extensive professional distributor network.

Materials
316 Marine-Grade Stainless Steel faceplate with polymer housing.

LED
LuminBeds®

Optics
Low-glare insetting with 10° beam angle.

Dimming
Luxor® control or a trailing-edge (reverse phase-cut) dimmer.

Configuration
Integrated driver.

Finish
Natural stainless steel.

Hardware
Stainless steel.

Wiring
Flexible rubber cable.

Power
Remote transformer required (specify separately).

Housing
Polymer.

Weight
0.9 lb (0.4 kg)

Installation Accessories (included)
Installation sleeve.

Lens
Frosted.

Ambient Operating Temperature
-4°F to 122°F (-20°C to 50°C)

Input Voltage
12-15 Vac, 60 Hz

Power Consumption
Specified power consumption indicates the full-apparent power.

Thermal Management
CoolDrive™ onboard thermal monitoring and control.

Sustainability
Innovation meets conservation in the design and manufacturing of our products. Where we can, we use recycled materials while maintaining superior functionality. Our LED products provide high-quality light at optimal energy efficiency, lifespan, and durability.

Installation Requirements
Designed for in-ground or recessed wall mounting. For conduit installs, swag green O-rings to orange O-rings for fit with 1.5" schedule 40 PVC, 1.9" schedule 80 PVC, or 2" install with included conduit.

Control
The Luxor Controller utilizes trailing-edge dimming to luminaires in up to 250 groups and dim each group in 1% increments between 0% and 100%.

Manufacturing
ISO 9001:2015 certified facility

Lifetime
>61,000 hours (L70, B10, TM21 Reported)

Warranty
10 Years

Listings

VO Wall Light PHOTOMETRICS

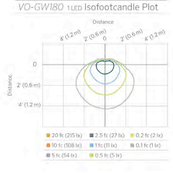
VO-ST 1 LED - Illuminance at a Distance

Distance	Center Beam fc	Beam Width	
Feet (Meters)	Foot-Candles (Lux)	Vertical : 22.7°	Horizontal : 35.8 °
2.0' (0.6 m)	107.0 fc (1,152 lx)	1.2' (0.4 m)	1.3' (0.4 m)
4.0' (1.2 m)	26.7 fc (287 lx)	2.4' (0.7 m)	2.6' (0.8 m)
6.0' (1.8 m)	11.9 fc (128 lx)	3.6' (1.1 m)	3.9' (1.2 m)
8.0' (2.4 m)	6.7 fc (72 lx)	4.8' (1.5 m)	5.2' (1.6 m)
10.0' (3.1 m)	4.3 fc (46 lx)	6.0' (1.8 m)	6.5' (2.0 m)
12.0' (3.7 m)	3.0 fc (32 lx)	7.2' (2.2 m)	7.8' (2.4 m)

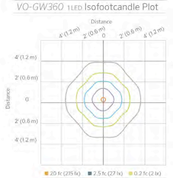
VO-RD 1 LED - Illuminance at a Distance

Distance	Center Beam fc	Beam Width	
Feet (Meters)	Foot-Candles (Lux)	Vertical : 20.7°	Horizontal : 34.2 °
0.5' (0.2 m)	21.9 fc (236 lx)	0.18' (0.1 m)	0.31' (0.1 m)
1.0' (0.3 m)	5.48 fc (58 lx)	0.36' (0.1 m)	0.62' (0.2 m)
1.5' (0.5 m)	2.44 fc (26 lx)	0.55' (0.2 m)	0.92' (0.3 m)
2.0' (0.6 m)	1.37 fc (15 lx)	0.73' (0.2 m)	1.23' (0.4 m)
2.5' (0.8 m)	0.88 fc (9 lx)	0.91' (0.3 m)	1.54' (0.5 m)
3.0' (0.9 m)	0.61 fc (7 lx)	1.09' (0.3 m)	1.85' (0.6 m)

VO-GW180 1LED Isofootcandle Plot



VO-GW360 1LED Isofootcandle Plot



Lighting Legend:

symbol	description	quantity	manufacturer	model	lumen	wattage	color temp (K)
L	controller	1	FX Luminaire	LZD-300-SS	N/A	N/A	N/A
	pathlight	10	Hinkley	Atlantis Small LED Pathlight 15014SK-LL COLOR: Satin Black	150	1-1.5	2,700
	wall light	5	FX Luminaire	PO-ZD-1LED-WW-FB	4-39	2.0	2,700
	step light	6	FX Luminaire	VO-ZD-1LED-GW-180-SS	10	3.1	2,700

notes:
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.



Hinkley- Pathlight



FX Luminaire - Wall Light



FX Luminaire - Step Light

3 BAREFOOT DESIGN
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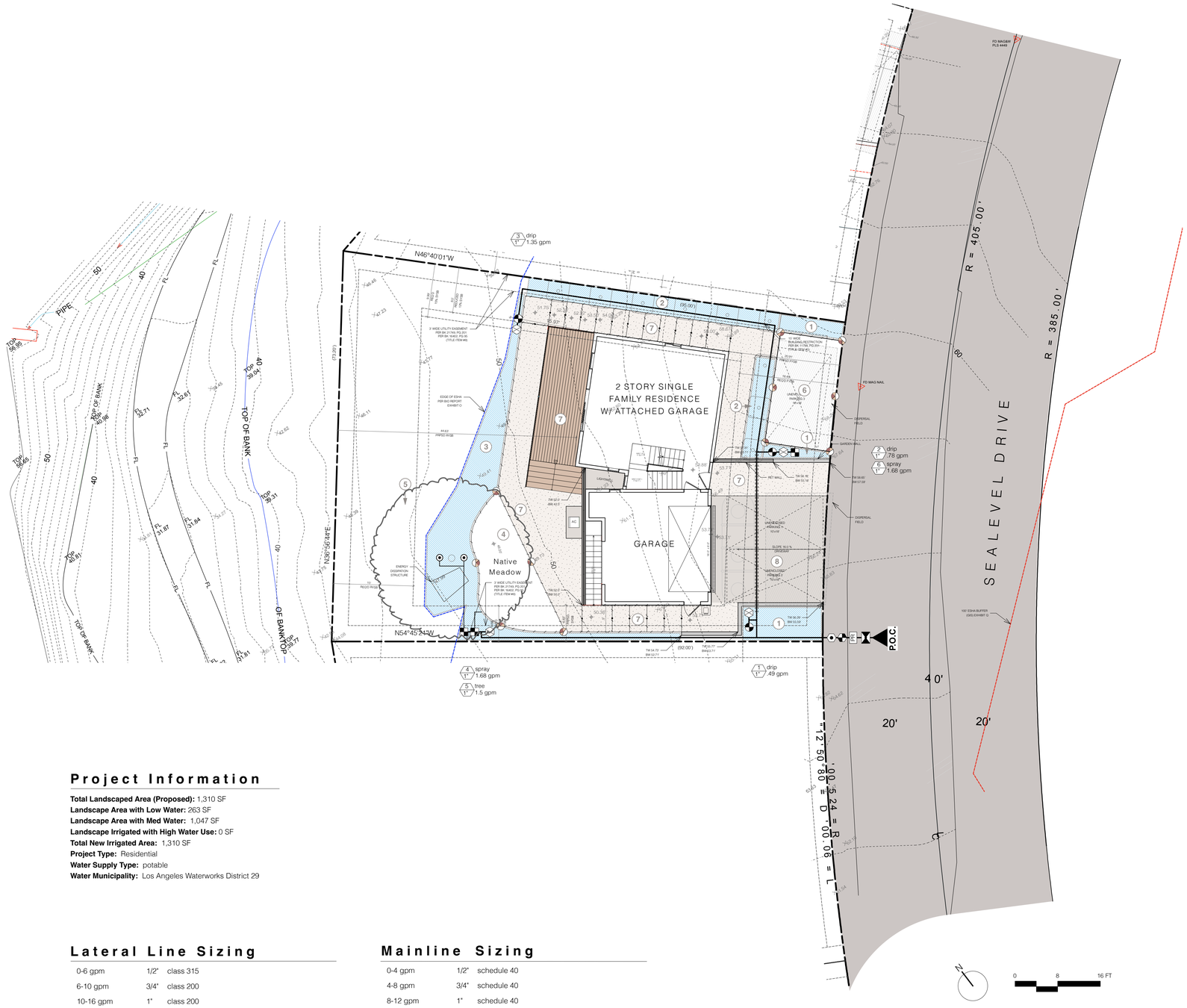
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PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Lighting Specifications

DATE 3/6/26
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-17
SHEET **L1.01**
1 OF 9 SHEETS



Irrigation Legend

symbol	description	manufacture / model
	domestic mainline	2" sch 40 PVC
	irrigation lateral	see Lateral Line Sizing
	irrigation sleeve	see Irrigation Notes
P.O.C.	point of connection	(N) 1" dedicated water meter, labeled "FOR IRRIGATION ONLY"
	irrigation controller	HUNTER I-Core IC-600-SS controller w/ (3) HUNTER ICM-600 Module & (1) HUNTER Wireless Rain-clik Rain Sensor WR-CLICK-TR. Rain Sensor to be programmed to automatically shutoff when onsite rainfall exceeds 1/4 inch.
	backflow preventer	1-1/2" FEBCO 825Y or approved equal
PR	pressure regulator	HONEYWELL D06-G with gauge (70 psi)
	master control valve	HUNTER IBV-151G-FS-R (65 psi)
	flow sensor	HUNTER HFS w/ FCT-100 (65 psi)
	spray valve	WEATHERMATIC 11024FCR (65 psi)
	drip valve	WEATHERMATIC 11024FCR w/ pressure regulating Y-Filter (30 psi)
	hose bib	3/4" brass hose bibb
	manual shut-off valve	PVC ball valve, size to match mainline
	root watering system	HUNTER RZWS (65 psi), see Emitter Legend for size and model
	rotary spray head, 360 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP800SR-360 nozzles (40 psi)
	rotary spray head, 90-210 degrees	HUNTER Pro-Spray PROS-06-PRS40-CV w/ MP Rotator MP1000-90 nozzles (40 psi)
#	drip irrigation zones	HUNTER 1/2" Supply Tubing w/ HUNTER Point Source Emitters, see Emitter Legend
#	temporary spray irrigation zones	HUNTER Pro-Spray PROS-12-PRS40-CV w/ MP Rotator (40psi). Temporary spray irrigation zones to be terminated after 2 year establishment period.

Valve Identification

valve number — # / 1" — type / flow — valve type / valve flow rate

valve size

Hydrozone Legend

valve/zone	description	area	plant type	exposure
1	Ornamental Shrubs and Grasses - Front Yard	146 SF	M	Full Sun
2	Hedge - North	233 SF	L	Part Sun
3	Ornamental Shrubs and Grasses - Backyard	401 SF	M	Part Sun
4	Native No Mow Meadow	247 SF	M	Part Sun
5	Tree	30 SF	L	Full Sun
6	GrassPave	253 SF	M	Full Sun
7	Hardscape - Permeable	1290 SF	NA	Full Sun
8	Hardscape - Impermeable	427 SF	NA	Full Sun

Project Information

Total Landscaped Area (Proposed): 1,310 SF
Landscape Area with Low Water: 263 SF
Landscape Area with Med Water: 1,047 SF
Landscape Irrigated with High Water Use: 0 SF
Total New Irrigated Area: 1,310 SF
Project Type: Residential
Water Supply Type: potable
Water Municipality: Los Angeles Waterworks District 29

Lateral Line Sizing

0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 200

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Irrigation Plan

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SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-17
SHEET
L2.00
4 OF 9 SHEETS

Maximum Applied Water Allowance Calculations:

ETo	40.6	
LA	1310	
SLA	1717	
ETAF	0.23	
MAWA (Gallons)		**37,586**
MAWA (Inches per sq.ft.)		46.0
MAWA (Inches per DAY)		0.13

Maximum Applied Water Allowance Equation:
MAWA = (ETo) (0.62) [(.55 x LA) + (1-0.55 x SLA)]

Definitions:

Eto	Reference provided in Appendix A - CIMIS
ETAF	Evapotranspiration Adjustment Factor - 0.55 or less
HA	Hydro zone area = Irrigated area
IE	Irrigation efficiency. Must exceed 0.71.
LA	Landscaped area
PF	Plant water use factor- WUCLOS
SLA	Special landscaped area WITHIN the landscaped area

Estimated Total Water Use:

ETo	40.6	
PF*HA (see chart)	1132.1	
HA (same as LA)	1310	
IE (see chart)	0.90	
SLA	1717	
ETWU (Gallons)		**19,844**
ETWU (Inches per sq.ft.)		24.3
ETWU (Inches per DAY)		0.07

Estimated Total Water Use Equation:
ETWU = ETo x 0.62 x [(PFxHA)/IE) +SLA]

Irrigation Efficiency:

H.Z.	Description	Type	PF	Irrigation Method	IE	ETAF (PF/IE)	HA	ETAF x Area	PF x HA	ETWU
Regular Landscape Areas										
1	Ornamental Shrubs & Grasses - Front Yard	Med	0.5	drip	0.81	0.41	146	59.13	73	
2	Hedge - North	Low	0.2	drip	0.81	0.16	233	37.75	46.6	
3	Ornamental Shrubs & Grasses - Backyard	Med	0.5	drip	0.81	0.41	401	162.41	200.5	
4	Native No Mow Meadow	Med	0.5	drip	0.81	0.41	247	100.04	123.5	
5	Trees	Low	0.2	Tree	0.81	0.16	30	4.86	6	
6	GrassPave	Med	0.5	Spray	0.75	0.38	253	94.88	126.5	
				Subtotal:	**0.80**	**0.32**	**1310**	**459.05**	576.1	18,127
Special Landscape/Hardscape Areas										
7	Hardscape - Permeable	Low	0.1	N/A	1.0	0.10	1290	129.00	129	
8	Hardscape - Impermeable	Low	1.0	N/A	1.0	1.00	427	427.00	427	
				Subtotal:	**1.00**	**0.55**	**1717**	**556.00**	556	13,996
									ETWU Total:	**32,123**
									MAWA Allowance:	**37,586**

Average System IE (IE is a derivative of DU defined as
IE = DU x IME. Where IME= Irrigation Management Efficiency

Irrigation Notes

1. This system is diagrammatic. All pipes, valves, etc. shown within paved areas are for design clarification only and shall be installed in planting areas wherever possible.

2. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that obstructions or grade differences exist and should be brought to the attention of the owner's authorized representative. In the event that this notification is not performed, the contractor must assume full responsibility for all revisions necessary.

3. Irrigation system is designed assuming a static water pressure of approximately 70 PSI at point-of-connection. Prior to installation of irrigation system, contractor shall verify pressure at point-of-connection.

4. It is the intent of this plan to provide adequate irrigation to all planting areas, prevent run-off, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas in accordance with MWELO sections 492.7(a)(1)(I) and 492.7(a)(1)(J)

Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to ensure 100% irrigation coverage of all planting areas and MWELO compliance.

5. Emitter shall be located on grade and staked a maximum of six inches from the center of plant, or edge of rootball, whichever is greater.

6. All piping installed under pathways or paved areas, through walls or footings shall be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe and any couplings in the sleeve. Provide (2) extra 2" sleeves in all locations where mainline or lateral line crosses under paving greater than 3' in dimension.

7. Irrigation lines shall be buried at the following minimum depths: PVC pressure mainline:18" PVC lateral line:12"

8. Irrigation Contractor shall adjust flow control for proper performance and valve longevity.

9. Pressure regulating devices shall be installed where necessary to ensure the dynamic pressure at each emission device is within manufacturer's recommended pressure range for optimal performance.

10. Flush valves shall be installed at the ends of all polyethylene drip tubing in round valve boxes with gravel fill.

11. Check valves shall be installed at low points on irrigation line to prevent leakage.

12. All planting areas shall be provided with a 3" thickness of mulch, samples to be provided to owner's representative.

13. No lawn or landscape irrigation with potable water allowed apart from the hours of 8:00PM and 8:00AM. Except for hand held hose equipment with a positive shut-off nozzle.

14. Irrigation water shall not run off landscaped areas to adjacent property, adjoining streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

15. All irrigation emission devices will meet the criteria set forth by MWELO section 492.7(a)(1)(M) and shall be installed per manufacturer's recommendations.

16. All irrigation piping and equipment to be purple in color and to be field or factory marked "CAUTION: NON-POTABLE RAINWATER, DO NOT DRINK." All irrigation piping to be purple reclaimed water pipe.

17. A manual indicating layout of irrigation system and manufacturer instructions for all equipment and procedures shall be provided to the owner at completion of project.

18. Certifcate of Completion in accordance with MWELO Section 492.9 will be submitted for review/approval by the Building and Safety Division prior to final occupancy.

19. Landscape Constractor shall clean up on a daily basis per Owner's representative's approval.

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

Lateral Line Sizing

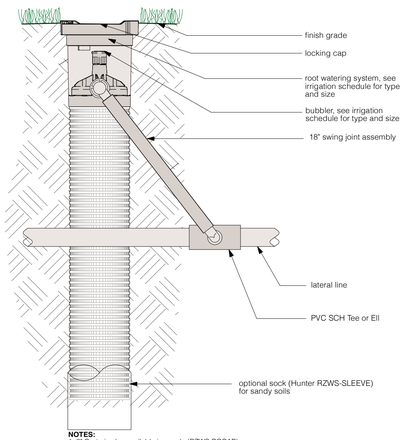
0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Emitter Legend

plant material	equipment
flatted groundcover	Microspray Emitters
4" pot	2 - HE-20-B Emitters per plant
1 gallon	2 - HE-20-B Emitters per plant
5 gallon shrubs	3 - HE-20-B Emitters per plant
15 gallon shrubs	4 - HE-20-B Emitters per plant
15 gallon trees	2 - RZWS-18-50-CV per tree
24" box trees	2 - RZWS-18-50-CV per tree
36" box trees	3 - RZWS-36-50-CV per tree
48" box trees	4 - RZWS-36-50-CV per tree
60" box trees and above	(Consult with a Local Arborist)

Valve Identification

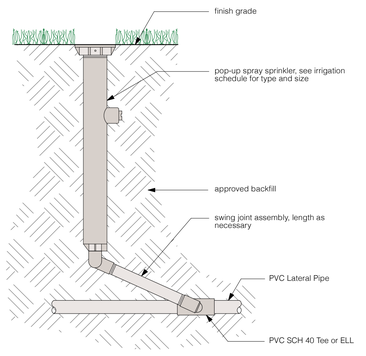




NOTES:
1. 3' Grate is also available in purple (RZWS-RCCAP).
2. Install product so that the grate is even with finish grade or top of mulch.
3. Optional sand sock (RZWS-SLEEVE) to cover mesh basket area.
4. When installing in extremely hard or clay soils, add 3/4" gravel under and around the unit to allow faster water infiltration and root penetration.
5. Once RZWS has been installed fill the basket with pea gravel before locking lid.

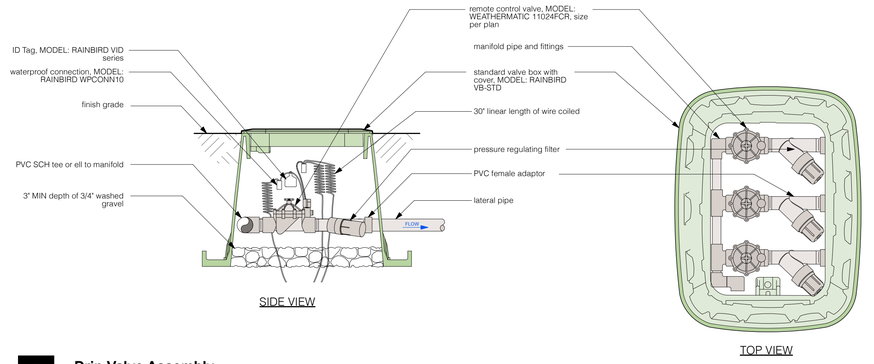
7 Root Watering System

scale: N.T.S.



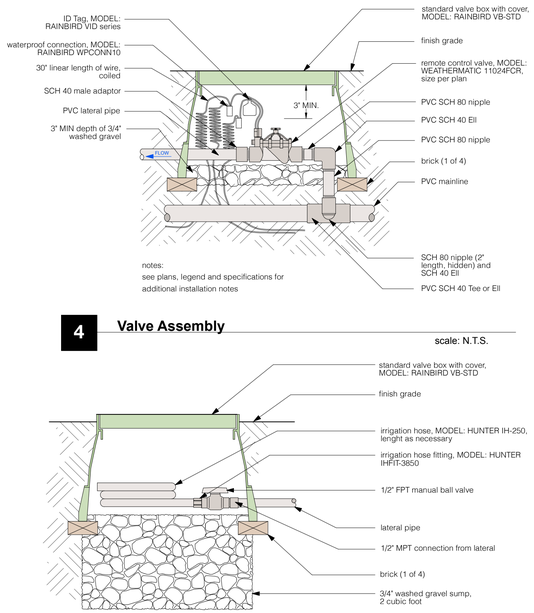
6 Spray Head

scale: N.T.S.



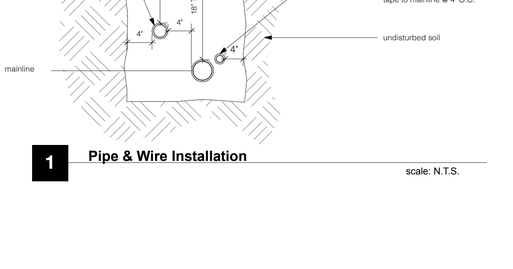
5 Drip Valve Assembly

scale: N.T.S.



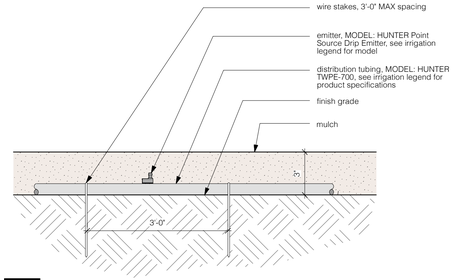
4 Valve Assembly

scale: N.T.S.



3 Manual Flush Valve

scale: N.T.S.



2 Drip Irrigation

scale: N.T.S.

1 Pipe & Wire Installation

scale: N.T.S.

3 BAREFOOT DESIGN
1197 Coast Village Road, #387
Santa Barbara, CA 93108
TEL 805-697-7866
WEB www.barefoot-design.net

SUBMITTALS

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE BAREFOOT DESIGN AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE BAREFOOT DESIGN. WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BAREFOOT DESIGN PRIOR TO THE COMMENCEMENT OF ANY WORK.

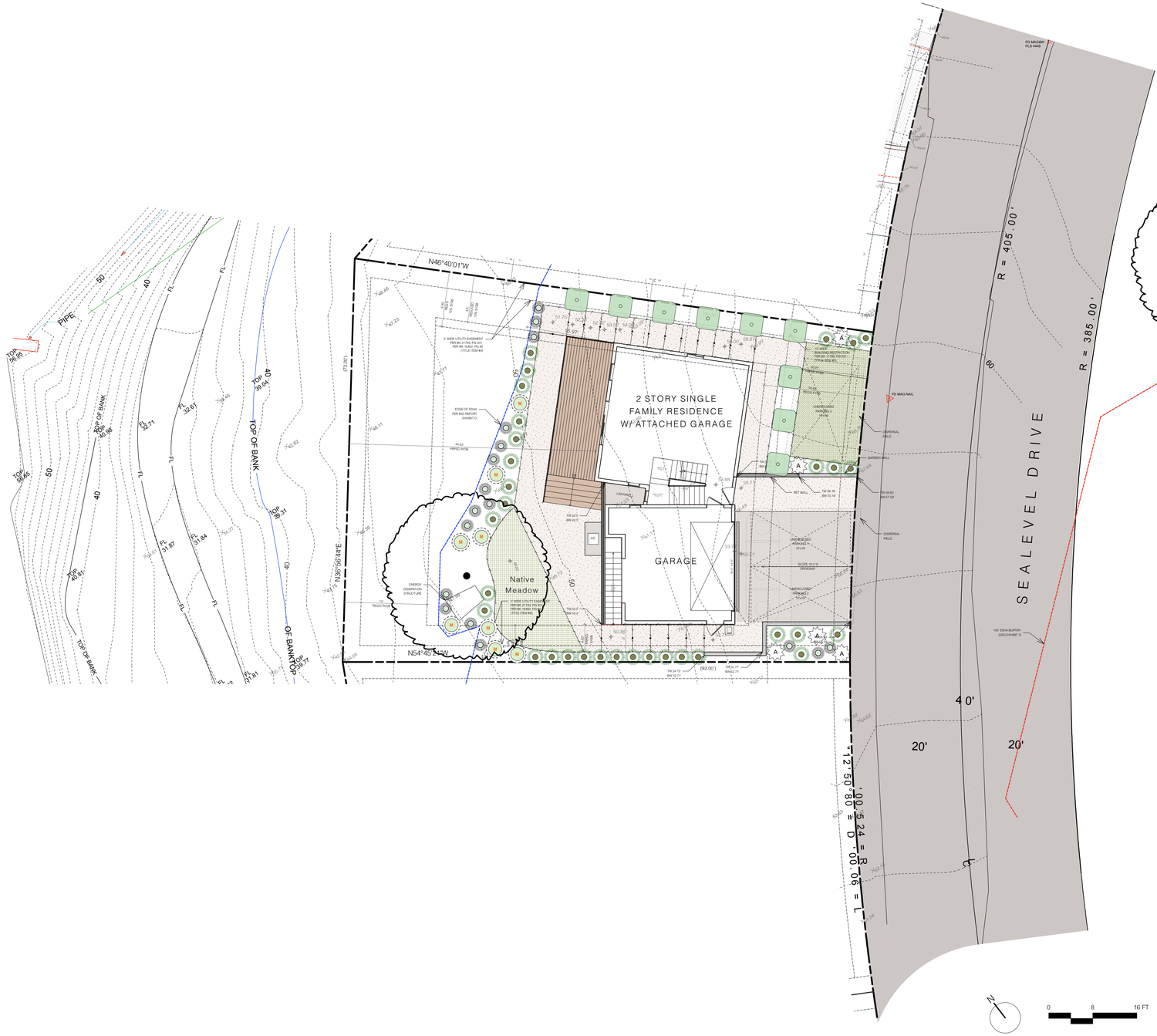
REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE PALMER
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS: **Irrigation Details**

DATE	3/6/26
SCALE	as noted
DRAWN	KR
JOB	24-17
SHEET	**L2.01**
5 OF 9	SHEETS



Plant Palette:

Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs				
Prunus ilicifolia	Hollyleaf Cherry	15gal	9	col.
Quercus agrifolia	Coast Live Oak	48" Box	1	std.

Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials				
Agave attenuata	Foxtail Agave	5g	5	4'-0"
Carex praegracilis	Clustered Field Sedge	1g	32	2-4'-0"
Juncus patens	Spreading Rush	1g	17	2'-0"
Mimulus aurantiacus	Bush Monkey Flower	1g	8	4-5'-0"
Groundcover				
Agrostis pallens	Native Bentgrass (No Mow Meadow)	seed	247 sf	1'-0"
Agrostis pallens	Native Bentgrass (GrassPave)		253 sf	

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE PETERSON
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS: **Planting Plan**

DATE	3/6/26
SCALE	1/8" = 1'-0"
DRAWN	KR
JOB	24-17
SHEET	**L3.00**
6 OF 9	SHEETS

Planting Notes

All plant materials shall be set out as shown on plan. Final locations shall be approved by the Landscape Designer prior to planting.

1. Landscape Contractor shall be responsible for becoming aware of all underground utilities, pipes and structures. The Contractor shall be held responsible for contacting all utility companies for field location of underground utility lines prior to any excavation.

2. Do not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the landscape designer, Barefoot Design, 805.697.7466.

3. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.

4. Landscape Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

5. The Landscape Contractor shall allow for the addition of specified quantities of soil amendments and conditioners in soil preparation and finish grading, per recommendation of soils report.

6. Recommendations in the Soils Management Report shall be incorporated into the landscape installation and a copy of the report is to be on-site at the time of inspection.

Unless soils have greater than 6% organic matter in the top 6" of soil, compost at a rate of a minimum of (4) cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of 6" into the soil.

7. It is the Landscape Contractor's responsibility to furnish plant material free of pests or plant diseases. Contract-grown or 'tagged' material must be inspected by the Landscape Contractor and certified disease free. It is the Landscape Contractor's obligation to warranty all plant materials.

8. The Landscape Contractor shall provide healthy, vigorous plant stock grown under climatic conditions similar to the conditions in the locality of the project.

9. Specimen trees will be selected and tagged by Landscape Designer prior to plant installation. Landscape Contractor is responsible to do their own quantity take-offs for all plant materials and sizes shown on plans. All substitutions shall be reviewed and approved by the Landscape Designer.

10. See details and specifications for staking method, plant pit dimensions and backfill requirements. If details have not been provided, contact Landscape Designer. Plant crown elevations relative to finish grade are shown on planting details and shall be strictly adhered to. Proper compaction of backfill to prevent settlement shall be required.

11. The Landscape Designer will approve finish grades at all landscape areas prior to planting.

12. The Landscape Designer reserves the right to adjust the location of plant material during installation as appropriate to the project.

13. Landscape mulch shall be applied at 3 inches thick over all landscape surfaces except lawn areas and per City of Malibu guidelines. Mulch must be approved by Landscape Designer. 0-5 feet from structure, flammable mulch is prohibited. 5 feet to 30 feet, limited non-continuous use of organic mulch is permitted with a maximum application area of 20 feet x 20 feet, and a minimum 5 foot separation between application areas. 30 feet from the structure, organic mulch and wood chips are permitted.

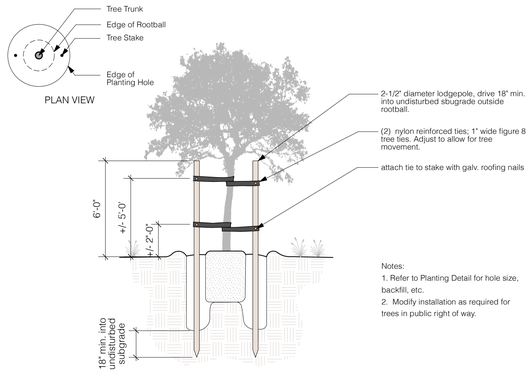
14. All side and rear yard hedges shall be maintained at or below 6'-0" in height.

15. View impermeable hedges occurring within the front setback serving the same function as a fence or wall shall be maintained at or below 42" in height.

16. Vegetation shall be situated on the propoerty so as not to obstruct the primary view from private property at any given time. Giving consideration to the plant materials future growth.

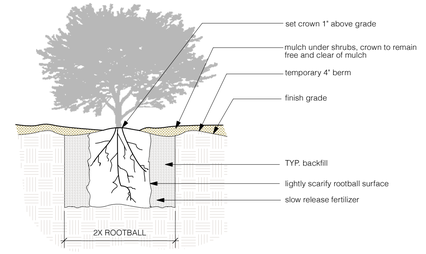
General Notes

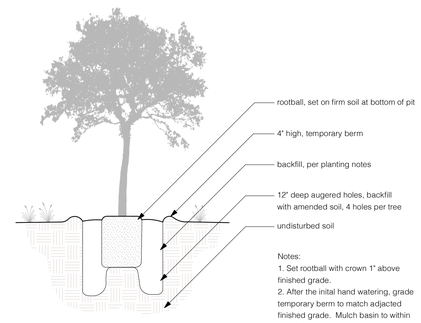
1. Refer to Architectural and Civil Engineer for hardscape and walls.
2. Refer to Civil Engineer for all grading and drainage



6 Tree Staking

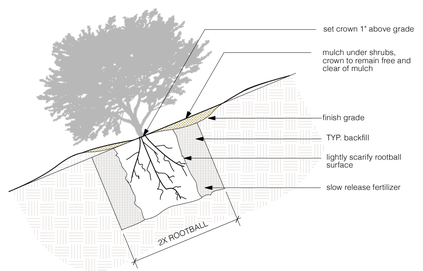
scale: N.T.S.





5 Tree Planting

scale: N.T.S.

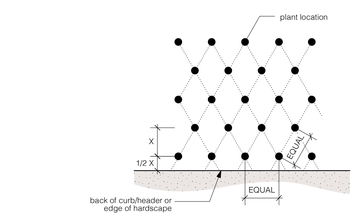


4 Shrub Planting on Slope

scale: N.T.S.

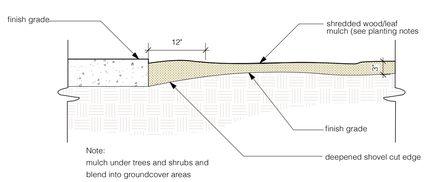
3 Shrub Planting

scale: N.T.S.



2 Groundcover Layout

scale: N.T.S.



1 Mulch Installation

scale: N.T.S.

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1187 Coast Village Road, #387
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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Planting Details

DATE	3/6/26
SCALE	as noted
DRAWN	KR
JOB	24-17
SHEET	L3.01

7 OF 9 SHEETS

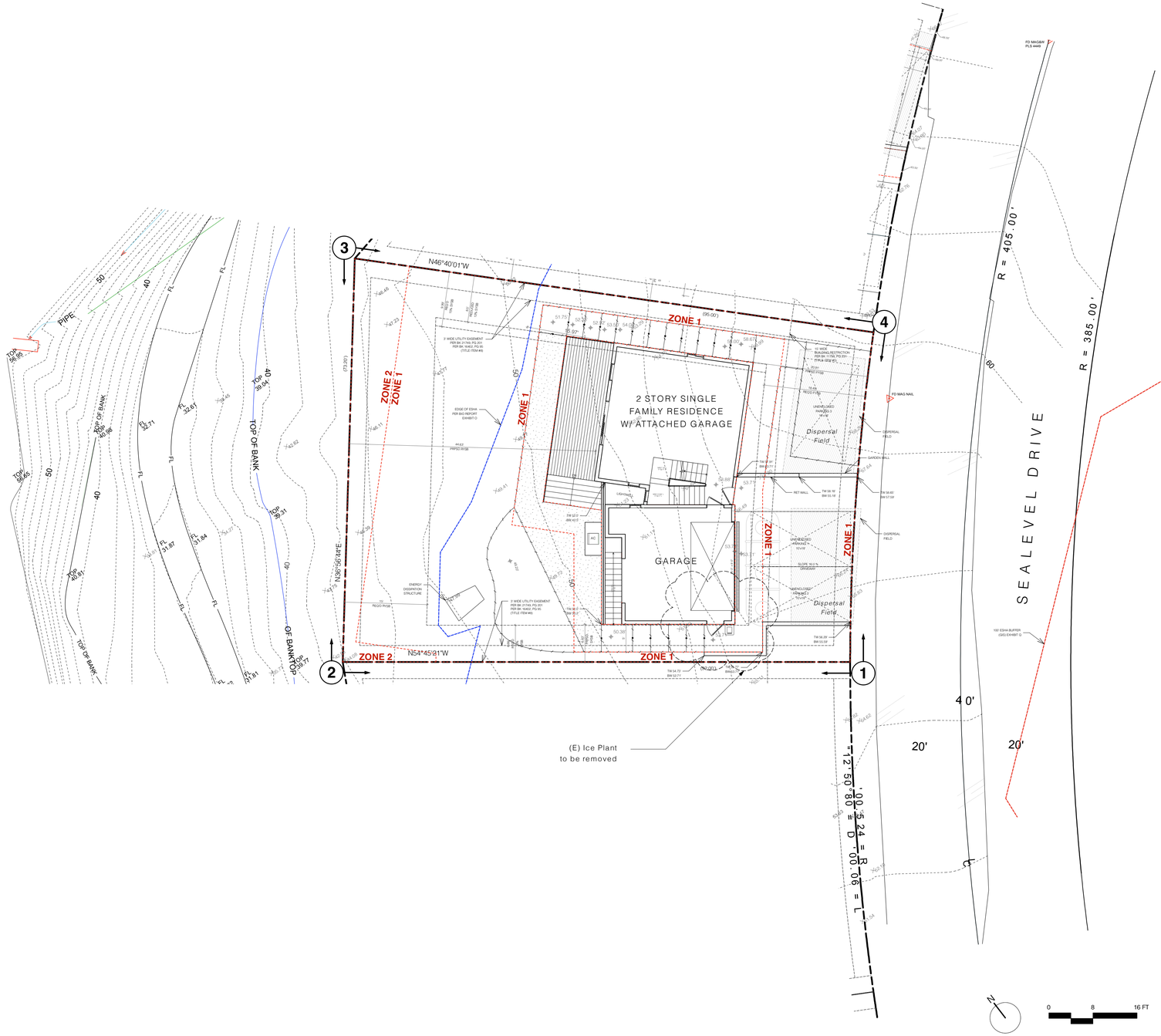




Photo 1



Photo 2



Photo 3



Photo 4

3 BAREFOOT DESIGN
1187 Coast Village Road, #387
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TEL 805-697-7866
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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FEATHERMAN
No.6606
March 31, 2026
Registered Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS

Site Images

DATE	3/6/26
SCALE	1/8" = 1'-0"
DRAWN	KR
JOB	24-17
SHEET	**L4.00**
8 OF 9	SHEETS



COUNTY OF LOS ANGELES
FIRE DEPARTMENT

FUEL MODIFICATION UNIT
605 NORTH ANGELENO AVENUE
AZUSA, CA 91702
(626) 969-5205
Email: forestryfuelmodification@fire.lacounty.gov
Website: https://fire.lacounty.gov/forestry-fuel-modification/

"Proud Protectors of Life, Property, and the Environment"

ANTHONY C. MARRONE
FIRE CHIEF FORESTER &
FIRE WARDEN

BOARD OF SUPERVISORS
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FIRST DISTRICT
HOLLY J. MITCHELL
SECOND DISTRICT
LINDSEY P. HORVATH
THIRD DISTRICT
JANICE HAHN
FOURTH DISTRICT
KATHRYN BARGER
FIFTH DISTRICT

Fuel Modification Plan Notes

Ember Resistant Zone (Pending State Fire Marshal Approval)

- Extends 5 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. The areas beneath eaves, overhangs or parts of structures including attached decks and pergolas shall be included in the ember resistant zone.
- This area shall be free of materials or landscaping known to be receptive to flying embers.
- **Disclaimer:** Please be advised, plants approved within the first five feet of the structure today, may not be compliant when the occupancy inspection or future defensible space inspections take place. Once the State Fire Code PRC 4291 and/or the LA County Fire Code Section 325 are updated to reflect the requirements of AB3074, they will take precedent. Defensible space is a year-round requirement and structures in a fire hazard severity zone must comply with the most current defensible space fire codes.

Zone 1

- Extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Plant species selected for Zone 1 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.
- Vines and climbing plants are not allowed on any combustible structure requiring review.

Zone 2

- Extends from the outer edge of Zone 1 an additional 70 feet for a total of 100 feet from the structure.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone 1 but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained.
- Plant species selected for Zone 2 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees in Zone 2 may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel ladders. Tree selections are subject to denial upon review.

Zone 3

- Extends from the outer edge of Zone 2 an additional 100 feet for a total of 200 feet from the structure.
- Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2).

Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private road, driveways and turnarounds used by firefighting resources.
- Clear and remove flammable vegetation on each side of access roads (Fire Code 325.10).
- Fire access roads shall have an unobstructed vertical clearance a minimum width of 20' and vertically clear to the sky (Fire Code 503.2.1).
- Additional clearance beyond 10 feet may be required upon an on-site inspection.
- All proposed plantings, unless otherwise approved, shall be positioned so they do not obstruct access at maturity. Pruning will not be considered as an alternative to plant selection.

Maintenance

Routine maintenance shall be regularly performed in all zones. Above all else, regular maintenance is paramount to the fire resistance of a well-planned fire-resistant landscape. Critical items are outlined below. Additional information may be found on our website listed in the header of this document.

- Start with the structure. Remove leaf litter and other combustible debris from roofs, eaves, rain gutters etc.
- Ensure the ember resistant zone is maintained free of any material known to be receptive to flying embers.
- Remove any plant or portion of a plant that is dead or dying throughout all zones.
- Remove downed, accumulated plant litter and dead wood throughout all zones.
- Prune to reduce the overall amount and continuity of fuels. Eliminate horizontal and vertical fuel ladders throughout all zones.
- All invasive species and their parts should be removed from the site.
- Ensure irrigation systems are functioning properly.
- Compliance with the fire code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of fine fuels between the months of April and June depending on the geographic region each dwelling exists.
- Inspection for compliance with an approved fuel modification plan may occur at any time.
- All future planting shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation.

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

BAREFOOT DESIGN
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Santa Barbara, CA 93108
TEL 805-697-7866
WEB www.barefoot-design.net

SUBMITTALS

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REGISTERED LANDSCAPE ARCHITECT
JESSICA LEE FRANKLIN
No.6606
March 31, 2026
Renewal Date
Signature
12/2/24
Date
STATE OF CALIFORNIA

PROJECT:

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS: **Fuel Modification Plan**

DATE	3/6/26
SCALE	1/8" = 1'-0"
DRAWN	KR
JOB	24-17
SHEET	**L4.01**
9 OF 9	SHEETS

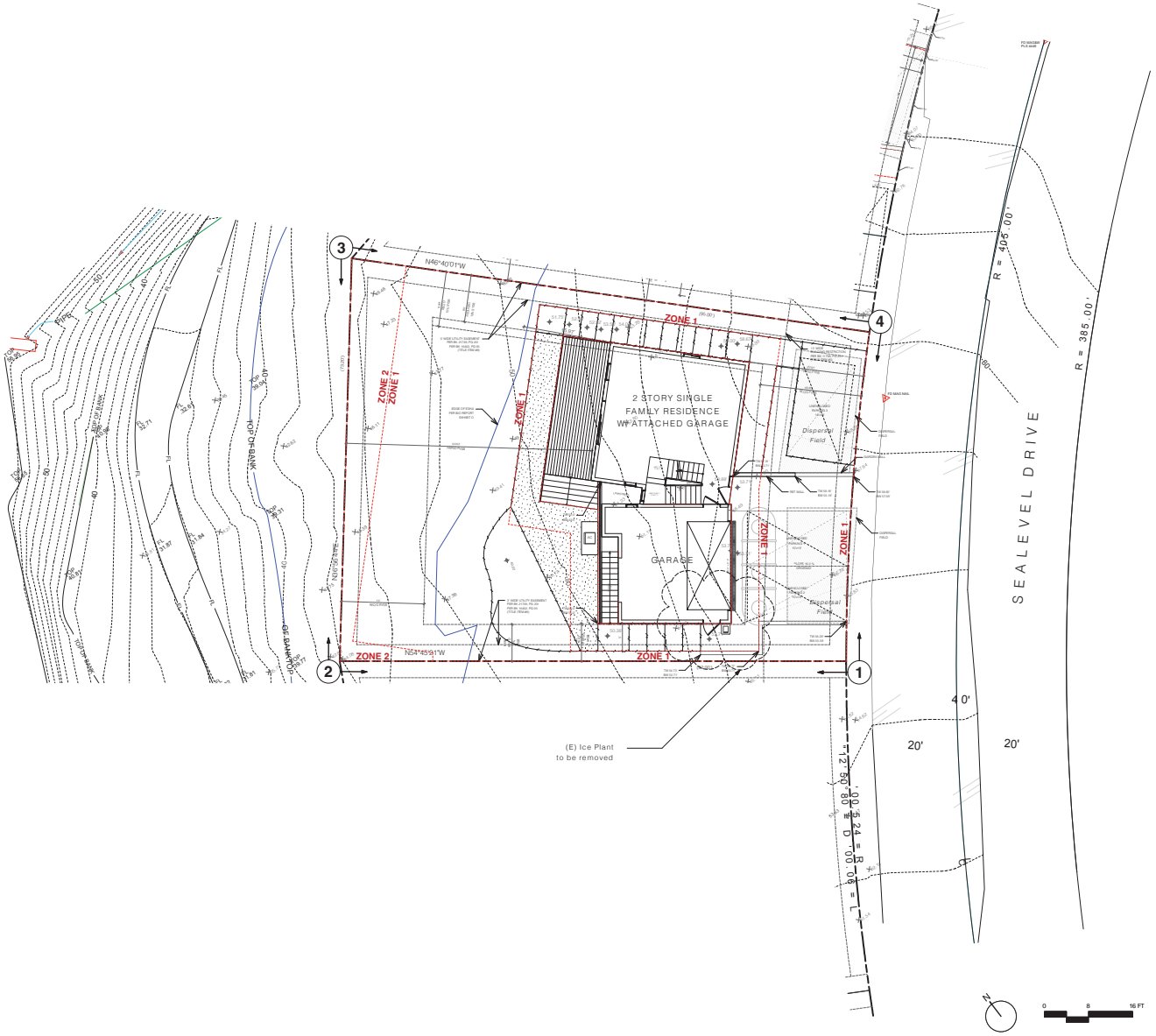




Photo 1



Photo 2



Photo 3



Photo 4

EXHIBIT 2

3 BAREFOOT DESIGN

SUBMITTALS

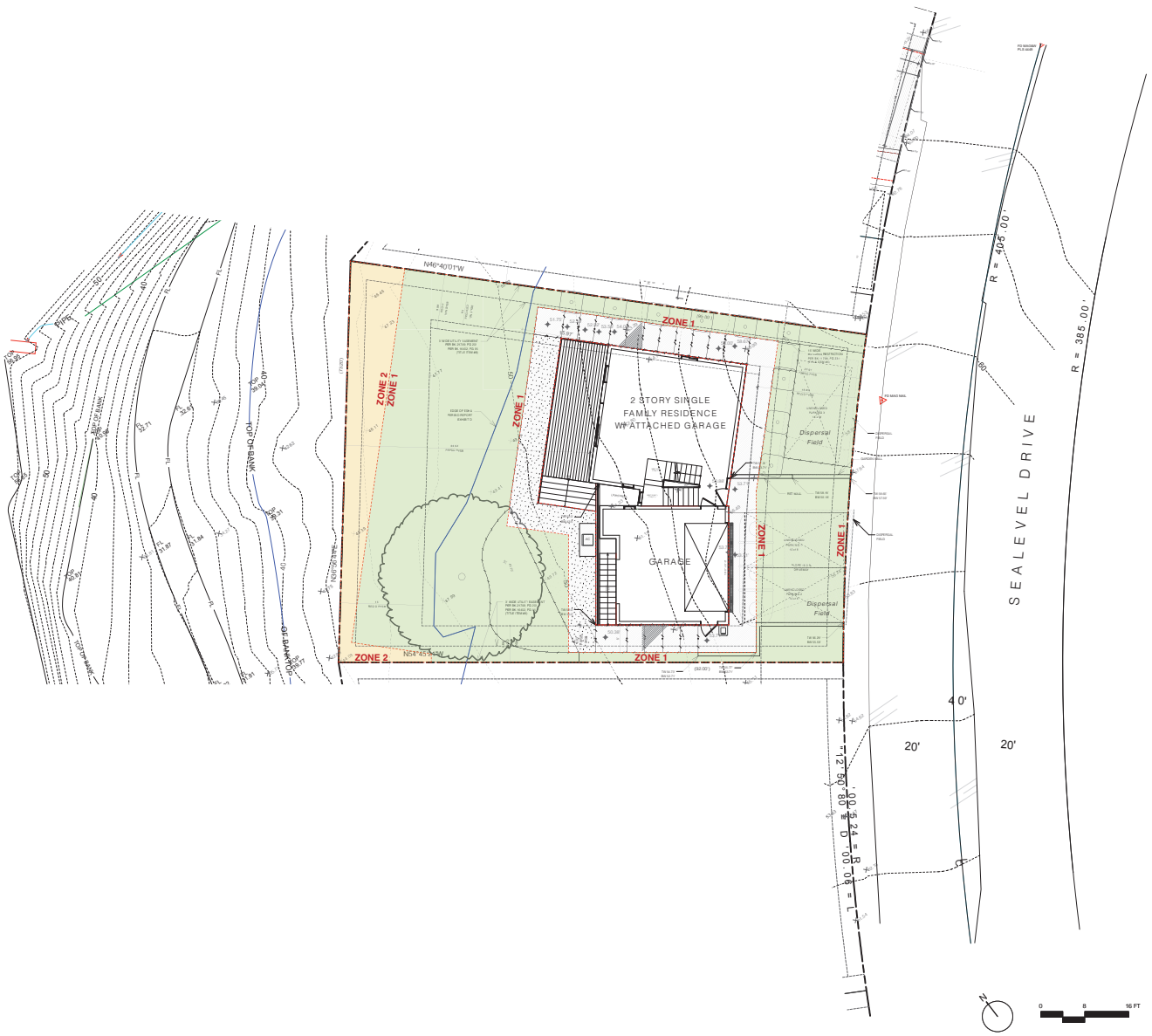
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REGISTERED LANDSCAPE ARCHITECT
No.6800
STATE OF CALIFORNIA

PROJECT
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Site Images

DATE 9/5/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-17
SHEET **L0.00**
1 OF 1 SHEETS



COUNTY OF LOS ANGELES
FIRE DEPARTMENT

FUEL MODIFICATION UNIT
605 NORTH ANGELENO AVENUE
AZUSA, CA 91702
(626) 969-5205
Email: fireinfo@fire.lacounty.gov
Website: https://fire.lacounty.gov/firesafety-fuel-modification/

"Proud Protectors of Life, Property, and the Environment"

ANTHONY C. MARRONE
FIRE CHIEF FORESTER &
FIRE WARDEN

BOARD OF SUPERVISORS

HILDA L. SOLIS
FIRST DISTRICT

HOLLY J. MITCHELL
SECOND DISTRICT

LINDSEY P. HORVATH
THIRD DISTRICT

JANICE HAHN
FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

Fuel Modification Plan Notes

Ember Resistant Zone (Pending State Fire Marshal Approval)

- Extends 5 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. The areas beneath eaves, overhangs or parts of structures including attached decks and pergolas shall be included in the ember resistant zone.
- This area shall be free of materials or landscaping known to be receptive to flying embers.
- **Disclaimer:** Please be advised, plants approved within the first five feet of the structure today, may not be compliant when the occupancy inspection or future defensible space inspections take place. Once the State Fire Code PRC 4291 and/or the LA County Fire Code Section 325 are updated to reflect the requirements of AB3074, they will take precedent. Defensible space is a year-round requirement and structures in a fire hazard severity zone must comply with the most current defensible space fire codes.

Zone 1

- Extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Plant species selected for Zone 1 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.
- Vines and climbing plants are not allowed on any combustible structure requiring review.

Zone 2

- Extends from the outer edge of Zone 1 an additional 70 feet for a total of 100 feet from the structure.
- Irrigation shall be provided to maintain healthy vegetation and fire resistance.
- Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone 1 but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity.
- Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained.
- Plant species selected for Zone 2 shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review.
- Trees in Zone 2 may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel ladders. Tree selections are subject to denial upon review.

Zone 3

- Extends from the outer edge of Zone 2 an additional 100 feet for a total of 200 feet from the structure.
- Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2).

Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private road, driveways and turnarounds used by firefighting resources.
- Clear and remove flammable vegetation on each side of access roads (Fire Code 325.10).
- Fire access roads shall have an unobstructed vertical clearance a minimum width of 20' and vertically clear to the sky (Fire Code 503.2.1).
- Additional clearance beyond 10 feet may be required upon an on-site inspection.
- All proposed plantings, unless otherwise approved, shall be positioned so they do not obstruct access at maturity. Pruning will not be considered as an alternative to plant selection.

Maintenance

Routine maintenance shall be regularly performed in all zones. Above all else, regular maintenance is paramount to the fire resistance of a well-planned fire-resistant landscape. Critical items are outlined below. Additional information may be found on our website listed in the header of this document.

- Start with the structure. Remove leaf litter and other combustible debris from roofs, eaves, rain gutters etc.
- Ensure the ember resistant zone is maintained free of any material known to be receptive to flying embers.
- Remove any plant or portion of a plant that is dead or dying throughout all zones.
- Remove downed, accumulated plant litter and dead wood throughout all zones.
- Prune to reduce the overall amount and continuity of fuels. Eliminate horizontal and vertical fuel ladders throughout all zones.
- All invasive species and their parts should be removed from the site.
- Ensure irrigation systems are functioning properly.
- Compliance with the fire code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of fine fuels between the months of April and June depending on the geographic region each dwelling exists.
- Inspection for compliance with an approved fuel modification plan may occur at any time.
- All future planting shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation.

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

BAREFOOT DESIGN

SUBMITTALS

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REGISTERED LANDSCAPE ARCHITECT
No.6800
STATE OF CALIFORNIA

PROJECT
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Fuel Modification Plan

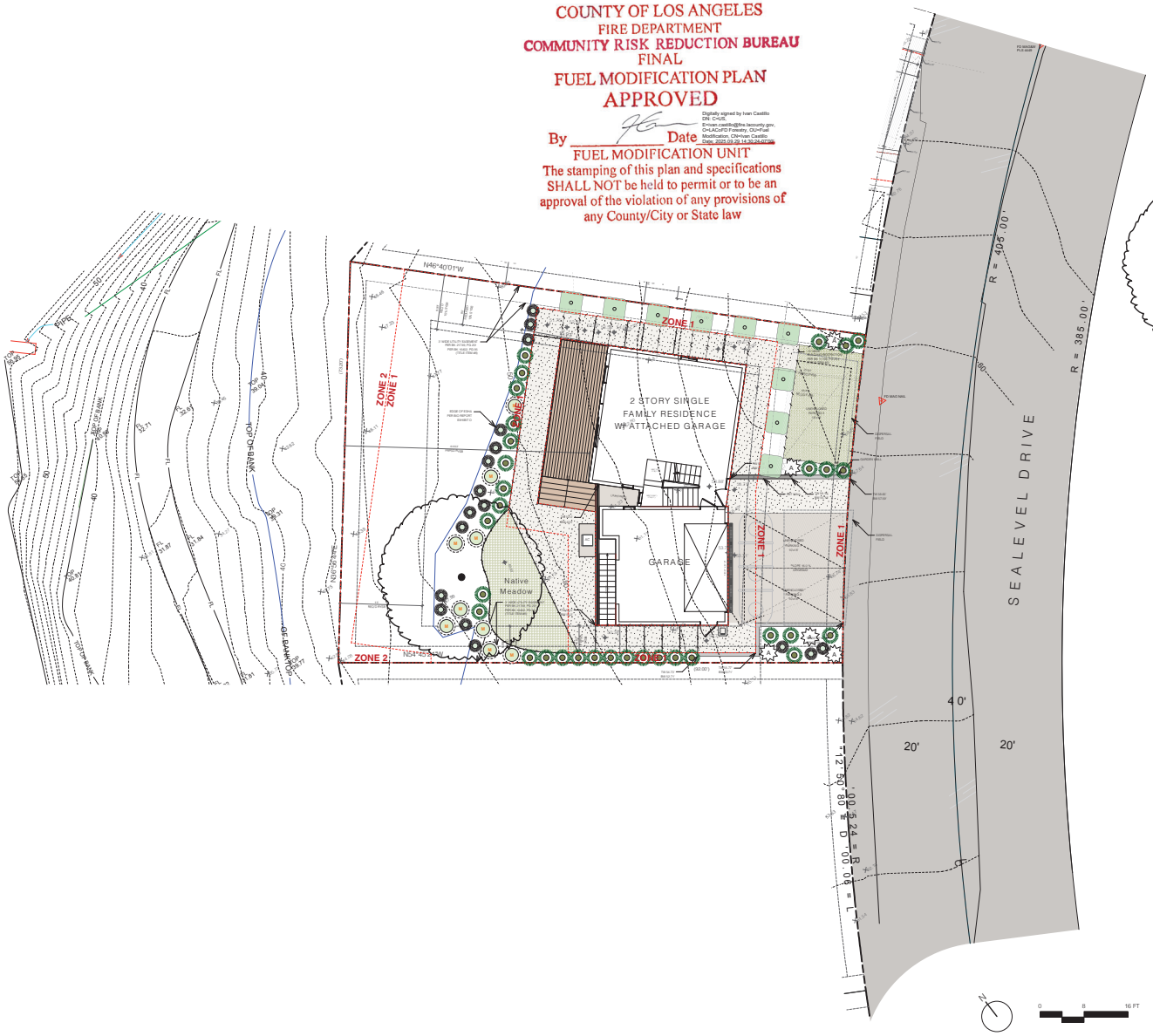
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2 OF 3 SHEETS

12183

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
COMMUNITY RISK REDUCTION BUREAU
FINAL
FUEL MODIFICATION PLAN
APPROVED

By _____ Date _____
FUEL MODIFICATION UNIT

The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County/City or State law



Plant Palette:

Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs				
Prunus ilicifolia	Hollyleaf Cherry	15gal	9	col.
Quercus agrifolia	Coast Live Oak	48" Box	1	std.

Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials				
Agave attenuata	Foxtail Agave	5g	5	4'-0"
Carex praegracilis	Clustered Field Sedge	1g	32	2-4'-0"
Juncus patens	Spreading Rush	1g	17	2'-0"
Mimulus aurantiacus	Bush Monkey Flower	1g	9	4-5'-0"
Groundcover				
Agrostis pallens	Native Bentgrass (No Mow Meadow)	seed	247 sf	1'-0"
Agrostis pallens	Native Bentgrass (GrassPave)		253 sf	

BAREFOOT DESIGN
1107 Cold Spring Road, #307
Santa Barbara, CA 93108
tel. 805.687.7964
www.barefootdesign.net

SUBMITTALS

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REGISTERED LANDSCAPE ARCHITECT
No.6800
STATE OF CALIFORNIA

PROJECT
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Planting Plan

DATE 9/5/25
SCALE 1/8" = 1'-0"
DRAWN KR
JOB 24-17
SHEET **L2.00**
2 OF 3 SHEETS

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4804
(310) 456-2489 FAX (310) 456-7650

BIOLOGY REVIEW REFERRAL SHEET

TO: City of Malibu Biologist

FROM: City of Malibu Planning Department **REVISED DATE** 05/14/2026

PROJECT NUMBER: CDP 23-037

JOB ADDRESS: 31882 SEA LEVEL DR

APPLICANT / CONTACT: Karen Hau, Burdge & Associates Architects

APPLICANT EMAIL: karen@buaia.com

PLANNER: Rick Casswell

PROJECT DESCRIPTION: NSFR

REVISION:

TO: Malibu Planning Department and/or Applicant

FROM: City Biologist, Courtney McCammon

_____ **The project review package is INCOMPLETE and; CANNOT proceed through Final Planning Review until corrections and conditions from Biological Review are incorporated into the proposed project design** (See Attached).

X

_____ **The project is APPROVED, consistent with City Goals & Policies associated with the protection of biological resources and CAN proceed through the Planning process.**

X Building Plan Check (BPC) Required ☐ Yes ☐ No BPC Fees Req'd $_____

_____ **The project may have the potential to significantly impact the following resources, either individually or cumulatively: Sensitive Species or Habitat, Watersheds, and/or Shoreline Resources and therefore Requires Review by the Environmental Review Board (ERB).**

Courtney McCammon 5/28/26

Signature Date

Additional requirements/conditions may be imposed upon review of plan revision

Contact Information:

Courtney McCammon, City Biologist, biology@malibucity.org, (310) 456-2489, extension 277

City of Malibu

Biology • Planning Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

BIOLOGY REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email)	Karen Hau, Burdge & Associates Architects karen@buaia.com		
Project Address:	**31882 SEA LEVEL DR** Malibu, CA 90265		
Planning Case No.:	CDP 23-037		
Project Description:	NSFR		
Date of Review:	May 28, 2026		
Reviewer:	Courtney McCammon	Signature:	Courtney McCammon
Contact Information:	Phone: (310) 456-2489 ext 277	Email:	biology@malibucity.org

SUBMITTAL INFORMATION

Site Plan:	5/14/26
Site Survey:	5/14/26
Landscape Plan:	5/14/26
Hydrozone Plan:	5/14/26
Irrigation Plan:	5/14/26
Fuel Modification Plan:	5/14/26
Grading Plan:	5/14/26
OWTS Plan:	5/14/26
Bio Assessment:	10/7/22 (Forde Biological), revised 8/5/25
Bio Inventory:	
Native Tree Survey:	
Native Tree Protection Plan:	
Miscellaneous:	Overwintering Monarch Survey Report (1/12/26) Notification of Lake or Streambed Alteration (1/16/25)
Previous Reviews:	6/25/23 (Incomplete), 1/16/25 (Incomplete), 8/27/25 (Incomplete)

REVIEW FINDINGS

Review Status:	☐	**INCOMPLETE**: Additional information and/or a response to the listed review comments is required.
	☒	**APPROVED**: The project has been approved with regards to biological impacts.
	☐	**CANNNOT APPROVE AS SUBMITTED**: The proposed project does not conform to the requirements of the MMC and/or LCP.
	☒	**ERB**: This project has the potential to impact ESHA and may require review by the Environmental Review Board pursuant to LIP Section 4.4.4

Recycled Paper

DISCUSSION:

1. The Maximum Applied Water Allowance (MAWA) for this project totals 37,586 gallons per year (gpy). The Estimated Applied Water Use (EAWU) totals 32,123 gpy. Therefore, the project meets the Landscape Water Conservation Ordinance Requirements.

RECOMMENDATIONS:

1. The project is recommended for **APPROVAL** with the following conditions:

   A. Pursuant to LIP Section 4.7.1, the allowable development area is limited to 10,000 square feet 25 percent of the parcel size, whichever is less, as all feasible building areas will result in impacts to Environmentally Sensitive Habitat Area (ESHA). The proposed development area is 1,527 square feet.

   B. Pursuant to LIP Section 4.8.1, all new development shall include mitigation for unavoidable impacts to Environmentally Sensitive Habitat Area (ESHA) from the removal, conversion, or modification of natural habitat for new development, including required fuel modification and brush clearance. The proposed project will result in *0.413* acres of permanent impacts (development footprint and/or Fuel Modification Zones A and/or B) to ESHA and *0.85* acres of partial impacts (Fuel Modification Zone C). One of the following three Habitat Impact Mitigation methods shall be required: (1) habitat restoration; (2) habitat conservation; or (3) in-lieu fee for habitat conservation. The CDP shall include conditions setting forth the requirements for habitat mitigation. Prior to final plan check the applicant shall provide either a detailed restoration plan, a habitat conservation plan, or evidence of payment of in lieu fees to the Santa Monica Mountains Conservancy.

   C. Prior to installation of any landscaping, the applicant shall obtain plumbing permit for the proposed irrigation system from the Building Safety Division.

   D. Prior to or at the time of a Planning final inspection, the property owner/applicant shall submit to the case planner a copy of the plumbing permit for the irrigation system installation that has been signed off by the Building Safety Division.

   E. Prior to final Planning inspection or other final project sign off (as applicable), the applicant shall submit to the Planning Community Development Director for review and approval a certificate of completion in accordance with MMC Chapter 17.53. The certificate shall include the property owner's signed acceptance of responsibility for maintaining the landscaping and irrigation in accordance with the approved plans and MMC Chapter 17.53.

   F. Prior to a final plan check approval, the property owner /applicant must provide a landscape water use approval from the Los Angeles County Waterworks District No. 29. For approval contact:

   LA County Waterworks District 29
   Address: 23533 Civic Center Way, Malibu, CA 90265

Email: wwsmaeng@dpw.lacounty.gov
Phone: (310) 317 – 0209

Please note: submit plans through EPIC-LA using the "Waterworks Division Landscape Water Efficiency Approval" application. This action may require several weeks. As such, the applicant should submit their approved landscape plans as soon as feasible in order to avoid a delay at plan check.

G. Vegetation forming a view impermeable condition serving the same function as a fence or wall (also known as a hedge) located within the side or rear yard setback shall be maintained at or below a height of six feet. A hedge located within the front yard setback shall be maintained at or below a height of 42 inches. Three violations of this condition will result in a requirement to permanently remove the vegetation from the site.

H. Plantings required for fuel modification, except for within irrigated Zone A nearest to approved residential structures, must be native, drought-tolerant species and shall blend with the existing natural vegetation and natural habitats on the site.

I. The use of wood chips and shredded rubber is prohibited anywhere on the site. Flammable mulch material, including shredded bark, pine needles, and artificial turf, are prohibited between zero and five feet of a structure. Non-continuous use of flammable mulch (excluding wood chips and shredded rubber) is allowed between 5 and 30 feet from the eave/overhang of a structure with limited application areas. Any mulch materials (excluding wood chips and shredded rubber) are allowed 30 feet or more from a structure with no limitation on application area.

J. Invasive plant species, as determined by the City of Malibu, are prohibited.

K. No non-native plant species shall be approved greater than 50 feet from the residential structure.

L. The landscape plan shall prohibit the use of building materials treated with toxic compounds such as creosote and copper arsenate.

M. Any site preparation activities, including removal of vegetation, between February 1 and September 15 will require nesting bird surveys by a qualified biologist at least five days prior to initiation of site preparation activities. Should active nests be identified, a buffer area no less than 150 feet (300 feet for raptors) shall be fenced off until it is determined by a qualified biologist that the nest is no longer active. A report discussing the results of nesting bird surveys shall be submitted to the City within two business days of completing the surveys.

N. Grading and/or demolition shall be scheduled only during the dry season from April 1 – October 31. If it becomes necessary to conduct grading activities from November 1 – March 31, a comprehensive erosion control plan shall be submitted for approval prior to issuance of a grading permit and implemented prior to initiation of vegetation removal and/or grading activities.

O. Construction fencing shall be placed within five feet of the limits of grading. Construction fencing shall be installed prior to the beginning of any construction and shall be maintained throughout the construction period to protect the site's sensitive habitat areas, the stream and riparian habitat.

P. All open areas not used for buildings, driveways, parking areas, or walkways shall be attractively landscaped and maintained in accordance with a landscape plan, with native plant species, to the satisfaction of the Planning Community Development Director.

Q. Night lighting from exterior and interior sources shall be minimized. All exterior lighting shall be low intensity and shielded directed downward and inward so there is no offsite glare or lighting of natural habitat areas. Lighting of the shore or the beach in excess of one foot-candle is prohibited.

2. **PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY**, the City Biologist shall inspect the project site and determine that all planning conditions to protect natural resources are in compliance with the approved plans.

3. **ERB REQUIRED**

Pursuant to LIP Section 4.4.4, the proposed project will require review by the Environmental Review Board (ERB) as it has the potential to impact special status biological resources.

-o0o-

If you have any questions regarding the above requirements, please contact the City Biologist office at your earliest convenience.

cc: Planning Project file
Planning Department

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4861
(310) 456-2489 FAX (310) 456-3356 www.malibucity.org

ENVIRONMENTAL HEALTH REVIEW
REFERRAL SHEET

TO: City of Malibu Environmental Health Administrator

FROM: City of Malibu Planning Department **REVISED DATE** 01/07/2025

PROJECT NUMBER:	CDP 23-037
JOB ADDRESS:	31882 SEA LEVEL DR
APPLICANT / CONTACT:	Karen Hau, Burdge & Associates Architects
APPLICANT ADDRESS:	24911 Pacific Coast Hwy Malibu, CA 90265
APPLICANT PHONE #:	(310)456-5905
APPLICANT FAX #:	
APPLICANT EMAIL:	karen@buaia.com
PROJECT DESCRIPTION:	NSFR

TO: Malibu Planning Department and/or Applicant

FROM: City of Malibu Environmental Health Reviewer

✓ **Conformance Review Complete** for project submittals reviewed with respect to the City of Malibu Local Coastal Plan/Local Implementation Plan (LCP/LIP) and Malibu Municipal Code (MMC). The Conditions of Planning conformance review and plan check review comments listed on the attached review sheet(s) (or else handwritten below) shall be addressed prior to plan check approval.

Building Plan Check (BPC) Required ☑ Yes ☐ No BPC Fees Req'd $ _____

_____ **Conformance Review Incomplete** for the City of Malibu LCP/LIP and MMC. The Planning stage review comments listed on the City of Malibu Environmental Health review sheet(s) shall be addressed prior to conformance review completion.

OWTS Plot Plan: ☐ **NOT REQUIRED**

☑ **REQUIRED (attached hereto)** ☐ **REQUIRED (not attached)**

Matthew Thomas 1/20/2025

Signature **Date**

The applicant must submit to the City of Malibu Environmental Health Specialist to determine whether or not an onsite wastewater treatment system (OWTS) Plot Plan approval is required.

The Environmental Health Specialist may be contacted Tuesday and Thursday from 8:00 am to 11:00 am, or by calling (310) 456-2489, extension 364.

City of Malibu

Environmental Health ● Environmental Sustainability Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-7650 · www.malibucity.org

ENVIRONMENTAL HEALTH REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email address)	Karen Hau, Burdge & Associates Architects karen@buaia.com		
Project Address:	**31882 Sea Level Lane** Malibu, California 90265		
Planning Case No.:	CDP 23-037		
Project Description:	NSFR, NOWTS		
Date of Review:	January 20, 2025		
Reviewer:	Matt Janousek	Signature:	
Contact Information:	Phone: (310) 456-2489	Email:	mjanousek@malibucity.org

SUBMITTAL INFORMATION

Architectural Plans:	Burdge & Associates Architects: Plans dated 5-12-2022, 12-18-2024
Grading Plans:	AHSIRT Engineering: Plans dated 9-2022
OWTS Plan:	Ensitu: OWTS plan dated 5-30-2022, 11-15-2024
OWTS Report:	Ensitu: OWTS report dated 5-30-2023, 11-15-2024
Geology Report:	GeoSystems Inc: Updated soils report dated 3-13-2023, 11-13-2024
Miscellaneous:	TEG: Reduction in Setback Letter dated 9-17-2024. Burdge & Associates Architects: Variance ESHA letter dated 6-5-2023. Larry Young; Percolation Test Report; dated 2015 and 2006 (Referenced only and not submitted).
Previous Reviews:	6-22-2023

REVIEW FINDINGS

Planning Stage:	☒	**CONFORMANCE REVIEW COMPLETE** for the City of Malibu Local Coastal Program (LCP)/Local Implementation Plan (LIP) and Malibu Municipal Code (MMC). The listed conditions of Planning stage conformance review and plan check review comments shall be addressed prior to plan check approval.
	☐	**CONFORMANCE REVIEW INCOMPLETE** for the City of Malibu LCP/LIP and MMC. The listed Planning stage review comments shall be addressed prior to conformance review completion.
OWTS Plot Plan:	☐	**NOT REQUIRED**
	☒	**REQUIRED (attached hereto)** ☐ **REQUIRED (not attached)**

Based upon the project description and submittal information noted above, a **conformance review** was completed for a new advanced onsite wastewater treatment system (OWTS) proposed to serve the onsite wastewater treatment and disposal needs of the subject property. The proposed advanced OWTS meets the minimum requirements of the Malibu Municipal Code (MMC) and the City of Malibu Local Coastal Program (LCP)/Local Implementation Plan (LIP). Please distribute this review sheet to all of the project consultants and, prior to final approval, provide a coordinated submittal addressing all conditions for final approval and plan check items.

Recycled Paper

The conditional conformance findings hereby transmitted complete the Planning stage Environmental Health review of the subject development project. In order to obtain Environmental Health final approval of the project OWTS Plot Plan and associated construction drawings (during Building Safety plan check), all conditions and plan check items listed below must be addressed through submittals to the Environmental Health office.

Conditions of Planning Conformance Review for Building Plan Check Approval:

1) **OWTS on Project Plans:** The final architectural plans and grading/retaining wall plans plans must show the proposed onsite wastewater treatment system (OWTS), including the treatment tank, present/future dispersal area(s), and all lines of connection to the residence.

    - The proposed OWTS must be shown on all final architectural, retaining wall, and structural cross-sections as applicable.

2) **Building Plans:** All project plans shall be submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

    Architectural Plans:

    - The final architectural plans must show 3 bedrooms and 37 drainage fixture units (DFU).

    - Show and label all drainage fixtures on the final floor plans including clothes washers and dishwashers.

    - **Outdoor Shower(s):** The proposed outdoor showers must be covered and protected at all times to prevent stormwater from entering into the drain and OWTS. Please show the limits proposed roof overhang and provide a detail/call out of a shower berm on the final architectural plans.

    - **Proof of 1.6 Gallon or Less Flushometer Water Closet:** The 2022 California Plumbing Code permits water closets to be computed as 3 DFU if the proposed water closet is categorized as a flushometer tank with a 1.6 gallon per flush or less and is ANSI approved. Specifications of the flushometer tank shall be submitted.

      The OWTS Designer references water closets to be computed as 3 DFU. Please provide the make and model number of the water closet that is ANSI approved and incorporate the low flow specification sheet into the final architectural plan set.

3) **Final Onsite Wastewater Treatment System (OWTS) Plot Plan:** A final plot plan prepared by a City Registered OWTS Designer shall be submitted showing an OWTS design meeting the minimum requirements of the Malibu Municipal Code (MMC) and the Local Coastal Program (LCP)/Local Implementation Plan (LIP). The plans must include all necessary construction details, the proposed drainage plan for the developed property, and the proposed landscape plan for the developed property. The OWTS Plot Plan shall show essential features of the OWTS, existing improvements, and proposed/new improvements. The plot plan must fit on an 11” x 17” sheet leaving a 5” left margin clear to provide space for a City-applied legend.

4) **Final OWTS Design Report, Plans, and System Specifications:** A final OWTS design report and large set of construction drawings with system specifications (four sets) shall be submitted to describe the OWTS design basis and all components proposed for use in the construction of the OWTS. All plans and reports must be signed by a City Registered OWTS Designer, and the plans stamped by the project Geologist, Coastal Engineer, and Structural Engineer as applicable. The final OWTS design report and construction drawings shall be submitted with the designer's signature, professional registration number, and stamp (if applicable).

   The final OWTS design submittal shall contain the following information (in addition to the items listed above).

   a. Required treatment capacity for wastewater treatment and disinfection systems. The treatment capacity shall be specified in terms of flow rate, gallons per day (gpd), and shall be supported by calculations relating the treatment capacity to the number of bedroom equivalents, plumbing drainage fixture units, and the subsurface effluent dispersal system acceptance rate. The drainage fixture unit count must be clearly identified in association with the design treatment capacity, even if the design is based on the number of bedrooms. Average and peak rates of hydraulic loading to the treatment system shall be specified in the final design.

   b. Sewage and effluent pump design calculations (as applicable).

   c. Description of proposed wastewater treatment and/or disinfection system equipment. State the proposed type of treatment system(s) (e.g., aerobic treatment, textile filter, ultraviolet disinfection, etc.); major components, manufacturers, and model numbers for "package" systems; and the design basis for engineered systems.

   d. Specifications, supporting geology information, and percolation test results for the subsurface effluent dispersal portion of the onsite wastewater disposal system. This must include the proposed type of effluent dispersal system (drainfield, trench, seepage pit, subsurface drip, etc.) as well as the system's geometric dimensions and basic construction features. Supporting calculations shall be presented that relate the results of soils analysis or percolation/infiltration tests to the projected subsurface effluent acceptance rate, including any unit conversions or safety factors. Average and peak rates of hydraulic loading to the effluent dispersal system shall be specified in the final design. The projected subsurface effluent acceptance rate shall be reported in units of total gallons per day (gpd) and gallons per square foot per day (gpsf). Specifications for the subsurface effluent dispersal system shall be shown to accommodate the design hydraulic loading rate (i.e., average and peak OWTS effluent flow, reported in units of gpd). The subsurface effluent dispersal system design must take into account the number of bedrooms, fixture units, and building occupancy characteristics.

   e. All OWTS design drawings shall be submitted with the wet signature and typed name of the OWTS designer. If the plan scale is such that more space than is available on the 11" x 17" plot plan is needed to clearly show construction details, larger sheets may also be provided (up to a maximum size of 18" x 22" for review by Environmental Health). [Note: For OWTS final designs, full-size plans for are also required for review by Building & Safety and Planning.]

5) **Building Plans:** All project architectural plans and grading/drainage plans shall be submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

6) **Traffic-Rated Slab Plan(s):** All project traffic rated slab plans shall be prepared by a California licensed civil engineer and submitted for Environmental Health review and approval. These plans must be approved by the Building Safety Division prior to receiving Environmental Health final approval.

7) **Architect / Engineer Certification for Reduction in Setbacks to Buildings or Structures:** All proposed reductions in setbacks from the OWTS to structures or other features less than those shown in Malibu Municipal Code (MMC) Section 15.42 must be supported by letters from the project consultants. The wastewater plans and the construction plans must be specifically referenced in all certification letters. The construction plans for all structures and/or buildings with reduced setback must be approved by City of Malibu Building Safety prior to Environmental Health final approval. The architectural and/or structural plans submitted for Building Safety plan check must detail methods of construction that will compensate for the reduction in setback (e.g., waterproofing, concrete additives). For complex waterproofing installations, submittal of a separate waterproofing plan may be required. All plans must show the location of OWTS components in relation to those structures from which the setback is reduced, and the plans must be signed and stamped by the architect, structural engineer, and geotechnical consultants (as applicable).

   - Structures – All proposed reductions in setback from the OWTS to structures (i.e., setbacks less than those shown in MMC Section 15.42) must be supported by a letter from the project Structural Engineer and a letter from the project Soils Engineer (i.e., a Geotechnical Engineer or Civil Engineer practicing in the area of soils engineering). Both engineers must certify unequivocally that the proposed reduction in setbacks from the treatment tank and effluent dispersal area will not adversely affect the structural integrity of the OWTS, and will not adversely affect the structural integrity of the structures for which the setback is reduced.

   - Buildings – All proposed reductions in setback from the OWTS to buildings (i.e., setbacks less than those shown in MMC Section 15.42) also must be supported by a letter from the project Architect, who must certify unequivocally that the proposed reduction in setbacks will not produce a moisture intrusion problem for the proposed building(s). If the building designer is not a California licensed architect, then the required Architect's certification may be supplied by an Engineer who is responsible for the building design with respect to mitigation of potential moisture intrusion from reduced setback to the OWTS; in this case the Engineer must include in the letter an explicit statement of responsibility for mitigation of potential moisture intrusion. If any specific construction features are proposed as part of a moisture intrusion mitigation system in connection with the reduced setback(s), then the Architect (or Engineer) must provide associated construction documents for review and approval during Building Plan Check.

   - **OWTS Designer Reductions in Setback Acknowledgement**: The OWTS Designer must acknowledge and provide recommendations for proposed reductions in setback from the OWTS to the existing site conditions and proposed development.

8) **Waterproofing Plan:** A waterproofing plan in conformance with the project consultants' recommendations shall be submitted to Building Safety and Environmental Health for review. This plan should be incorporated into the architectural/structural/foundation plans as applicable.

9) **OWTS Monitoring Plan:** A monitoring and maintenance plan must be submitted to the Environmental Health Administrator for approval. The plan must adhere to the recommendations of the OWTS designer and include a monitoring plan, maintenance schedule, sampling program and corrective actions if the OWTS fails to function as designed or meet the prescribed standards outlined in the monitoring plan.

10) **Proof of Ownership:** Proof of ownership of subject property shall be submitted.

11) **Operations & Maintenance Manual:** An operations and maintenance manual specified by the OWTS designer shall be submitted to the property owner and maintenance provider of the proposed advanced OWTS.

12) **Maintenance Contract:** A maintenance contract executed between the owner of subject property and an entity qualified in the opinion of the City of Malibu to maintain the proposed advanced onsite wastewater treatment system shall be submitted prior to Environmental Health approval. ***Please note only original "wet* signature" documents are acceptable**.

13) **Advanced Onsite Wastewater Treatment System (OWTS) Covenant:** A covenant running with the land shall be executed between the City of Malibu and the holder of the fee simple absolute as to subject real property and recorded with the City of Malibu Recorder's Office. Said covenant shall serve as constructive notice to any future purchaser for value that the OWTS serving subject property is an advanced method of sewage disposal pursuant to the City of Malibu Municipal Code. Said covenant shall be provided by the City of Malibu Environmental Health Administrator. ***Please submit a certified* copy issued by the City of Malibu Recorder**.

14) **Covenant to Forfeit 100% Expansion Effluent Disposal Area:** A covenant running with the land shall be executed by the property owner and recorded with the City of Malibu Recorder's Office. Said covenant shall serve as constructive notice to any successors in interest that (1) the private sewage disposal system serving the development on the property does not have a 100% expansion effluent dispersal area (i.e., replacement disposal field(s) or seepage pit(s)) and (2) if the primary effluent dispersal area fails to drain adequately, the City of Malibu may require remedial measures including, but not limited to, limitations on water use enforced through an operating permit and/or repairs, upgrades or modifications to the private sewage disposal system. The recorded covenant shall state and acknowledge that future maintenance and/or repair of the private sewage disposal system may necessitate interruption in use of the private sewage disposal system and, therefore, any building(s) served by the private sewage disposal system may become non-habitable during any required future maintenance and/or repair. Said covenant shall be in a form acceptable to the City Attorney and approved by the Environmental Sustainability Department. ***Please submit a certified copy issued by* the City of Malibu Recorder.**

15) **Storm Water Pollution Prevention Plan (S.W.P.P. Plan):** A S.W.P.P. Plan shall be submitted during the building plan check stage review. The plan must show the proposed OWTS components.

16) **Project Geologist/Geotechnical Consultant Approval:** Project Geologist/Geotechnical Consultant final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

17) **City of Malibu Geologist/Geotechnical Approval:** City of Malibu geotechnical staff final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

18) **City of Malibu Public Works Approval:** City of Malibu Public Works final approval of the OWTS plan shall be submitted to the Environmental Health Administrator.

19) **City of Malibu Planning Approval:** City of Malibu Planning Department final approval of the OWTS plan shall be obtained.

20) **Environmental Health Final Review Fee:** A final fee in accordance with the adopted fee schedule at the time of final approval shall be paid to the City of Malibu for Environmental Health review of the OWTS design and system specifications.

21) **Operating Permit Application and Fee:** In accordance with Malibu Municipal Code, an application shall be made to the Environmental Health office for an Onsite Wastewater Treatment System operating permit. An operating permit fee in accordance with the adopted fee schedule at the time of final approval shall be submitted with the application.

-o0o-

If you have any questions regarding the above requirements, please contact the Environmental Health office at your earliest convenience.

cc: Environmental Health file
Planning Department

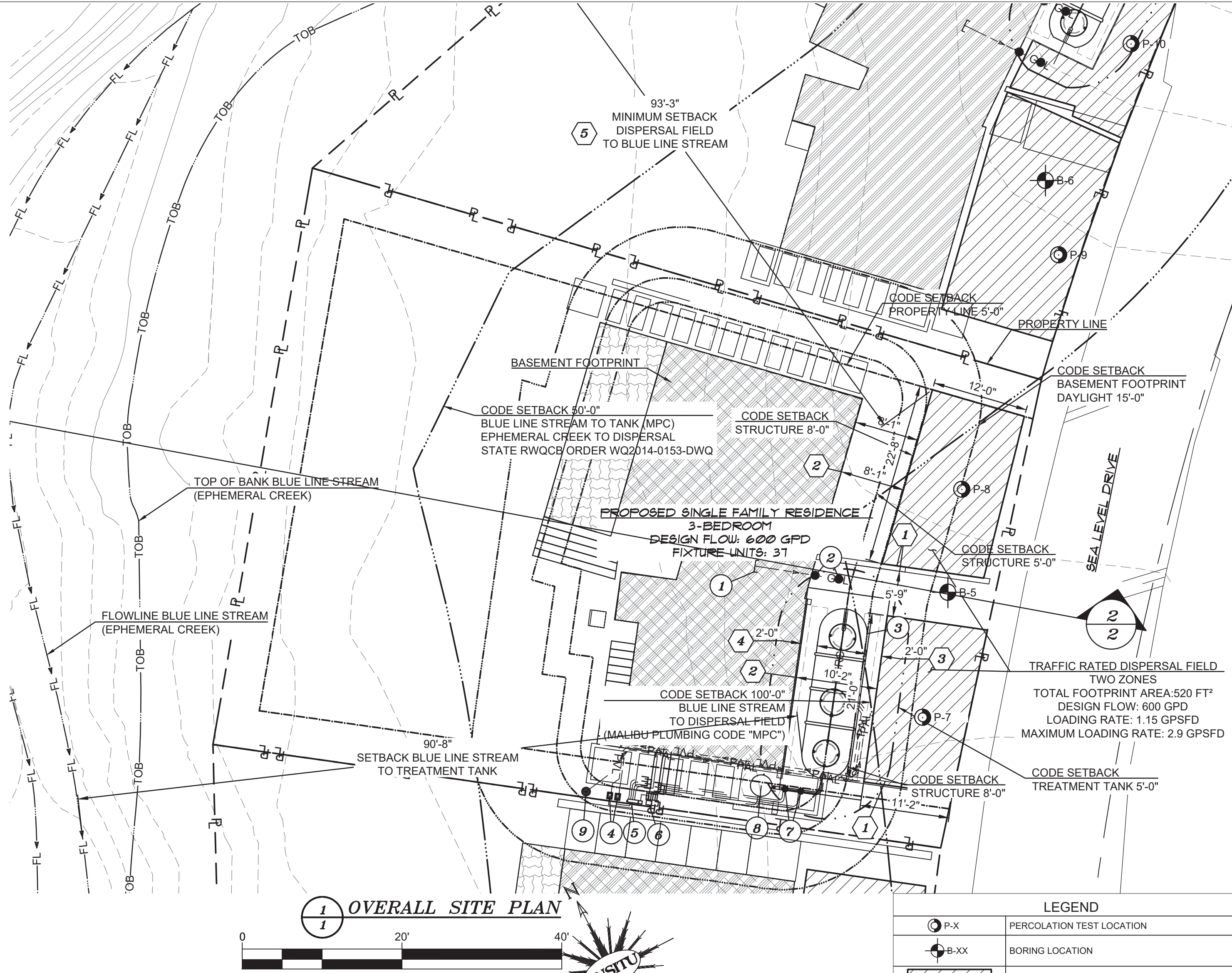
31882 SEA LEVEL DRIVE (CDP 23-037)
MALIBU, CA 90265

S.F.D.:	3 Bedrooms/37 Fixture Units (N)
TREATMENT TANK:	3634 Gallon MicroSepTec ES12 w/2 - UV Disinfection Units (N)
ACTIVE:	1 - 520 ft2 Drip Dispersal Field (N)
FUTURE:	N/A
PERC RATE:	1.15 gpsf/d
DESIGNER:	John Yaroslaski, RCE (60149)
REFERENCE:	Ensitu: OWTS report dated 5-31-2023, OWTS plan dated 5-30-2023, 11-15-2024
	GeoSystems: Preliminary soils report dated 6-27-2005; Updated soils report dated 12-21-2015; Updated soils report 3-13-2023, 11-13-2024

NOTES:

1. This conformance review is for a new single-family dwelling and advanced onsite wastewater treatment system (OWTS). The new advanced OWTS conforms to the requirements of the Malibu Municipal Code (MMC) and the Local Coastal Program (LCP).
2. The OWTS must be operated, monitored and maintained in accordance with the Monitoring Plan prepared by the OWTS designer.
3. The Operating Permit must be renewed on an annual basis in accordance with the monitoring plan and terms of the operating permit unless modified by the City.
4. This review only relates to the minimum requirements of the MMC and LCP, and does not include an evaluation of any geological, or other potential problems, which may require an alternative method of wastewater treatment.
5. This review is valid for one year, or until the MMC and LCP, and/or Administrative Policy changes render it noncomplying.

CITY OF MALIBU
ENVIRONMENTAL SUSTAINABILITY DEPT.
ENVIRONMENTAL HEALTH
CONFORMANCE REVIEW
SIGNATURE: DATE: 1/20/2025
THIS IS NOT AN APPROVAL. FINAL APPROVAL IS REQUIRED PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMITS



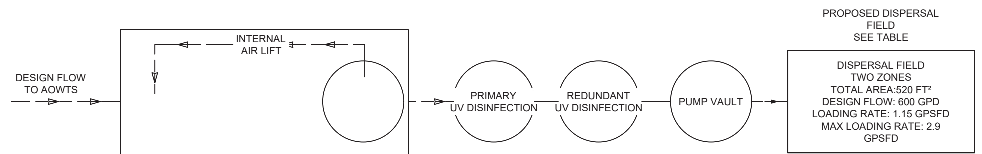
OWTS Capacity (Design and Maximum)				
Component	Description	Size/Capacity	Design Capacity	Max Capacity
Treatment Volume (Fixture Unit Capacity)	1-MicroSepTec ES12	3,634 gallons	37 fixture units	105 fixture units
Treatment (Organic Capacity)	1-MicroSepTec ES12	2.00 lb BOD5/day	600 gpd at 220 mg/L BOD5	1200 gpd at 220 mg/L BOD5
Disinfection	2-Salcor Gravity UV	1,200 gpd	600 gpd	1,200 gpd
Subsurface Irrigation Dispersal	Subsurface Irrigation	520 square feet at 1.154 gallons per square foot per day	600 gpd	1,556 gpd

Fixture Units Summary		
Total Proposed Fixture Units	37	
Total Fixture Units	37	
Dwelling Units Summary		
Total Proposed Dwelling Units	1	
Proposed Bedroom Summary		
Total Proposed Bedrooms	3	bedrooms
Number of Proposed Master Bedrooms	1	bedrooms
Number of Proposed Standard Bedrooms	2	bedrooms
Flow Calculations (Q)		
Peak Flow per Master Bedroom	300	gpd
Peak Flow per Standard Bedroom	150	gpd
Average Flow per Master Bedroom	200	gpd
Average Flow per Standard Bedroom	100	gpd
Flow Calculations Proposed (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Design Flow, Q_P	600	gpd
Influent Characteristics		
BOD5 (mg/l)	220	
TSS (mg/l)	220	
TN (mg/l)	35	
Effluent Characteristics		
BOD5 (mg/l)	20	
TSS (mg/l)	20	
TN (mg/l)	17.5	

MicroSepTec Design		
Design Flow	600	gpd
Design Influent BOD	220	mg/L
Design Effluent BOD	20	mg/L
Design Organic Loading BOD	1.00	lb BOD_5
MicroSepTec Model Specified	ES12	
MicroSepTec Tank Volume	3634	gal
MicroSepTec ES12 Base Organic Removal (I)	2.00	lb BOD_5
Minimum Number of MicroSepTec ES12 Required	1	units
Design Organic Removal	2.00	lb BOD_5
Design Tank Volume	3634	gal
Maximum Effluent Flow Based on Organic loading	1200	gpd
Maximum Effluent Flow Based on Hydraulic Loading	1200	gpd
Maximum Fixtures Based on Design Tank Volume	105	

Septic Tank (ST) Calculations		
Total Existing Fixture Units		
Total Proposed Fixture Units	37	
Total Fixture Units	37	
Minimum Septic Tank Size based on Fixtures	2000	gal
Number of Dwelling Units	1	
Number of Bedrooms	3	bedrooms
Minimum Septic Tank Size based on Bedrooms	1500	gal
Design Septic Tank Size	3634	gal
Flow Calculations (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Leaching Field Design Flow, Q	600	gpd
Drip Distribution Calculations		
Design Subsurface Irrigation Loading (Application) Rate, I	2.992	gpsfd
Minimum Square Feet of Leaching Area Required, Q/I	201	ft^2
Design Square Feet of leaching Area from Site Plan, A	520	ft^2
Actual Loading Rate (Application), L_A = Q/A	1.154	gpsfd
Maximum Effluent Capacity, Q_{MAX}=AxI	1556	gpsfd
Minimum Design Safetey Factor, H	10	

Ryons T value to Subsurface Irrigation Conversion Calculations										
Test Pit Number	Test Depth	Percolation Rate from Ryon's Test Method Converted to Gal/day					Percolation Area	Infiltration rate	Safety Factor	Applic Ra
		A	B=1/A	C=Bx1440	D=C/12	E=Dx7.481	F (SEE FIGURE)	G=E/F	H	I=G
	ft	min/inch	inch/min	in/day	ft/day	gal/day	ft²	gal/ft²-day		gal/ft²
P-7	7	8	0.125	180.00	15.00	112.22	3	37.41	10	3.7
P-8	7	10	0.100	144.00	12.00	89.77	3	29.92	10	2.9
T Average	9								Application Rate Average	3.3
T Max	10								Application Rate Max	3.7
T Ryon (T_P)	10								Design Application Rate	2.9



PROPOSED MICROSEPTEC ENVIROSERVER FIBERGLASS TREATMENT TANK WITH UV DISINFECTION
MICROSEPTEC ENVIROSERVER MODEL ES12

LEGEND	
P-X	PERCOLATION TEST LOCATION
B-XX	BORING LOCATION
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT
	DECK

SETBACK REDUCTIONS				
	COMPONENT	SITE ELEMENT	CODE REQUIREMENT	ACTUAL
1	DISPERSAL FIELD	SITE WALL	8'	0 5'-9"±
2	DISPERSAL FIELD	BASEMENT	15' DAYLIGHT	8'-1"± 10'-2"±
3	DISPERSAL FIELD	TREATMENT TANK	5'	2'-0"
4	TREATMENT TANK	STRUCTURE	5'	2'-0"±
5	DISPERSAL FIELD	BLUE LINE STREAM	100'-0" (MPC) 50'-0" SRWQCB	93'-3"±

GENERAL NOTES:

1. EXISTING OWTS COMPONENTS LOCATION AND ABANDONMENT:
   1.1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS. THE LOCATIONS ON THE ENGINEERING PLANS ARE INFORMATIONAL AND MAY NOT INCLUDE ALL COMPONENTS OF THE OWTS. MANY ITEMS, SUCH AS TANKS, PIPING, DISTRIBUTION DEVICES, SEEPAGE PITS, DISPERSAL FIELDS, AND OTHER APPURTENANCES ARE BURIED AND NOT LOCATABLE BY THE SURVEYOR OR UTILITIES LOCATOR .
   1.2. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS AN "OWTS ABANDONMENT PERMIT" SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWTS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REGULATORY REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THIS SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
   1.3. THE EXISTING OWTS COMPONENTS INCLUDING; SEPTIC TANK(S), PIPING, CLEANOUT(S) SEEPAGE PIT(S), DISPERSAL FIELD(S), AND ALL OTHER APPURTENANCES SHALL BE PROPERLY ABANDONED PURSUANT TO CITY OF MALIBU ORDINANCE 435, SECTION 15.40.170 C, AND SECTION 15.40.170 D, TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES. METHOD OF ABANDONMENT SHALL BE DETERMINED BY THE ENGINEER AND/OR THE OWNER'S REPRESENTATIVE
2. SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH SPECIFICATIONS AND TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND ORDINANCES.
3. SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS, VENTS, BACKWATER VALVES, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
4. ELECTRICAL COMPONENTS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 27 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA ELECTRICAL CODE, LOCAL ELECTRICAL CODE, AND ORDINANCES.
5. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. ENSITU ENGINEERING INC., IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
6. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE INSTALLATION OF THE TANK AND DISPERSAL SYSTEM COMPONENTS OF THE AOWTS (INCLUDING BUT NOT LIMITED TO; (A) TANK EXCAVATION, BEDDING, AND BACKFILL (B) SEEPAGE PITS EXCAVATION, CONSTRUCTION, AND BACKFILL (C) SUBSURFACE DISPERSAL SYSTEM BEDDING, FILL MATERIAL, CONSTRUCTION, AND BACKFILL) AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE TANK AND DISPERSAL SYSTEM COMPONENTS WERE INSTALLED PER APPROVED AOWTS PLANS.
7. LEACH FIELDS AND DISPERSAL SYSTEMS DESIGNATED AS SAND CATEGORY: ANY REMAINING FILL MATERIAL AND ANY BEACH SAND SEDIMENT THAT MIGHT HAVE REDUCED PERMEABILITY FROM EXISTING LEACH FIELD OPERATIONS ENCOUNTERED BELOW THE BOTTOM OF THE PROPOSED LEACH FIELD OR ANY MATERIAL ENCOUNTERED IN THE CONSTRUCTION OF THE LEACH FIELD THAT IS NOT CATEGORIZED AS BEACH SAND DEPOSITS SHALL BE EXCAVATED TO THE LEVEL OF THE NATIVE BEACH SAND DEPOSITS AND REPLACED WITH DOUBLE- WASHED SAND. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE EXCAVATION OF THE LEACH FIELD AND CONFIRM IN WRITING THAT ALL THE DELETERIOUS FILL AND NON-BEACH SAND MATERIALS BELOW THE LEACH FIELD HAVE BEEN REMOVED AND REPLACED WITH CLEAN SAND AND THE LEACH FIELD WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED OWTS PLANS.
8. SUBSURFACE DRIP LINE SHALL BE PLACED IN UNCOMPACTED NATIVE SOILS RIPPED AND TILLED A MINIMUM OF 18 INCHES. SOIL SHALL BE AMENDED TO BE 30% SAND, 30% MULCH, 40% NATIVE OR LANDSCAPE DESIGNER SHALL BE CONTACTED TO ADVISE CONTRACTOR ON TYPE OF TOPSOIL TO IMPORT FOR MINIMUM BURIAL DEPTH. DISPERSAL FIELD SHALL BE PLANTED AND ESTABLISHED PRIOR TO OCCUPANCY (ENGINEER TO VERIFY)
9. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SYSTEM INSTALLATION, BUILDING SEWER DEPTH OR CONNECTION POINT WAS NOT PROVIDED AND SHALL BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION
10. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF BUILDING SEWER CONNECTION, MINIMUM 2% SLOPE FROM STRUCTURE TO CONNECTION POINT.
11. ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE VENTED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
12. THE OWTS IS SITED AS FAR LANDWARD AS FEASIBLE.

EQUIPMENT SCHEDULE			
ITEM	QTY	DESCRIPTION	MFG/PART NUMBER
1	1	CONNECTION TO BUILDING SEWER[1]	
2	1	GRAVITY CLEAN-OUT AND BACKWATER VALVE[1]	INDUSTRIAL BACKWATER VALVE (SPEARS MODEL S475P FOR 4") 8" I.D. VALVE BOX (CHRISTY MODEL F08)
3	1	TREATMENT TANK[1][2]	MICROSEPTEC ES12
4	2	AIR COMPRESSOR[1][2]	MICROSEPTEC
5	1	REMOTE TELEMETRY CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	MICROSEPTEC
6	1	CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES.[1][2]	GEOFLOW
7	2	GRAVITY UV DISINFECTION UNIT (2 IN SERIES 100% REDUNDANCY)	SALCOR
8	1	DUPLEX PUMP SYSTEM WITH 30" DIAMTER VAULT[1][2]	MICROSEPTEC
9	1	VENT ASSEMBLY[1][2]	ORENCO
[1]	ALL PLUMBING APPURTENANCES AND WORK SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE PLUMBING CODES. APPURTENANCES AND WORK INCLUDE, BUT ARE NOT LIMITED TO; CONNECTION TO BUILDING PLUMBING, VENTILATION, ISOLATION, BACKWATER VALVES, CLEANOUTS, AND FITTINGS.		
[2]	ALL ELECTRICAL APPURTENANCES INCLUDING BUT NOT LIMITED TO; CONDUIT, CONDUCTOR, CONTROL PANELS, CONTACTORS, FLOATS, PUMPS, DISCONNECTS, AND COMMUNICATION DEVICES SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE ELECTRICAL CODE AND CURRENT NATIONAL ELECTRIC CODE. CONDUIT AND CONDUCTOR RUNS AND SIZING SHOWN ON PLAN ARE FOR ALIGNMENT AND COST ESTIMATION. ELECTRICAL CONTRACTOR SHALL SPECIFY ALL ELECTRICAL APPURTENANCES. CONTROL AND POWER CONDUCTORS SHALL BE PLACED IN SEPARATE CONDUIT		

PIPING SCHEDULE			
	TAG	DESCRIPTION	SPECIFICATION
GSL	GSL	PROPOSED GRAVITY SEWER LINE	4" SCH40 PVC
PEL	PEL	PROPOSED PUMPED EFFLUENT LINE	2" SCH80 PVC
PVL	PVL	PROPOSED AIR VENT LINE	4" SCH40 PVC
RCRC	RCRC	RECIRCULATION RETURN LINE	1½" SCH80 PVC
LFH	LFH	DISPERSAL FIELD HEADER	1½" SCH80 PVC
LFL	LFL	DISPERSAL FIELD LATERAL	1½" SCH80 PVC
FL	FL	FLOWLINE	
TOB	TOB	TOP OF BANK	

FINAL FOR APPROVAL
ISSUED
11/15/2024

JOHN N. YAROSLASKI
PRINCIPAL ENGINEER

Project Engineer: John N Yaroslaski PE # 60149
DWG NAME: D:\Ensitu Engineering Inc\EEI - P\144-118 31870 Sea Level Drive\Engineering\Cad Design\144-118.010 31870 Sea Level Drive PWCR\144-118.010 31870 Sea Level Drive PWCR-04.dwg
CREATION TIME: Friday, November 15, 2024 2:19:20 PM
MOD. TIME: Thursday, November 21, 2024 5:16:22 PM
PLOT TIME: Thursday, November 21, 2024 5:29:42 PM

31882 SEA LEVEL DRIVE
CONFORMANCE REVIEW DESIGN PLANS
CR-144-116 SITE PLANS AND TABLES 11 X 17
MALIBU, CALIFORNIA

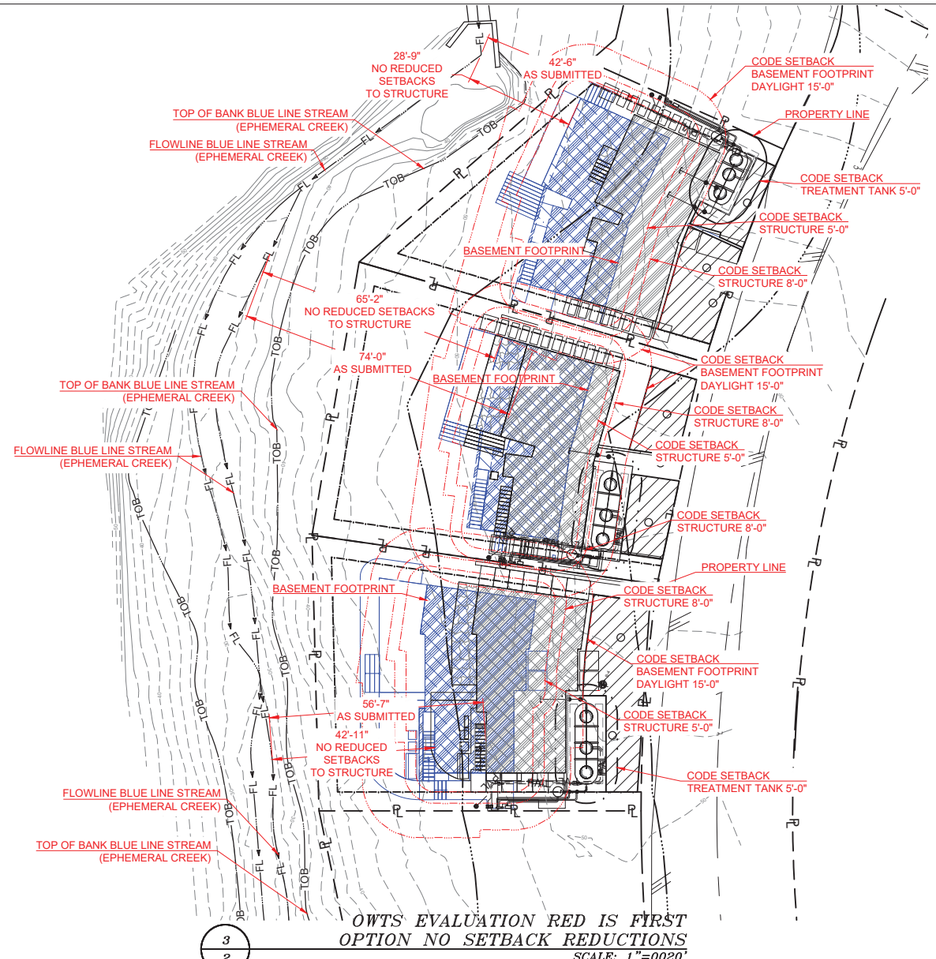
REVISIONS		
NO.	DATE	BY

ENSITU
ENSITU ENGINEERING, INC.
"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."
7475 CARMELITA AVE.
ATASCADERO, CA 93422
Tel: 805.772.0150
ENSITU@ensitu.com

REGISTERED PROFESSIONAL ENGINEER
JOHN N. YAROSLASKI
60149
EXP 06-2026
CIVIL
STATE OF CALIFORNIA

DATE: 11/15/2024
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: KCY

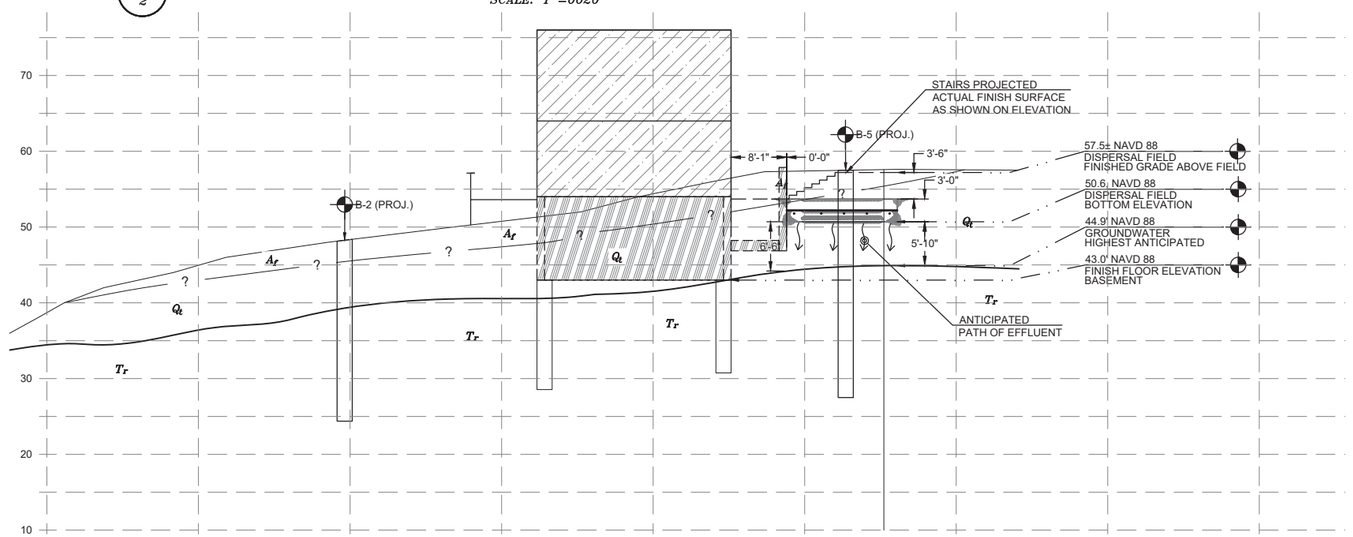
JOB NO. 144-116
SHEET 1 OF 2



3/2 *OWTS EVALUATION RED IS FIRST OPTION NO SETBACK REDUCTIONS*

SCALE: 1"=0020'

LEGEND	
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT
	DECK
	BASEMENT NO REDUCED SETBACKS FROM BUILDING TO DISPERSAL FIELD



2/2 *DISPERSAL FIELD SECTION*

SCALE: 1"=0010'

ENSITU

7420 CARMELITA AVE.
ATASCADERO, CA 93422
Tel: 805.772.0150
ENSITU@ensitu.com

ENSITU ENGINEERING, INC.
"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."

REVISIONS

NO.	DATE	BY

31882 SEA LEVEL DRIVE
CONFORMANCE REVIEW DESIGN PLANS
CR-114-116 SITE SECTION AND ALTERNATIVE
11X17
MALIBU, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN Y. YAROSLAVSKY
60149
EXP. 06-2026
CIVIL
STATE OF CALIFORNIA

DATE: 11/15/2024
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: KCY

JOB NO.
144-116

SHEET
2 OF 2

Project Engineer: John Y Yaroslavski PE# 60149
Drawing Name: Malibu\144-118 31870 Sea Level Drive\Engineering\Cad Design\144-118.010 31870 Sea Level Drive PWCR-04.dwg
Last Modified By: Kelly Cunningham
CREATION TIME: Friday, November 15, 2024 2:19:20 PM
MOD. TIME: Thursday, November 21, 2024 5:16:22 PM
PLOT TIME: Thursday, November 21, 2024 5:28:44 PM

City of Malibu

23825 Stuart Ranch Road • Malibu, California 90265-4861
(310) 456-2489 • Fax (310) 456-3356 • www.malibucity.org

GEOTECHNICAL REVIEW SHEET

Project Information

Date:	January 31, 2025	**Review Log #:**	**5088**
Site Address:	31882 Sea Level Drive		
Lot/Tract/PM #:	Lot 168, Tract 10630, APN 4470-027-022	**Planning #:**	**CDP 23-037 P2**
Applicant/Contact:	Karen Hau, karen@buaia.com	**BPC/GPC #:**	
Contact Phone #:	310-456-5905 **Fax #:**	**Planner:**	**Rick Casswell**
Project Type:	**Revised Project**: New single-family residential development		

Submittal Information

Consultant(s)/Report Date(s): *(Current submittal(s) in **Bold**.)*

GeoSystems, Inc. (Gladson, CEG 1758; Tsai, GE 2268): **11-13-2024,** 03-13-2023
GeoSystems, Inc. (Gladson, CEG 1758; Chi-Hsin Lin, RCE 67109): 12-05-2007; 03-17-2008
GeoSystems, Inc. (Kruger, CEG 2345; Chi-Hsin Lin, RCE 67109): 06-27-2005 [Ref: GeoPlan, Inc.: 05-14-1990; RSA Associates, Inc.: 06-06-1989]
EnSitu Engineering, Inc. (Yaroslaski, RCE 60149): **11-15-2024**, 5-31-2023

2nd Coastal Development Permit Submittal
Burdge Architects (Burdge, C-16899): Architectural Plans dated December 18, 2024; Letters (2) 06-05-2023
Ensitu Engineering, Inc. (Yaroslaski, PE 60149): OWTS Plans dated November 15, 2024.
Ahsirt Engineering, Inc. (Coffey, PE 67657): Civil Plans dated December 13, 2024.
Barefoot Design (Harlin, RLA 6606): Landscape Plans dated December 2, 2024.

Previous Reviews: 7-20-2024; Ref: Environmental Health Review Letter dated 1-20-2025; Ref: 8-3-2005; 05-11-2007; 01-10-2008; 04-17-2008

Review Findings

Coastal Development Permit Review

☒ The project is **ACCEPTABLE** from a geotechnical perspective.

☐ The project is **NOT ACCEPTABLE** from a geotechnical perspective. The listed "Planning Stage Review Comments" shall be addressed prior to acceptance.

Building Plan-Check Stage Review

☒ Awaiting Building Plan-Check submittal.

☐ The plans are **COMPLETE** from a geotechnical perspective. Please review the attached "Geotechnical Notes for Building Plan Check" and incorporate into Building Plan-Check submittals.

☐ The plans are **NOT COMPLETE** from a geotechnical perspective. The listed "Building Plan-Check Stage Review Comments" shall be addressed prior to Building Plan-Check Stage completion.

Project submittals were reviewed from a geotechnical perspective for conformance with applicable codes, guidelines, and standards of practice, including the following current City adopted standards:

- City of Malibu Local Coastal Program – Land Use Plan and Local Implementation Plan (LCP-LUP and LCP-LIP)
- Malibu Municipal Code – Title 15, *Buildings and Construction*
- City of Malibu *Guidelines for the Preparation of Engineering Geology and Geotechnical Engineering Reports and Procedures for Report Submittal* (November 2013) referred to herein as "Geotechnical Guidelines"

In the case of conflicting requirements between the Geotechnical Guidelines and any other referenced standards, the latest standard will apply. The Applicant is responsible for complying with the submittal requirements for all Planning variances, as appropriate; any questions regarding variances should be directed to the case Planner.

Remarks

The referenced response geotechnical report, architectural plans, civil plans, OWTS plan, and landscape plans have been reviewed by the City's consultants from a geotechnical perspective. The revised project consists of a new two-story 1,899 square foot single-family residence and an attached garage with a 859 square foot basement (three levels total), site walls, and an onsite wastewater treatment system (OWTS). The floor of the basement (elevation 43 feet) is expected to be below the "maximum anticipated groundwater level," which was observed in 2005 to be between 6.5 to 13 feet below the ground surface. The recommended bearing material for the proposed residence and site walls is bedrock, anticipated at 9 to 15 feet below the ground surface in the area of the proposed structures. A deepened foundation system consisting of friction piles is planned to support the improvements.

Grading consists of 60 yards of R & R; 450 yards of cut under structure; 100 yards of cut and 5 yards of fill non-exempt; and 545 yards of export.

The OWTS consists of a 3,634-gallon Microseptec Enviroserver ES12 primary treatment tank with UV disinfection and a 520 square foot traffic-rated dispersal field in two zones proposed on the east side of the proposed residence, between the residence and Sea Level Drive. In lieu of constructing the proposed OWTS beyond the required setbacks, the Project Geotechnical Consultant recommends to waterproof and design the basement retaining walls and floor slabs for hydrostatic pressure. Open subdrains down-gradient of the OWTS are not proposed. The design flow is 600 gpd, loading rate is 1.15 gpsf/d, and the maximum loading rate is 2.9 gpsf/d.

NOTE TO PLAN PREPARERS: Please review the City's recently adopted Electronic Submittal Guidelines and resubmit plans that conform. https://www.malibucity.org/DocumentCenter/View/28469/Electronic-Plans-Submittal-Guideline

Building Plan Check Stage Review Comments:

1. Please clearly show the name, address, and phone number of the project geotechnical consultant on the cover sheet of the architectural plans (GeoSystems).
2. Ensure that all plans and design documents for the proposed project conform to the current Malibu Municipal Code, including the adoption of the 2022 California Building Code.
3. The following notes must be added to the grading plan:

- The Project Geotechnical Consultant should determine the expansion potential of the finish grade materials at the completion of grading. Grading and Foundation design recommendations should be revised if the expansion potential of finish grade materials substantially differs from the assumed expansion range.
- At the completion of grading, samples of the onsite soils should be collected and tested for corrosion potential. Final recommendations for mitigation measures including cement type should be based on the corrosion potential of the finish grade materials

4. Indicate the bearing material and depth for all foundation type on the foundation plans, following recommendations by the Project Geotechnical Consultant.
5. Include the following note on all the Foundation Plans: "*All foundation excavations must be observed and approved by the Project Geotechnical Engineer or Engineering Geologist prior to placement of reinforcing steel.*"
6. The Project Geotechnical Consultant recommends and Section 7.4 of the City's geotechnical guidelines requires a minimum thickness of 10 mils for vapor barriers beneath slabs-on-grade. Building plans shall reflect this requirement.
7. Please include the following note on the shoring plans, as appropriate: *"The Project Geotechnical Consultants shall prepare an as-built report documenting the installation of the pile foundation elements for the City's files. The report shall include total depths of the piles, depth into the recommended bearing material, minimum required depth into the recommended bearing material, and a map depicting the locations of the piles."*
8. The final set of electronic grading, retaining wall, OWTS, and residence plans (**APPROVED BY BUILDING AND SAFETY**) incorporating the Project Geotechnical Consultant's recommendations and items on this review sheet must be **reviewed and electronically stamped and signed by the Project Engineering Geologist and Project Geotechnical Engineer**. The City's geotechnical consultants will review the plans for conformance with the Project Geotechnical Consultants' recommendations and items on this review sheet.

Please direct questions regarding this review sheet to the City's geotechnical consultants listed below.

Geotechnical Engineering Review by: Ali A. Haq *1-31-2025*

Ali Abdel-Haq, G.E. #2308, Exp. 12-31-25 Date
Geotechnical Engineering Reviewer (805-496-1222)
Email: ali@geodynamics-inc.com

Engineering Geology Review by: *1-31-2025*

Christopher Dean, C.E.G. #1751, Exp. 9-30-26 Date
Engineering Geology Reviewer (408-656-3210)
Email: cdean@malibucity.org

This review sheet was prepared by representatives of Cotton, Shires and Associates, Inc. and GeoDynamics, Inc., contracted through Cotton, Shires and Associates, Inc., as an agent of the City of Malibu.

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

GeoDynamics, Inc.
Applied Earth Sciences
Geotechnical Engineering & Engineering Geology Consultants

City of Malibu

– GEOTECHNICAL –

NOTES FOR BUILDING PLAN-CHECK

The following standard items should be incorporated into Building Plan-Check submittals, as appropriate:

1. One set of grading, retaining wall, OWTS, and residence plans, incorporating the Project Geotechnical Consultant's recommendations and items on this review sheet must be submitted to City geotechnical staff for review. **Additional review comments may be raised at that time that may require a response.**
2. Show the name, address, and phone number of the Project Geotechnical Consultant(s) on the cover sheet of the Building, OWTS, and Grading Plans.
3. Include the following note on Grading and Foundation Plans: "*Subgrade soils shall be tested for Expansion Index prior to pouring footings or slabs; Foundation Plans shall be reviewed and revised by the Project Geotechnical Consultant, as appropriate.*"
4. Include the following note on the Foundation Plans: "*All foundation excavations must be observed and approved by the Project Geotechnical Consultant prior to placement of reinforcing steel."*
5. The Foundation Plans for the proposed project shall clearly depict the embedment material and minimum depth of embedment for the foundations in accordance with the Project Geotechnical Consultant's recommendations.
6. Show the onsite wastewater treatment system (OWTS) on the Site Plan and/or Geologic Map.
7. Please contact the Building and Safety Department regarding the submittal requirements for a grading and drainage plan review.
8. A comprehensive Site Drainage Plan, incorporating the Project Geotechnical Consultant's recommendations, shall be included in the Plans. Show all area drains, outlets, and non-erosive drainage devices on the Plans. Water shall not be allowed to flow uncontrolled over descending slopes.

Grading Plans (as Applicable)

1. Grading Plans shall clearly depict the limits and depths of overexcavation, as applicable.
2. Prior to final approval of the project, an as-built compaction report prepared by the Project Geotechnical Consultant must be submitted to the City for review. The report must include the results of all density tests as well as a map depicting the limits of fill, locations of all density tests, locations and elevations of all removal bottoms, locations and elevations of all keyways and back drains, and locations and elevations of all retaining wall backdrains and outlets. Geologic conditions exposed during grading must be depicted on an as-built geologic map. This comment must be included as a note on the grading plans.

Retaining Walls (As Applicable)

1. Show retaining wall backdrain and backfill design, as recommended by the Geotechnical Consultant, on the Plans.
2. Retaining walls separate from a residence require separate permits. Contact the Building and Safety Department for permit information. One set of retaining wall plans shall be submitted to the City for review by City geotechnical staff. Additional concerns may be raised at that time which may require a response by the Project Geotechnical Consultant and applicant.

City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4861
(310) 456-2489 FAX (310) 456-7650

PUBLIC WORKS REVIEW
REFERRAL SHEET

TO: Public Works Department

FROM: City of Malibu Planning Department **DATE:** 06/13/2023

PROJECT NUMBER:	CDP 23-037
JOB ADDRESS:	31882 SEA LEVEL DR
APPLICANT / CONTACT:	Karen Hau, Burdge & Associates Architects
APPLICANT ADDRESS:	24911 Pacific Coast Hwy Malibu, CA 90265
APPLICANT PHONE #:	(310)456-5905
APPLICANT FAX #:	
APPLICANT EMAIL:	karen@buaia.com
PROJECT DESCRIPTION:	NSFR

TO: Malibu Planning Department and/or Applicant

FROM: Public Works Department

____ The following items described on the attached memorandum shall be addressed and resubmitted.

✓ The project was reviewed and found to be in conformance with the City's Public Works and LCP policies and CAN proceed through the Planning process.

SIGNATURE

6/23/2023
DATE

City of Malibu
MEMORANDUM

To: Planning Department

From: Public Works Department
Jorge Rubalcava, Senior Civil Engineer

Date: June 23, 2023

Re: Proposed Conditions of Approval for 31882 Sea Level Dr, CDP 23-037

The Public Works Department has reviewed the plans submitted for the above referenced project. Based on this review sufficient information has been submitted to confirm that conformance with the Malibu Local Coastal Plan (LCP) and the Malibu Municipal Code (MMC) can be attained. Prior to the issuance of building and grading permits, the applicant shall comply with the following conditions.

GRADING AND DRAINAGE

1. Clearing and grading during the rainy season (extending from November 1 to March 31) shall be prohibited for development LIP Section 17.3.1 that:
    - Is located within or adjacent to ESHA, or
    - Includes grading on slopes greater than 4:1
    - Approved grading for development that is located within or adjacent to ESHA or on slopes greater than 4:1 shall not be undertaken unless there is sufficient time to complete grading operations before the rainy season. If grading operations are not completed before the rainy season begins, grading shall be halted and temporary erosion control measures shall be put into place to minimize erosion until grading resumes after March 31, unless the City determines that completion of grading would be more protective of resources

2. Exported soil from a site shall be taken to the County Landfill or to a site with an active grading permit and the ability to accept the material in compliance with the City's LIP Section 8.3. **A note shall be placed on the project that addresses this condition.**

3. A grading and drainage plan shall be approved containing the following information prior to the issuance of grading permits for the project.
    - Public Works Department General Notes

Recycled Paper

- The existing and proposed square footage of impervious coverage on the property shall be shown on the grading plan (including separate areas for buildings, driveways, walkways, parking, tennis courts and pool decks).
- The limits of land to be disturbed during project development shall be delineated on the grading plan and a total area shall be shown on the plan. Areas disturbed by grading equipment beyond the limits of grading, areas disturbed for the installation of the septic system, and areas disturbed for the installation of the detention system shall be included within the area delineated.
- The grading limits shall include the temporary cuts made for retaining walls, buttresses, and over excavations for fill slopes and shall be shown on the grading plan.
- If the property contains trees that are to be protected they shall be highlighted on the grading plan.
- If the property contains rare and endangered species as identified in the resources study the grading plan shall contain a prominent note identifying the areas to be protected (to be left undisturbed). Fencing of these areas shall be delineated on the grading plan if required by the City Biologist.
- Private storm drain systems shall be shown on the grading plan. Systems greater than 12-inch diameter shall also have a plan and profile for the system included with the grading plan.
- Public storm drain modifications shown on the grading plan shall be approved by the Public Works Department prior to the issuance of the grading permit.

4. A digital drawing (AutoCAD) of the project's private storm drain system, public storm drain system within 250 feet of the property limits, and post-construction BMP's shall be submitted to the Public Works Department prior to the issuance of grading or building permits. The digital drawing shall adequately show all storm drain lines, inlets, outlet, post-construction BMP's and other applicable facilities. The digital drawing shall also show the subject property, public or private street, and any drainage easements.

STORMWATER

5. A Local Storm Water Pollution Prevention Plan shall be provided prior to the issuance of the Grading/Building permits for the project. This plan shall include an Erosion and Sediment Control Plan (ESCP) that includes, but not limited to:

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Entrance
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage

	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

All Best Management Practices (BMP) shall be in accordance to the latest version of the California Stormwater Quality Association (CASQA) BMP Handbook. Designated areas for the storage of construction materials, solid waste management, and portable toilets must not disrupt drainage patterns or subject the material to erosion by site runoff.

MISCELLANOUS

6. The developer's consulting engineer shall sign the final plans prior to the issuance of permits.

COMMERCIAL DEVELOPMENT

7. Prior to the approval of any grading and drainage permit, the applicant shall submit a PDF of the final plans. If there are further modifications to the plans, the applicant shall provide the City with an updated PDF.

LOS ANGELES COUNTY WATERWORKS DISTRICTS *

P. O. Box 1460
Alhambra, CA 91802
Telephone: (626) 300-3306

260 East Avenue K-8
Lancaster, CA 93535
Telephone: (661) 942-1157

23533 Civic Center Way
Malibu, CA 90265
Telephone: (310) 317-1389

TO:

☐ Los Angeles County
Department of Public Health
Environmental Health:
Drinking Water / Land Use Program
5050 Commerce Drive
Baldwin Park, CA 91706-1423

☐ Los Angeles County
Department of Public Works
Building & Safety Division

☐ Los Angeles County
Fire Department

☐ City of Lancaster
Building Department
44933 N. Fern Ave.
Lancaster, CA 93534

☒ City of Malibu
Building Department
23815 W. Stuart Ranch Rd.
Malibu, CA 90265

☐ City of Palmdale
Building Department
38300 N. Sierra Hwy.
Palmdale, CA 93550

RE: **31882 Sea Level** (Address) **MALIBU** (City) **90265** (Zip Code)

APN # 4470-027-022

Los Angeles County Waterworks District No. 29

***Will serve* water to the above *single lot* property subject to the following conditions:**

☐	Annexation of the property into Los Angeles County Waterworks District is required. **Water service to this property will not be issued until the annexation is completed.**
☒	The appropriate fees must be paid to the District and other related water agencies.
☐	The appropriate service connection fees have been paid to Waterworks Districts for the existing service connection.
☐	The property has an existing water meter. Meter and service upgrade may be required to comply with WWD Rules and Regulations 1-H-16d.
☐	The appropriate connection fees have been paid to Waterworks Districts for the proposed service.
☐	Water system improvements will be required to be installed by the developer subject to the requirements set by the Fire Department and the District.
☒	Water meter serving the property must be installed in accordance with Waterworks' District standards.
☒	Public water system and sewage disposal system must be in compliance with Health Department separation requirements.
☒	A portion of the existing fronting water main may be required to be replaced or upgraded if the water service tap cannot be made or if damage occurs to the water main.
☒	Property may experience low water pressure and / or shortage in high demand periods.
☐	The District **CAN NOT** serve water to this property at this time.
☒	Must comply with and satisfy City of Malibu requirements in order to obtain Water Service.
☒	A USC approved backflow device is required for this property and is to be installed and maintained by the property owner and tested annually.
☒	This Will Serve Letter is for a 1,899 sq. ft. NSFR with 859 sq. ft. basement only. FEPC 2024-1228 and FEPC2023-1088.

By: _____ (Signature) | William Johnson (Print Name) | Senior Civil Engineer | (310) 317-0209 (Phone Number) | 8-29-2025 (Date)

**** THIS WILL SERVE LETTER WILL EXPIRE ONE YEAR AFTER THE DATE OF ISSUANCE.***

ABBREVIATIONS

ADDITIONAL	ADD'L.
ADJUSTABLE	ADJ.
ABOVE FINISHED FLOOR	A.F.F.
ABOVE RAISED FLOOR	A.R.F.
AIR CONDITIONING	A/C
ALTERNATE	ALT.
ARCHITECT (URAL)	ARCH.
AREA DRAIN	A.D.
BLOCKING	BLKG.
BOARD	BD.
BUILDING	BLDG.
CABINET	CAB.
CEILING	CLG.
CENTER	CTR.
CENTER LINE	C.L.
CERAMIC TILE	C.T.
CLEAR	CLR.
CONCRETE	CONC.
CONCRETE MASONRY UNIT	C.M.U.
CONSTRUCTION	CONST.
CONTINUOUS	CONT.
CONTROL JOINT	C.J.
DIAMETER	D.I.A..
DIMENSION	DIM.
DOUBLE	DBL.
DOUBLE HUNG	D.H.
DOWN	DN.
DRAWING	DWG.
ELECTRIC	ELECT.
ELECTRIC PANEL	ELECT. PNL.
ELEVATOR	ELEV.
ENCLOSURE	ENCL.
ENGINEER	ENGR.
EQUAL	EQ.
EQUIPMENT	EQUIP.
EXISTING	EXIST.
EXTRUDE OR EXTRUSION	EXTR.
FABRICATE(ED)	FAB.
FINISH	FIN.
FIXTURE	FIXT.
FLOOR	FL.
FLUORESCENT	FLUOR.
FOOT	FT.
FRESH AIR INTAKE (OR INLET)	F.A.I.
FURNISH(ED)	FURN.
FURRING	FUR.
GALVANIZED	GALV.
GAUGE	GA.
GROUND	GRND.
GYPSUM BOARD	GYP. BD.
HEIGHT	HT.
HOLLOW METAL	H.M.
HORIZONTAL	HORIZ.
HOT WATER	H.W.
INSIDE DIAMETER	I.D.
JOINT	JT.
MANUFACTURE	MFR.
MANUFACTURER'S	MFR'S.
MATERIAL	MATL.
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MTL.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
NORTH	N
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR #
ON CENTER	O.C.
OUTSIDE DIAMETER	O.D.
OPENING	OPG.
PAIR	PR.
PERFORATED(IED)	PERF.
PIECE/PIECES	PC./PCS.
PLANTER AREA	P.A.
QUANTITY	QTY.
RADIUS	RAD.
REFERENCE	REF.
REFRIGERATOR	REFRIG.
REINFORCE/REINFORCING	REINF.
REQUIRED	REQ.
RETURN AIR	R.A.
ROUGH OPENING	R.O.
SHEET	SHT.
SIMILAR	SIM.
SOUTH	S
SMOKE DETECTOR	S.D.
SPEAKER	SPKR.
SPECIFICATIONS	SPECS.
SPRINKLER HEAD	S.H.
SQUARE	SQ.
STAINLESS STEEL	S.S.
STANDARD	STD.
STEEL	STL.
STRUCTURAL	STRUCT.
TELEPHONE	TEL.
TELEVISION	TV
TEMPORARY	TEMP.
TONGUE AND GROOVE	T. & G.
TYPICAL	TYP.
UNLESS OTHERWISE NOTED	U.O.N.
VERTICAL	VERT.
VINYL COMPOSITION TILE	V.C.T.
WITH	W/
WITHOUT	W/O
WOOD	WD.

UNDER SEPARATED PERMIT

Deferred submittal documents shall be submitted to the architect- or engineer-of-record, who shall review them and forward them to the building official with a notation that they have been reviewed and have been found to be in general conformance with the design of the building or structure. The deferred items shall not be installed until their design and submittal documents have been reviewed and approved by the building official.

DEFERRED SUBMITTAL ITEMS:

- TBD

APPROVAL STAMPS

NEW SINGLE FAMILY RESIDENCE

31882 SEA LEVEL DRIVE
MALIBU, CA 92605

February 12 2025

PROJECT TEAM

•Architect:
Douglas W. Burdge, A.I.A.
Burdge Architects, Inc.
24911 Pacific Coast Hwy
Malibu, CA 90265
P: (310) 456-5905
www.buaia.com

• Percolation Testing & Septic system design:
Ensitu Engineering Inc.
7475 Carmelita Ave
Atascadero, CA 93422
Tel: (805) 772-0150
John N Yaroslasky, PE
Eml: jyaroslaski@ensitu.com

•Surveyor:
Land and Air Surveying, Inc.
22741 Pacific Coast Hwy.
Suite: 400A
Malibu, CA 90265
P: (310) - 456-9381
Fax: (310) - 456-9821

•Biologist:
Forde Biological Consultants
10664 Presilla Road
Santa Rosa Valley, CA 93012
P: (805) 402-3310
Andrew Forde, PE, QSD

•Geology & Soil Engineer:
GeoConcepts Inc
14428 Hamlin St, #200
Van Nuys, CA 91401
T 818 994 8895
F 818 994 8599

•M.E.P. and TITLE 24:
TBD

•STRUCTURAL:
TBD

•CIVIL:
Ahsirt Engineering INC.
360 Miller Way.
Arroyo Grande, CA 93420
P: 805-474-4008
Trisha Coffey

•Landscape Architect
+Seed Design Collaborative
311 N. Robertson Blvd, #672.
Beverly Hills CA 90211
P: (213) 675 3067
Louisa Relia

SYMBOL LEGEND

NORTH ARROW
INTERIOR ELEVATION FLAG
TYP. DOOR SCHEDULE SYMB.
TYP. WINDOW SCHEDULE SYMB.
ELEVATION DATUM
GRID LINE SYMB.
WOOD FRAME
CONCRETE
TRUE NORTH ARROW
BUILDING ELEVATION/ SECTION
WALL SECTION
TYP. ELEVATION VIEW DETAIL CALL OUT
TYP. CUT DETAIL CALL OUT
CMU
STONE

PROJECT DATA

•ADDRESS:	**31882 SEA LEVEL DRIVE**, Malibu, CA 90265
•OWNER:	Jeff Peterson
•LEGAL DESCR.:	See Survey
•A.P.N:	4470-027-022
•ZONING:	SFM
•FIRE HAZARD SEVERITY ZONE:	VHFHSZ
•SPRINKLERS :	Required (Sprinklers per LACo. Fire Department's Requirement)
•OCCUPANCY GROUP:	R3 / U1
•TYPE OF CONSTRUCTION:	V-B
•NUMBER OF STORIES:	2 + Basement

•SCOPE OF WORK: New Two-Story, Single Family Residence w/attached Garage and Basement. Outdoor roof deck. New Driveway access. New OWTS.

•DISCRETIONARY REQUESTS:

-SPR for height above 18' up to 28' for pitched roof
-Minor Modification for 12.75% reduction side yard setback.
-Variance for construction within ESHA setback

•LOT INFO.:
Area:
Gross: **6,164** Sq.Ft. (Acres) Net: **6,164** Sq.Ft.

Width/Depth:
Depth: 92.23' Width: 66.63'

•MINIMUM SETBACKS: Required Proposed

Front : 18.45' 20.91'
(The front yard setback shall be at least 20 percent of the lot depth or 65 feet, whichever is less)

Side 10% : 6.66' 6.83'
Side 15% : 9.99' *8.50'
(The side yard setbacks shall be cumulatively at least 25 percent of the lot width; in no event, shall a single side yard setback be less than 10 percent of the lot width or five feet, whichever is greater)

Rear : 15.00' 44.63'
(The rear yard setback shall be at least 15 percent of the lot depth or 15 feet whichever is greater)

*Minor Modification for 15% reduction side-yard setback.

•MAX. ALLOWABLE SQUARE FOOTAGE:

6,164 x .177 = 1,091 + 1,000= **2,091 SF**

•PROPOSED SQUARE FOOTAGE TABULATION:

First Floor.....	676	Sq.Ft.+
Garage at First Floor.....	464	Sq.Ft.+
Second Floor	759	Sq.Ft.=
Total Enclosed area	1,899	Sq.Ft. < 2,091 Sq.Ft.

Basement 859 Sq. Ft. sf < 1,000 Sq. Ft.

•ALLOWABLE DEVELOPMENT AREA:

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
6,164 SF X 25% = 1,541 SF

1,527 SF < 1,541 SF (MAX)

•BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,140 SF
MAXIMUM ALLOWED OVER 18' = (1,140 x .667) = 760 SF
AREA OVER 18' = 759 SF

ADD'L PROJECT DATA

•BUILDING HEIGHT:
Allowed* max: 28' for pitched roof and 24' for Flat roof
Proposed max: 28' for pitched roof and 24' for Flat roof

*With Discretionary submittal for height above 18'

NOTES:
Slope 3:1 or greater shall conform to Sections R403.1.7.1 through R403.1.7.4. (CRC 2016)
See Grading plans Sheet 2, and note on structural foundation plans.

•PARKING:
Required: Four (4) Parking Spaces of which min (2) enclosed
Proposed: Enclosed: Two (2) Unenclosed: Three (3)

•RETAINING WALLS HEIGHT:
Allowed max height: 6'
Proposed: in compliance with code

•FENCE, DRIVEWAY GATE:
Required: Max height 6' with 42" upper portion visually permeable.
Proposed: NONE

•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE: 6,164 x 45% = 2,773 SF

•PROPOSED IMPERMEABLE COVERAGE:

BUILDING FOOTPRINT	1,139 SF
CONCRETE SLABS	542 SF
TOTAL	1,681 SF < 2,773 SF

APPLICABLE CODES

•2022 California Building Code (CBC) (Volume 1 & 2)
•2022 California Residential Code (CRC) and Title 24
•2022 California Electrical, Mechanical & Plumbing Code, (CMC), (CPC), (CEC)
•2022 CA Energy Code (2013 Building Energy Efficiency Standards), (CEnC) [§ R106.1.1 CRC]
•2022 CGBSC (California Green Building Code Standards)
•2023 County of LA Building, Mechanical, Electrical, Plumbing Code

VICINITY MAP



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Sections		
	A-3.1	PROPOSED SECTIONS A AND B
	A-3.2	PROPOSED SECTION C
	A-3.3	PROPOSED SECTION D
Civil		
	G1	PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN
	G2	COASTAL DEVELOPMENT PERMIT, GRADING AND DRAINAGE PLAN
	G3	EROSION CONTROL PLAN AND LOCAL SWPPP
Landscape		
	L0.00	COVER SHEET
	L1.00	HARDSCAPE & LIGHTING PLAN
	L2.00	IRRIGATION PLAN
	L2.01	IRRIGATION DETAILS
	L3.00	PLANTING PLAN
	L3.01	PLANTING DETAILS

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
ACCESS REQUIREMENTS ONLY
By J.Yanez
Fire Prevention Engineer
Date 08/08/2025
FEPC 2024-1228

Approved Fire Department turnaround at end of Sea Level Drive per FEPC2023-1088.

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION ENGINEERING
APPROVED
FIRE HYDRANT LOCATION ONLY
By J.Yanez
Fire Prevention Engineer
Date 08/08/2025
FEPC 2024-1228

Hydrant location approved through approved plan check FEPC2023-1088.

1. Project is approved for water and access requirements only for 31882 Sea Level Drive.
2. Separate submittal required for occupancy approval.

PETERSON RESIDENCE

31882 SEA LEVEL DR MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

COVER SHEET/
PROJECT INFO

DRAWING NO.
T-1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	
DRAWN BY	D.W.B.

PROPERTY ADDRESS:

31882 & 31888 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-022 (LOS ANGELES COUNTY)
4470-027-023 (LOS ANGELES COUNTY)

LEGAL DESCRIPTION:

LOTS 168 AND 169 OF TRACT NO. 10630, IN THE CITY OF MALIBU, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 181 PAGES 6 THROUGH 11, IN THE OFFICE OF THE RECORDER OF SAID COUNTY.

EXCEPT ALL OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES, IN AND UNDER SAID SAID LAND BUT WITHOUT THE RIGHT TO ENTER UPON THE SURFACE THEREOF FOR THE PURPOSE OF EXPLORING FOR OR EXTRACTING SUCH OIL, GAS OR OTHER HYDROCARBON SUBSTANCES AND MINERALS

BASIS OF BEARINGS:

THE BASIS OF BEARINGS WAS DERIVED FROM THE INVERSE MEASUREMENT OF FOUND MONUMENTS AS SHOWN ON TRACT MAP NO. 10630 AS FILED IN BOOK 181 PAGES 6-11 OF MAPS, IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, STATE OF CALIFORNIA.

LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.):
WOOD FENCE:
WIRE FENCE:
WROUGHT IRON-FENCE
MANHOLE (M.H.):
TREES: PINE PALM EUC OAK TREE SYC PEPPER CORK OLIVE

BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MIE/O DECKER RD 33FT W/O DR TO HSE •31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N (2008) DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

NOTES:

1) THIS SURVEY WAS PERFORMED WITHOUR BENEFIT OF TITLE REPORT. EASEMENTS AS SHOWN ARE FROM INFORMATION OBTAINED FROM NEIGHBORING PROPERTY REPORT.

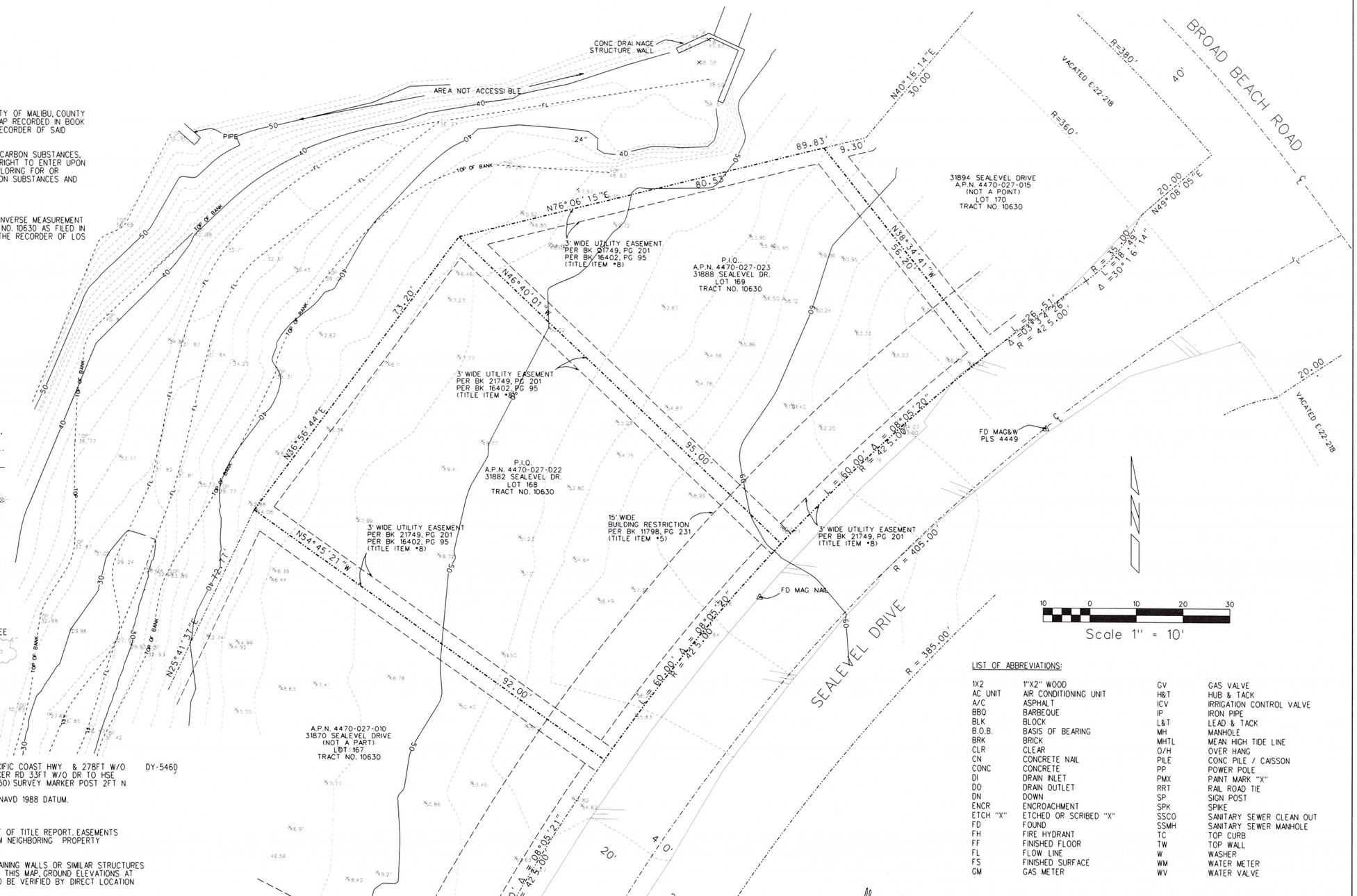
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3) UTILITIES, IF LOCATED, ARE BY SURFACE EVIDENCE ONLY. (MANHOLES, WATER METERS, GAS METERS, POWER POLES, ETC.)

4) GROSS PARCEL AREA APN:4470-027-022 • 6,164 SQ.FT. / 0.14 ACRES
GROSS PARCEL AREA APN:4470-027-023 • 4,854 SQ.FT. / 0.11 ACRES

5) 02/17/22 EXTENDED TOPO TO THE NORTHWEST PER COUNTY GIS INFORMATION

6) 05/13/22 EXTENDED AND UPDATED NORTHWESTERLY TOPOGRAPHY



10 0 10 20 30
Scale 1" = 10'

LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
AC UNIT	AIR CONDITIONING UNIT	H&T	HUB & TACK
A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

STATE OF CALIFORNIA · LICENSED LAND SURVEYOR · MARK D. SANDERS · No. L.S. 6847 · STAMP

TOPOGRAPHIC SURVEY

REVISIONS:
02/17/22 SEE NOTE 5
06/13/22 SEE NOTE 6

SURVEYED BY: JM,HC

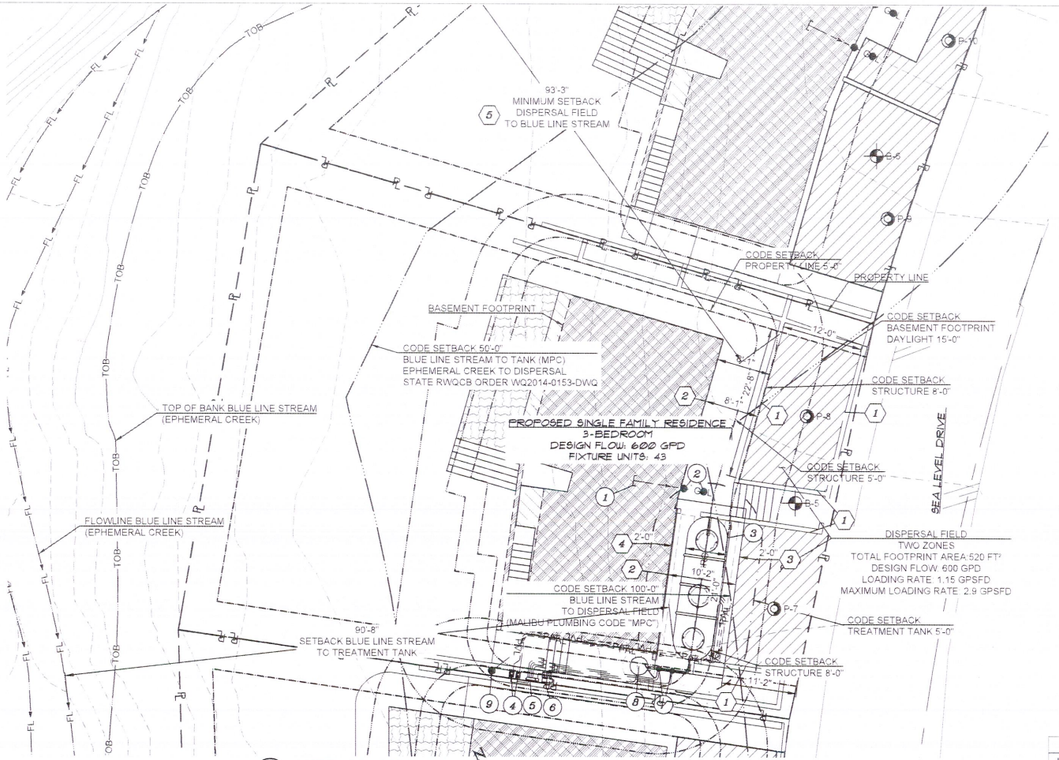
DRAWN BY: AL

SURVEYED FOR:
JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY · TOPOGRAPHIC · ALTA SURVEYS
SUBDIVISIONS · PARCEL MAPS
23741 PACIFIC COAST HIGHWAY
SUITE 400
MALIBU, CA 90265
BUSINESS (310) 456 9081
FAX (310) 456 9821

SCALE: 1" = 10'
JOB NO: PETER-J-121
SURVEY DATE: 10/05-06/21 02/13/22
SHEET: 1 OF 1

T-2



1/1 OVERALL SITE PLAN

0 20' 40'

SCALE: 1" =20'-0"

GENERAL NOTES:

1. EXISTING OWTS COMPONENTS LOCATION AND ABANDONMENT:
   1.1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS. THE LOCATIONS ON THE ENGINEERING PLANS ARE INFORMATIONAL AND MAY NOT INCLUDE ALL COMPONENTS OF THE OWTS. MANY ITEMS, SUCH AS TANKS, PIPING, DISTRIBUTION DEVICES, SEEPAGE PITS, DISPERSAL TILES, AND OTHER APPURTENANCES ARE BURIED AND NOT LOCATABLE BY THE SURVEYOR OR UTILITIES LOCATOR.
   1.2. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) COMPONENTS AND OWTS ABANDONMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWTS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REGULATORY REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THE SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
   1.3. THE EXISTING OWTS COMPONENTS INCLUDING SEPTIC TANK(S), PIPING, CLEANOUT(S) SEEPAGE PIT(S), DISPERSAL FIELD(S), AND ALL OTHER APPURTENANCES SHALL BE PROPERLY ABANDONED PURSUANT TO CITY OF MALIBU ORDINANCE 438, SECTION 15.40.170 C, AND SECTION 15.40.170 D, TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES. METHOD OF ABANDONMENT SHALL BE DETERMINED BY THE ENGINEER AND/OR THE OWNER'S REPRESENTATIVE.
2. SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH SPECIFICATIONS AND TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND ORDINANCES.
3. SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEANOUTS, VENTS, BACKWATER VALVES, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
4. ELECTRICAL COMPONENTS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 27 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA ELECTRICAL CODE, LOCAL ELECTRICAL CODE, AND ORDINANCES.
5. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. ENSITU ENGINEERING INC. IS NOT A GEOTECHNICAL ENGINEERING COMPANY, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
6. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE INSTALLATION OF THE TANK AND DISPERSAL SYSTEM COMPONENTS OF THE AOWTS (INCLUDING BUT NOT LIMITED TO: (A) TANK EXCAVATION, BEDDING AND BACKFILL; (B) SEEPAGE PITS EXCAVATION, CONSTRUCTION, AND BACKFILL; (C) SUBSURFACE DISPERSAL SYSTEM BEDDING FILL MATERIAL, CONSTRUCTION, AND BACKFILL; AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE TANK AND DISPERSAL SYSTEM COMPONENTS WERE INSTALLED PER APPROVED AOWTS PLANS.
7. LEACH FIELDS AND DISPERSAL SYSTEMS DESIGNATED AS SAND CATEGORY. ANY REMAINING FILL MATERIAL AND ANY BEACH SAND SEDIMENT THAT MIGHT HAVE REDUCED PERMEABILITY FROM EXISTING LEACH FIELD OPERATIONS ENCOUNTERED BELOW THE BOTTOM OF THE PROPOSED LEACH FIELD OR ANY MATERIAL ENCOUNTERED IN THE CONSTRUCTION OF THE LEACH FIELD THAT IS NOT CATEGORIZED AS BEACH SAND DEPOSITS SHALL BE EXCAVATED TO THE LEVEL OF THE NATIVE BEACH SAND DEPOSITS AND REPLACED WITH DOUBLE-WASHED SAND. THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE THE EXCAVATION OF THE LEACH FIELD AND CONFIRM IN WRITING THAT ALL THE DELETERIOUS FILL AND NON-BEACH SAND MATERIALS BELOW THE LEACH FIELD HAVE BEEN REMOVED AND REPLACED WITH CLEAN SAND AND THE LEACH FIELD WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED OWTS PLANS.
8. SUBSURFACE DRIP LINE SHALL BE PLACED IN UNCOMPACTED NATIVE SOILS RIPPED AND TILLED A MINIMUM OF 18 INCHES. SOIL SHALL BE AMENDED TO BE 30% SAND, 30% MULCH, 40% NATIVE OR LANDSCAPE DESIGNER SHALL BE CONTACTED TO ADVISE CONTRACTOR ON TYPE OF TOPSOIL TO IMPORT FOR MINIMUM BURIAL DEPTH. DISPERSAL FIELD SHALL BE PLANTED AND ESTABLISHED PRIOR TO OCCUPANCY. ENGINEER TO VERIFY.
9. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SYSTEM INSTALLATION. BUILDING SEWER DEPTH OR CONNECTION POINT WAS NOT PROVIDED AND SHALL BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION.
10. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF BUILDING SEWER CONNECTION. MINIMUM 2% SLOPE FROM STRUCTURE TO CONNECTION POINT.
11. ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE VENTED IN ACCORDANCE WITH TITLE 28 OF THE LOS ANGELES COUNTY CODE, INCORPORATING THE MOST CURRENT CALIFORNIA PLUMBING CODE, LOCAL PLUMBING CODE, AND POLICIES.
12. THE OWTS IS SITED AS FAR LANDWARD AS FEASIBLE.

EQUIPMENT SCHEDULE

ITEM	QTY	DESCRIPTION	MFG/PART NUMBER
1	1	CONNECTION TO BUILDING SEWER[1]	
2	1	GRAVITY CLEAN-OUT AND BACKWATER VALVE[1]	INDUSTRIAL BACKWATER VALVE (SPEARS MODEL 6476SP FOR 4" I.D. VALVE BOX (CHRISTY MODEL FOB)
3	1	TREATMENT TANK[1][2]	MICROSEPTEC ES12
4	2	AIR COMPRESSOR[1][2]	MICROSEPTEC
5	1	REMOTE TELEMETRY CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES[1][2]	MICROSEPTEC
6	1	CONTROL UNIT DEDICATED COMMUNICATION AND POWER AS OUTLINED IN MANUFACTURER INSTALLATION GUIDELINES[1][2]	GEOFLOW
7	2	GRAVITY UV DISINFECTION UNIT (2 IN SERIES, 100% REDUNDANCY)	SA.COR
8	1	DUPLEX PUMP SYSTEM WITH 30" DIAMETER VAULT[1][2]	MICROSEPTEC
9	1	VENT ASSEMBLY[1][2]	ORENCO
11		ALL PLUMBING APPURTENANCES AND WORK SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE PLUMBING CODES. APPURTENANCES AND WORK INCLUDE, BUT ARE NOT LIMITED TO, CONNECTION TO BUILDING PLUMBING, VENTILATION, ISOLATION, BACKWATER VALVES, CLEANOUTS, AND FITTINGS.	
12		ALL ELECTRICAL APPURTENANCES INCLUDING BUT NOT LIMITED TO: CONDUIT, CONDUCTOR, CONTROL PANELS, CONTACTORS, FLOATS, PUMPS, DISCONNECTS, AND COMMUNICATION DEVICES SHALL COMPLY WITH CURRENT LOCAL, COUNTY, AND STATE ELECTRICAL CODE AND CURRENT NATIONAL ELECTRIC CODE. CONDUIT AND CONDUCTOR RUNS ARE SHOWN ON PLAN ARE FOR ALIGNMENT AND COST ESTIMATION. ELECTRICAL CONTRACTOR SHALL SPECIFY ALL ELECTRICAL APPURTENANCES, CONTROL AND POWER CONDUCTORS SHALL BE PLACED IN SEPARATE CONDUIT.	

LEGEND

P-X	PERCOLATION TEST LOCATION
B-XX	BORING LOCATION
	PROPOSED DISPERSAL FIELD
	BUILDINGS AND STRUCTURES
	BASEMENT

PIPING SCHEDULE

TAG	DESCRIPTION	SPECIFICATION
GSL	PROPOSED GRAVITY SEWER LINE	4" SCH-40 PVC
PSL	PROPOSED PUMPED EFFLUENT LINE	2" SCH-80 PVC
PVL	PROPOSED AIR VENT LINE	4" SCH-40 PVC
RSRC	RECIRCULATION RETURN LINE	1½" SCH-80 PVC
DFH	DISPERSAL FIELD HEADER	1½" SCH-80 PVC
DFL	DISPERSAL FIELD LATERALS	1" SCH-40 PVC
TOB	TOP OF BANK	

OWTS Capacity (Design and Maximum)

Component	Description	Size/Capacity	Design Capacity	Max Capacity
Treatment Volume (Fixture Unit Capacity)	1-MicroSepTec ES12	3,634 gallons	49 fixture units	105 fixture units
Treatment (Organic Capacity)	1-MicroSepTec ES12	2.00 lb BOD5/day	600 gpd at 220 mg/L BOD5	1,200 gpd at 220 mg/L BOD5
Disinfection	2-Solcor Gravity UV	1,200 gpd	600 gpd	1,200 gpd
Subsurface Irrigation Dispersal	Subsurface Irrigation	520 square feet of 1,154 gallons per square foot per day	600 gpd	1,556 gpd

Fixture Units Summary

Total Proposed Fixture Units	49	
Total Fixture Units	49	
Dwelling Units Summary		
Total Proposed Dwelling Units	1	
Proposed Bedroom Summary		
Total Proposed Bedrooms	3	bedrooms
Number of Proposed Master Bedrooms	1	bedrooms
Number of Proposed Standard Bedrooms	2	bedrooms
Flow Calculations (Q)		
Peak Flow per Master Bedroom	300	gpd
Peak Flow per Standard Bedroom	150	gpd
Average Flow per Master Bedroom	200	gpd
Average Flow per Standard Bedroom	100	gpd
Flow Calculations Proposed (Q)		
Peak Flow, Q_P	600	gpd
Average Flow, Q_A	400	gpd
Design Flow, Q_D	600	gpd
Influent Characteristics		
BOD5 (mg/l)	220	
TSS (mg/l)	220	
TN (mg/l)	35	
Effluent Characteristics		
BOD5 (mg/l)	20	
TSS (mg/l)	20	
TN (mg/l)	17.5	

MicroSepTec Design

Design Flow	600	gpd
Design Influent BOD	220	mg/L
Design Effluent BOD	20	mg/L
Design Organic Loading BOD	1.00	lb BOD_5
MicroSepTec Model Specified	ES12	
MicroSepTec Tank Volume	3634	gal
MicroSepTec ES12 Base Organic Removal (1)	2.00	lb BOD_5
Minimum Number of MicroSepTec ES12 Required	1	units
Design Organic Removal	2.00	lb BOD_5
Design Tank Volume	3634	gal
Maximum Effluent Flow Based on Organic Loading	1200	gpd
Maximum Effluent Flow Based on Hydraulic Loading	1700	gpd
Maximum Factored Based on Design Tank Volume	105	

Septic Tank (S_T) Calculations

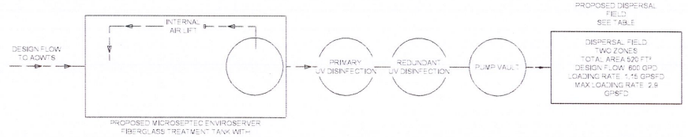
Total Existing Fixture Units:		
Total Proposed Fixture Units:	49	
Total Fixture Units:	49	
Minimum Septic Tank Size based on Fixtures:	2250	gal
Number of Dwelling Units:	1	
Number of Bedrooms:	3	bedrooms
Minimum Septic Tank Size based on Bedrooms:	1500	gal
Design Septic Tank Size:	3634	gal
Flow Calculations (Q)		
Peak Flow, Q_P:	600	gpd
Average Flow, Q_A:	400	gpd
Leaching Field Design Flow, Q_D:	600	gpd
Drip Distribution Calculations		
Design Subsurface Irrigation Loading (Application) Rate, I_r:	1.992	gpsfd
Minimum Square Feet of Leaching Area Required, Q_D/I_r:	301	ft^2
Design Square Feet of leaching Area from Site Plan, A_r:	520	ft^2
Actual Loading Rate (Application), $L_a = Q_A/A_r$:	1.154	gpsfd
Maximum Effluent Capacity, $Q_{max} = A_r I_r$:	1556	gpsfd
Minimum Design Safety Factor, M:	1.0	

Ryons T value to Subsurface Irrigation Conversion Calculations

Test Pit Number	Test Depth	Percolation Rate from Ryons Test Field not Converted to Gal/day: A	B=t/A	C=8x144/B	D=Q*12	E=D/(T-M)	Percolation Area T-SIZE FIGURE	Infiltration rate G=60/T	Safety Factor H	Application Rate I=G/H
	ft	min/inch	inch/min	in/day	ft/day	gal/day	ft^2	gal/ft²-day		gal/ft²-day
P-7	7	8	0.125	1,152.00	96.00	113.33	3	37.41	10	3.741
P-8	7	10	0.100	1,440.00	120.00	89.77	3	29.92	10	2.992
T Average		9						Application Rate Average		3.37
T Max		10						Application Rate Max		3.74
T Ryon (T_R)		10						Design Application Rate		2.99

SETBACK REDUCTIONS

	COMPONENT	SITE ELEMENT	CODE REQUIREMENT	ACTUAL
1	DISPERSAL FIELD	SITE WALL	8'	0'
2	DISPERSAL FIELD	BASEMENT	15' DAYLIGHT	8'-1"± 10'-2"±
3	DISPERSAL FIELD	TREATMENT TANK	5'	2'-0"
4	TREATMENT TANK	STRUCTURE	5'	2'-0"±
5	DISPERSAL FIELD	BLUE LINE STREAM	100'-0" (MPC) 50'-0" (RWQCB)	93'-3"±



FINAL FOR APPROVAL
ISSUED
10/31/2022

JOHN N. YAROSLASKI
PRINCIPAL ENGINEER

ENSITU

9428 CAMBRITA AVE.
ATASCADERO, CA. 93422
Tel: 805.772.0815
ENSITUeng@att.net

ENSITU ENGINEERING, INC.
"Dedicated to achieving higher standards in onsite and decentralized wastewater systems."

REVISIONS

NO.	DATE	BY

31882 SEA LEVEL DRIVE, CONFORMANCE REVIEW
DESIGN PLANS
CR-SITE PLANS AND TABLES 31882
MALIBU, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN N. YAROSLASKI
No. 6014
EXP. 06-2024
CIVIL
STATE OF CALIFORNIA

DATE: 10/31/2022
DESIGNED BY: JNY
DRAWN BY: JNY
CHECKED BY: JNY

JOB NO.
114-116

SHEET
1 OF 1

Project Engineer: John N Yaroslaski, PE # 60149
Project Number: 114-116.010 31870 Sea Level Drive
CREATION TIME: Friday, November 4, 2022 10:42:16 AM
MOD. TIME: Friday, November 4, 2022 10:45:40 AM
PLOT TIME: Friday, November 4, 2022 10:46:06 AM
FILE: C:\Users\Ensitu\Documents\Sea Level Drive\Engineering\Cad Design\114-116.010 31870 Sea Level Drive PWCR-01.dwg

PROPERTY ADDRESS:

31882 & 31888 (VACANT) SEALEVEL DRIVE
MALIBU, CA 90265

ASSESSOR'S PARCEL NO.:

4470-027-022 (LOS ANGELES COUNTY)
4470-027-023 (LOS ANGELES COUNTY)

LEGAL DESCRIPTION:

LOTS 168 AND 169 OF TRACT NO. 10630, IN THE CITY OF MALIBU, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 181 PAGES 6 THROUGH 11, IN THE OFFICE OF THE RECORDER OF SAID COUNTY.

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BASIS OF BEARINGS:

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BENCHMARK:

MALIBU 90.567' CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O BROAD BEACH RD 1.5MIE/O DECKER RD 33FT W/O DR TO HSE (2008) *31905 MKD (DUME POINT D-8 1950) SURVEY MARKER POST 2FT N DY-5460

ELEVATIONS SHOWN ON THIS MAP ARE BASED ON NAVD 1988 DATUM.

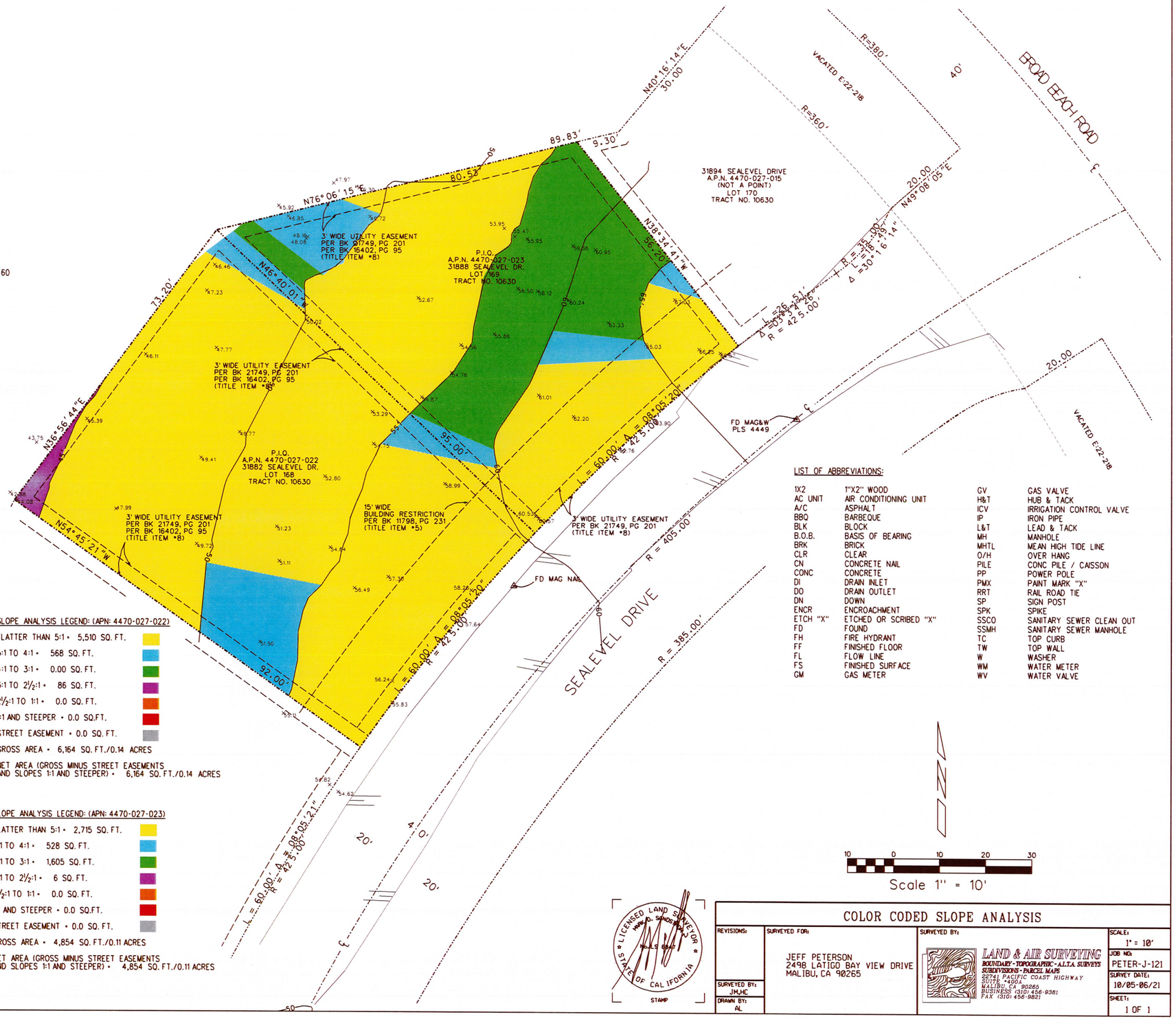
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3) UTILITIES, IF LOCATED, ARE BY SURFACE EVIDENCE ONLY. (MANHOLES, WATER METERS, GAS METERS, POWER POLES, ETC.)

4) GROSS PARCEL AREA APN:4470-027-022 = 6,164 SQ. FT. / 0.14 ACRES
GROSS PARCEL AREA APN:4470-027-023 = 4,854 SQ. FT. / 0.11 ACRES
TOTAL GROSS PARCEL AREA = 11,018 SQ. FT./0.25 ACRES
NET AREA = 11,018 SQ. FT./0.25 ACRES



LEGEND:

PROPERTY LINE:
STREET CENTERLINE:
EASEMENT:
MONUMENT:
STREET LIGHT (ST.LT.):
ASPHALT (A/C):
BUILDING:
CHAIN LINK FENCE (C.L.F.):
WOOD FENCE:
WIRE FENCE:
WROUGHT IRON-FENCE
CONCRETE (CONC.):
TILE:
SLATE/FLAGSTONE:
DIRT/GRAVEL:
BRICK (BRK):
MANHOLE (M.H.):
TREES: PINE PALM EUC OAK TREE SYC PEPPER CORK OLIVE

SLOPE ANALYSIS LEGEND: (APN: 4470-027-022)

FLATTER THAN 5:1 =	5,510 SQ. FT.
5:1 TO 4:1 =	568 SQ. FT.
4:1 TO 3:1 =	0.00 SQ. FT.
3:1 TO 2½:1 =	86 SQ. FT.
2½:1 TO 1:1 =	0.0 SQ. FT.
1:1 AND STEEPER =	0.0 SQ.FT.
STREET EASEMENT =	0.0 SQ. FT.
GROSS AREA =	6,164 SQ. FT./0.14 ACRES
NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) =	6,164 SQ. FT./0.14 ACRES

SLOPE ANALYSIS LEGEND: (APN: 4470-027-023)

FLATTER THAN 5:1 =	2,715 SQ. FT.
5:1 TO 4:1 =	528 SQ. FT.
4:1 TO 3:1 =	1,605 SQ. FT.
3:1 TO 2½:1 =	6 SQ. FT.
2½:1 TO 1:1 =	0.0 SQ. FT.
1:1 AND STEEPER =	0.0 SQ.FT.
STREET EASEMENT =	0.0 SQ. FT.
GROSS AREA =	4,854 SQ. FT./0.11 ACRES
NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) =	4,854 SQ. FT./0.11 ACRES

LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD	GV	GAS VALVE
AC UNIT	AIR CONDITIONING UNIT	H&T	HUB & TACK
A/C	ASPHALT	ICV	IRRIGATION CONTROL VALVE
BBQ	BARBEQUE	IP	IRON PIPE
BLK	BLOCK	L&T	LEAD & TACK
B.O.B.	BASIS OF BEARING	MH	MANHOLE
BRK	BRICK	MHTL	MEAN HIGH TIDE LINE
CLR	CLEAR	O/H	OVER HANG
CN	CONCRETE NAIL	PILE	CONC PILE / CAISSON
CONC	CONCRETE	PP	POWER POLE
DI	DRAIN INLET	PMX	PAINT MARK "X"
DO	DRAIN OUTLET	RRT	RAIL ROAD TIE
DN	DOWN	SP	SIGN POST
ENCR	ENCROACHMENT	SPK	SPIKE
ETCH "X"	ETCHED OR SCRIBED "X"	SSCO	SANITARY SEWER CLEAN OUT
FD	FOUND	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	TC	TOP CURB
FF	FINISHED FLOOR	TW	TOP WALL
FL	FLOW LINE	W	WASHER
FS	FINISHED SURFACE	WM	WATER METER
GM	GAS METER	WV	WATER VALVE

N

10 0 10 20 30

Scale 1" = 10'

STATE OF CALIFORNIA * LICENSED LAND SURVEYOR * MARVIN D. SANDERS No. L.S. 6647
STAMP

COLOR CODED SLOPE ANALYSIS

REVISIONS:

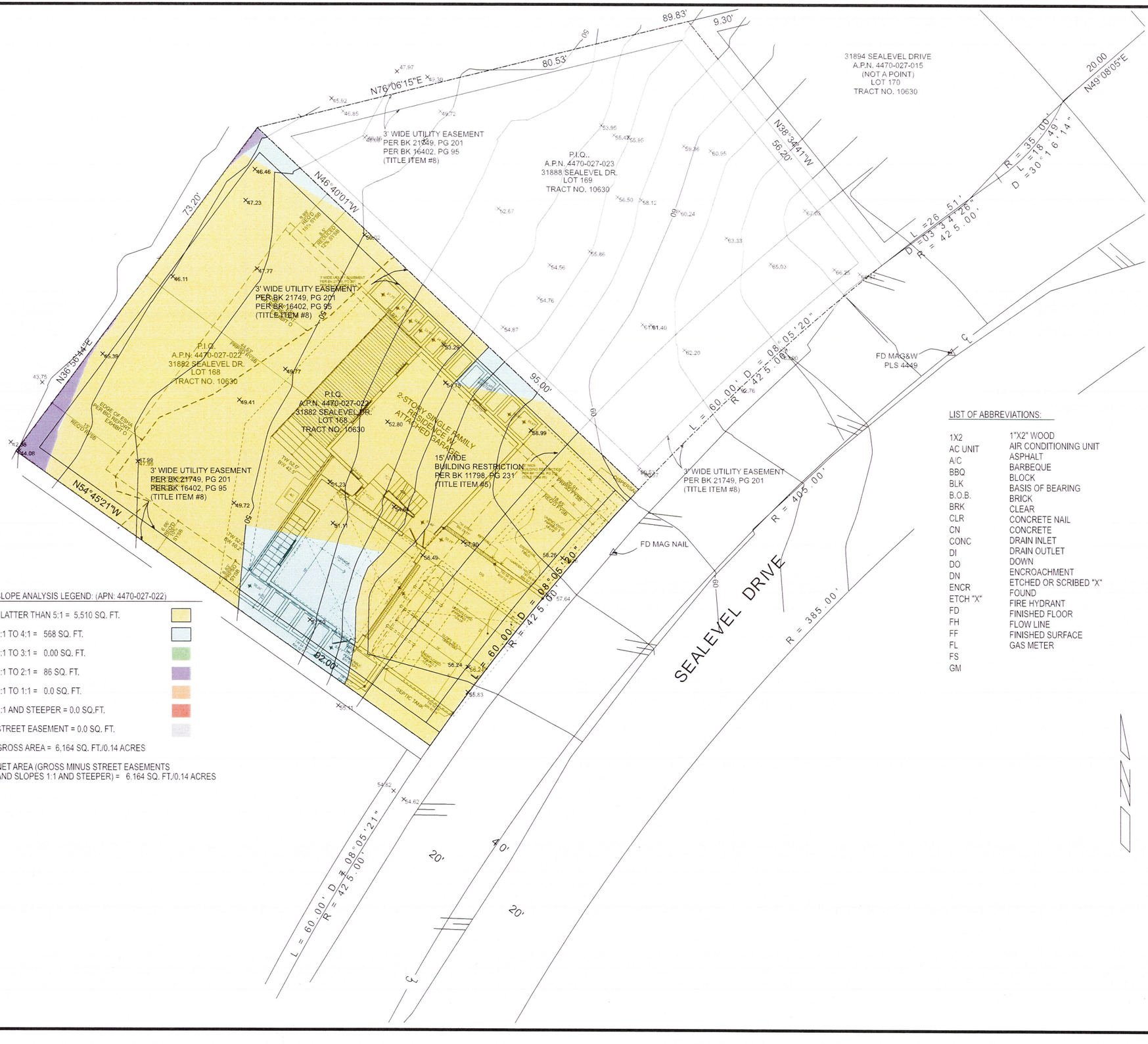
SURVEYED FOR:
JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

SURVEYED BY:
LAND & AIR SURVEYING
BOUNDARY - TOPOGRAPHIC - A.L.T.A. SURVEYS
SUBDIVISIONS - PARCEL MAPS
26741 PACIFIC COAST HIGHWAY
SUITE 104DA
MALIBU, CA. 90265
BUSINESS (310) 456-8381
FAX (310) 456-9821

SURVEYED BY: JM,HC
DRAWN BY: AL

SCALE: 1" = 10'
JOB NO: PETER-J-121
SURVEY DATE: 10/05-06/21
SHEET: 1 OF 1

T-4



SLOPE ANALYSIS LEGEND: (APN: 4470-027-022)

FLATTER THAN 5:1 =	5,510 SQ. FT.
5:1 TO 4:1 =	568 SQ. FT.
4:1 TO 3:1 =	0.00 SQ. FT.
3:1 TO 2:1 =	86 SQ. FT.
2:1 TO 1:1 =	0.0 SQ. FT.
1:1 AND STEEPER =	0.0 SQ.FT.
STREET EASEMENT =	0.0 SQ. FT.
GROSS AREA =	6,164 SQ. FT./0.14 ACRES
NET AREA (GROSS MINUS STREET EASEMENTS AND SLOPES 1:1 AND STEEPER) =	6,164 SQ. FT./0.14 ACRES

LIST OF ABBREVIATIONS:

1X2	1"X2" WOOD
AC UNIT	AIR CONDITIONING UNIT
A/C	ASPHALT
BBQ	BARBEQUE
BLK	BLOCK
B.O.B.	BASIS OF BEARING
BRK	BRICK
CLR	CLEAR
CN	CONCRETE NAIL
CONC	CONCRETE
DI	DRAIN INLET
DO	DRAIN OUTLET
DN	DOWN
ENCR	ENCROACHMENT
ETCH "X"	ETCHED OR SCRIBED "X"
FD	FOUND
FH	FIRE HYDRANT
FF	FINISHED FLOOR
FL	FLOW LINE
FS	FINISHED SURFACE
GM	GAS METER

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

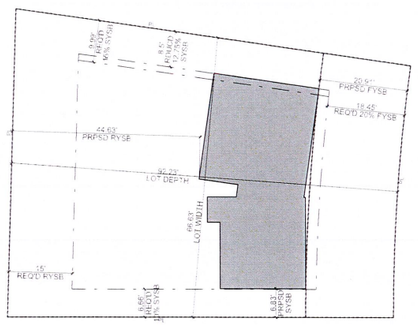
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

SITE PLAN WITH COLOR CODED SLOPE

DRAWING NO.
A-0.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/8" = 1'-0"
DRAWN BY	D.W.B.



SETBACK PLAN
SCALE: 1/16" = 1'-0" (2)

Width/Depth:
Depth: 92.23' Width: 66.63'

•MINIMUM SETBACKS: Required Proposed

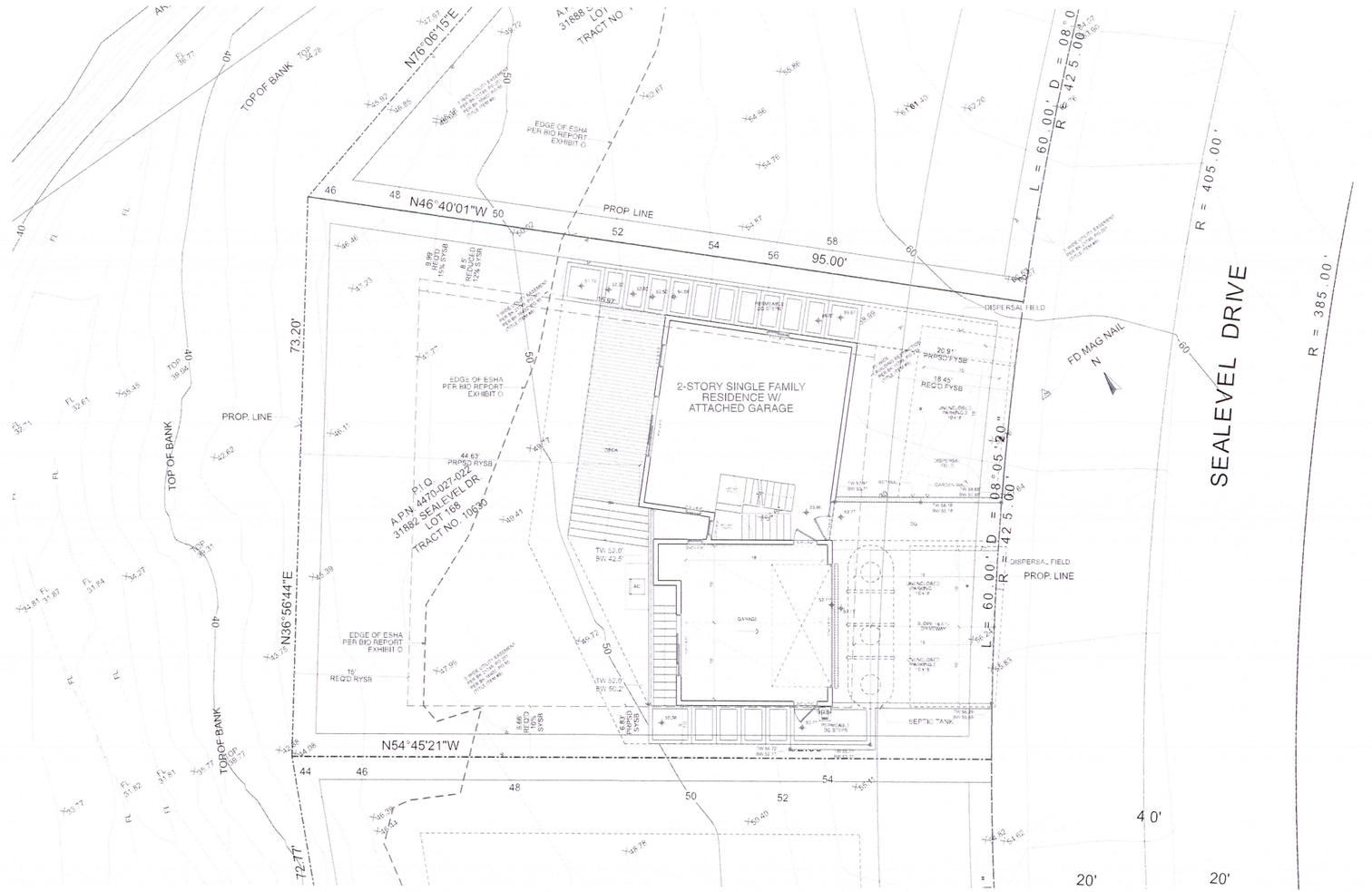
Front : 18.45' 20.91'
(The front yard setback shall be at least 20 percent of the lot depth or 65 feet, whichever is less)

Side 10% : 6.66' 6.83'

Side 15% : 9.99' *8.50'
(The side yard setbacks shall be cumulatively at least 25 percent of the lot width; in no event, shall a single side yard setback be less than 10 percent of the lot width or five feet, whichever is greater)

Rear : 15.00' 44.63'
(The rear yard setback shall be at least 15 percent of the lot depth or 15 feet whichever is greater)

*Minor Modification for 15% reduction side-yard setback.



SITE PLAN
SCALE: 1/8" = 1'-0" (1)

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

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DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

SITE PLAN

DRAWING NO.
A-0.2

PROJECT NO:	Project No. 15754
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.

•MAX. ALLOWABLE SQUARE FOOTAGE:

6,164 x .177 = 1,091 + 1,000= **2,091 SF**

•PROPOSED SQUARE FOOTAGE TABULATION:

First Floor.....	676	Sq.Ft.+	
Garage at First Floor.....	464	Sq.Ft.+	
Second Floor	759	Sq.Ft.=	
Total Enclosed area	1,899	Sq.Ft.	< 2,091 Sq.Ft.

Basement 859 Sq. Ft. sf < 1,000 Sq. Ft.

City of Malibu Planning Division

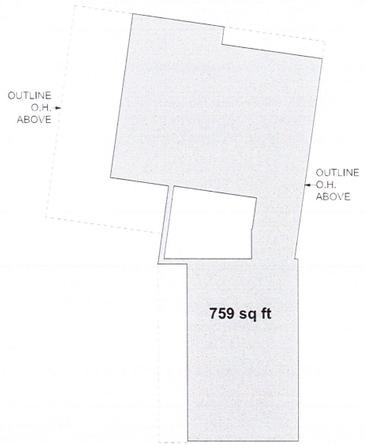
Total Development Square Footage Calculator

Plug in Net Lot Area* here

>>>> 6164 <<<<

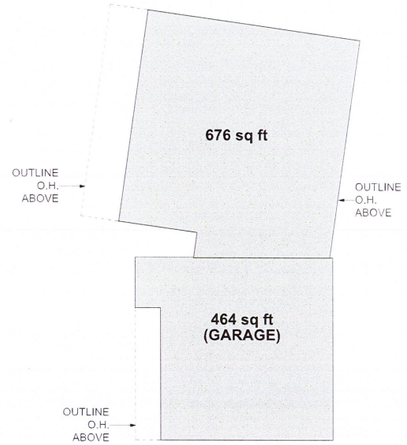
				subtotal
Up to 0.5 acre	6164	6164	2,091	s.f.
0.5 to 1 acre	-15616		0	s.f.
1 to 1.5 acres	0		0	s.f.
1.5 acres or more	0	0	0	s.f.
			1885	

TDSF -->>> **2,091**



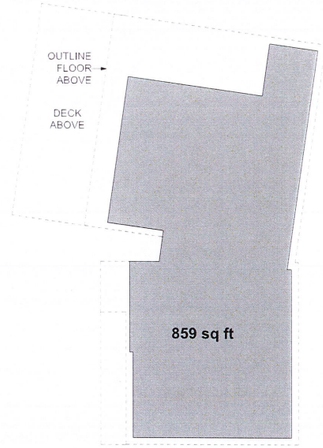
SECOND FLOOR PLAN 3

SCALE: 1/8" = 1'-0"



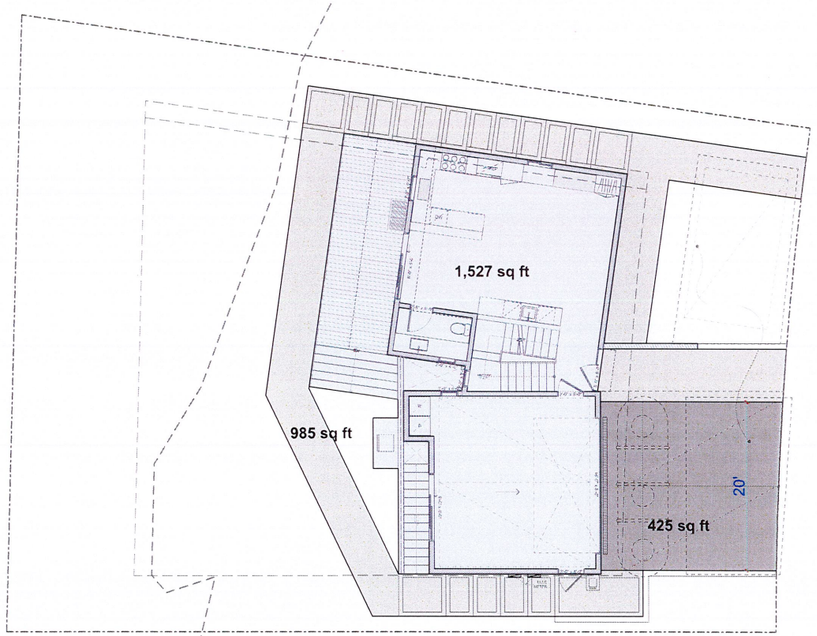
FIRST FLOOR PLAN 2

SCALE: 1/8" = 1'-0"



BASEMENT PLAN 1

SCALE: 1/8" = 1'-0"



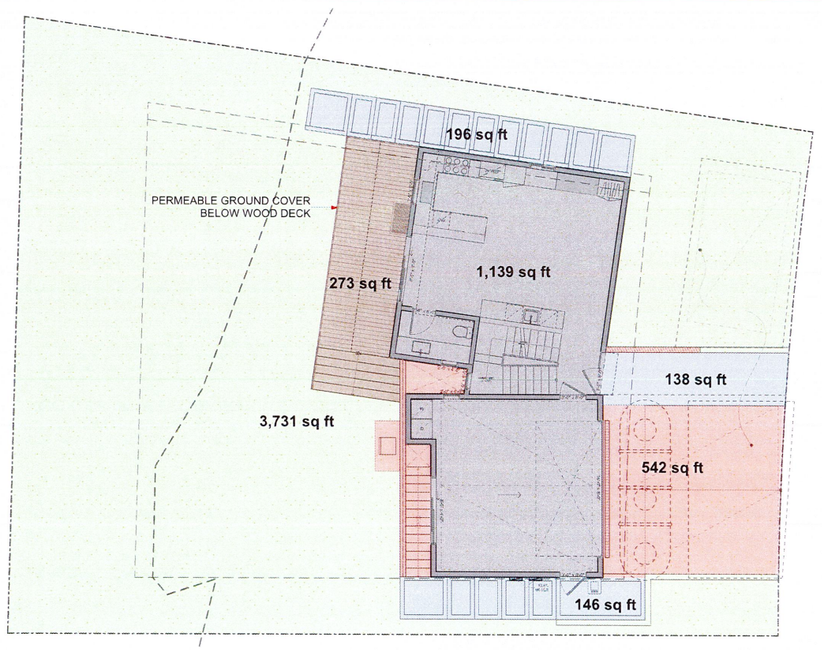
SYMBOL LEGEND:

	DEVELOPMENT AREA	1,527 SF
	FD SQUARE FOOTAGE	1,410 SF (EXEMPT)

LIMIT OF DEVELOPMENT AREA 5

SCALE: 1/8" = 1'-0"

PER LIP 4.7.1, THIS PARCEL IS IN AN ESHA BUFFER THEREFORE THE DEVELOPMENT AREA IS LIMITED TO 25% OF THE PARCEL SIZE
6,164 SF X 25% = 1,541 SF : 1,527 SF < 1,541 SF (MAX)



•MAX. ALLOWABLE IMPERMEABLE COVERAGE:
LESS THAN 1/4 ACRE : 6,164 X 45 = 2,773 Sq.Ft.

•PROPOSED IMPERMEABLE COVERAGE:

	Buildings footprint	1,139 sf+
	Concrete slabs	542 sf+
	TOTAL	1,681 sf < 2,773 sf limit

•**OTHER** PROPOSED PERMEABLE AREAS:

	Wooden deck	273 sf
	Existing grading to remain	3,731 sf
	DG	480 sf

IMPERMEABLE PLAN 4

SCALE: 1/8" = 1'-0"

PETERSON RESIDENCE

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MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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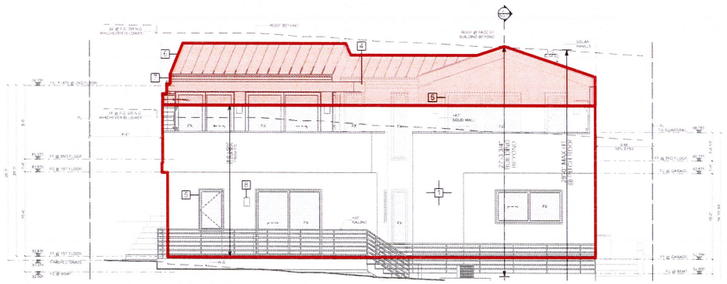
SHEET TITLE

AREA DIAGRAMS

DRAWING NO.
A-0.3

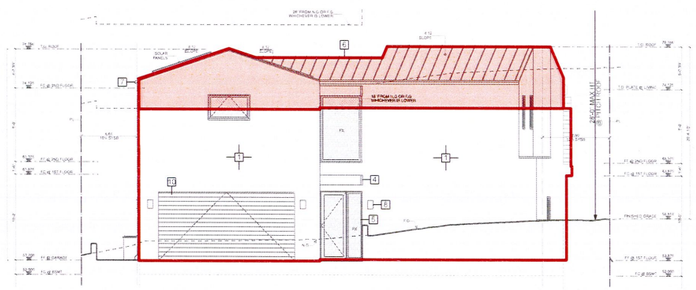
PLAN NORTH

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



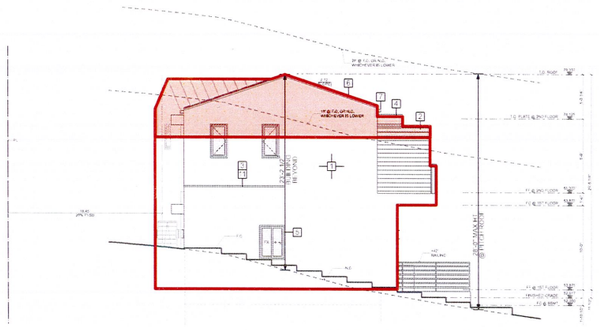
WEST ELEVATION 3

SCALE 1/8" = 1'-0"



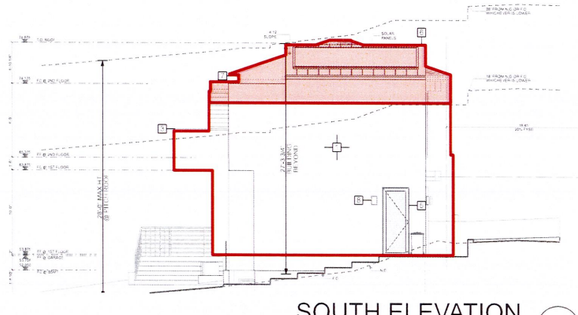
EAST ELEVATION 4

SCALE 1/8" = 1'-0"



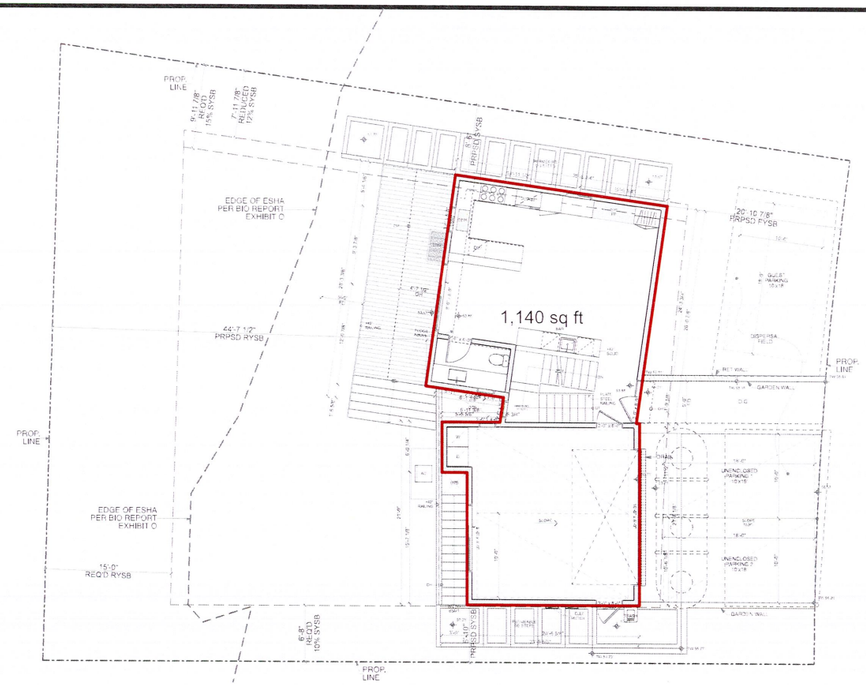
NORTH ELEVATION 5

SCALE 1/8" = 1'-0"



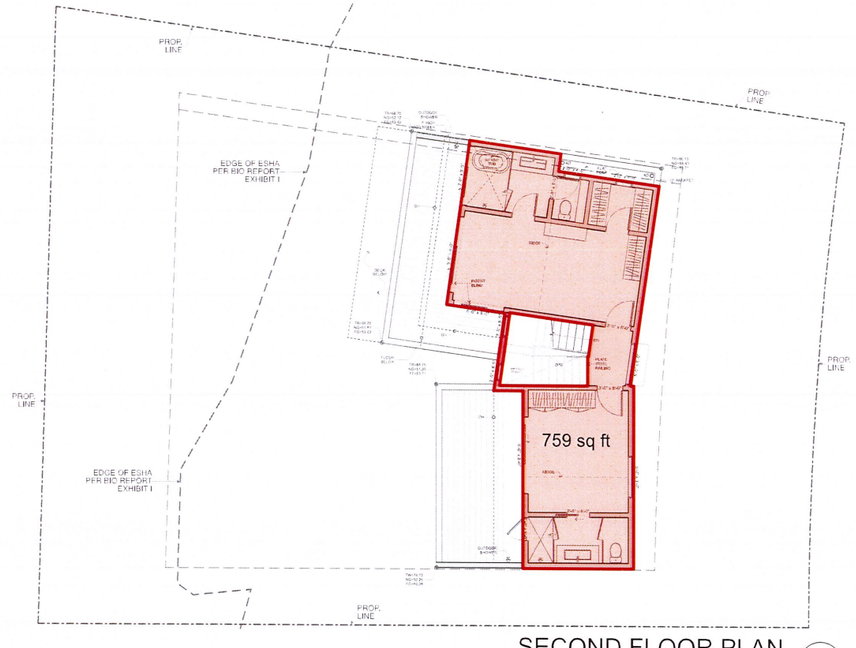
SOUTH ELEVATION 6

SCALE 1/8" = 1'-0"



FIRST FLOOR PLAN 1

SCALE 1/8" = 1'-0"



SECOND FLOOR PLAN 2

SCALE 1/8" = 1'-0"

BULK AREA TABULATION: (2/3'S RULE)

AREA BELOW 18' = 1,140 SF
MAXIMUM ALLOWED OVER 18' = (1,140 x .667) = 760 SF
AREA OVER 18' = 759 SF

FIRST FLOOR AREA (1,140 SF)

SECOND FLOOR AREA (759 SF)

PETERSON RESIDENCE

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MALIBU, CA 90265

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	05/12/22	REVISIONS

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MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

2/3RD'S CALCULATIONS DIAGRAM

DRAWING NO.
A-0.4

PLAN NORTH

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.

License#: 16899 Burdge Douglas Wayne Date: 2025-02-12 | Sheet #: Use [Manic Knallaway] 31882 Sea Level Drive, Malibu, CA 90265

FIRE DEPARTMENT NOTES

1. PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 20 FEET, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6 AND AN UNOBSTRUCTED VERTICAL CLEARANCE "CLEAR TO SKY" FIRE DEPARTMENT VEHICULAR ACCESS TO WITHIN 150 FEET OF ALL PORTIONS OF THE EXTERIOR BUILDING WALLS. FIRE CODE 503.2.1

2. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED FIRE DEPARTMENT TURNAROUND. FIRE CODE 503.2.5

3. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE PROVIDED WITH A 32 FOOT CENTERLINE TURNING RADIUS. FIRE CODE 503.2.4

4. THE GRADIENT OF FIRE DEPARTMENT VEHICLE ACCESS ROADS SHALL NOT EXCEED 15% UNLESS APPROVED BY THE FIRE CODE OFFICIAL. FIRE CODE 503.2.7

5. A MINIMUM 5 FOOT WIDE APPROVED FIREFIGHTER ACCESS WALKWAY LEADING FROM THE FIRE APPARATUS ACCESS ROAD TO THE BUILDINGS EXTERIOR OPENINGS SHALL BE PROVIDED FOR FIREFIGHTING AND RESCUE PURPOSES. FIRE CODE 504.1

6. GRADE BREAKS SHALL NOT EXCEED THE MAXIMUM ANGLE OF APPROACH OR DEPARTURE FOR FIRE DEPARTMENT APPARATUS.

7. THE INSPECTION, HYDROSTATIC TEST AND FLUSHING OF THE FIRE SPRINKLER PIPING SHALL BE WITNESSED BY AN AUTHORIZED FIRE DEPARTMENT REPRESENTATIVE. FIRE CODE 901.6

8. PROVIDE AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM AS SET FORTH BY BUILDING CODE 903, AND FIRE CODE 903. PLANS SHALL BE SUBMITTED TO THE SPRINKLER PLAN CHECK UNIT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

REASON : FIRE CODE 903.2.8 AND 903.2.11.7
LOCATION : MAIN HOUSE, GUEST HOUSE, AND DETACHED GARAGE
TYPE OF FIRE SPRINKLER SYSTEM : FIRE CODE 903.3.1.3 - NFPA 13D

9. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE HARDSCAPE ALL WEATHER ACCESS IN ACCORDANCE WITH THE DEPARTMENT'S ALL WEATHER ACCESS REQUIREMENTS. FIRE CODE 503.2.3

10. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. FIRE CODE 505.1

11. FIRE APPARATUS ACCESS ROADS SHALL BE IDENTIFIED WITH APPROVED SIGNS. TEMPORARY SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS. FIRE CODE 505.2

12. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. BUILDING CODE 1008.1.9

13. ALL ROOF COVERINGS SHALL BE CLASS "A" AS SPECIFIED IN BUILDING CODE 1505.1.1 (RESIDENTIAL CODE R327.5.2 & R902)

14. ROOF VALLEY FLASHINGS SHALL BE NOT LESS THAN 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36-INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF NO. 72 ASTM CAP SHEET MEETING RUNNING THE FULL LENGTH OF THE VALLEY. (RESIDENTIAL CODE R327.5.3 AND BUILDING CODE 705A.3)

15. ROOF GUTTERS SHALL BE PROVIDED WITH A MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER. (RESIDENTIAL CODE R327.5.4 AND BUILDING CODE 705A.4)

16. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

17. FIRE DEPARTMENT VEHICULAR ACCESS ROADS MUST BE INSTALLED AND MAINTAINED IN A SERVICEABLE MANNER PRIOR TO AND DURING THE TIME OF CONSTRUCTION. FIRE CODE 503.1.1

18. PROVIDE APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS NO PARKING - FIRE LANE. SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE BY 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS, TO CLEARLY INDICATE THE ENTRANCE TO SUCH ROAD, OR PROHIBIT THE OBSTRUCTION THEREOF AND AT INTERVALS, AS REQUIRED BY THE FIRE INSPECTOR. FIRE CODE 503.3.

19. AN APPROVED KEY BOX, LISTED IN ACCORDANCE WITH UL 1037 SHALL BE PROVIDED AS REQUIRED BY FIRE CODE 506. THE LOCATION OF EACH KEY BOX SHALL BE DETERMINED BY THE FIRE INSPECTOR.

20. THE ELECTRIC SECURITY GATE SHALL PROVIDE AN APPROVED MEANS OF EMERGENCY OPERATION, AND SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES AND REPLACED OR REPAIRED WHEN DEFECTIVE. ELECTRIC GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F220. GATES SHALL BE OF THE SWINGING OR SLIDING TYPE. CONSTRUCTION OF GATES SHALL BE OF MATERIALS THAT ALLOW MANUAL OPERATION BY ONE PERSON. FIRE CODE 503.6.

21. ALL FIRE HYDRANTS SHALL MEASURE 6" X 4" X 2-1/2", BRASS OR BRONZE, CONFORMING TO AMERICAN WATER WORKS ASSOCIATION STANDARD C503, OR APPROVED EQUAL, AND SHALL BE INSTALLED, TESTED AND ACCEPTED PRIOR TO BEGINNING CONSTRUCTION. FIRE CODE 501.4.

22. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. RESIDENTIAL CODE R314.4

23. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. REQUIRED CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. RESIDENTIAL CODE R315.1.2, BUILDING CODE 420.4.1

24. VENTS SHALL RESIST THE INTRUSION OF FLAME AND EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS. VENT OPENINGS SHALL BE PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH A MINIMUM 1/16TH INCH OPENINGS AND SHALL NOT EXCEED 1/8TH INCH. VENTS SHALL NOT BE INSTALLED IN EAVES OR CORNICES. (RESIDENTIAL CODE R327.6.1 AND BUILDING CODE 706A.1)

25. CLEARANCE OF BRUSH AND VEGETATIVE GROWTH SHALL BE MAINTAINED PER FIRE CODE 325

FIRE FLOW AVAILABILITY

THE REQUIRED FIRE FLOW FOR FIRE HYDRANTS AT THIS LOCATION IS 1,250 GPM, AT 20 PSI RESIDUAL PRESSURE, FOR A DURATION OF 1 HOUR OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND. FIRE CODE 507.3 AND APPENDIX B105.1 APPENDIX B.

THE REQUIRED FIRE FLOW IS BASED ON THE FOLLOWING CALCULATION

TYPE OF CONSTRUCTION PER THE BUILDING CODE	TYPE VB
VHFHSZ	YES
SIZE OF LOT (ACRES)	0.14 AC
FIRE FLOW BASED ON THE FIRE-FLOW CALCULATION AREA	1,250 GPM
REDUCTION FOR FIRE SPRINKLERS (MAXIMUM 50%)	750 GPM
TOTAL FIRE FLOW REQUIRED	1,250 GPM (MIN.)
HOUSE SQUARE FOOTAGE = 2,798 SF	FLOW DURATION HOUR = 1 HOUR

FIREFIGHTER WALKING ACCESS HOSE PULL DISTANCE

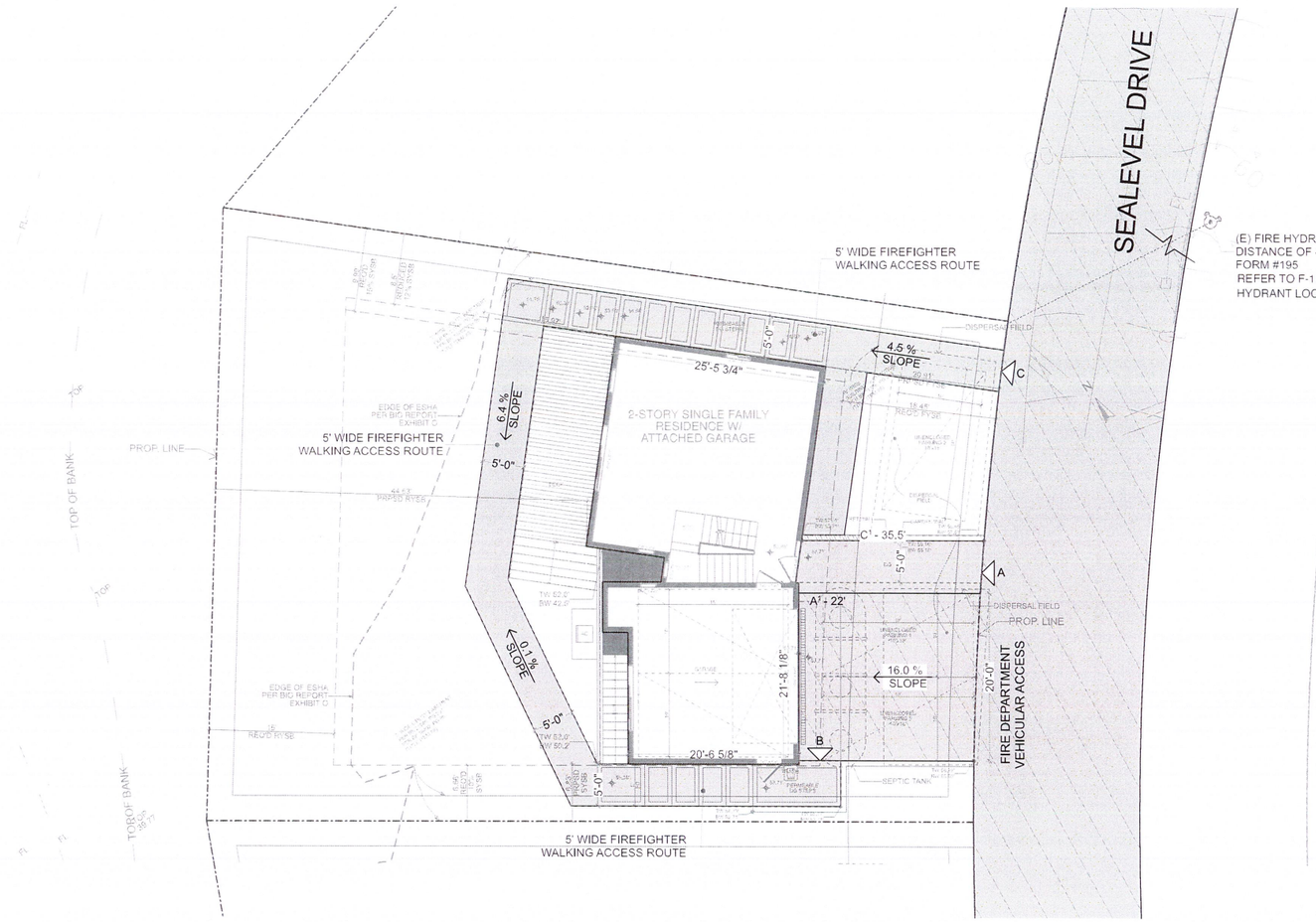
A-A' = 22'
B-C = 135'
C-C' = 35.5'

FIRE DEPT. LEGEND

FIRE DEPT. VEHICULAR AND WALKING ACCESS

ROAD DETAIL

(N) 4" THK CONC O. 4" THK. CLASS 2 BASE MAT DRIVEWAY



SITE PLAN
SCALE: 1/8" = 1'-0"

1 FIRE DEPARTMENT PLAN

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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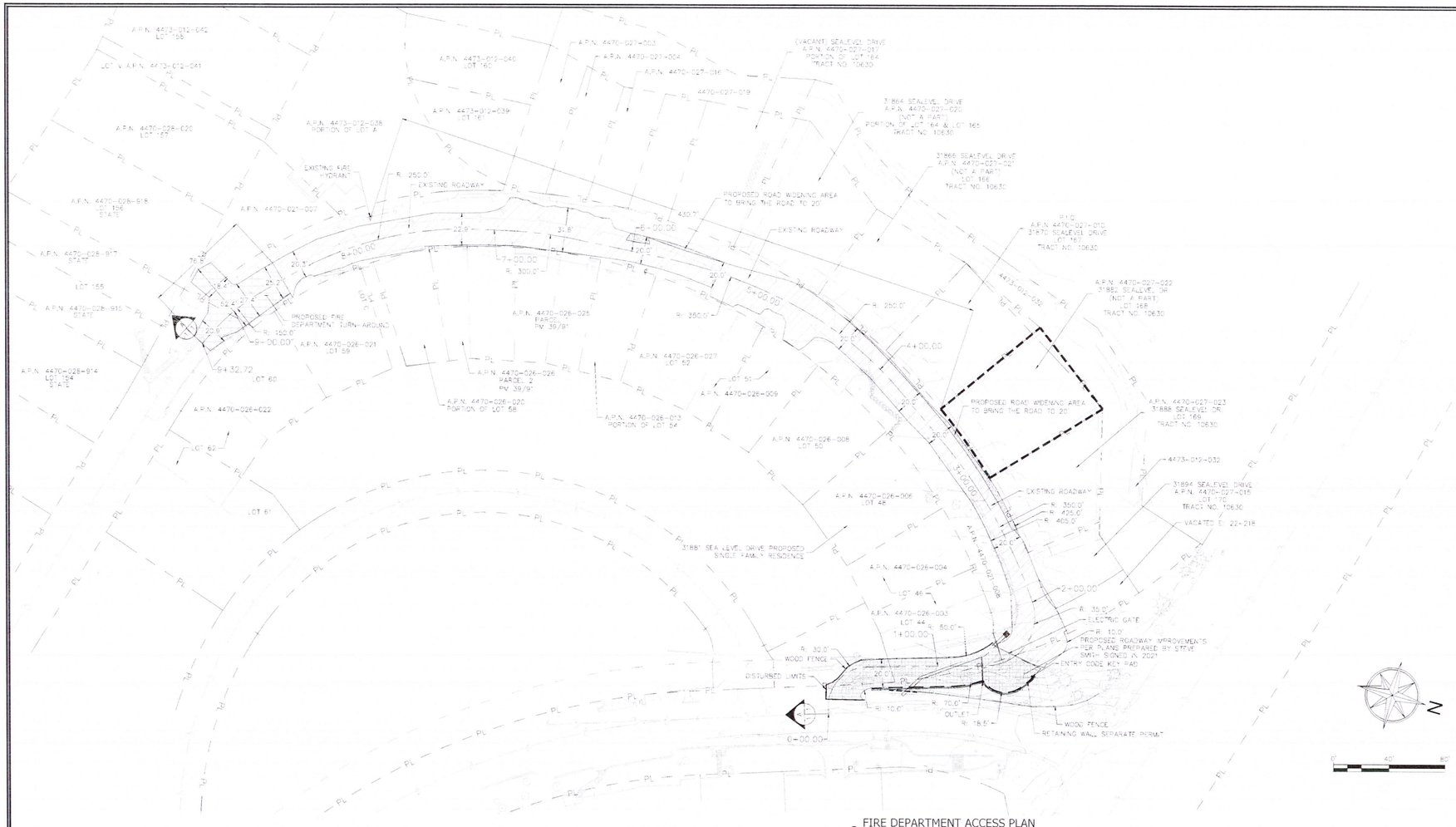
MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

DRAWING NO.
A-0.5

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



FIRE DEPARTMENT ACCESS PLAN

LINETYPE	DESCRIPTION
P.L.	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
	PROPOSED MINOR CONTOURS
	ROAD CENTERLINE
	EASEMENT LINE

PROPOSED ON GRADE ROAD WIDENING AREA TO BRING THE ROAD TO 20'

EXISTING FIRE DEPARTMENT ACCESS ROAD PER TYPICAL DRIVEWAY DETAIL HEREON

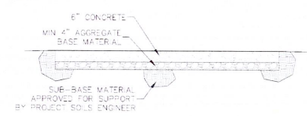
EXISTING FIRE DEPARTMENT TURN-AROUND

PROPOSED ROADWAY IMPROVEMENTS PER PLANS PREPARED BY STEVE SMITH SIGNED IN 2021

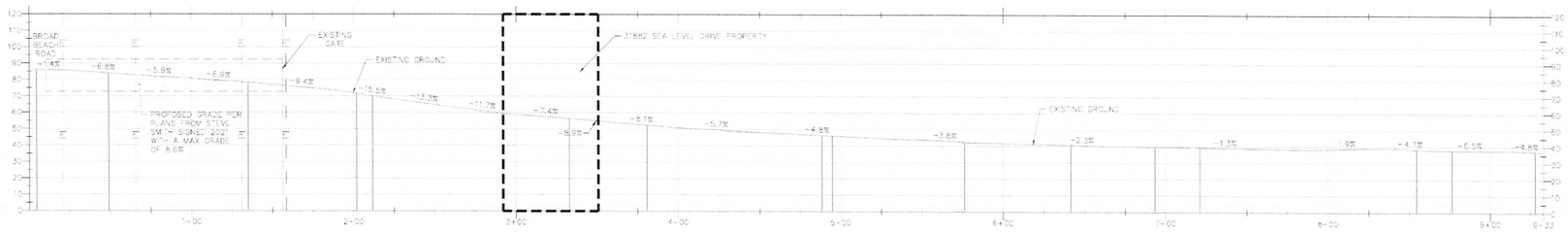
GENERAL NOTES:

THE DRIVEWAY SHALL BE FLUSH WITH EXISTING GRADES WITH NO CURBS.

THE DRIVEWAY MAY ALSO BE CONSTRUCTED OF MIN. 4" ASPHALT CONCRETE OVER MIN. 6" OF AGGREGATE BASE.



TYPICAL DRIVEWAY SECTION DETAIL (NTS)



CROSS SECTION A
DRIVEWAY PROFILE
(SCALE: 1" = 40')

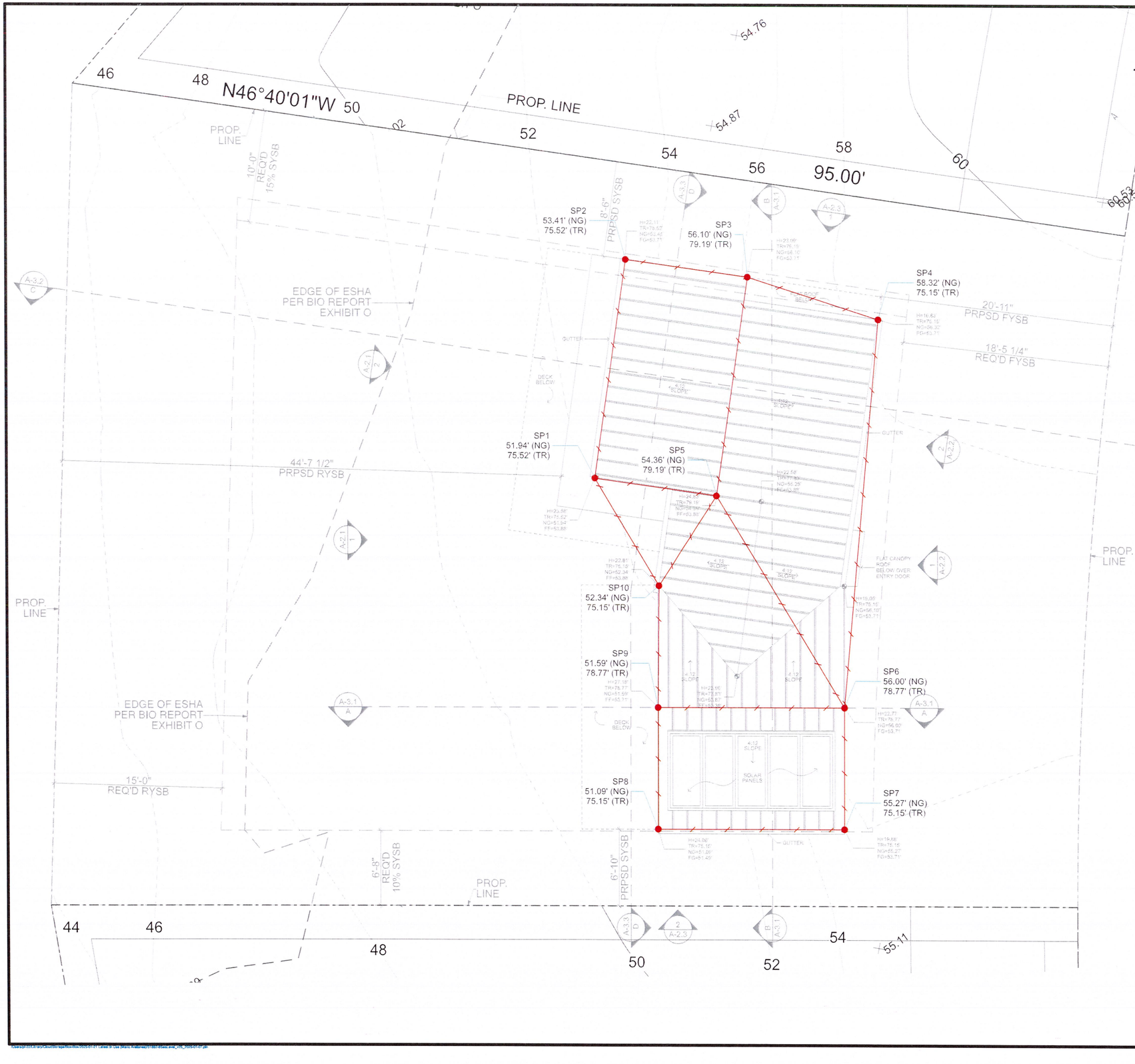
REVISIONS

REV	BY	DATE
1		ADDENDUM ACCESS ROADWAY IMPROVEMENT PLANS

AHSIRT
ENGINEERING
760 MILFORD WAY
ARROYO GRANDE, CA 93420
PHONE: 805.474.4008

ROADWAY IMPROVEMENT ACCESS PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA 90265

JOB #	104-11
DATE	12/24
DRAWN BY	HN
CHECKED BY	TAC
SHEET NUMBER	F1.1



PLAN NOTES:

"The top one-foot (1'-0") of the story pole shall be painted with a clearly visible black paint. Markings shall also be made at 16 feet above finish or natural grade, whichever results in a lower building height, and at one (1) foot increments above 16 feet. Bright orange construction mesh approximately one (1) foot in width shall be placed connecting poles to show all proposed roof and ridgelines.

"If at anytime the story pole becomes unsafe, they shall be repaired and reset immediately. The story poles shall be removed immediately if determined by the City to be a public safety risk."

INSTRUCTIONS:

Indication of story pole Height- The elevation of the height of each story pole and the natural and finish grades shall be indicated on the plans. In addition, the applicant shall provide an Elevation plan showing a typical story pole.

LEGEND:

- Plastic Ribbon
- Story Pole
- SP# XX.XX' XX.XX' — Story pole Number, Datum @ Bottom of Pole, Datum @ Top of Pole
- SP# — Datum @ Top of Pole/ Story Pole Number
- FN/EG# — Datum @ Bottom of Pole

STORY POLE PLAN
APPROVED BY:

I hearby absolve the City of any liability associated with the construction of, or
damage caused by, the placement of the approved story poles.

Project Applicant

Date

Burdge & Associates Architects, Inc.

STORY POLE			
STORY POLE ID	NG DATUM @ BOTTOM	DATUM @ TOP	STORY POLE HEIGHT
SP1	51.94'	75.52'	23.57'
SP2	53.41'	75.52'	22.1'
SP3	56.10'	79.19'	23.08'
SP4	58.32'	75.15'	16.83'
SP5	54.36'	79.19'	24.82'
SP6	56.00'	78.77'	22.77'
SP7	55.27'	75.15'	19.89'
SP8	51.09'	75.15'	24.07'
SP9	51.59'	78.77'	27.18'
SP10	52.34'	75.15'	22.81'

PETERSON RESIDENCE

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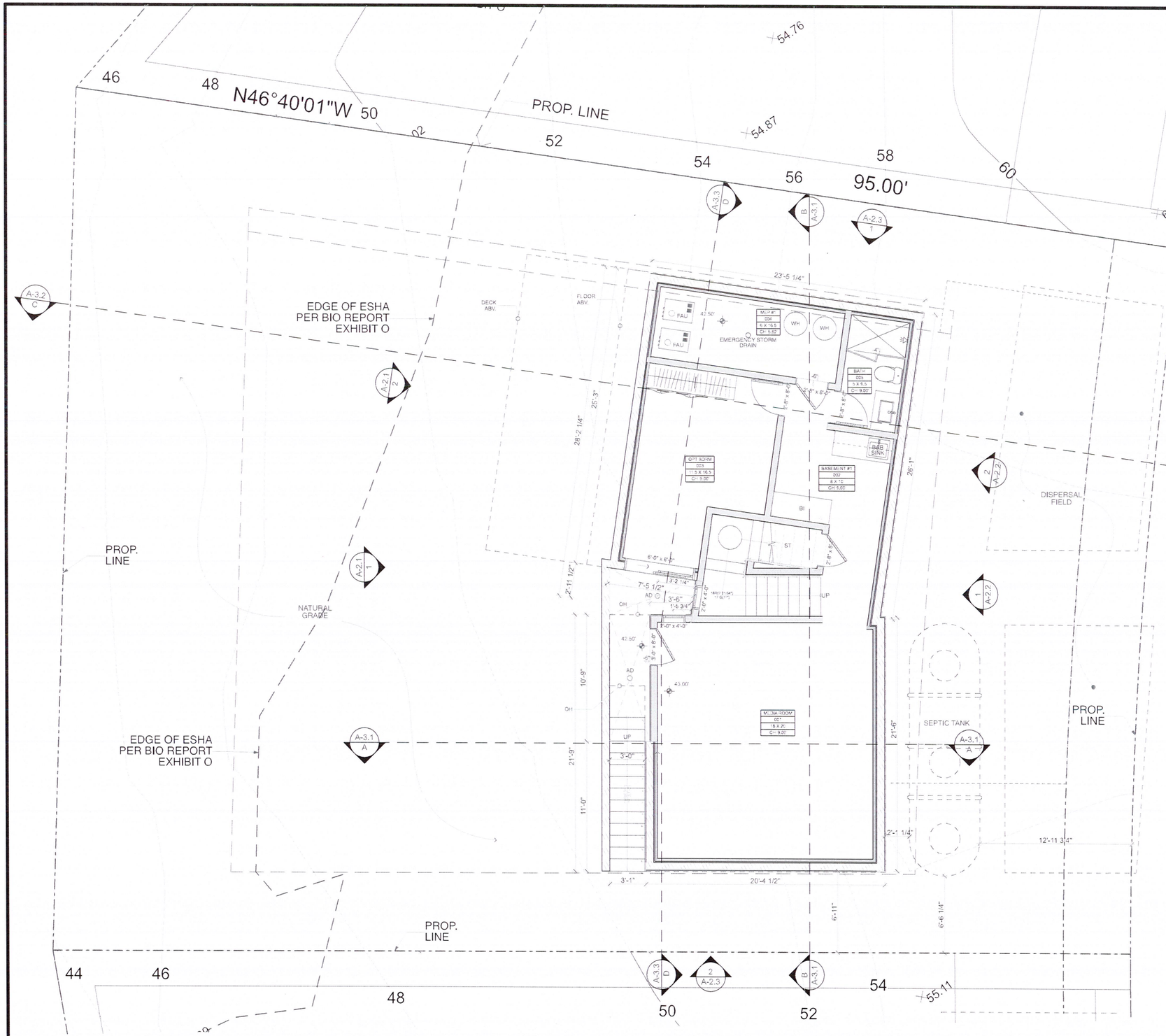
STORY POLE PLAN

DRAWING NO.
A-0.6

PLAN NORTH

PROJECT NO.	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.

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PLAN NORTH

KEYNOTES

01	DEMOLISH
02	SELECTIVE DEMOLITION ONLY
03	ALIGN
04	GRADING - REFER TO GRADING PLANS
05	GRADE LINE @ EXTERIOR WALLS: REPRESENT 6" O. FINISH S.O. CONC. SLAB
06	42" GUARDRAIL, ESR-3583, REF. 7/A4.1
07	PLANTER BOX/ PLANTER AREA
08	RET. WALL WATERPROOFING
09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED SOLID WOOD DOOR, SELF CLOSING
12	1 HR FIRE RATED CONSTRUCTION: 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS. REF. 8/A4.2
13	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION, OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSURE, WHICHEVER IS GREATER. ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. (CRC 1509.4.3)
14	ROOFING MEMBRANES, CLASS 'A' RATED ROOF. CARLISLE SYNTEC SYSTEMS, CARLISLE TPO SINGLE-PLY ROOFING MEMBRANES, ESR-3663 (TYP.)
17	ENDURA-COTE (MFR'D BY 4863) CLASS "A" WALKING DECK SURFACE OVER 80 MIL SHEAR LEG APPLIED POLYUREA (TYP.)
12	ROOF BUILDING INSULATION, PER ENERGY REPORT
17	MASONRY NOTES = REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING, REINF'G & INSTALLATION
18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
19	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
20	GUTTERS & DOWN SPOUTS
21	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP.)
24	FLASHING AND SHEET METAL
24	SEALANTS AND CAULKING
24	ALUMINUM DOORS & FRAMES
24	ALUMINUM WINDOWS
24	FRAMELESS GLASS
24	FINISH HARDWARE
24	METAL WALL CLADDING
29	BOARD FORMED CONCRETE
30	HARDWOOD FLOORING
31	CERAMIC TILE
32	GYPSUM WALLBOARD SYSTEM
33	SHOWER ENCLOSURES
34	PREFABRICATED FIREPLACE 72" MODPIE "85" FIREPLACE, ANSI Z21.50-2006
35	BATHROOM ACCESSORIES - REFER TO ACCESSORIES SCHEDULE
36	WINDOW COVERINGS
37	SPECIAL CONSTRUCTION
38	FIRE PROTECTION SPRINKLER SYSTEM
39	TV ABOVE
40	ELEVATOR- RESIDENTIAL ELEVATOR TO COMPLY WITH ASME A17.1/CSA-B44
41	BUILDING BEYOND
42	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
43	NOTE: 5 FT. POOL FENCING ENCLOSURE W/ 4' W, X 5' H. SELF CLOSING, SELF LATCHING. RE: A4.2 FOR POOL BARRIER SURROUND
44	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
45	BATHROOM EXHAUST FAN WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP.)
46	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 (150 CFM) (CMC)
47	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (c). THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 (FAN CAPACITY TO BE A MINIMUM OF 150 CFM)
48	CHIMNEY FLUE FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
49	DRYER VENT, EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS OR GRILLES WITH OPENING OF 1/4"-1/2" IN ANY DIMENSION.
50	DRYER VENT PATH: EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3-0" FROM OPENING INTO THE BUILDING (§ 504.6 CMC)
51	HVAC SYSTEM - CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
52	HVAC SYSTEM - DUCT/DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
53	ELECTRICAL - ELECTRICAL METER REFER TO ELECTRICAL ENGINEERING PLANS
54	ELECTRICAL - ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
55	ELECTRICAL - RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
56	ELECTRICAL - LIGHTING FIXTURE/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & RCP/LIGHTING PLANS
57	LOW VOLTAGE COMMUNICATIONS SYSTEM
58	LOW VOLTAGE DATA SYSTEM
59	ELEC. VEHICLE CHARGING STATION
60	MINIMUM OF 1 EQUIPPED RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED 208/240 VOLT BRANCH-CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV-CAPABLE. (CBC 4.106.4)
61	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICES SPACE(S) RESERVED FOR FUTURE EV CHARGING AS EV-CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV-CAPABLE.
62	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH-CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREAS (CRC/CMC) (210.52)
63	All new one- and two-family dwelling units, the service panels and/or sub-panels shall have the capacity of an additional load not less than 5 kVA for every 2,000 square feet of living space designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub-panels shall have capacity reserved/dedicated to permit installation of the branch circuit overcurrent protective device(s) for the energy storage system. (LACEC 220.41)
64	WP GFCI RET. +20' FROM POOL
65	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP.) - DOWN CAST, SHIELDED
66	PLUMBING - WATER METER REFER TO PLUMBING ENGINEERING PLANS
67	PLUMBING - SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
68	PLUMBING - WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
69	PLUMBING FIXTURE - REFER TO PLUMBING ENGINEERING PLANS
70	WASTEWATER TREATMENT EQUIPMENT LOCATION - REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS TOILETS)

LIGHTWELL CALCULATION
6.7% < 25% PER LCP POLICY 4

LINEAR FEET OF EXT WALL = 148.81'
LIGHTWELL LENGTH = 9.91'
9.91' / 148.81' = 6.7%

PETERSON RESIDENCE

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MALIBU, CA 90265

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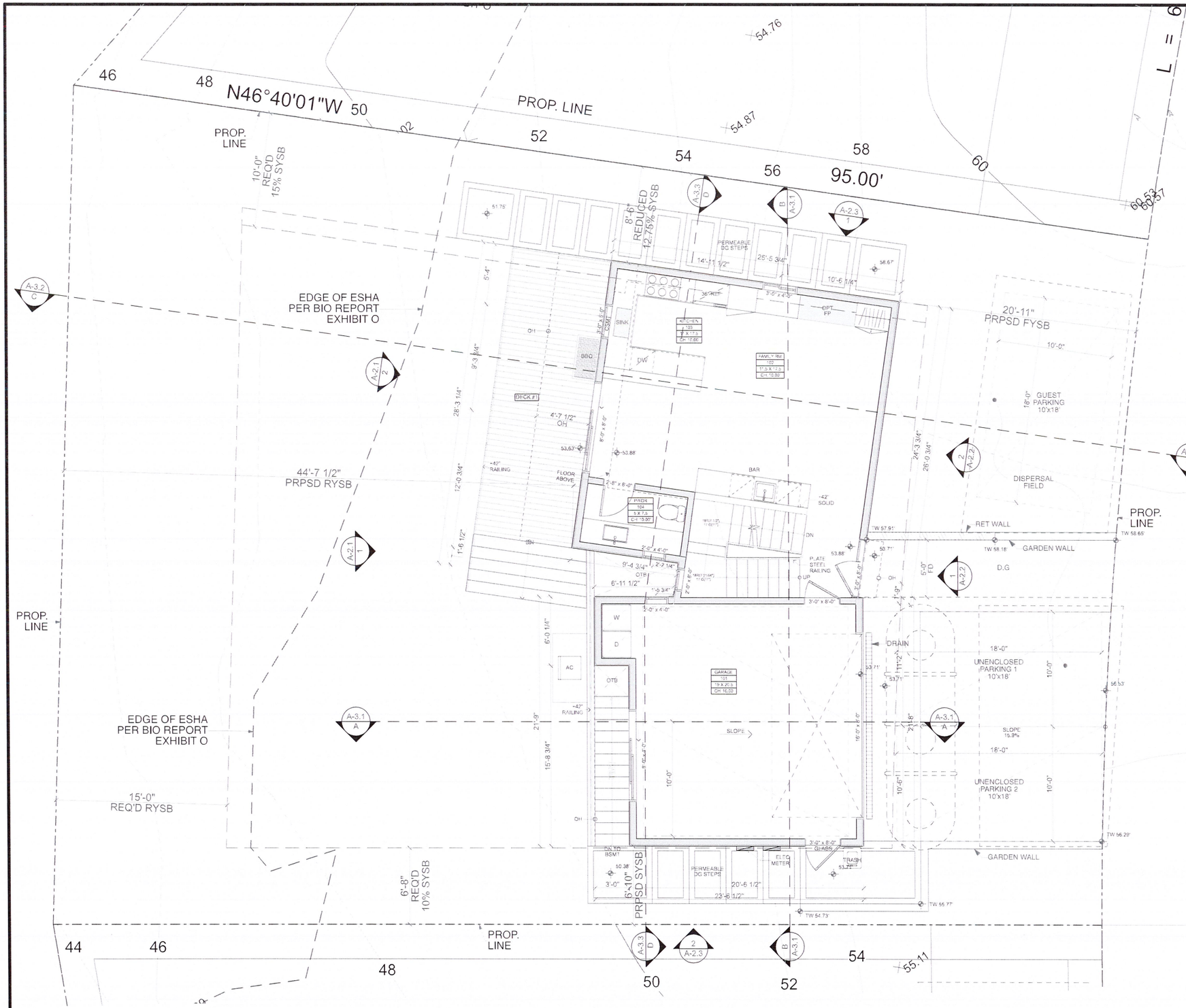
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED
BASEMENT PLAN

DRAWING NO.
A-1.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.



KEYNOTES

01	DEMOLISH
02	SELECTIVE DEMOLITION ONLY
03	ALIGN
04	GRADING – REFER TO GRADING PLANS
05	GRID LINES @ EXTERIOR WALLS REPRESENT TO FACE OF CONCRETE
06	42" GUARDRAIL, ESR-2555, REF. 7/A4.2
07	PLANTER BED/ PLANTER AREA
08	RET. WALL- WATERPROOFING
09	MEMBRANE WATERPROOFING
10	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
11	1 HR FIRE RATED CONSTRUCTION, 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS, REF. 8/A4.2
12	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY 1-HR. FIRE-RESISTANCE-RATED CONSTRUCTION OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSURE, WHICHEVER IS GREATER. ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. (CRC 1009.5.3)
13	ROOFING MEMBRANES, CLASS 'A' RATED ROOF, GARLISS SYNTEC SYSTEMS, CARLISLE EPC SINGLE-PLY ROOFING MEMBRANES (ESR-1483) (TYP.)
14	ENDURA-HOTE 'IMPAD ER-480 CLASS 'A' WALKING DECK SURFACE OVER .90 MIL. SCOAT LIQ. APPLIED POLYUREA (TYP.)
15	R-XX BUILDING INSULATION PER ENERGY REPORT
16	MASONRY NOTES – REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR BOND PATTERN, REINFORCING & INSTALLATION
17	STRUCTURAL STEEL – REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES & CONNECTIONS
18	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES & CONNECTIONS
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20	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP.)
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22	SEALANTS AND CAULKING
23	ALUMINUM DOORS & FRAMES
24	ALUMINUM WINDOWS
25	FRAMELESS GLASS
26	FINISH HARDWARE
27	METAL WALL CLADDING
28	BOARD FORMED CONCRETE
29	HARDWOOD FLOORING
30	CERAMIC TILE
31	GYPSUM WALLBOARD SYSTEM
32	SHOWER ENCLOSURES
33	PREFABRICATED FIREPLACE: 72" MODERE 185 FIREPLACE, ANSI Z21.50-2006
34	BATHROOM ACCESSORIES – REFER TO ACCESSORIES SCHEDULE
35	WINDOW COVERINGS
36	SPECIAL CONSTRUCTION
37	FIRE PROTECTION SPRINKLER SYSTEM
38	TV ABOVE
39	ELEVATOR-RESIDENTIAL ELEVATOR TO COMPLY WITH ASME A17.1/CSA-B44
40	BUILDING BEYOND
41	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
42	NOTE 5 IN. POOL FENCING ENCLOSURE W/ 4' W, X 5' H. SELF CLOSING, SELF LATCHING. SEE A4.1 FOR POOL BARRIER SURROUND
43	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7-1 (150W) CHEC
44	BATHROOM EXHAUST FAN WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP.)
45	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7-1 (150W) CHEC
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47	CHIMNEY FLUE FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
48	DRYER VENT EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS OR GRILLES WITH OPENING OF 1/4"-1/2" IN ANY DIMENSION.
49	DRYER VENT PATH/ EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3'-0" FROM OPENING INTO THE BUILDING (§ 504.5 CMC)
50	HVAC SYSTEM – CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
51	HVAC SYSTEM – DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
52	ELECTRICAL – ELECTRICAL METER REFER TO ELECTRICAL ENGINEERING PLANS
53	ELECTRICAL – ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
54	ELECTRICAL – RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
55	ELECTRICAL – LIGHTING FIXTURE/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & NOTE/LIGHTING PLANS
56	LOW VOLTAGE COMMUNICATIONS SYSTEM
57	LOW VOLTAGE DATA SYSTEM
58	EVEC VEHICLE CHARGING STATION
59	MINIMUM OF ** 1-1/4" CONDUIT RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED, 208/240 VOLT BRANCH CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV CAPABLE. (CBC 4.106.4)
60	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE PV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.
61	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUIT'S SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREAS (210.11(C)(1) CEC)
62	All new one- and two-family dwelling units the service panel and/or sub panels shall have the capacity of an additional load not less than 5 kW for every 2,000 square feet of living space designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub panels shall have space(s) reserved/dedicated to permit installation of the branch circuit overcurrent protective device(s) for the energy storage system. (LA CEC 220.57)
63	WP OR OF ME +20' FROM POOL
64	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP.) DOWN CAST, SHIELDED
65	PLUMBING – WATER METER REFER TO PLUMBING ENGINEERING PLANS
66	PLUMBING – SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
67	PLUMBING – WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
68	PLUMBING FIXTURE – REFER TO PLUMBING ENGINEERING PLANS
69	WASTEWATER TREATMENT EQUIPMENT LOCATION – REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS).

PETERSON RESIDENCE

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

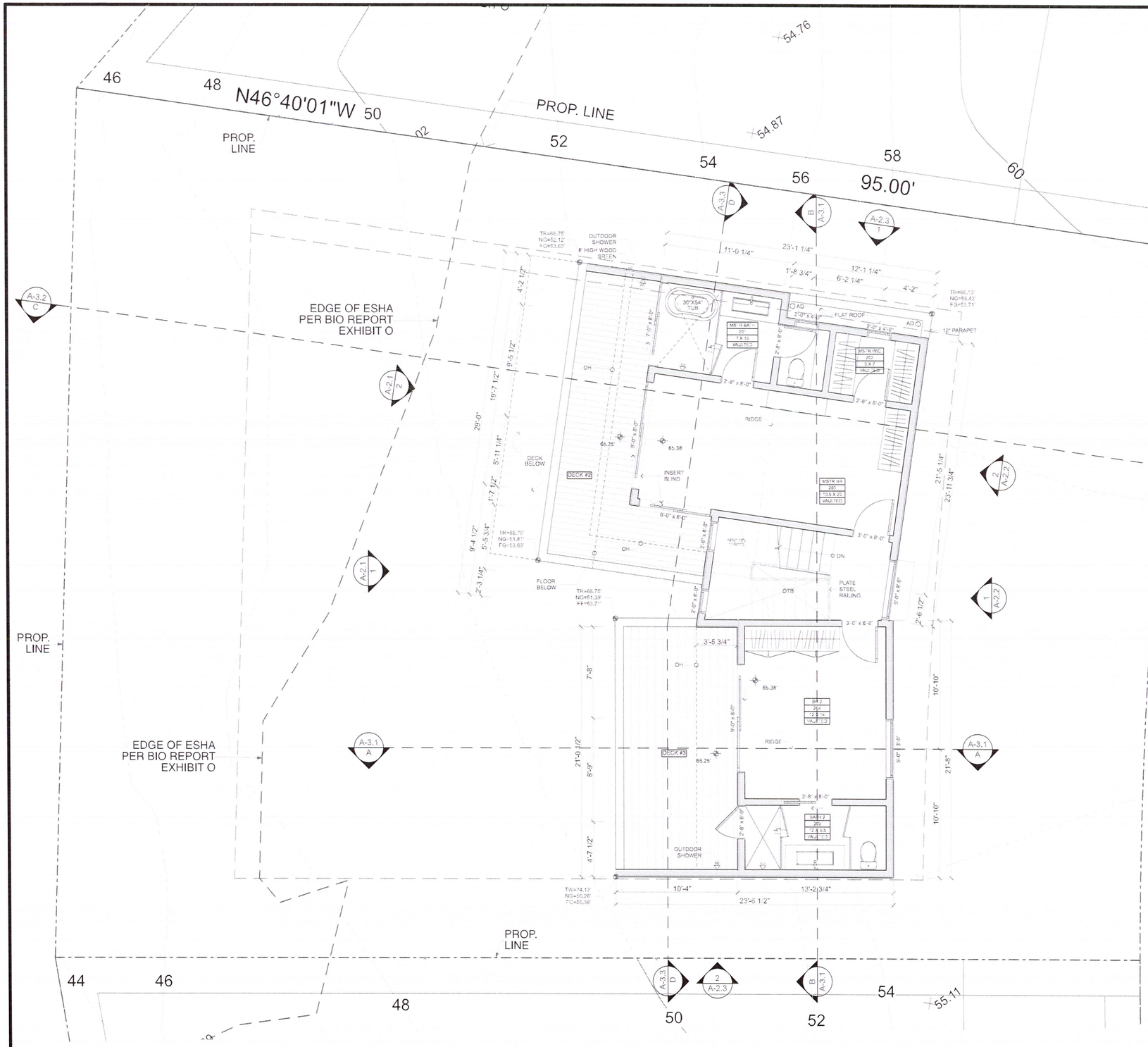
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED FIRST FLOOR PLAN

DRAWING NO.
A-1.2

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.



KEYNOTES

(D1)	DEMOLISH
(D2)	SELECTIVE DEMOLITION ONLY
(D3)	ALIGN
(G1)	GRADING - REFER TO GRADING PLANS
(G2)	GRID LINE @ EXT. FOR WALLS REPRESENT F.O. PLYWD. SHEATHING, U.O.N.
(G3)	H2 GUARDRAIL - ESR-2555, REF. TAG 7
(P1)	PLANTER BED PLANTER AREA
(R1)	RET. WALL WATERPROOFING
(R2)	MEMBRANE WATERPROOFING
(T1)	20 MINUTE FIRE RATED: SOLID WOOD DOOR, SELF CLOSING
(T2)	1 HR FIRE RATED CONSTRUCTION, 1 LAYER 5/8" TYPE-X GYP. BD., @ ALL WALLS, CEILINGS, POSTS AND BEAMS. RET. BASIS
(T3)	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY ONE-HOUR-RESISTANCE RATED CONSTRUCTION OR THE ONE-HOUR-RESISTANCE RATING OF THE STAIRWAY ENCLOSING WHICHEVER IS GREATER. ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. [CBC 1019.3.3]
(T4)	ROOFING MEMBRANES - CLASS 'A' RATED ROOF COVERING SYSTEM, CAN SELECT TPO SINGLE-PLY ROOFING MEMBRANES (ESR-1461) (TYP.)
(T5)	ENDURAGATE (MFMC ER-4832) CLASS "A" WALKING DECK SURFACE OVER 30 MIL SHEDR. LIQ. APPLIED PLY. MEMB. (TYP.)
(T6)	R-30 ROOFING INSULATION PER ENERGY REPORT
(T7)	MASONRY NOTES - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING REINFO & INSTALLATION
(T8)	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS SIZES & CONNECTIONS
(T9)	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES, & CONNECTIONS
(T10)	GUTTERS & DOWN SPOUTS
(T11)	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP)
(T12)	FLASHING AND SHEET METAL
(T13)	SEALANTS AND CAULKING
(T14)	ALUMINUM DOORS & FRAMES
(T15)	ALUMINUM WINDOWS
(T16)	FRAMELESS GLASS
(T17)	FINISH HARDWARE
(T18)	METAL WALL CLADDING
(T19)	BOARD FORMED CONCRETE
(T20)	HARDWOOD FLOORING
(T21)	CERAMIC TILE
(T22)	GYPSUM WALLBOARD SYSTEM
(T23)	SHOWER ENCLOSURES
(T24)	PREFABRICATED FIREPLACE: 72" MODRE 185 FIREPLACE, ANSI Z21.50-2008
(T25)	BATHROOM ACCESSORIES - REFER TO ACCESSORIES SCHEDULE
(T26)	WINDOW COVERINGS
(T27)	SPECIAL CONSTRUCTION
(T28)	FIRE PROTECTION SPRINKLER SYSTEM
(T29)	TV ABOVE
(T30)	ELEVATOR-RESIDENTIAL, ELEVATOR TO COMPLY WITH ASME A17.1/CSA-B44
(T31)	BUILDING BEYOND
(T32)	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
(T33)	NOTE: 5 FT. POOL FENCING ENCLOSURE W/ 4 FT. SELF CLOSING, SELF LATCHING, RE: A4.2 FOR POOL BARRIER SURROUND
(T34)	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
(T35)	BATHROOM EXHAUST FAN WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP)
(T36)	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 (150 in CHC)
(T37)	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (E). THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 FAN CAPACITY TO BE A MINIMUM OF 150 CFM
(T38)	CHIMNEY FLUE FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
(T39)	DRYER VENT EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS OR GRILLES WITH A OPENING OF 1/4" - 1/2" IN ANY DIMENSION.
(T40)	DRYER VENT PATH / EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3'-0" FROM OPENINGS INTO THE BUILDING (§ 504.5 CMC)
(E1)	HVAC SYSTEM - CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
(E2)	HVAC SYSTEM - DUCT/DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
(E3)	ELECTRICAL - ELECTRICAL METER REFER TO ELECTRICAL ENGINEERING PLANS
(E4)	ELECTRICAL - ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
(E5)	ELECTRICAL - RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
(E6)	ELECTRICAL - LIGHTING FIXTURE/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & RE:HIGHLIGHTING PLANS
(E7)	LOW VOLTAGE COMMUNICATIONS SYSTEM
(E8)	LOW VOLTAGE DATA SYSTEM
(E9)	ELEC. VEHICLE CHARGING STATION
(E10)	MINIMUM OF 1" I.D. - LISTED RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED 208/240 VOLT BRANCH CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV CAPABLE. [CBC 4.106.4]
(E11)	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.
(E12)	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREAS [CRC 210.52 (B)(1)]
(E13)	All new one- and two-family dwelling units, the service panels and/or sub panels shall have the capacity of an additional load not less than 5 kVA for every 2,000 square feet of living space designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub panels shall have space(s) reserved/designated to permit installation of the branch circuit overcurrent protective device(s) for the energy storage system. [LAGBC 220.4.1]
(E14)	WP GFCI RECEPT +20" FROM POOL
(E15)	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP.) DOWN CAST, SHIELDED
(P1)	PLUMBING - WATER METER REFER TO PLUMBING ENGINEERING PLANS
(P2)	PLUMBING - SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
(P3)	PLUMBING - WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
(P4)	PLUMBING FIXTURE - REFER TO PLUMBING ENGINEERING PLANS
(P5)	WASTEWATER TREATMENT EQUIPMENT LOCATION - REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS)

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS

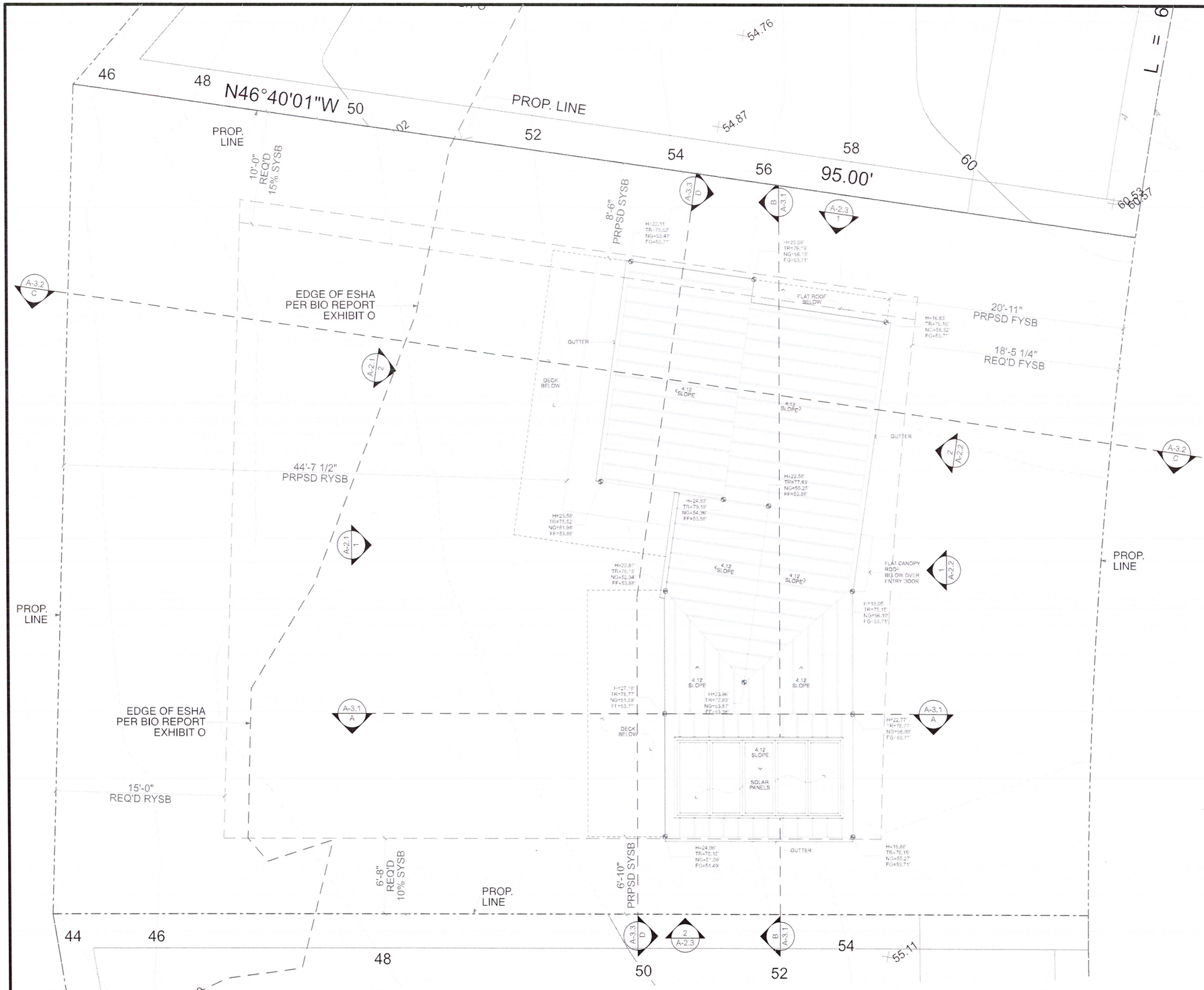
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED SECOND FLOOR PLAN

DRAWING NO.
A-1.3

PROJECT NO.	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.



KEYNOTES

01	DEMOLISH
02	SELECTIVE DEMOLITION ONLY
03	ALIGN
04	GRADING - REFER TO GRADING PLANS
05	GRID LINE @ EXTERIOR WALLS REPRESENT TO FACE OF CONC. U.O.N.
06	42 GUARDRAIL, ESR-2585, RFR, TAS-7
07	PLANTER BED / PLANTER AREA
08	RET. WALL WATERPROOFING
09	MEMBRANE WATERPROOFING
11	20 MINUTE FIRE RATED, SOLID WOOD DOOR, SELF CLOSING
12	1 HR FIRE RATED CONSTRUCTION, 1 LAYER 5/8" TYPE-X GYP. BD. @ ALL WALLS, CEILINGS, POSTS AND BEAMS, RET. BASE
13	THE WALLS AND SOFFITS WITHIN ENCLOSED USABLE SPACES UNDER ENCLOSED AND UNENCLOSED STAIRWAYS SHALL BE PROTECTED BY NOT LESS THAN 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION OR THE FIRE-RESISTANCE RATING OF THE STAIRWAY ENCLOSING, WHICHEVER IS GREATER. ACCESS TO THE ENCLOSED SPACE SHALL NOT BE DIRECTLY FROM WITHIN THE STAIR ENCLOSURE. (CBC 1009.5.3)
14	ROOFING MEMBRANES - CLASS 'A' RATED ROOF CANTILEVER SYSTEM, CAN BE 1 PLY SINGLE-PLY ROOFING MEMBRANES (ESR-1463) (TYP.)
15	ENDURAKOTE (SPRAY ON) 4837 CLASS "A" WALKING DECK SURFACE OVER 30 MIL SHEAR LIC. APPLIED PG WARR. (TYP.)
16	R-XXX BUILDING INSULATION, PER ENERGY REPORT
17	MASONRY NOTES - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR SIZING, REINFO & INSTALLATION
18	STRUCTURAL STEEL - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES & CONNECTIONS
19	ROUGH FRAMING/CARPENTRY - REFER TO STRUCTURAL ENGINEERING PLANS/SPECS FOR MEMBERS, SIZES & CONNECTIONS
20	GUTTERS & DOWN SPOUTS
21	DRAIN W/ OVERFLOW- OVERFLOW TO BE 2" ABOVE MAIN DRAIN (TYP)
22	FLASHING AND SHEET METAL
23	SEALANTS AND CAULKING
24	ALUMINUM DOORS & FRAMES
25	ALUMINUM WINDOWS
26	FRAMELESS GLASS
27	FINISH HARDWARE
29	METAL WALL CLADDING
29	BOARD FORMED CONCRETE
30	HARDWOOD FLOORING
31	CERAMIC TILE
32	GYPSUM WALLBOARD SYSTEM
33	SHOWER ENCLOSURES
34	PREFABRICATED FIREPLACE 72" MODENE 185 FIREPLACE, ANSI Z21.50-2006
35	BATHROOM ACCESSORIES - REFER TO ACCESSORIES SCHEDULE
36	WINDOW COVERINGS
37	SPECIAL CONSTRUCTION
38	FIRE PROTECTION SPRINKLER SYSTEM
39	TV ABOVE
40	ELEVATOR-RESIDENTIAL, ELEVATOR TO COMPLY WITH ASME A17.1/CSA B44
41	BUILDING BEYOND
42	SUCTION OUTLETS TO BE EQUIPPED WITH ANTI-ENTRAPMENT GRATES
43	NOTE: 5 FT. POOL FENCING ENCLOSURE W/ 4' W, X 5' H., SELF CLOSING, SELF LATCHING, HE. A-C. FOR POOL BARRIER SURROUND
44	EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER OR SPA, AS SOURCE OF MOISTURE, SHALL HAVE AN EXHAUST DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
45	BATHROOM EXHAUST FAN WIL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506 (TYP)
46	EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 (1508) CEC
47	WHOLE HOUSE CONTINUOUSLY OPERATING EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE CALCULATED ACCORDINGLY TO ASHRAE STANDARD 62.2 EQUATION 4.1 (a). THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1 FAN CAPACITY TO BE A MINIMUM OF 150 CFM
48	CHIMNEY FLUE, FRAMING CAPPED W. SPARK ARRESTOR & SHROUD (TYP.)
49	DRYER VENT EXHAUST AND INTAKE OPENINGS TERMINATING OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS OR GRILLES WITH OPENING OF 1/4" - 1/2" IN ANY DIMENSION.
50	DRYER VENT PATH / EXHAUST DUCT SHALL TERMINATE NO LESS THAN 3-0" FROM OPENING INTO THE BUILDING (§ 504.5 CMC)
51	HVAC SYSTEM - CENTRAL EQUIPMENT LOCATION REFER TO MECHANICAL ENGINEERING PLANS
52	HVAC SYSTEM - DUCT/DIFFUSER OR REGISTER REFER TO MECHANICAL ENGINEERING PLANS
53	ELECTRICAL - ELECTRICAL METER REFER TO ELECTRICAL ENGINEERING PLANS
54	ELECTRICAL - ELECTRICAL PANEL/SUBPANEL REFER TO ELECTRICAL ENGINEERING PLANS
55	ELECTRICAL - RECEPTACLE REFER TO ELECTRICAL ENGINEERING PLANS
56	ELECTRICAL - LIGHTING FIXTURES/SWITCH REFER TO ELECTRICAL ENGINEERING PLANS & RCP/LIGHTING PLANS
57	LOW VOLTAGE COMMUNICATIONS SYSTEM
58	LOW VOLTAGE DATA SYSTEM
59	ELEC. VEHICLE CHARGING STATION
60	MINIMUM OF 1" CONDUIT RACEWAY TO BE INSTALLED TO ACCOMMODATE A DEDICATED 208/240 VOLT BRANCH CIRCUIT FOR CHARGING SYSTEM. - SHALL BE PERMANENT AND VISIBLE MARKED EV CAPABLE. (CBC 4.106.4)
61	THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.
62	A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREAS (CRC 1107.5 (2) C)
63	All new one- and two-family dwelling units, the service panels and/or sub panels shall have the capacity of an additional load not less than 5 kW for every 2,000 square feet of living space, designated to accommodate future energy storage system(s). This load shall be considered continuous and demand factors shall not apply. Additionally, the service panels and/or sub panels shall have space(s) reserved/dedicated to permit installation of the branch circuit overcurrent protective device(s) for the energy storage system. (LACEC 220.61)
64	WP OPTR HR. +20' FROM POOL
65	EXTERIOR LIGHTS TO COMPLY WITH DARK SKY ORDINANCE (TYP.) DOWN CAST, SHIELDED
66	PLUMBING - WATER METER REFER TO PLUMBING ENGINEERING PLANS
67	PLUMBING - SEPTIC/SEWER SYSTEM REFER TO PLUMBING ENGINEERING PLANS
68	PLUMBING - WATER FILTRATION SYSTEM REFER TO PLUMBING ENGINEERING PLANS
69	PLUMBING FIXTURE - REFER TO PLUMBING ENGINEERING PLANS
70	WASTEWATER TREATMENT EQUIPMENT LOCATION - REFER TO WASTEWATER TREATMENT & PLUMBING ENGINEERING PLANS

NOTES

1. THE DWELLING SHALL HAVE A LOW FLOW 1.6 GALLON WATER CLOSETS (TOILETS).

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2005
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

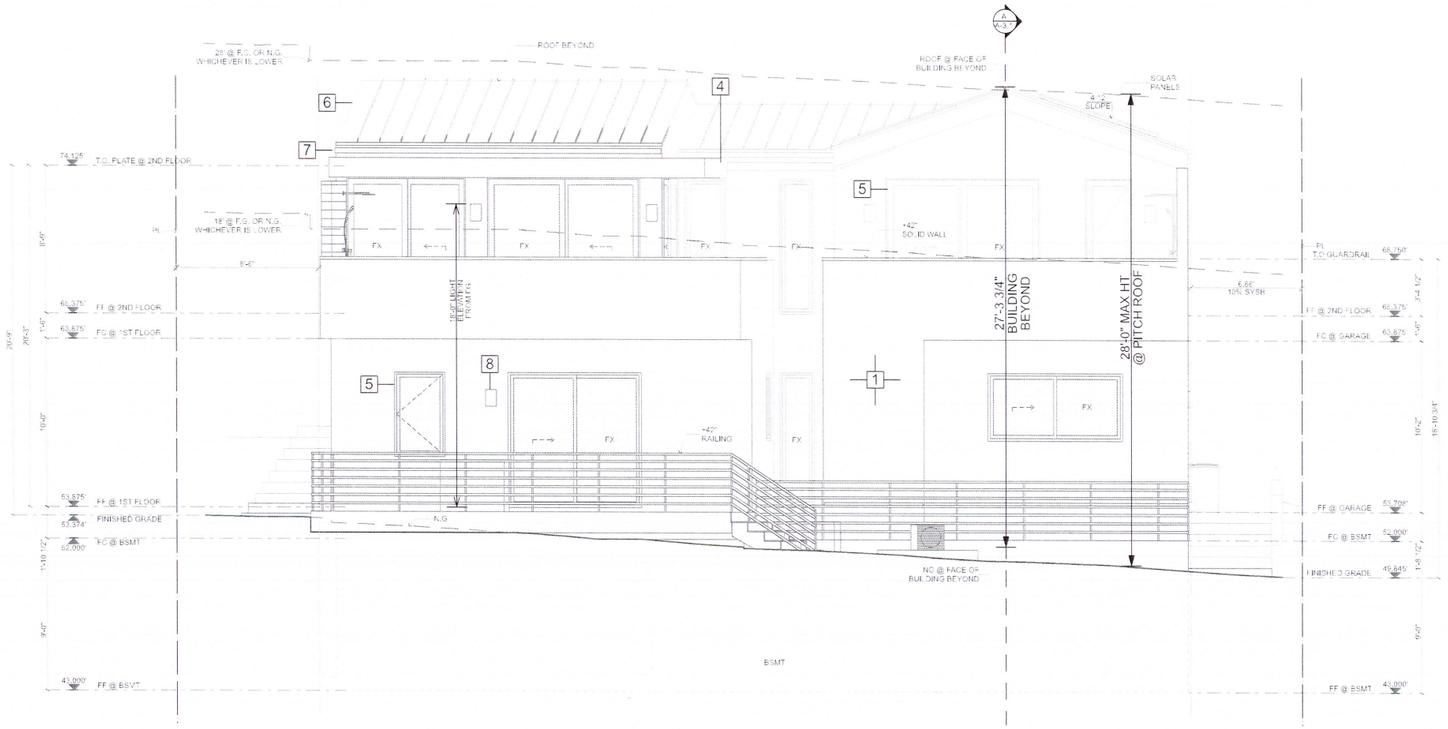
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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ROOF PLAN

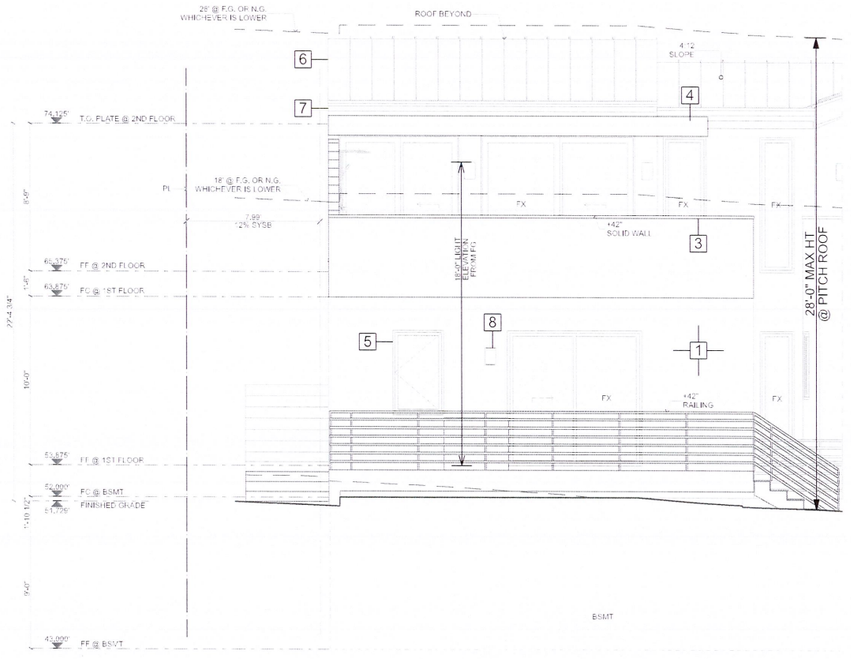
DRAWING NO.
A-1.4

PROJECT NO.	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	1/4" = 1'-0"
DRAWN BY	D.W.B.



WEST ELEVATION 1

SCALE: 1/4" = 1'-0"



WEST PARTIAL ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" CEDIAL WOOD	TBD
3	FLASHING CAP	SHEET METAL SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TBD	TBD	TBD	TBD
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	60 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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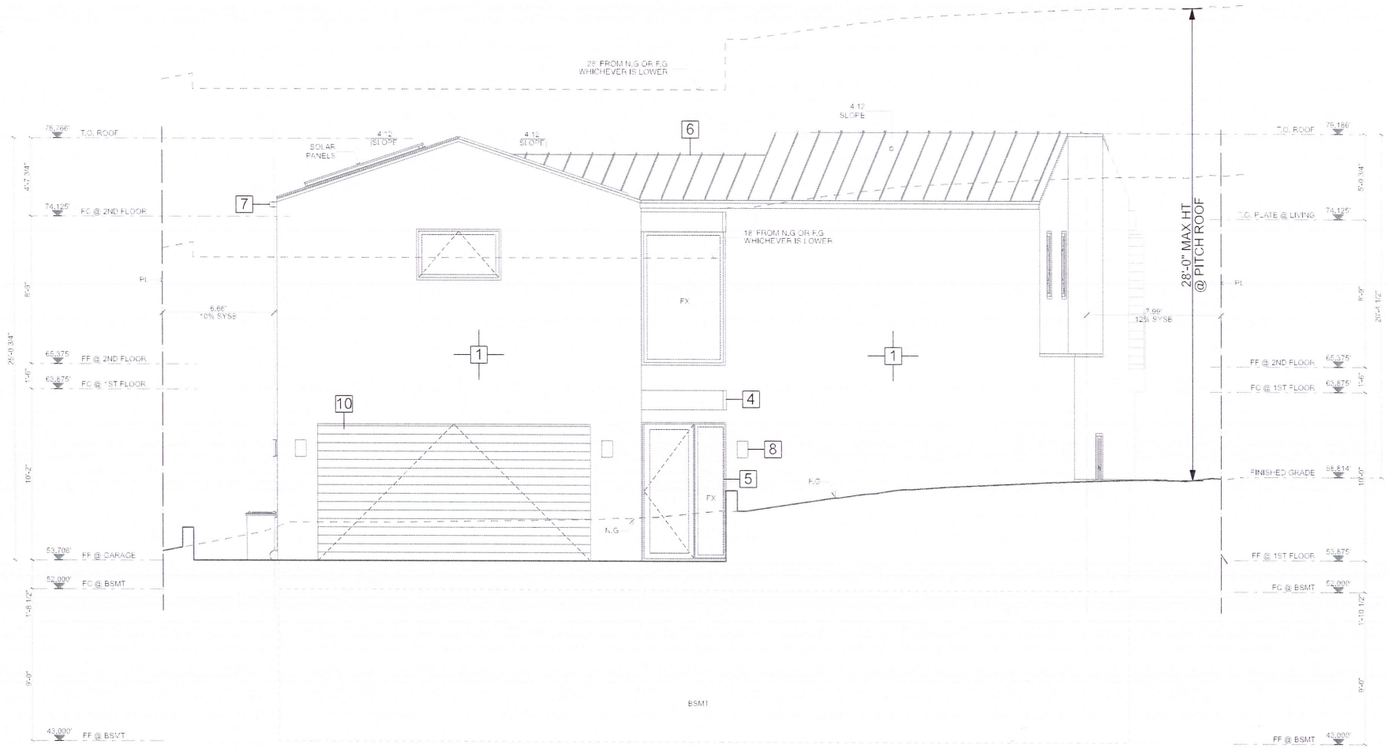
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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ELEVATIONS WEST

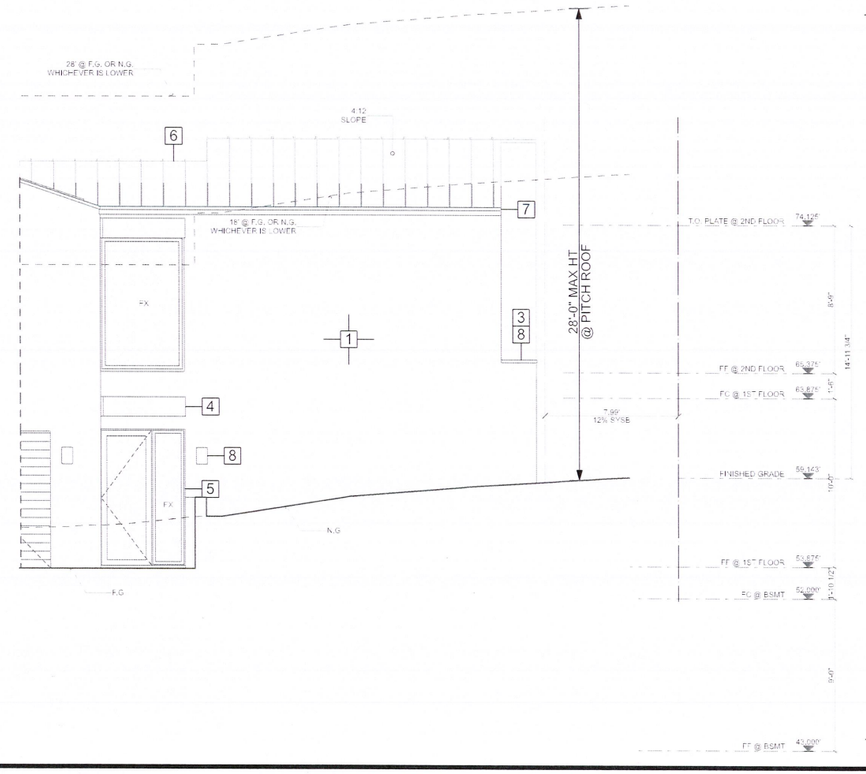
DRAWING NO.
A-2.1

PROJECT NO:	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



EAST ELEVATION 1

SCALE: 1/4" = 1'-0"



EAST PARTIAL ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" CEDIAL WOOD	TBD
3	FLASHING CAP	SHEET METAL SUBCONTRACTOR	20 OZ 3'S MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL SUBCONTRACTOR	20 OZ 3'S MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TBD	TBD	TBD	TBD
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	60 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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	05/12/22	REVISIONS

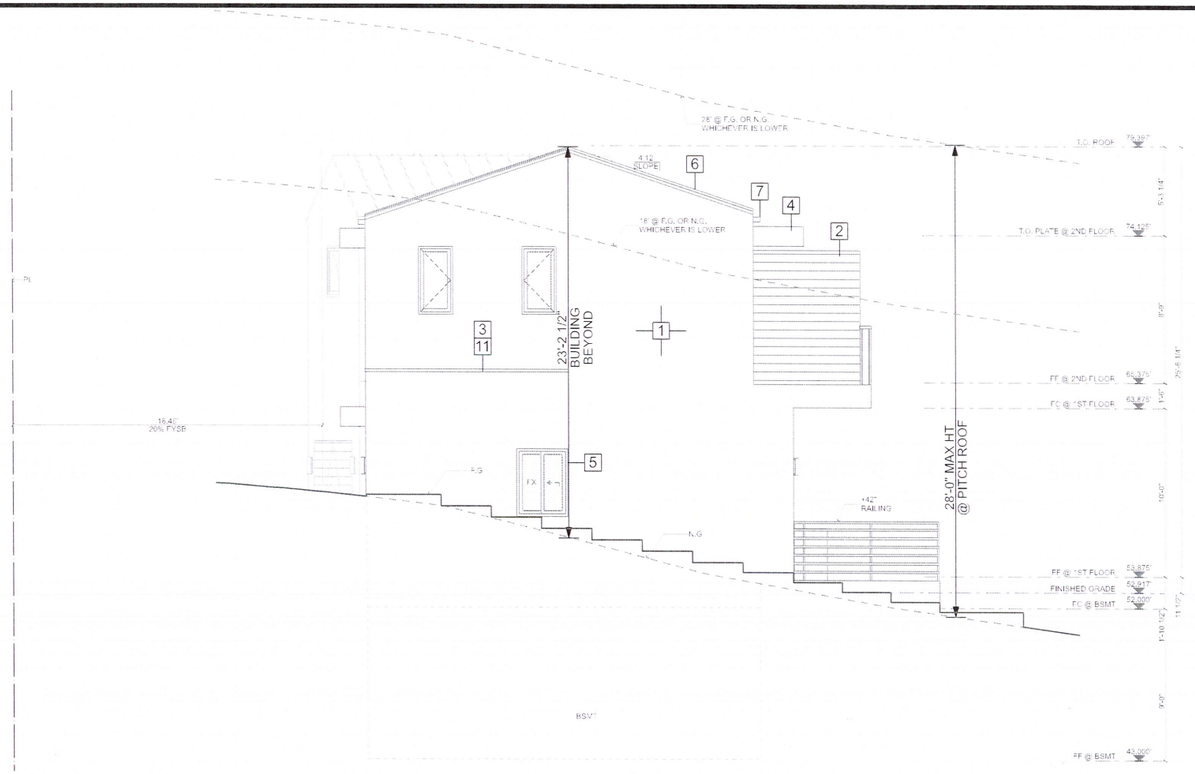
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24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ELEVATIONS EAST

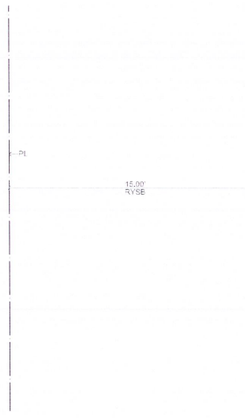
DRAWING NO.
A-2.2

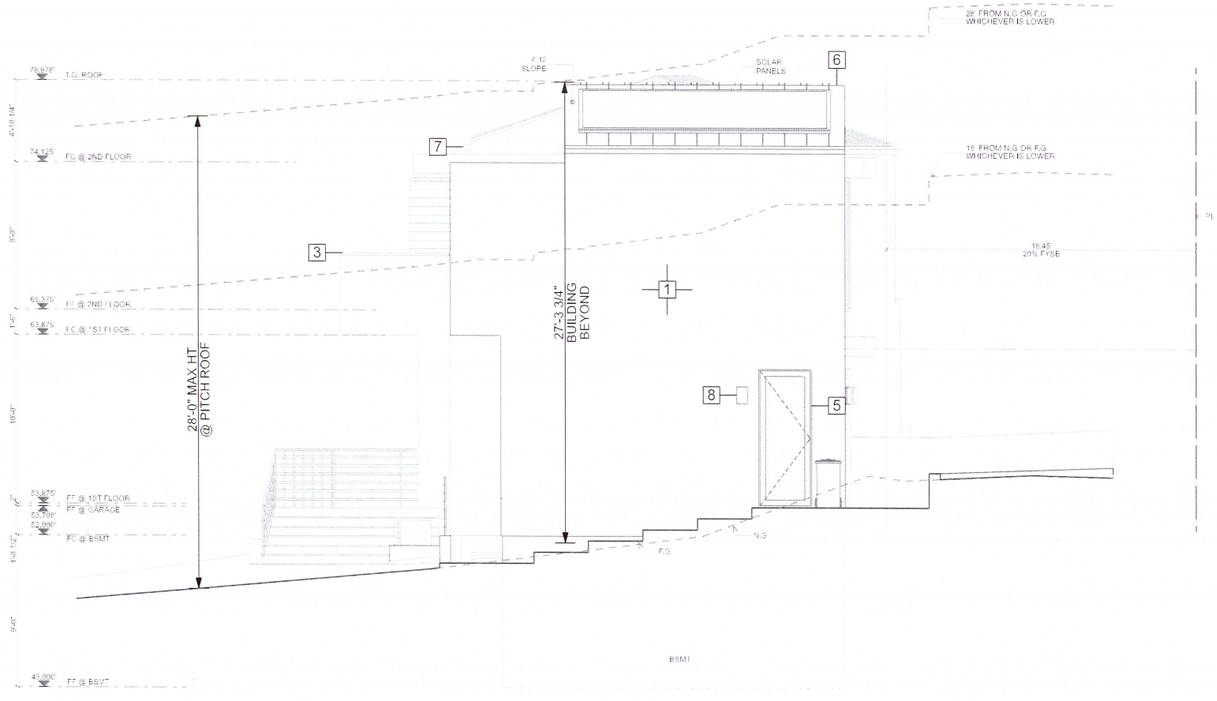
PROJECT NO:	Project No. 15754
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



NORTH ELEVATION 1

SCALE: 1/4" = 1'-0"





SOUTH ELEVATION 2

SCALE: 1/4" = 1'-0"

MATERIAL SCHEDULE

ITEM #	ITEM DESCRIPTION	MANUFACTURER	SPECIFICATIONS	FINISH	COLOR
1	STUCCO	LA HABRA	CALIFORNIA 2 COAT	SMOOTHE	TBD
2	WOOD SIDING	TBD	TBD	6" GEDAL WOOD	TBD
3	FLASHING CAP	SHEET METAL SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTED	PAINTED TO MATCH ADJ WALL WHITE
4	METAL CLAD (OVERHANG)	SHEET METAL SUBCONTRACTOR	20 OZ 315 MARINE GRADE STAINLESS STEEL	STAINLESS-PAINTEDTBD	TBD
5	EXTERIOR DOOR AND WINDOWS	TBD	TBD	TBD	TBD
6	ROOFING METAL	CUSTOM BUILT METALS	STANDING SEAM ZINCALUME	MATTE	SURFMIST (GALVANIZED)
7	GUTTERS & DOWNSPOUT	BY BUILDER	TBD	TBD	TBD
8	LIGHTING	TBD	TBD	TBD	TBD
9	WEEP SCREED & FLASHINGS	BY BUILDER	TO BE INSTALLED 4" ABOVE GRAD OR 2" ABOVE HARD SURFACE	COPPER	NATURAL PATINA
10	GARAGE DOOR	TBD	TBD	TBD	TBD
11	FLAT ROOF	CARLISLE CONSTRUCTION MATERIALS, LLC	60 MIL	SURE-WELD TPO	WHITE

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

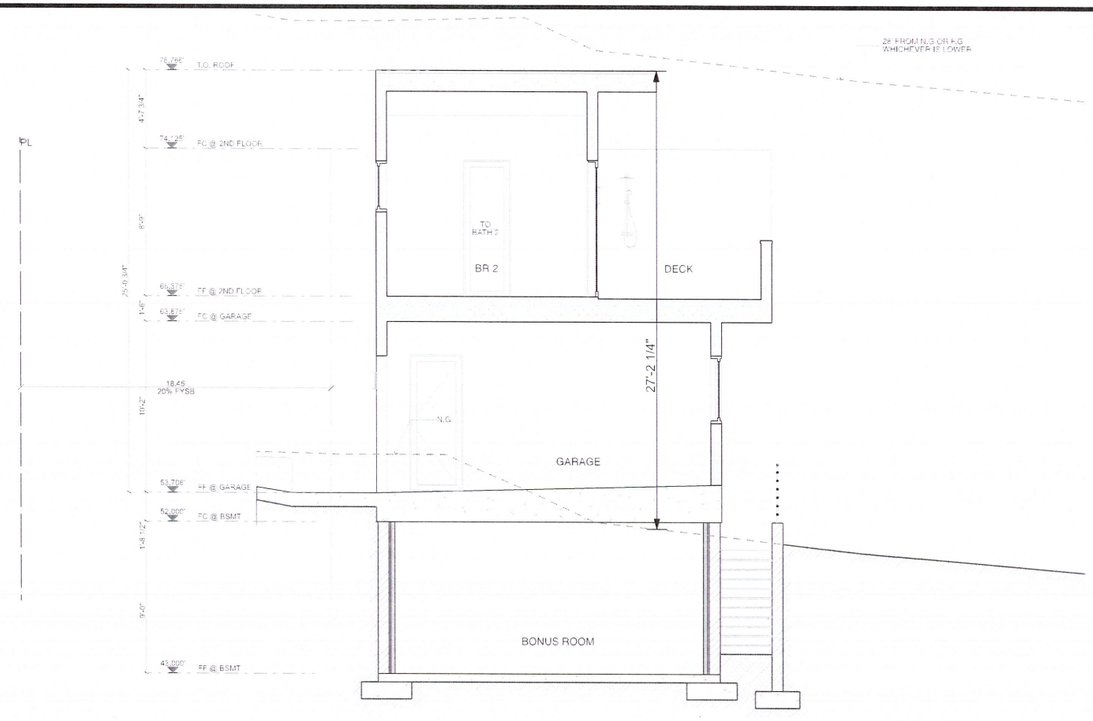
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED ELEVATIONS NORTH AND SOUTH

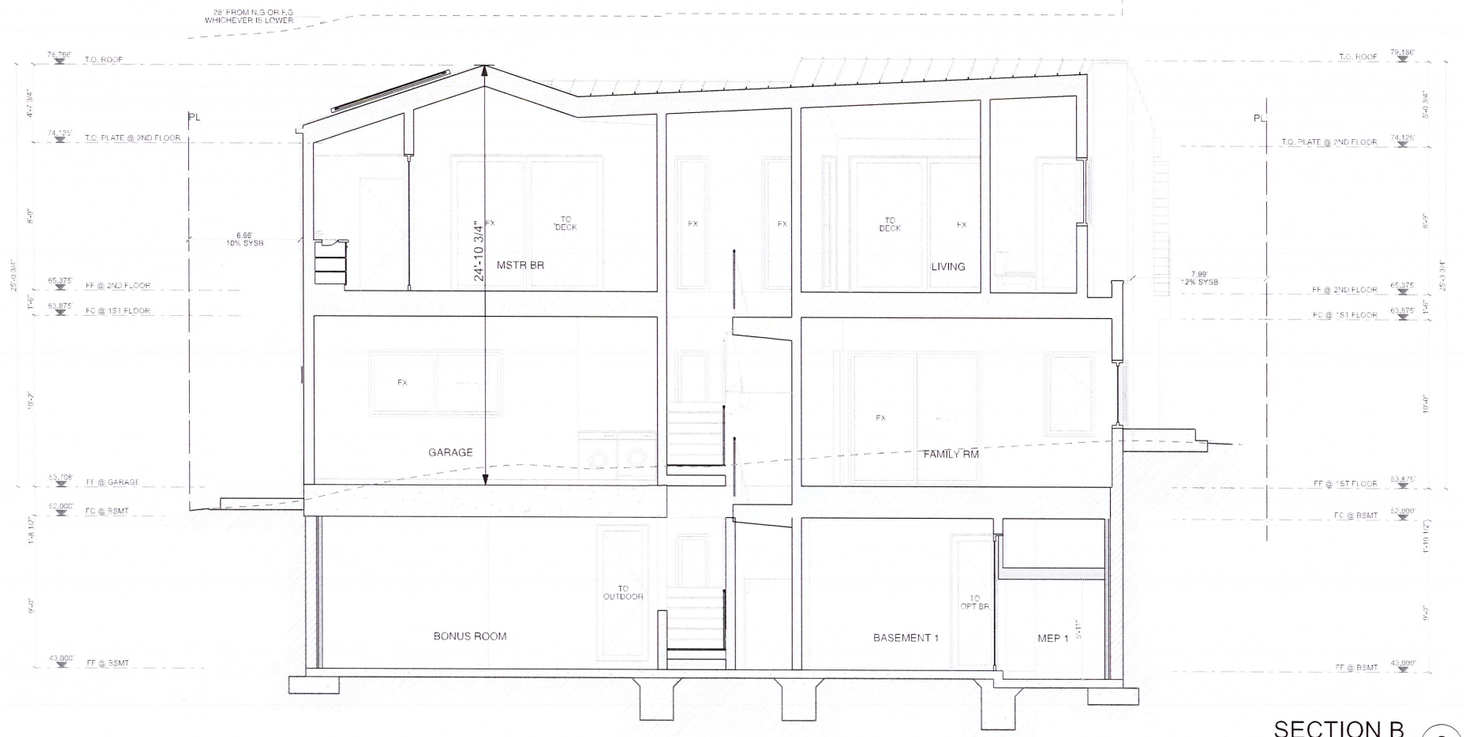
DRAWING NO.
A-2.3

PROJECT NO:	Project No. 15754
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



SECTION A 1

SCALE 1/4" = 1'-0"



SECTION B 2

SCALE 1/4" = 1'-0"

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

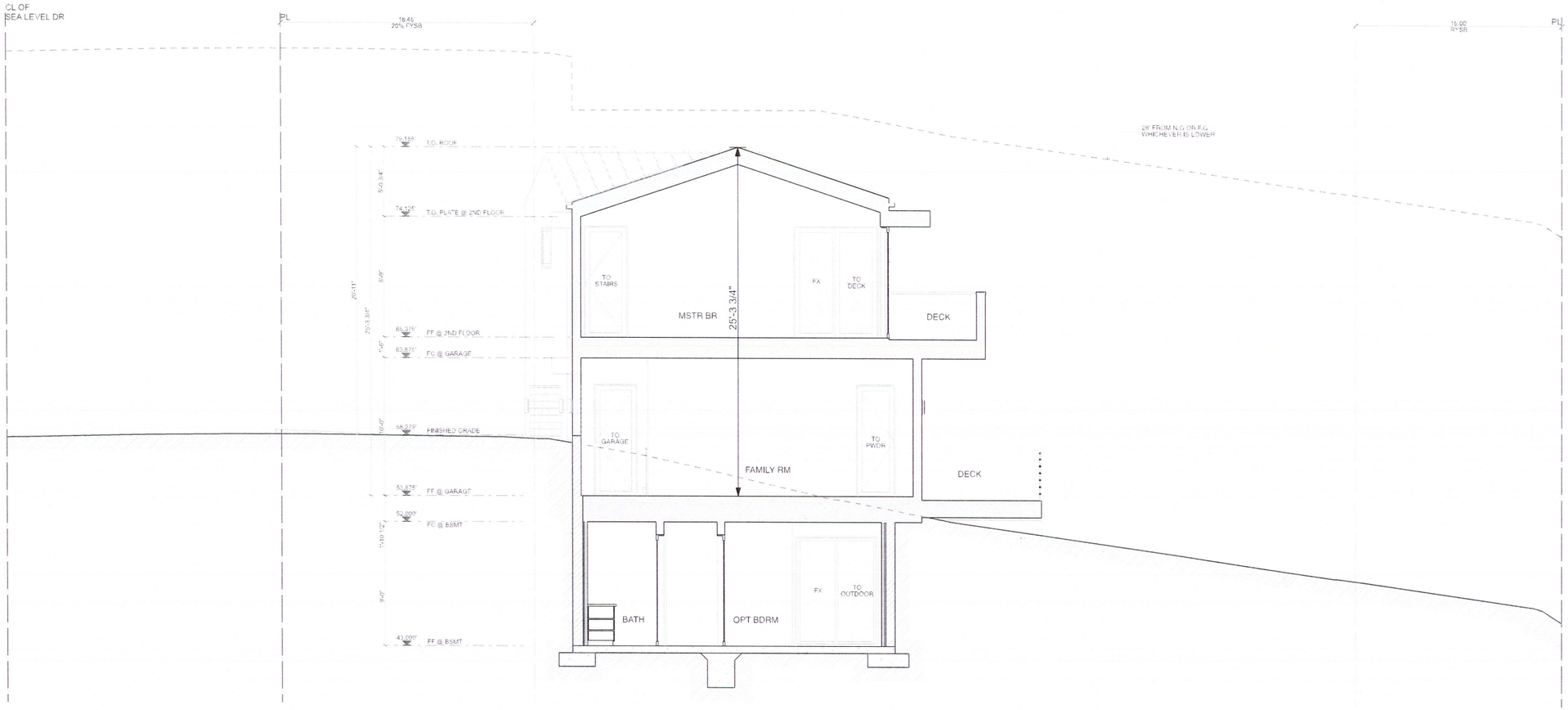
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED
SECTIONS A AND B

DRAWING NO.
A-3.1

PROJECT NO.	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



SECTION C 1

SCALE 1/4" = 1'-0"

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL
11/30/2025
STATE OF CALIFORNIA

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

BURDGE ARCHITECTS

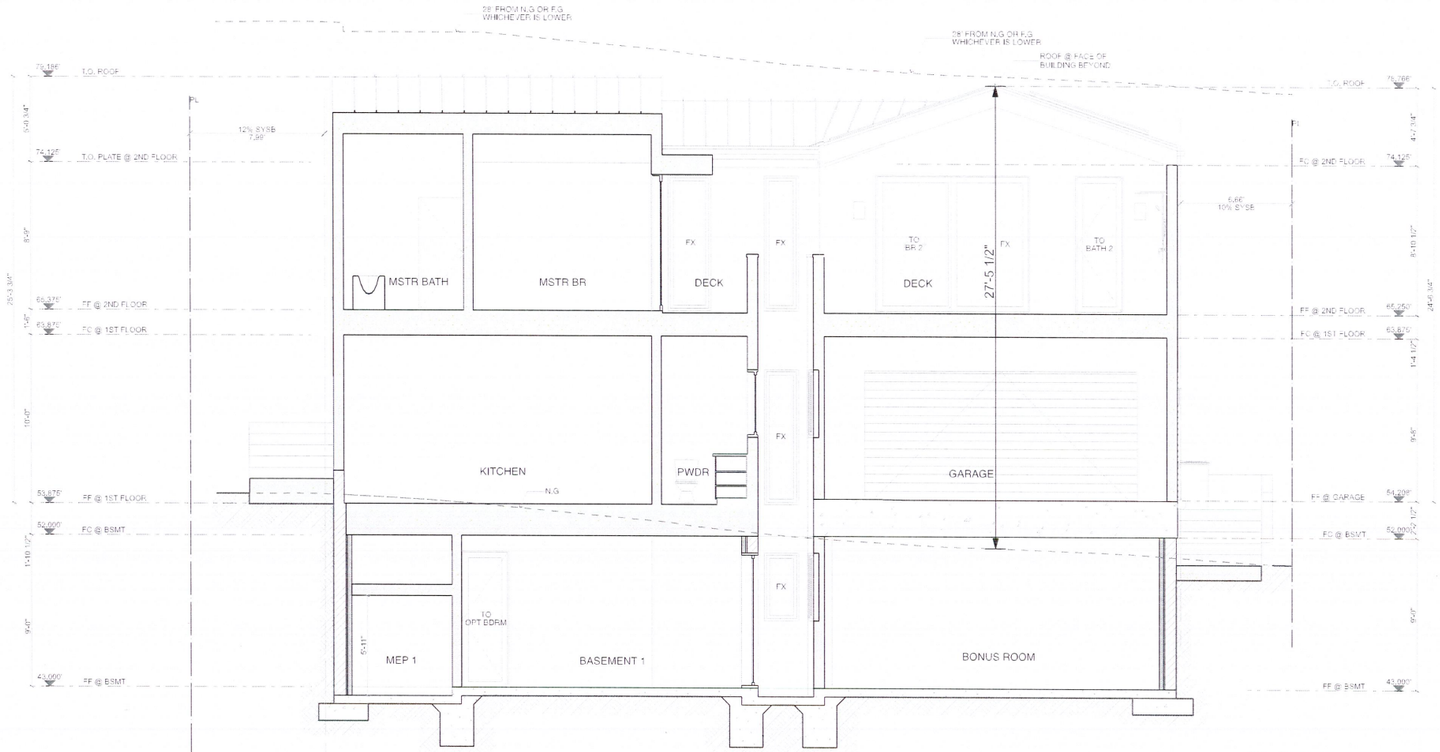
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

PROPOSED SECTION C

DRAWING NO.
A-3.2

PROJECT NO.	Project No. 15754
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



SECTION D 1

SCALE: 1/4" = 1'-0"

PETERSON RESIDENCE

31882 SEA LEVEL DR
MALIBU, CA 90265

LICENSED ARCHITECT
DOUGLAS W. BURDGE
C-16899
RENEWAL 11/30/2025
STATE OF CALIFORNIA

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

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MARK	DATE	DESCRIPTION
	05/12/22	REVISIONS

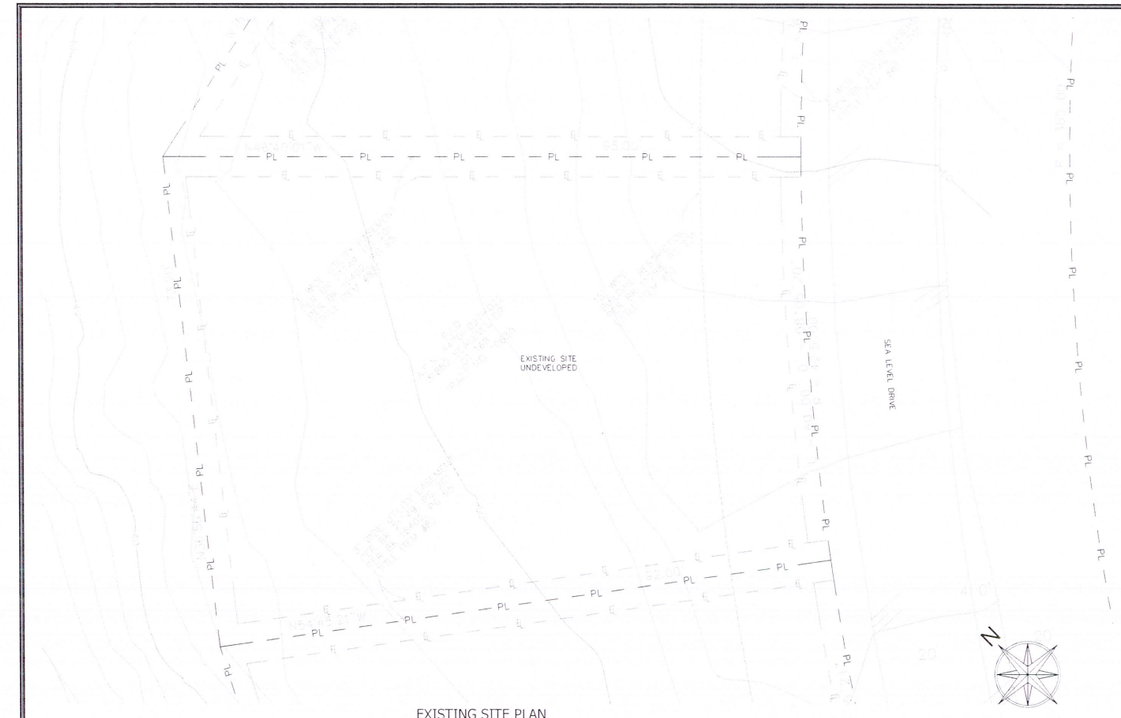
BURDGE ARCHITECTS
24911 PACIFIC COAST HWY.
MALIBU, CA 90265
TEL. 310-456-5905

SHEET TITLE

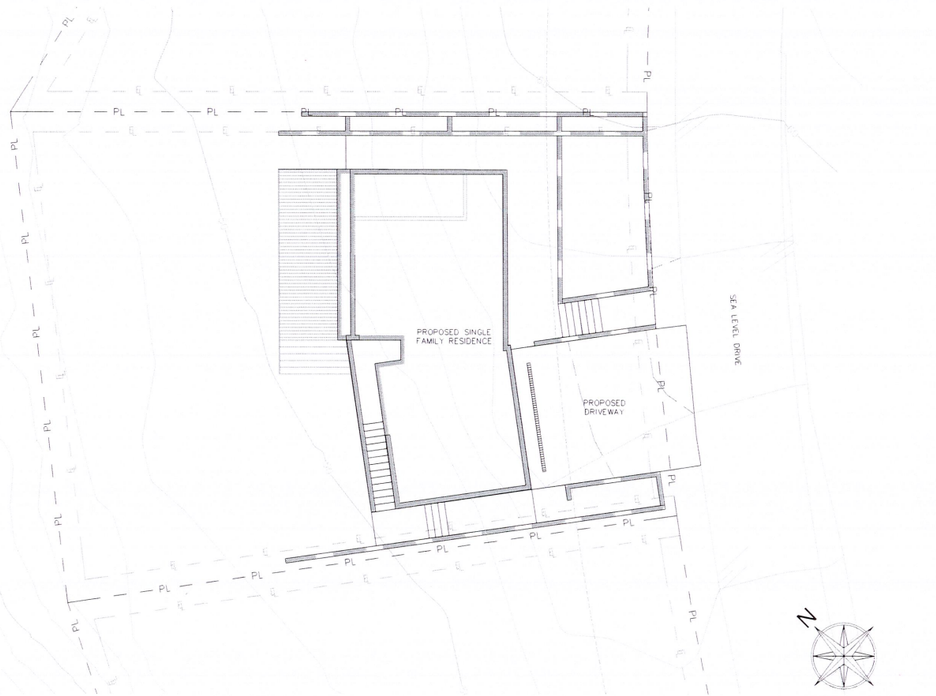
PROPOSED SECTION D

DRAWING NO.
A-3.3

PROJECT NO.	Project No. 1575-6
PROJECT	PETERSON RESIDENCE
DATE	Plot Date: 2025/02/12
SCALE	AS NOTED
DRAWN BY	D.W.B.



EXISTING SITE PLAN



PROPOSED SITE PLAN

PUBLIC WORKS DEPARTMENT GENERAL NOTES

1. ALL WORK SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) "GREEN BOOK."
2. CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (CAL-OSHA) SAFETY STANDARDS. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM SAID DIVISION.
3. CONTRACTOR SHALL CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 FOR PRE-CONSTRUCTION MEETING PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR GRADING OPERATIONS. CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS INSPECTOR 48 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION AND 24 HOURS IN ADVANCE OF SPECIFIC INSPECTION NEEDS DURING THE COURSE OF THE WORK.
4. NO IMPROVEMENTS ARE PROPOSED WITHIN THE PUBLIC RIGHT-OF-WAY.
5. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CITY PUBLIC RIGHT OF WAY SHALL REQUIRE A CITY ENCROACHMENT PERMIT. CALL THE PUBLIC WORKS INSPECTOR AT (310) 456-2489, EXT. 341 TO APPLY FOR A PERMIT.
6. STORAGE OF ANY CONSTRUCTION MATERIALS, CONSTRUCTION TRAILER, AND/OR PARKING AND ANY WORK WITHIN THE CALTRANS PUBLIC RIGHT OF WAY SHALL REQUIRE A CALTRANS ENCROACHMENT PERMIT. SUBMIT A COPY OF THE CALTRANS ENCROACHMENT PERMIT TO THE PUBLIC WORKS DEPARTMENT.
7. ALL WORK SHALL BE PERFORMED DURING CITY WORKING HOURS AND IN COMPLIANCE WITH THESE PLANS.
8. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
9. CONTRACTOR SHALL LOCATE, PROTECT, AND SAVE ANY AND ALL SURVEY MONUMENTS THAT WILL BE OR MAY BE DAMAGED OR DESTROYED BY THEIR OPERATIONS. ONCE FOUND, THE CONTRACTOR SHALL THEN NOTIFY BOTH THE DEVELOPER'S SUPERVISING CIVIL ENGINEER AND THE PUBLIC WORKS INSPECTOR. THE SUPERVISING CIVIL ENGINEER SHALL RESET ALL SAID MONUMENTS PER THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY INSOFAR AS IT MAY BE AFFECTED BY THESE OPERATIONS.
11. EXISTING TRAFFIC SIGNS ARE NOT TO BE REMOVED WITHOUT PRIOR NOTIFICATION AND APPROVAL OF THE CITY ENGINEER. AS A MINIMUM, CONSTRUCTION WORK ZONE TRAFFIC SIGNS AND STRIPING SHALL BE FURNISHED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (THE "WATCH MANUAL"), PUBLISHED BY BNI BUILDING NEWS, INC. A TRAFFIC CONTROL PLAN, PREPARED BY THE DEVELOPER, MAY BE REQUIRED BY THE CITY.
12. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES.
13. EROSION CONTROL PLANS SHALL BE PROVIDED FOR ALL PROJECTS. GRADING AND CLEARING IS PROHIBITED FROM NOVEMBER 1 TO MARCH 31 FOR ALL DEVELOPMENTS WITHIN OR ADJACENT TO ESHA AND/OR INCLUDING GRADING ON SLOPES GREATER THAN 4:1.
14. ALL UNDERGROUND UTILITIES AND SERVICE LATERALS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS, AND PAVING UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER.
15. THE DEVELOPER SHALL COMPLY WITH NPDES REQUIREMENTS. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES AND SHALL BE KEPT UPDATED.
16. ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL/SOILS ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED), AND CONTAINED IN THE REPORTS REFERENCED HEREON, AS APPROVED OR CONDITIONED BY THE CITY, SHALL BE CONSIDERED A PART OF THE GRADING PLAN.
17. ALL STORM DRAIN PIPE WITHIN THE PUBLIC RIGHT-OF-WAY AND EASEMENTS SHALL BE REINFORCED CONCRETE PIPE (RCP).
18. TERRACE DRAINS, INTERCEPTOR DRAINS, AND DOWN DRAINS SHALL BE CONSTRUCTED OF 3" P.C.C. REINFORCED WITH 6"X6" X #10 W.W.M. AND SHALL BE EITHER SEMICIRCULAR OR TRIANGULAR CROSS SECTION. CONCRETE COLOR SHALL BE "OMAHA TAN" OR APPROVED EQUIVALENT.
19. GRADING QUANTITIES: SEE GRADING YARDAGE VERIFICATION FORM HEREON
20. TOTAL DISTURBED AREA 0.2 ACRES (INCLUDING GRADING, CLEARING, AND LANDSCAPING AREA)
    TOTAL EXISTING IMPERVIOUS SURFACE AREA 0 SQ. FT.
    TOTAL PROPOSED IMPERVIOUS SURFACE AREA 1442 SQ. FT.
    FLOOD ZONE ON FIRM: X (FEMA MAP: 06037C1511G EFF. APRIL 21, 2021)
    BASE FLOOD ELEVATION: N/A FT.
21. ALL SLOPES ON PRIVATE PROPERTY ADJOINING STREETS, DRAINAGE CHANNELS, OR OTHER PUBLIC FACILITIES SHALL BE GRADED NOT STEEPER THAN 2:1 FOR CUT AND FILL UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER ON RECOMMENDATION OF THE PROJECT'S GEOTECHNICAL/SOILS CONSULTANT.
22. THE APPLICANT SHALL LABEL ALL CITY/COUNTY STORM DRAIN INLETS WITHIN 250 FEET FROM EACH PROPERTY LINE PER THE CITY OF MALIBU'S STANDARD LABEL TEMPLATE.

PUBLIC WORKS COMMENT SHEET NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 EACH YEAR PER LIP SECTION 17.2.1. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER
- EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH LIP, SECTION 8.3.

GEOTECHNICAL COMMENT SHEET NOTE(S)

- PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF ALL DENSITY TESTS, LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACKDRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACKDRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

PLANNING COMMISSION APPROVAL CONDITION NOTE(S)

- GRADING PERMITS SHALL NOT BE ISSUED BETWEEN NOVEMBER 1 AND MARCH 31 OF EACH YEAR FOR PROJECTS WITHIN OR ADJACENT TO ESHA AND FOR PROJECTS THAT INCLUDE GRADING ON SLOPES GREATER THAN 4 TO 1 PER LIP SECTION 8.4. PROJECTS APPROVED FOR GRADING PERMIT SHALL NOT RECEIVE GRADING PERMITS UNLESS THE PROJECT CAN BE ROUGH GRADED BEFORE NOVEMBER 1.

PROJECT NOTES:

OWNER INFORMATION:

JEFF PETERSON
2498 LATIGO BAY VIEW DRIVE
MALIBU, CA 90265

ALL SURVEY DATA OBTAINED FROM:

10/05-06/21
05/13/22
LAND AND AIR SURVEYING
22741 PACIFIC COAST HIGHWAY
SUITE #490A
MALIBU, CA 90265
(310)456-9381

BENCHMARK:

MALIBU 90.567' (2008) CS MON 6IN DN 37FT N C/L PACIFIC COAST HWY & 278FT W/O DY-5460 BROAD BEACH RD 1.5MI E/O DECKER RD 33FT W/O DR TO HSE #31905 MKD (DUME POINT D-E 1950) SURVEY MARKER POST 2FT N

PROJECT GEOLOGY/GEOTECHNICAL REPORTS:

GEOSYSTEMS, INC
1545 VICTORY BLVD. 2ND. FLOOR
GLENDALE, CALIFORNIA 91201
(818) 500-9533

REPORT DATE(S): MARCH 13, 2023

GENERAL NOTES:

1. PROTECTION OF SENSITIVE OR ENDANGERED SPECIES PER BIOLOGY STUDY (IF APPLICABLE) SHALL BE MAINTAINED AT ALL TIMES.
2. A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE STORMWATER APPURTENANCES AND SHEET FLOW WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE. AHSIRT ENGINEERING INC. IS NOT A GEOTECHNICAL ENGINEERING FIRM, THEREFORE, WE CAN NOT PREDICT AND/OR DETERMINE THE STABILITY OF THE EXISTING SLOPE.
3. ALL DIMENSIONS, GRADES, EXISTING AND PROPOSED UTILITIES, EXISTING AND PROPOSED STRUCTURES, AND EXISTING AND PROPOSED APPURTENANCES SHALL BE VERIFIED AND LOCATED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS SHOWING ANY CONFLICTS LOCATED DURING CONSTRUCTION AND/OR PRE-BID INSPECTIONS.

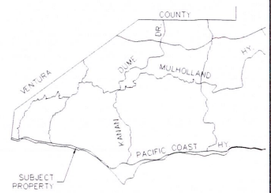
INSPECTION NOTES:

ALL CONSTRUCTION PROJECTS WITHIN THE CITY OF MALIBU WITH A GRADING PERMIT MUST OBTAIN A "ROUGH GRADING APPROVAL" AND "FINAL SUPERVISED GRADING INSPECTION VERIFICATION" AS SPECIFIED IN THE CITY OF MALIBU SITE GRADING POLICY. THE CIVIL ENGINEER IS REQUIRED TO VERIFY THAT THE GRADING HAS BEEN PERFORMED UNDER THEIR SUPERVISION AND IN CONFORMANCE WITH THE PLANS APPROVED BY THE CITY OF MALIBU. THIS VERIFICATION INCLUDES APPROXIMATE ELEVATIONS, PRIMARY DRAINAGE DEVICES, SLOPE VEGETATION, LOCATION AND GRADIENT OF FILL SLOPES, STORMWATER POLLUTION CONTROL DEVICES, AND PROPERTY LINES.

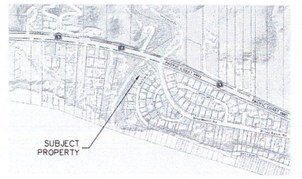
IN ORDER TO BE ABLE TO VERIFY THESE ITEMS, AHSIRT ENGINEERING, INC. NEEDS TO BE INVOLVED IN THE CONSTRUCTION PROCESS, MADE AWARE OF PROJECT SCHEDULES AND PERIODICALLY INSPECT CONSTRUCTION. BELOW IS A LIST OF ABSOLUTE MINIMUM INSPECTIONS THAT WILL BE REQUIRED FOR AHSIRT ENGINEERING INC. TO BE ABLE TO SIGN THE PROJECT ROUGH GRADING APPROVAL REQUIRED BY THE CITY OF MALIBU. WITHOUT THESE INSPECTIONS, AHSIRT ENGINEERING, INC. CANNOT VERIFY THE ITEMS REQUIRED BY THE CITY OF MALIBU.

1. CONSTRUCTION STARTUP
2. PRIMARY STORM DRAIN DEVICE LAYOUT
3. BACKDRAIN AND SUBDRAIN OUTLETS
4. BOE ROUGH GRADING COMPLETION
5. ROUGH GRADING COMPLETION
6. FINAL STORMDRAIN DEVICE LAYOUT
7. BOE TO FINAL COMPLETION
8. FINAL COMPLETION

IN ADDITION TO THESE INSPECTIONS, ANY TIME THERE ARE PROPOSED CHANGES TO THE CIVIL ENGINEER'S APPROVED PLAN SET, THE CIVIL ENGINEER NEEDS TO BE NOTIFIED IMMEDIATELY.



VICINITY MAP (NTS)



LOCATION MAP (NTS)

CITY OF MALIBU

City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-7650 · www.malibucity.org

TOTAL GRADING YARDAGE VERIFICATION CERTIFICATE

PLANNING DEPARTMENT REVIEW LEVEL

PROJECT NUMBER:

PROJECT ADDRESS: 31882 SEA LEVEL DRIVE

All projects proposing land form alteration which involves more than 100 cubic yards of grading shall complete this form. The completed form must be provided at the time of Planning Department application for grading approval. All applicable cubic yardages shall be completed in the table. **All calculations utilized to estimate the cubic yardages indicated shall be attached to this form.** This form and the required calculations must be prepared by a State of California Licensed Civil Engineer. The form and the calculations shall be stamped and wet signed by the preparing party.

	EXEMPT			NON EXEMPT	REMEDIAL GRADING	TOTAL
	R&R	UNDERSTRUCTURE	SAFETY			
CUT	50	450	0	150	0	650
FILL	50	0	0	10	0	60
TOTAL	100	450	0	160	0	710
IMPORT	0	0	0	0	0	0
EXPORT	0	450	0	140	0	590

All quantities indicated shall be in cubic yards only.
R&R = Removal and Recompaction – *R&R must be balanced.*
Safety Grading is required grading for L.A. County Fire Department access approval beyond the 15 foot minimum access and may include turnouts, hammerheads, turnarounds, and access roadway widening.
Remedial grading is grading recommended by a full site geotechnical or soils report prepared by a licensed geologist or soils engineer which is necessary to correct physical deficiencies on the site for the construction of a primary residential structure or access to the lot.
Imported means soil that is brought on to the site. Exported means soil that is leaving the site. This information will be used to calculate the number of truck trips required for site preparation.

PREPARED BY: TRISHA A. COFFEY
PRINT NAME
SIGNATURE

DATE: 2023-04-17

REGISTERED PROFESSIONAL ENGINEER TRISHA A. COFFEY 67657 Exp06/2023 CIVIL STATE OF CALIFORNIA

Page 1 of 1
P:\Forms\COUNTER FORMS\Planning\Grading Verification Certificate_120101.doc

REVISIONS

REV	BY	DATE
1ST CITY COMMENTS	TJM	2023-04-25

(1) PLANS MUST MATCH THE APPLICATION SITE PLAN AND TAXES SYSTEM. (2) PLOT ALL EASEMENTS AND DEDICATIONS. (3) SHOW ALL EXISTING BUILDINGS, DRIVEWAYS, GRADING DATA, ETC. (4) SUBMIT 3 COPY SETS.

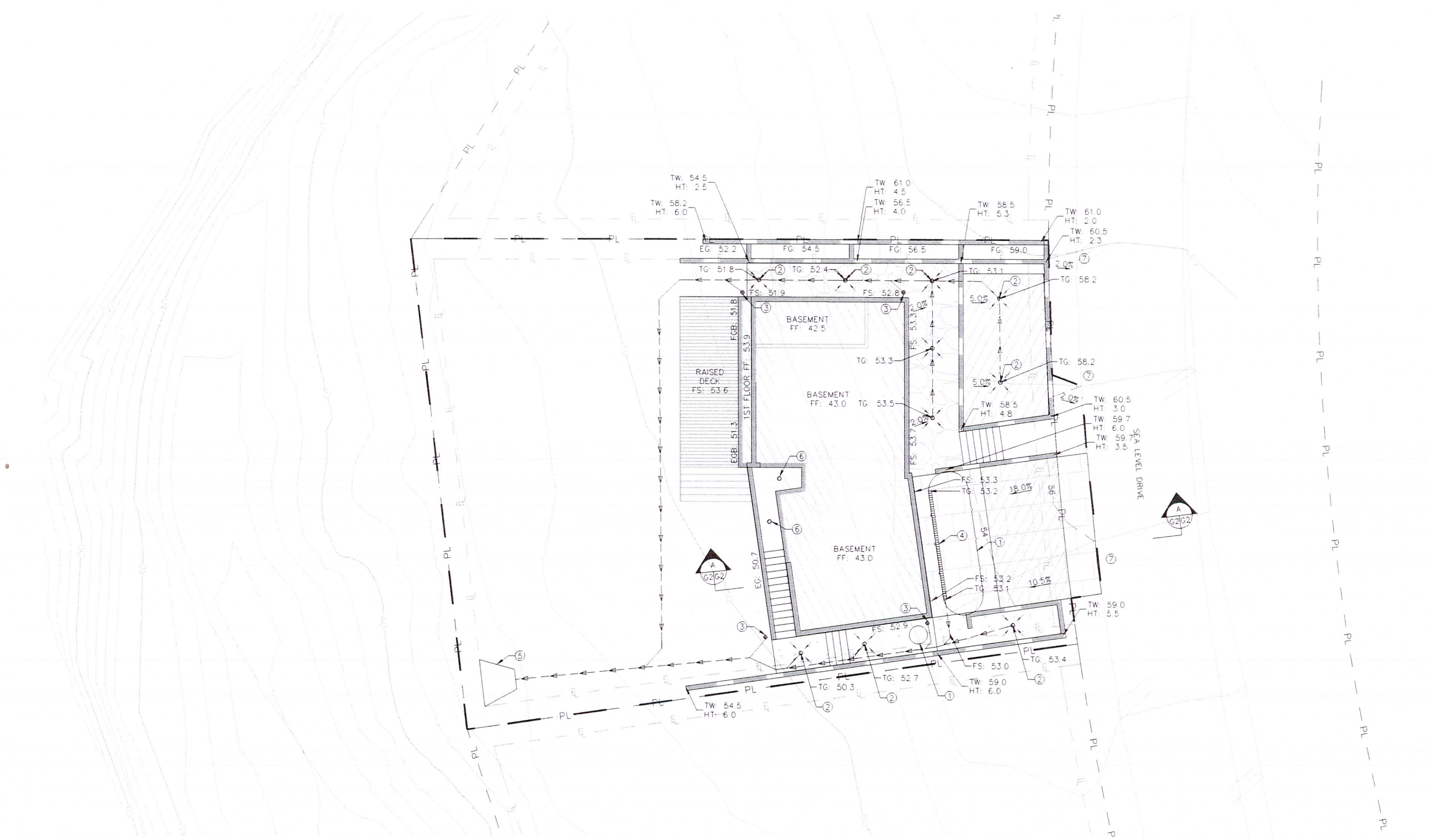
AHSIRT ENGINEERING INC
350 MILLER WAY
ARROYO GRANDE, CA 93420
PH: 805-474-4008

PROJECT INFORMATION, EXISTING AND PROPOSED SITE PLAN
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA

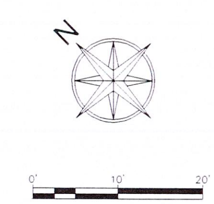
REGISTERED PROFESSIONAL ENGINEER TRISHA A. COFFEY 67657 Exp06/2023 CIVIL STATE OF CALIFORNIA

JOB # 104-11
DATE SEPTEMBER 2022
DRAWN BY TJM
CHECKED BY TAC
SHEET NUMBER G1 OF 3
AS NOTED

DRAWING NAME: J:\ARCHIVE\PROJECTS\104-11 31882 SEA LEVEL, PETERSON\ENGINEERING\G1-SITE PLAN.DWG
LAST SAVED: 4/25/2023 11:55:58 AM
LAST PLOT: 4/25/2023 11:55:58 AM



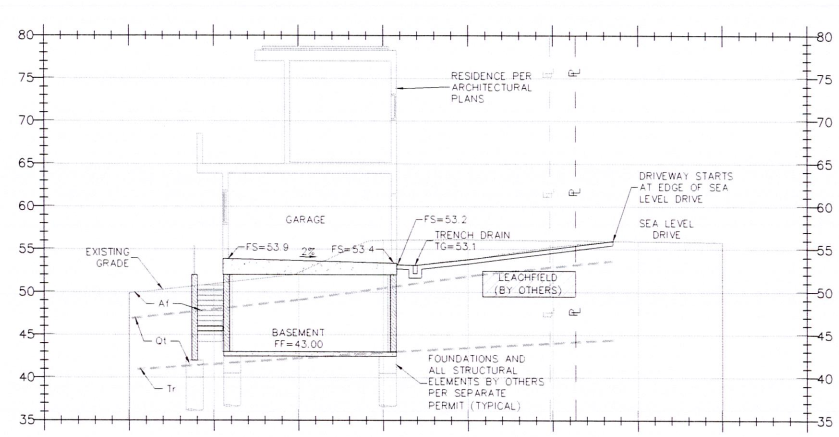
GRADING AND DRAINAGE PLAN



CROSS SECTION NOTES:

SOIL DELINEATIONS SHOWN HEREON ARE FROM THE SOILS REPORT PREPARED BY GEOSYSTMS, INC. DATEDED DECEMBER OF 2022. THE LIMITS OF Af, Qt AND Tr ARE APPROXIMATED BASED ON CROSS SECTION B AND E AND BORINGS 2 AND 5.

Af - ARTIFICIAL FILL
Qt - TERRACE DEPOSITS
Tr - BEDROCK



CROSS SECTION A
(SCALE: 1" = 10')

ABBREVIATION	DESCRIPTION
BOF	BOTTOM OF FOUNDATION ELEVATION
EG	EXISTING GRADE ELEVATION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE ELEVATION
FGB	FINISH GRADE BELOW
FS	FINISHED SURFACE ELEVATION
HP	HIGH POINT ELEVATION
HT	HEIGHT OF WALL FROM FS (DOES NOT INCLUDE HEIGHT OF FOOTING)
INV	INVERT ELEVATION
OC	ON CENTER
R&R	REMOVAL AND RECOMPACTION
SPPWC	CURRENT VERSION OF STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
TW/TOW	TOP OF WALL ELEVATION
TG	TOP OF GRATE ELEVATION
TBD	TO BE DETERMINED BY CONTRACTOR IN FIELD
WW	WASTEWATER

LINETYPE	DESCRIPTION
— — — PL —	PROPERTY LINE
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
	PROPOSED MINOR CONTOURS
	LIMITS OF DISTURBED SITE AREA
	FLOW LINES
	6" SDR35 PVC PIPE AT 2.0% MIN SLOPE INSTALLED PER THE LATEST VERSION OF CALIFORNIA PLUMBING INCLUDING CLEANOUTS WHEN THE AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDS 135° OR CONTINUOUS PIPE LENGTHS EXCEED 100 FEET
	ROAD CENTERLINE
	EASEMENT LINE
	PROPOSED RETAINING WALL (BY OTHERS PER SEPARATE PERMIT)
	AREA DRAIN CAPTURING ROOF DOWNSPOUT
	6" AREA DRAIN WITH 2.0% MIN SLOPE TOWARDS DRAIN
	PERMEABLE SURFACE PER ARCHITECTURAL PLANS
	IMPERMEABLE SURFACE PER ARCHITECTURAL PLANS
	PERMEABLE SURFACE PER ARCHITECTURAL PLANS
	LEACH FIELD PER WW PLANS

#	DESCRIPTION
1.	WASTWATER APPURTENANCE PER WASTEWATER PLANS BY OTHERS PER SEPARATE PERMIT
2.	6" AREA DRAIN
3.	ROOF DOWNSPOUT CONNECTED DIRECTLY TO STORMWATER COLLECTION SYSTEM OR OUTLETS TO SPLASH PAD AND A 2.0% MINIMUM SLOPE AWAY FROM THE STRUCTURE
4.	TRENCH DRAIN
5.	ENERGY DISSIPATION STRUCTURE
6.	EXTERIOR BASEMENT ENTRY AREA DRAINS CONNECTED TO BUILDING STORMWATER/GROUNDWATER SUMP PUMP OUTLETTING TO ENERGY DISSIPATION STRUCTURE (BY OTHERS)
7.	MAINTAIN EXISTING FLOWLINE AWAY FROM PROPOSED RESIDENCE

STORMWATER NOTES:

ALL ROOF DOWNSPOUTS SHALL BE DIRECTLY ROUTED TO A NON-ERODIBLE SURFACE, DOWNSPOUT DISSIPATION STRUCTURE, THE CLOSEST CATCH BASIN OR DRAINAGE SWALE.

ALL STORMWATER APPURTENANCES SHALL BE MONITORED BEFORE, DURING AND AFTER EVERY STORM TO ENSURE THERE ARE NO BLOCKAGES OF THE STORMWATER CONVEYANCE SYSTEM.

SYSTEM COMPONENTS AND APPURTENANCES (INCLUDING CLEAN-OUTS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT APPLICABLE PLUMBING CODE.

RETAINING WALL NOTES:

SITE RETAINING WALLS AND/OR FOUNDATION WALLS ARE BY OTHERS PER SEPARATE PERMIT.

SUBDRAINS BEHIND ALL WALLS SHALL BE INSTALLED PER THE STRUCTURAL PLAN AND GEOTECHNICAL RECOMMENDATIONS.

ALL WALLS WITH A DROP OFF GREATER THAN 30" (OR THE HEIGHT DETERMINED BY THE LOCAL AUTHORITY HAVING JURISDICTION, WHICHEVER IS LESS) SHALL HAVE A RAILING INSTALLED PER THE STRUCTURAL OR ARCHITECT'S PLANS.

SOILS ENGINEER NOTES:

PRIOR TO CONSTRUCTION/GRADING, THE BUILDING AREAS SHOULD BE CLEARED OF ANY LOOSE SLOUGH, ARTIFICIAL FILL, SOIL, VEGETATION, AND/OR MAN-MADE DEBRIS

IDEALLY, ALL EXTERIOR CONCRETE SLABS AND HARDSCAPE, SUCH AS ON-GRADE DECKING, STEPS, WALKWAYS, ETC., SHOULD BE SUPPORTED ON CERTIFIED COMPACTED FILL OR BEDROCK, OR THEY SHOULD BE DESIGNED AS STRUCTURAL ELEMENTS THAT DERIVE THEIR SUPPORT FROM FOUNDATIONS BEARING IN BEDROCK OR OTHER APPROVED BEARING MATERIAL. HOWEVER, EXTERIOR SLABS AND HARDSCAPE ARE NOT NORMALLY SUBJECT TO BUILDING CODE REQUIREMENTS FOR STRUCTURAL SUPPORT, AND IT MAY BE DESIRABLE TO SUPPORT THESE STRUCTURES ONT HE EXISTING SURFICIAL SOILS. IN ORDER TO REDUCE THE POTENTIAL FOR FUTURE DISTRESS, IT MAY BE DESIRABLE TO PROVIDE ADDITIONAL SUBGRADE PREPARATION AND ADDITIONAL STEEL AND CONCRETE THICKNESS FOR THE PROPOSED SLABS AND HARDSCAPE. AT A MINIMUM, WE RECOMMEND THAT PATIO SLABS AND HARDSCAPE BE REINFORCED WITH MINIMUM OF #4 REBAR PLACED AT 16-INCHES ON CENTER, EACH WAY. THE UPPER 12 INCHES OF EXISTING SURFICIAL SOIL TO BE USED FOR SUPPORT SHOULD BE REMOVED AND RECOMPACTED TO 90 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM METHOD D1557-02E1

TEMPORARY EXCAVATIONS FOR RETAINING WALLS ARE EXPECTED TO BE UP TO 12-FEET IN TOTAL HEIGHT AND ARE EXPECTED TO EXPOSE ARTIFICIAL FILL AND TERRACE DEPOSITS OVER BEDROCK. THE MAXIMUM RECOMMENDED HEIGHT OF TEMPORARY VERTICAL EXCAVATIONS IN TERRACE DEPOSITS OR BEDROCK IS 5-FEET, AND ANY PORTION EXPOSING ARTIFICIAL FILL OR LOOSE SOILS, SHOULD BE TRIMMED TO A 1:1 SLOPE OR THE EXCAVATION MAY BE SHORED.

PRIOR TO FINAL APPROVAL OF THE PROJECT, AN AS-BUILT COMPACTION REPORT PREPARED BY THE PROJECT GEOTECHNICAL CONSULTANT MUST BE SUBMITTED TO THE CITY FOR REVIEW. THE REPORT MUST INCLUDE THE RESULTS OF ALL DENSITY TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF DENSITY TESTS, AND LOCATIONS AND ELEVATIONS OF ALL REMOVAL BOTTOMS, LOCATIONS AND ELEVATIONS OF ALL KEYWAYS AND BACK DRAINS, AND LOCATIONS AND ELEVATIONS OF ALL RETAINING WALL BACK DRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.

THIS IS NOT AN EXHAUSTIVE LIST OF RECOMMENDATIONS FROM THE SOILS ENGINEER. THE ENTIRE SOILS REPORT SHALL BE REVIEWED BY ALL PARTIES INVOLVED WITH THE GRADING ACTIVITIES AND ALL RECOMMENDATIONS MADE IN THE SOILS REPORT SHALL BE CONSIDERED PART OF THE GRADING AND DRAINAGE PLAN.

GENERAL NOTES:

ALL RETAINING WALLS, BASEMENT WALLS, SHORING DESIGN, WATEPPROOFING DESIGN AND ALL OTHER DESIGN NOT SPECIFICALLY CALLED OUT ON THIS PLAN ARE BY OTHERS PER SEPARATE PERMIT.

EXPORTED SOIL FROM THE SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH THE CITY'S LOCAL IMPLEMENTATION PLAN (LIP), SECTION 8.3

REVISIONS

REV	BY	DATE
1	TJM	2023-04-18

UPDATE WASTEWATER APPURTENANCES IN SITE PLAN AND CROSS SECTION, UPDATE FOUNDATIONS IN CROSS SECTION, ADD SOILS RECOMMENDATIONS, UPDATE GRADING CALCS, UPDATE LSWPPP NOTES

AHSIRT ENGINEERING INC
360 MILLER WAY
ARROYO GRANDE, CA 93420
PH: 805-474-4008

COASTAL DEVELOPMENT PERMIT GRADING AND DRAINAGE PLAN

FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
EXP 06/2023
CIVIL
STATE OF CALIFORNIA

JOB #
104-11

DATE
SEPTEMBER 2022

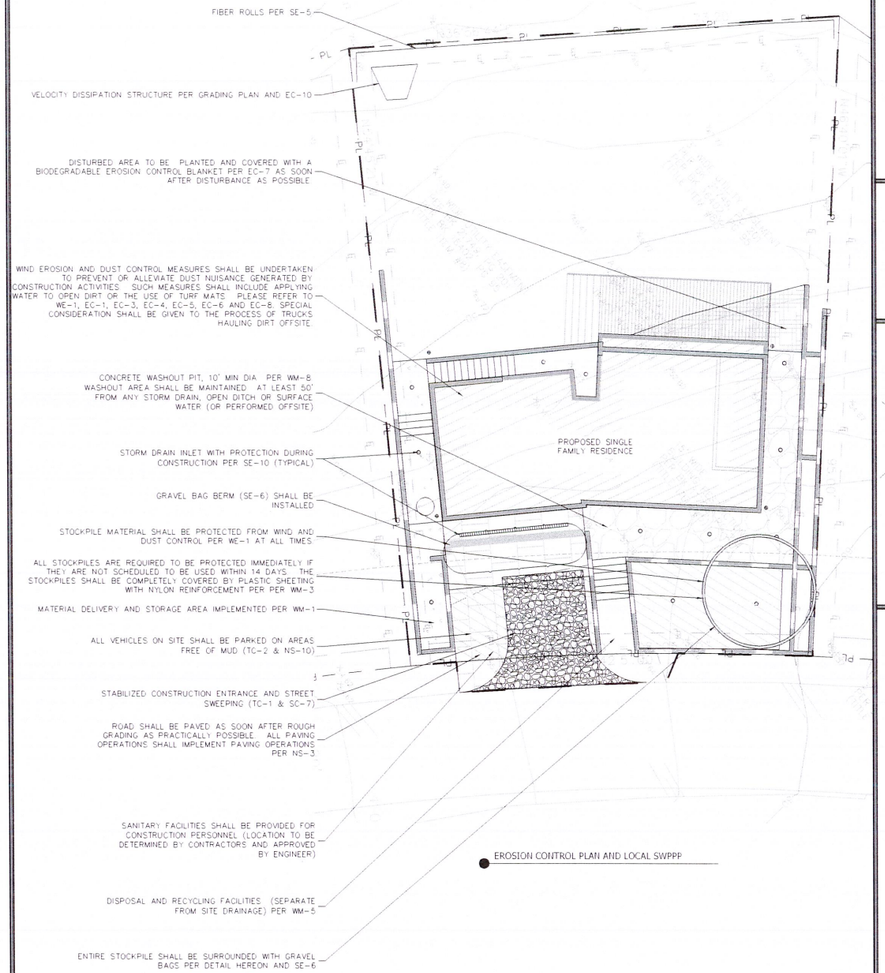
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TJM

CHECKED BY
TAC

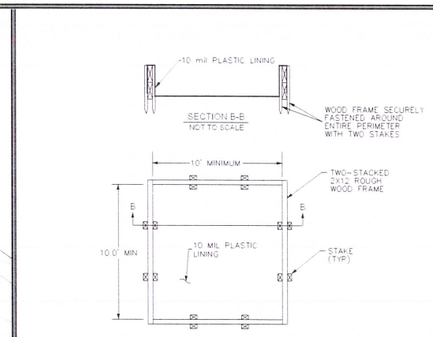
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SHEET NUMBER
G2 OF 3

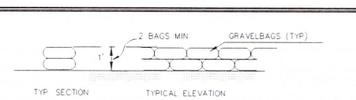
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SAVE DATE: 4/18/2023 11:30:27 AM
PLOT DATE: 4/18/2023 11:31:01 AM



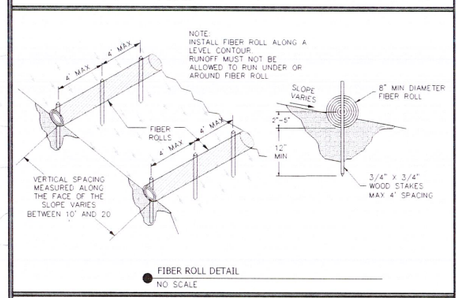
EROSION CONTROL PLAN AND LOCAL SWPPP



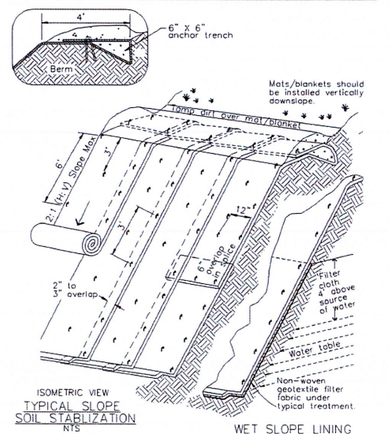
CONCRETE WASHOUT PIT DETAIL (WM-8)
NO SCALE



GRAVEL BAG BERM DETAIL (SE-6)
NO SCALE

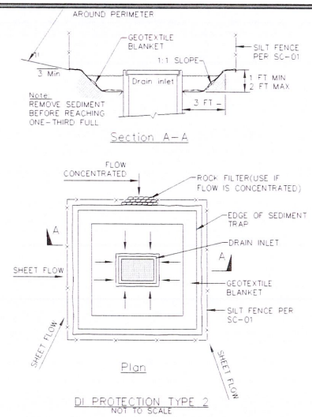


FIBER ROLL DETAIL
NO SCALE



NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

EROSION CONTROL BLANKET EC-7
NO SCALE



DI PROTECTION TYPE 2
NOT TO SCALE

NOTES
1. FOR USE IN CLEARED AND GRUBBED AND IN GRADED AREAS.
2. SHAPE BASIN SO THAT LONGEST INFLOW AREA FACES LONGEST LENGTH OF TRAP.
3. FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW

STORM DRAIN INLET PROTECTION DETAIL (SE-10)
NO SCALE



CONCRETE CURING GENERAL NOTES

- AVOID OVER-SPRAY OF CURING COMPOUNDS.
- USE PROPER STORAGE AND HANDLING TECHNIQUES FOR CONCRETE CURING COMPOUNDS. REFER TO BMP WM-1
- PROTECT ANY POTENTIAL DRAIN INLETS PRIOR TO APPLYING OF CURING COMPOUNDS.
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION NS-12

CONCRETE CURING DETAIL (NS-12)
NO SCALE



SWEET SWEEPING GENERAL NOTES

- DURING ACTIVE CONSTRUCTION, ALL POINTS OF INGRESS AND EGRESS SHALL BE MONITORED AT ALL TIMES.
- BE CAREFUL NOT TO SWEEP UP ANY UNKNOWN SUBSTANCE OR ANY OBJECT THAT MAY BE POTENTIALLY HAZARDOUS.
- AFTER SWEEPING IS FINISHED, PROPERLY DISPOSE OF SWEEPER WASTES AT AN APPROVED DUMPSITER
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION SE-7)

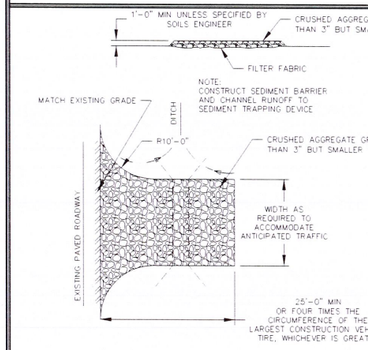
STREET SWEEPING DETAIL (SE-7)
NO SCALE



WIND EROSION CONTROL GENERAL NOTES

- WATERING PREVENTS DUST ONLY FOR A SHORT PERIOD AND SHOULD BE APPLIED DAILY TO BE EFFECTIVE
- DO NOT OVER WATER – THAT MAY LEAD TO EROSION AND TRACKING OFF SITE
- SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE EXPOSURE TO WINDY ACTIVITIES
- WATER SHOULD BE APPLIED USING NOZZLES THAT ENSURE EVEN DISTRIBUTION
- IDENTIFY AND STABILIZE KEY ACCESS POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION
- STABILIZE INACTIVE AREAS OF CONSTRUCTION SITES USING
- THIS IS A PARTIAL LIST OF RECOMMENDATIONS FOR A COMPLETE LIST REFER TO CASQA BMP HANDBOOK SECTION WE-7)

WIND EROSION CONTROL DETAIL (WE-1)
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

TC	TRACKING CONTROL BMP
SE	SEDIMENT CONTROL BMP
NS	NON-STORMWATER MANAGEMENT CONTROL BMP
WM	WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMP
EC	EROSION CONTROL BMP
SE-#/TC-#/NS-#	ALL PER LATEST CASQA BMP HANDBOOK
WM-#	ALL PER LATEST CASQA BMP HANDBOOK
CASQA	CALIFORNIA STORMWATER QUALITY ASSOCIATION

HATCH	DESCRIPTION
	EXPOSED DISTURBED AREA TO BE PLANTED AND COVERED WITH A BIODEGRADABLE EROSION CONTROL BLANKET PER EC-7 AS SOON AFTER DISTURBANCE AS POSSIBLE

EROSION AND SEDIMENT CONTROL PLAN (ESCP) GENERAL NOTES:

1. In case of emergency, call TO BE DETERMINED at 24-HOUR TELEPHONE
   1. Please fill in name and number
2. Total Disturbed Area < 0.2 ACRES WDID # N/A
   1 Risk Level 1 2 3 (circle one as determined by State General Permit for sites greater than 1 acre)
3. A stand-by crew for emergency work shall be available at all times during the rainy season (November 1 to April 15). Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
4. Erosion control devices shown on this plan may be removed when approved by the Building Official if the grading operation has progressed to the point where they are no longer required.
5. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of slope at the conclusion of each working day. All loose soils and debris that may create a potential hazard to off-site property shall be stabilized or removed from the site on a daily basis.
6. All silt and debris shall be removed from all devices within 24 hours after each rainstorm and be disposed of properly.
7. A guard shall be posted on the site whenever the depth of water in any device exceeds two feet. The device shall be drained or pumped dry within 24 hours after each rainstorm. Pumping and draining of all basins and drainage devices must comply must comply with the appropriate BMP for dewatering operations.
8. The placement of additional devices to reduce erosion damage and contain pollutants within the site is left to the discretion of the Field Engineer. Additional devices as needed shall be installed to retain sediments and other pollutants on site.
9. Desilting basins may not be removed or made inoperable between November 1 and April 15 of the following year without the approval of the Building Official.
10. Storm Water Pollution and Erosion Control devices are to be modified, as needed, as the project progresses, the design and placement of these devices is the responsibility of the field engineer. Plans representing changes must be submitted for approval if requested by the Building Official.
11. Every effort should be made to eliminate the discharge of non-storm water from the project sites at all times.
12. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
13. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.
14. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
15. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.
16. Developers-contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly if there is a 50% or greater probability of predicted precipitation, and after actual precipitation. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official (copies of the self-inspection check list and inspection logs are available upon request).
17. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
18. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
19. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
20. As the engineer/QSD of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness.

Civil Engineer/QSD Signature — Date

21. The following notes must be on the plan:

As the project owner or authorized agent of the owner, I certify that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to ensure that a qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/or adequately implement the ESCP may result in revocation of grading and/or other permits or other sanctions provided by law."

Owner or Authorized Representative (Permittee) — Date

22. Developers-contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly as required by the State Construction General Permit. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official.
23. The following BMPs from the "2009 Construction BMP Handbook/Portal" must be implemented for all construction activities as applicable. As an alternative, details from "Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMP) Manual" may be used. Additional measures may be required if deemed appropriate by the Building Official.

EROSION CONTROL
EC1 – SCHEDULING
EC2 – PRESERVATION OF EXISTING VEGETATION
EC3 – HYDRAULIC MULCH
EC4 – HYDROSEEDING
EC5 – SOIL BINDERS
EC6 – STRAW MULCH
EC7 – GEOTEXTILES & MATS
EC8 – WOOD MULCHING
EC9 – EARTH DIKES AND DRAINAGE SWALES
EC10 – VELOCITY DISSIPATION DEVICES
EC11 – SLOPE DRAINS
EC12 – STREAMBANK STABILIZATION
EC13 – RESERVED
EC14 – COMPOST BLANKETS
EC15 – SOIL PREPARATION/ROUGHENING
EC16 – NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL
SE1 – SILT FENCE
SE2 – SEDIMENT BASIN
SE3 – SEDIMENT TRAP
SE4 – CHECK DAM
SE5 – FIBER ROLLS
SE6 – GRAVEL BAG BERM
SE7 – STREET SWEEPING AND VACUURING
SE8 – SANDBAG BARRIER
SE9 – STRAW BALE BARRIER
SE10 – STORM DRAIN INLET PROTECTION
SE11 – ACTIVE TREATMENT SYSTEMS
SE12 – TEMPORARY SILT DIKE
SE13 – COMPOST SOCKS & BERMS
SE14 – BIOFILTER BAGS

WIND EROSION CONTROL
WE1 – WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL
TC1 – STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 – STABILIZED CONSTRUCTION ROADWAY
TC3 – ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT
NS1 – WATER CONSERVATION PRACTICES
NS2 – DEWATERING OPERATIONS
NS3 – PAVING AND GRINDING OPERATIONS
NS4 – TEMPORARY STREAM CROSSING
NS5 – CLEAR WATER DIVERSION
NS6 – ILLICIT CONNECTION/DISCHARGE
NS7 – POTABLE WATER/IRRIGATION
NS8 – VEHICLE AND EQUIPMENT CLEANING
NS9 – VEHICLE AND EQUIPMENT FUELING
NS10 – VEHICLE AND EQUIPMENT MAINTENANCE
NS11 – PILE DRIVING OPERATIONS
NS12 – CONCRETE CURING
NS13 – CONCRETE FINISHING
NS14 – MATERIAL AND EQUIPMENT USE
NS15 – DEMOLITION ADJACENT TO WATER
NS16 – TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 – MATERIAL DELIVERY AND STORAGE
WM2 – MATERIAL USE
WM3 – STOCKPILE MANAGEMENT
WM4 – SPILL PREVENTION AND CONTROL
WM5 – SOLID WASTE MANAGEMENT
WM6 – HAZARDOUS WASTE MANAGEMENT
WM7 – CONTAMINATION SOIL MANAGEMENT
WM8 – CONCRETE WASTE MANAGEMENT
WM9 – SANITARY/SEPTIC WASTE MANAGEMENT
WM10 – LIQUID WASTE MANAGEMENT

REVISIONS

REV	BY	DATE

AHSIRT
ENGINEERING, INC.
350 MILLER WAY
ARROYO GRANDE, CA 93420
PH: 805-474-4048

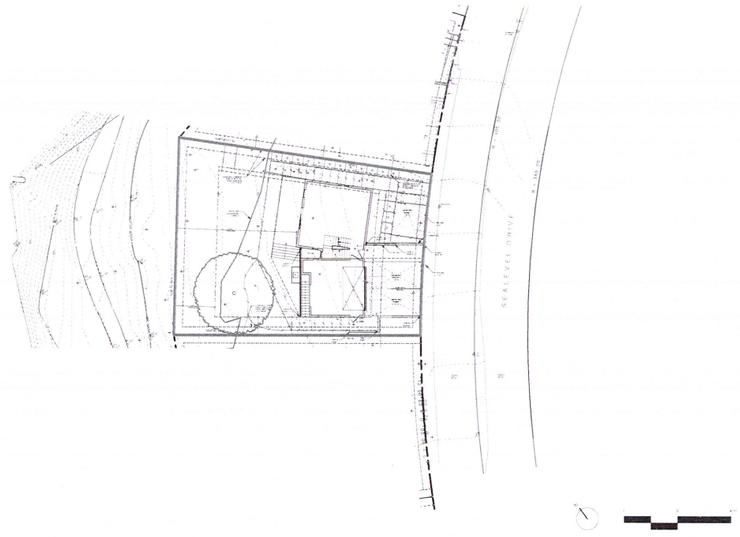
EROSION CONTROL PLAN AND LOCAL SWPPP
FOR APPROVAL ONLY - NOT FOR CONSTRUCTION
31882 SEA LEVEL DRIVE
MALIBU, CA

REGISTERED PROFESSIONAL ENGINEER
TRISHA A. COFFEY
67657
Exp06/2023
CIVIL
STATE OF CALIFORNIA

JOB # 104-11
DATE SEPTEMBER 2022
DRAWN BY TJM
CHECKED BY TAC
SHEET NUMBER 3 OF 3

31882 SEA LEVEL DRIVE

Malibu, CA 92605





vicinity map

Project Description

Exterior landscape, lighting and irrigation for Proposed two-story single family residence with attached garage.

Project Details

project address:	31882 Sea Level Drive Malibu, CA 90265
owner:	Jeff Peterson
assessors number	4470-027-022
zoning:	SFM
total proposed landscape area:	1,310 SF low water use: 263 SF med water use: 1,047 SF high water use: 0 SF
total irrigated landscape:	1,310 SF
water supply type:	potable
water municipality:	Los Angeles Waterworks District 29

Consultants

architect:	Burdge & Associates 2649 Th Ave Malibu, CA 90265 p. 310.456.5805
landscape:	Barefoot Design, Inc. 1187 Coast Village Road, #267 Santa Barbara, CA 93108 p. 805.697.7466

Sheet Index

sheet #	Title
L0.00	Cover Sheet
L1.00	Hardscape & Lighting Plan
L2.00	Irrigation Plan
L2.01	Irrigation Details
L3.00	Planting Plan
L3.01	Planting Details

Statement of Compliance

"I have complied with the criteria of the Landscape Water Conservation Ordinance and applied them for the efficient use of water in the landscape design."

Preparer Name: Jessica Hafer

Preparer Signature:

Professional License / Designation: Landscape Architect, #6606

BAREFOOT DESIGN
1187 Coast Village Road, #267
Santa Barbara, CA 93108
Web: www.barefootdesign.net

SUBMITTALS

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE BAREFOOT DESIGN AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH THE BAREFOOT DESIGN. WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BAREFOOT DESIGN PRIOR TO THE COMMENCEMENT OF ANY WORK.

REGISTERED LANDSCAPE ARCHITECT
No. 6606
JESSICA LEE HAFER
12/31/21
STATE OF CALIFORNIA

PROJECT

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS

Cover Sheet

DATE 12/2/21
SCALE as noted
DRAWN KR
JOB 2417

SHEET

L0.00

OF # SHEETS

Materials Legend:

symbol	description
	Gravel
	Concrete
	Wood Deck
	Grass/Pave
	Garden Wall
	14" Steel Landscape Header
	Shovel Cut Edge

Steps with steel header

Lighting Legend:

symbol	description	quantity	manufacturer	model
L	controller	1	FX Luminaire	LZD 300 SS
	pathlight	10	Hinkley	Atlantis Small LED Pathlight 16"HSK LL CO, OR Satin Black
	wall light	5	FX Luminaire	PD ZD 1LED SQ B2
	step light	6	FX Luminaire	VO ZD 1LED GW 1 B/U SS

notes
1. Wiring and transformer locations to be provided by Electrician.
2. Location of lights are diagrammatic. Final location to be set prior to installation by Landscape Designer.

Hinkley Pathlight

FX Luminaire - Wall Light

FX Luminaire - Step Light

AS NOTED

BAREFOOT DESIGN

SUBMITTALS

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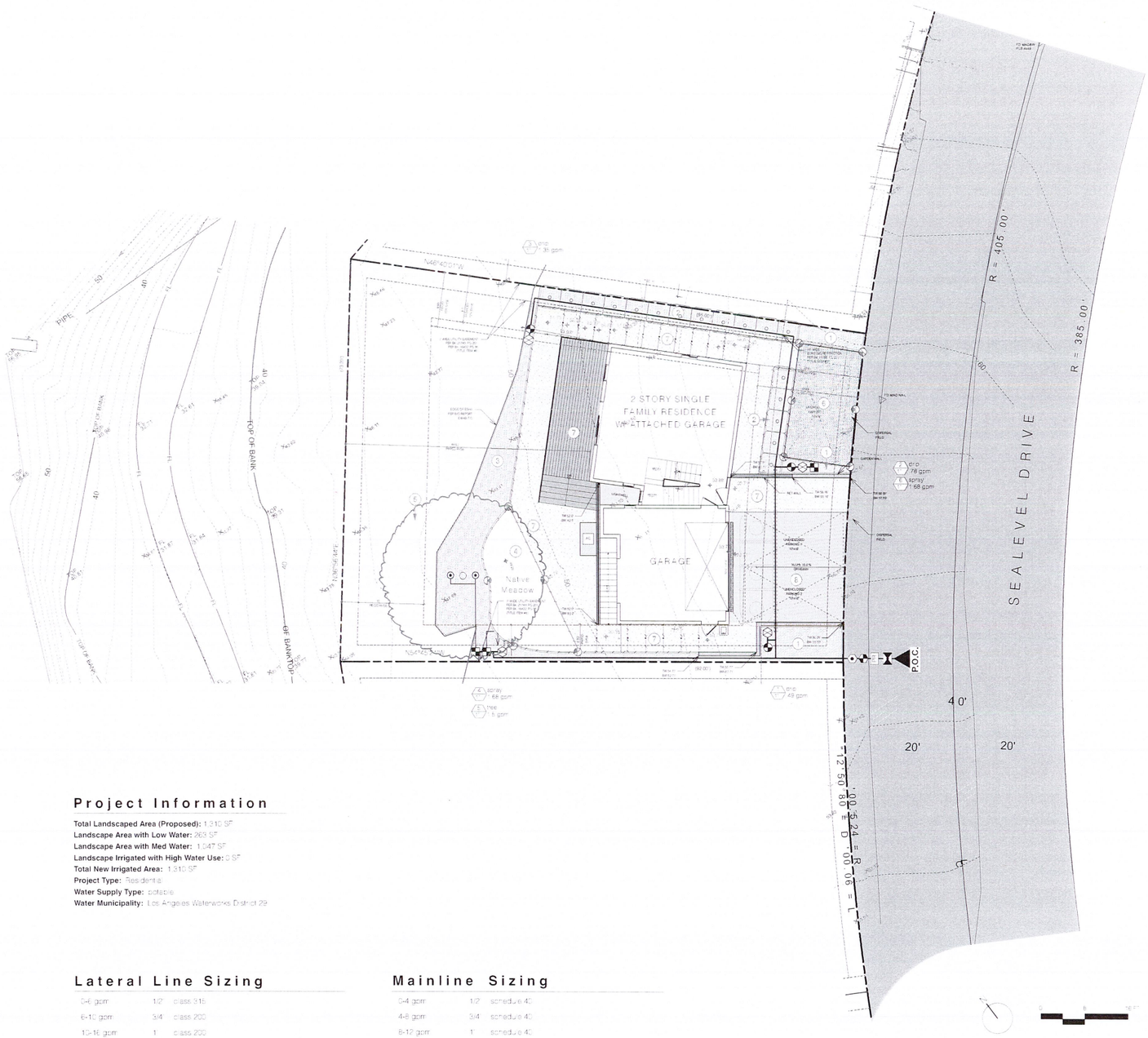
REGISTERED LANDSCAPE ARCHITECT
No. 5606
STATE OF CALIFORNIA

PROJECT
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Hardscape & Lighting Plan

DATE 12/2/24
SCALE AS NOTED
DRAWN KR
JOB 24-12

SHEET
L1.00



Irrigation Legend

symbol	description	manufacture / model
———	domestic mainline	2" sch 40 PVC
———	irrigation laterals	see Laterals Line Sizing
- - - - - -	irrigation sleeve	see Irrigation Notes
P.O.C.	point of connection	(N) 1" dedicated water meter labeled FOR IRRIGATION ONLY
C	irrigation controller	HUNTER i-Core IC-600-SS controller w (3) HUNTER ICM-602 Module & (1) HUNTER Wireless Rain/Freeze/Rain Sensor WR-HUB-CK-ITS Rain Sensor to be programmed to automatically shutoff when onsite rainfall exceeds ¼" incr.
BFP	backflow preventer	1-1/2" FEBCO 825Y or approved equal
PRV	pressure regulator	HONEYWELL D06-G with gauge (70 psi)
MV	master control valve	HUNTER ISV-101G-PS-R (65 psi)
FS	flow sensor	HUNTER HFS w/ FCT 100 (65 psi)
SV	spray valve	WEATHERMATIC 11024PCR (65 psi)
DV	drip valve	WEATHERMATIC 11024PCR w/ pressure regulating MPFilter (30 psi)
HB	hose bib	3/4" brass hose bibb
MV	manual shut-off valve	PVC ball valve, size to match mainline
RZWS	root watering system	HUNTER RZWS (65 psi), see Emitter Legend for size and mode
S	rotary spray head 360 degrees	HUNTER Pro Spray PROS-06-PRS40-CV w/ MP Rotator MP800SR-360 nozzles (40 psi)
S	rotary spray head 90-210 degrees	HUNTER Pro Spray PROS-06-PRS40-CV w/ MP Rotator MP1000-90 nozzles (40 psi)
2	drip irrigation zones	HUNTER 1/2" Supply Tubing w/ HUNTER Point Source Emitters, see Emitter Legend
T	temporary spray irrigation zones	HUNTER Pro-Spray PROS-12-PRS40-CV w/ MP Rotator (40 psi) Temporary spray irrigation zones to be terminated after 2 year establishment period

Valve Identification

valve number — valve size — type / flow — valve type — valve flow rate

Hydrozone Legend

valve/zone	description	area	plant type	exposure
1	Ornamental Shrubs and Grasses - Front Yard	146 SF	M	Full Sun
2	Hedge - North	233 SF	L	Part Sun
3	Ornamental Shrubs and Grasses - Backyard	401 SF	M	Part Sun
4	Native No Mow Meadow	247 SF	M	Part Sun
5	Tree	30 SF	L	Full Sun
6	Grass/Lawn	253 SF	M	Full Sun
7	Hardscape - Permeable	290 SF	NA	Full Sun
8	Hardscape - Impermeable	427 SF	NA	Full Sun

Project Information

Total Landscaped Area (Proposed): 1,310 SF
Landscape Area with Low Water: 263 SF
Landscape Area with Med Water: 1,047 SF
Landscape Irrigated with High Water Use: 0 SF
Total New Irrigated Area: 1,310 SF
Project Type: Residential
Water Supply Type: potable
Water Municipality: Los Angeles Waterworks District 29

Lateral Line Sizing

0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

3 BAREFOOT DESIGN
111 Anacapa Street, A-2nd
Santa Barbara, CA 93101
TEL (805)963-2100
WEB www.barefoot-design.com

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REGISTERED LANDSCAPE ARCHITECT
No. 6606
JAMES E. BOSS
RENEWAL 12/31/2025
STATE OF CALIFORNIA

PROJECT
Peterson Residence
3382 Sea Level Drive

SHEET CONTENTS
Irrigation Plan

DATE 12/20/24
SCALE 1/8"=1'-0"
DRAWN KB
JOB 24-12
SHEET
L2.00
2 OF 6 SHEETS

Maximum Applied Water Allowance Calculations:

ETo	42.6
LA	1310
SLA	177
ETAF	0.23
MAWA (Gallons)	**37,586**
MAWA (inches per sq ft)	46.0
MAWA (inches per DAY)	0.10

Maximum Applied Water Allowance Equation:
MAWA = (ETo) (0.62) ((ETAF x LA) + (1-0.62 x SLA))

Definitions:

ETo	Reference provided in Appendix A - CIMIS
ETAF	Evapotranspiration Adjustment Factor - 0.55 or less
HA	Hydro zone area - irrigated area
IE	Irrigation efficiency - Must exceed 0.71
LA	Landscaped area
PF	Plant water use factor- WUCOLS
SLA	Special landscaped area, within the landscaped area

Estimated Total Water Use:

ETo	42.6
PF x HA (see chart)	1130
HA (same as LA)	1310
IE (see chart)	0.50
SLA	177
ETWU (Gallons)	**19,844**
ETWU (inches per sq ft)	24.2
ETWU (inches per DAY)	0.01

Estimated Total Water Use Equation:
ETWU = ETo x 0.62 x ((PF x HA/IE) + SLA)

Irrigation Efficiency:

Hydrozone #	Description	Type	PF	Irrigation Method	IE	ETAF (PF/IE)	HA	ETAF x Area	PF x HA	ETWU
Regular Landscape Areas										
1	Ornamental Shrubs & Grasses - Front Yard	Med.	0.5	drip	0.81	0.41	146	59.74	73	
2	Hedge - North	Low	0.3	drip	0.81	0.16	233	37.75	70.0	
3	Ornamental Shrubs & Grasses - Backyard	Med.	0.5	drip	0.81	0.41	451	182.41	200.5	
4	Native No Mow Meadow	Med.	0.5	drip	0.81	0.41	247	100.00	123.5	
5	Trees	Low	0.2	drip	0.81	0.16	30	4.86	6	
6	Grass/Fescue	Med.	0.5	Spray	0.75	0.38	253	94.88	126.5	
				Subtotal:	**0.80**	**0.32**	**1310**	**459.06**	**579.1**	**18,127**
Special Landscape/Hardscape Areas										
7	Hardscape - Permeable	Low	0.1	N/A	1.0	0.10	1290	129.000	129	
8	Hardscape - Impermeable	Low	1.0	N/A	1.0	1.00	427	427.000	427	
				Subtotal:	**1.00**	**0.55**	**1717**	**986.06**	**556**	**13,996**
								ETWU Total:		**32,123**
								MAWA Allowance:		**37,586**

Average System IE EE is a derivative of DU defined as:
IE = DU x ME. Where ME= Irrigation Management Efficiency.

Irrigation Notes

1. This system is diagrammatic. All pipes, valves, etc. shown within paved areas are for design clarification only and shall be installed in planting areas wherever possible.

2. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that obstructions or grade differences exist and should be brought to the attention of the owner's authorized representative. In the event that this notification is not performed, the contractor must assume full responsibility for all revisions necessary.

3. Irrigation system is designed assuming a static water pressure of approximately 70 PSI at point of connection. Prior to installation of irrigation system, contractor shall verify pressure at point of connection.

4. It is the intent of this plan to provide adequate irrigation to all planting areas, prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas in accordance with MWELO sections 492.7(a)(1)(B) and 492.7(a)(1)(D).

Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to ensure 100% irrigation coverage of all planting areas and MWELO compliance.

5. Emitter shall be located on grade and staked a maximum of six inches from the center of plant, or edge of rootball, whichever is greater.

6. All piping installed under pathways or paved areas, through walls or footings shall be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe and any couplings in the sleeve. Provide (2) extra 2" sleeves in all locations where mainline or lateral line crosses under paving greater than 3'-0" dimension.

7. Irrigation lines shall be buried at the following minimum depths: PVC pressure mainline 18" PVC lateral line 12".

8. Irrigation Contractor shall adjust flow control for proper performance and valve longevity.

9. Pressure regulating devices shall be installed where necessary to ensure the dynamic pressure at each emission device is within manufacturer's recommended pressure range for optimal performance.

10. Flush valves shall be installed at the ends of all polyethylene drip tubing in round valve boxes with gravel fill.

11. Check valves shall be installed at low points on irrigation line to prevent leakage.

12. All planting areas shall be provided with a 3" thickness of mulch, samples to be provided to owner's representative.

13. No lawn or landscape irrigation with potable water allowed apart from the hours of 8:00PM and 8:00AM. Except for hand held hose equipment with a positive shut-off nozzle.

14. Irrigation water shall not run off landscaped areas to adjacent property, adjoining streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

15. All irrigation emission devices will meet the criteria set forth by MWELO section 492.7(a)(3)(M) and shall be installed per manufacturer's recommendations.

16. All irrigation piping and equipment to be purple in color and to be field or factory marked "CAUTION, NON-POTABLE RAINWATER, DO NOT DRINK." All irrigation piping to be buried per approved water plan.

17. A manual indicating layout of irrigation system and manufacturer instructions for all equipment and procedures shall be provided to the owner at completion of project.

18. Certificate of Completion in accordance with MWELO Section 492.9 will be submitted for review/approval by the Building and Safety Division prior to final occupancy.

19. Landscape Contractor shall clean up on a daily basis per Owner's representative's approval.

Mainline Sizing

0-4 gpm	1/2"	schedule 40
4-8 gpm	3/4"	schedule 40
8-12 gpm	1"	schedule 40
12-22 gpm	1 1/4"	schedule 40
22-30 gpm	1 1/2"	schedule 40
30-50 gpm	2"	class 315
50-70 gpm	2 1/2"	class 315
70-120 gpm	3"	class 315

Lateral Line Sizing

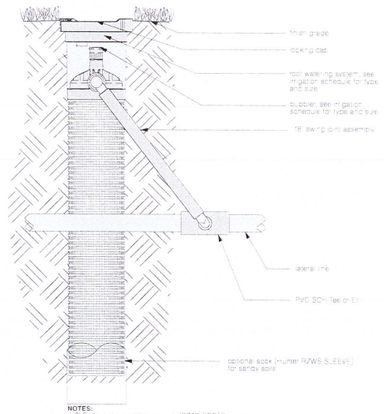
0-6 gpm	1/2"	class 315
6-10 gpm	3/4"	class 200
10-16 gpm	1"	class 200
16-26 gpm	1 1/4"	class 200
26-35 gpm	1 1/2"	class 200
35-55 gpm	2"	class 200
55-80 gpm	2 1/2"	class 200
80-120 gpm	3"	class 200

Emitter Legend

plant material	equipment
flatted groundcover	Microspray Emitters
1 gal. pot	2 - HE-20-B Emitters per plant
5 gallon shrubs	3 - HE-20-B Emitters per plant
15 gallon shrubs	4 - HE-20-B Emitters per plant
15 gallon trees	2 - RZWS-18-50-CV per tree
24" box trees	2 - RZWS-18-50-CV per tree
36" box trees	3 - RZWS-36-50-CV per tree
48" box trees	4 - RZWS-36-50-CV per tree
60" box trees and above	(Consult with a Local Arborist)

Valve Identification

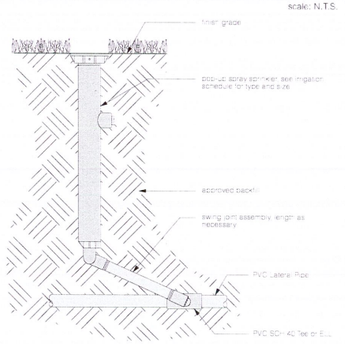




NOTES:
1. Grate is also available in purple (RZWS-RCCAP).
2. Install product so that the grate is even with finish grade or top of mulch.
3. Optional sand sock (RZWS-SLEEVE) to cover mesh basket area.
4. When installing in extremely hard or clay soils, add 3/4" gravel under and around the unit to allow faster water infiltration and root penetration.
5. Once RZWS has been installed in the basket with pea gravel before locking lid.

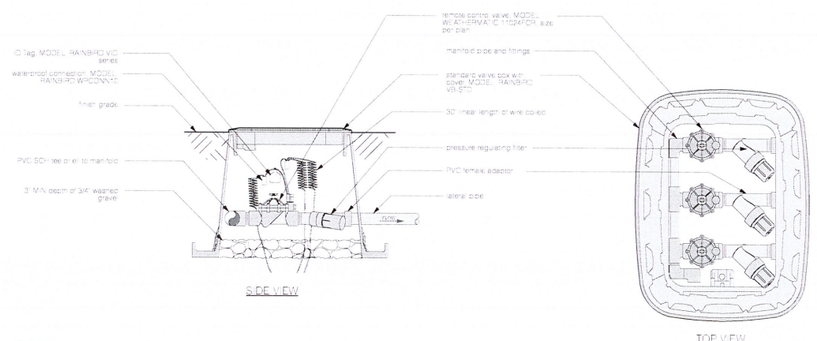
7 Root Watering System

scale: N.T.S.



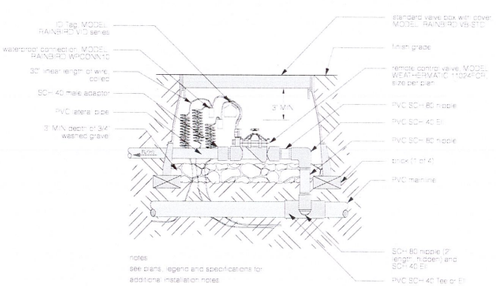
6 Spray Head

scale: N.T.S.



5 Drip Valve Assembly

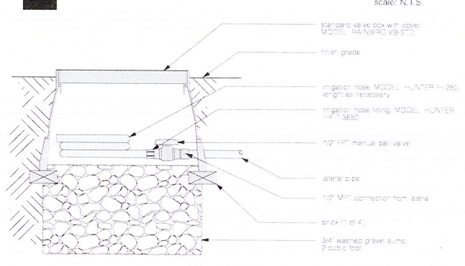
scale: N.T.S.



notes
see plans, legend and specifications for additional installation notes.

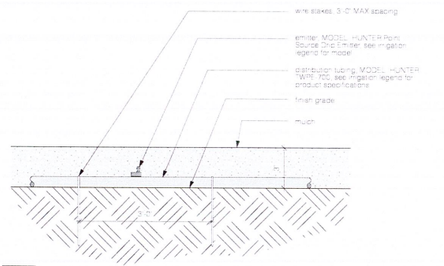
4 Valve Assembly

scale: N.T.S.



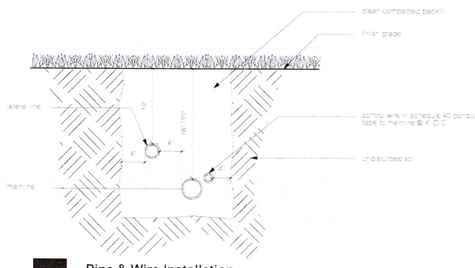
3 Manual Flush Valve

scale: N.T.S.



2 Drip Irrigation

scale: N.T.S.



1 Pipe & Wire Installation

scale: N.T.S.

3 BAREFOOT DESIGN
Landscape Architecture & Design
1331 Coast Village Road, Suite 1-F
Santa Barbara, CA 93108
Tel: (805) 969-3344
Web: www.barefootdesign.net

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REGISTERED LANDSCAPE ARCHITECT
No. 6606
STATE OF CALIFORNIA

PROJECT

Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS

Irrigation Details

DATE 12/2024
SCALE As noted
DRAWN KR
JOB 24-12
SHEET

L2.01

Plant Palette:

Botanic Name	Common Name	Size	Quantity	Notes
Trees & Large Shrubs				
Prunus ilicifolia	Hollyleaf Cherry	15gal	6	20'
Quercus agrifolia	Coast Live Oak	48" Box	3	std

Botanic Name	Common Name	Size	Quantity	MAX Height
Shrubs & Perennials				
Agave attenuata	Foxtail Agave	5g	6	4'-0"
Carex praegracilis	Clustered Field Sedge	1g	33	2'-4"
Juncus patens	Spreading Rush	1g	18	2'-0"
Mimulus aurantiacus	Bush Monkey Flower	1g	11	4'-6"
Groundcover				
Agrostis pallens	Native Sentgrass (No Mow Meadow)	seed	247 sf	1'-0"
Agrostis pallens	Native Sentgrass (GrassPave)		253 sf	

BAREFOOT DESIGN

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REGISTERED LANDSCAPE ARCHITECT
No. 6606
March 31, 2025
STATE OF CALIFORNIA

PROJECT:
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS:
Planting Plan

DATE: 7/8/24
SCALE: 1/8" = 1'-0"
DRAWN: KR
JOB: 24-12
SHEET:
L3.00
3 OF 5 SHEETS

Planting Notes

All plant materials shall be set out as shown on plan. Final locations shall be approved by the Landscape Designer prior to planting.

1. Landscape Contractor shall be responsible for becoming aware of all underground utilities, pipes and structures. The Contractor shall be held responsible for contacting all utility companies for field location of underground utility lines prior to any excavation.

2. Do not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the landscape designer, Barefoot Design, 805.697.7466.

3. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.

4. Landscape Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

5. The Landscape Contractor shall allow for the addition of specified quantities of soil amendments and conditioners in soil preparation and finish grading, per recommendation of soils report.

6. Recommendations in the Soils Management Report shall be incorporated into the landscape installation and a copy of the report is to be on-site at the time of inspection.

Unless soils have greater than 6% organic matter in the top 6" of soil, compost at a rate of a minimum of (4) cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of 6" into the soil.

7. It is the Landscape Contractor's responsibility to furnish plant material free of pests or plant diseases. Contract-grown or tagged material must be inspected by the Landscape Contractor and certified disease free. It is the Landscape Contractor's obligation to warranty all plant materials.

8. The Landscape Contractor shall provide healthy, vigorous plant stock grown under climatic conditions similar to the conditions in the locality of the project.

9. Specimen trees will be selected and tagged by Landscape Designer prior to plant installation. Landscape Contractor is responsible to do their own quantity take-offs for all plant materials and sizes shown on plans. All substitutions shall be reviewed and approved by the Landscape Designer.

10. See details and specifications for staking method, plant pit dimensions and backfill requirements. If details have not been provided, contact Landscape Designer. Plant crown elevations relative to finish grade are shown on planting details and shall be strictly adhered to. Proper compaction of backfill to prevent settlement shall be required.

11. The Landscape Designer will approve finish grades at all landscape areas prior to planting.

12. The Landscape Designer reserves the right to adjust the location of plant material during installation as appropriate to the project.

13. Landscape mulch shall be applied at 3 inches thick over all landscape surfaces except lawn areas and per City of Malibu guidelines. Mulch must be approved by Landscape Designer. 0-5 feet from structure, flammable mulch is prohibited. 5 feet to 30 feet, limited non-continuous use of organic mulch is permitted with a maximum application area of 20 feet x 20 feet, and a minimum 5 foot separation between application areas. 30 feet from the structure, organic mulch and wood chips are permitted.

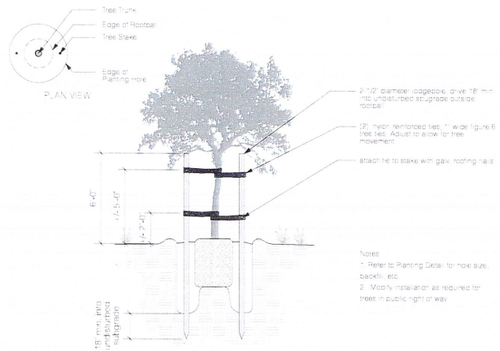
14. All side and rear yard hedges shall be maintained at or below 6'-0" in height.

15. View impermeable hedges occurring within the front setback serving the same function as a fence or wall shall be maintained at or below 42" in height.

16. Vegetation shall be situated on the propoerty so as not to obstruct the primary view from private property at any given time. Giving consideration to the plant materials future growth.

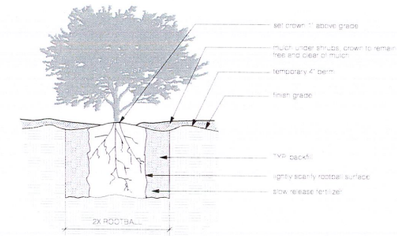
General Notes

1. Refer to Architectural and Civil Engineer for hardscape and walls.
2. Refer to Civil Engineer for all grading and drainage.



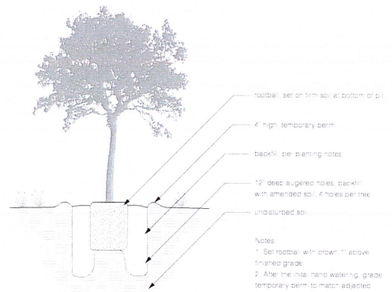
6 Tree Staking

scale: N.T.S.



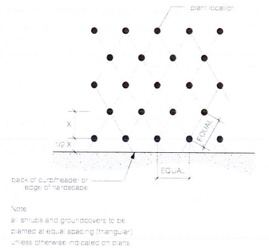
3 Shrub Planting

scale: N.T.S.



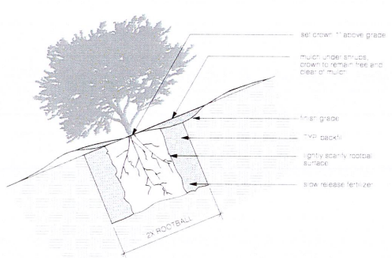
5 Tree Planting

scale: N.T.S.



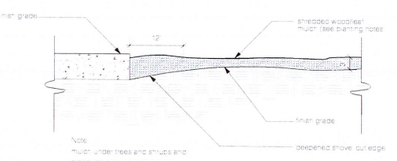
2 Groundcover Layout

scale: N.T.S.



4 Shrub Planting on Slope

scale: N.T.S.



1 Mulch Installation

scale: N.T.S.

3 BAREFOOT DESIGN
Santa Barbara, CA 93108

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REGISTERED LANDSCAPE ARCHITECT
No. 6606
STATE OF CALIFORNIA

PROJECT
Peterson Residence
31882 Sea Level Drive

SHEET CONTENTS
Planting Details

DATE	12/2/04
SCALE	as noted
DRAWN	KD
JOB	04-10
SHEET	**L3.01**
# OF #	SHEETS

Biological Assessment

Jeff Peterson

31882 Sea Level Drive (APN 4470-027-022)

Malibu, Los Angeles County, California

FORDE

BIOLOGICAL CONSULTANTS

Date Prepared: 8/05/2025

Prepared By:

FORDE BIOLOGICAL CONSULTANTS

10664 Presilla Road

Santa Rosa Valley, CA 93012

Tel: (805) 302-7165

Email: info@fordebio.com

EXHIBIT 4

This report is a true and accurate statement regarding biological resources located on the property commonly known as 31882 Sea Level Drive (APN 4470-027-022), Malibu, Los Angeles County, California. This report complies with the requirements of Chapter 4 of the City of Malibu Local Coastal Program, Local Implementation Plan (2002).



8/5/2025

Signature *Date*



8/5/2025

Signature *Date*

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INTRODUCTION

Forde Biological Consultants (Forde) visited the property commonly known as 31882 Sea Level Drive (APN 4470-027-022), City of Malibu, Los Angeles County, California, to conduct a Biological Assessment. The property is in Central Malibu, west of Point Dume, approximately 1.5 miles east from the intersection of Highway 23 and Pacific Coast Highway and about 690 feet north of the Pacific Ocean. The location of the property is depicted in Exhibit A.

PROJECT DESCRIPTION

The proposed project includes construction of a 1,527 sq. ft. single-family residence (SFR), septic system, fire department walkway, and other associated infrastructure. The site plan is included as Exhibit B.

PURPOSE

The City of Malibu Local Coastal Plan (City of Malibu LCP) requires a Biological Assessment (BA) for new development proposed within 200 feet of Environmentally sensitive Habitat Areas (ESHA). Furthermore, the City of Malibu's staff determined that fuel-modification is development; therefore, staff also requires a BA for new development within 300 feet of stream or wetland ESHA. The City GIS ESHA and Marine Resources Overlay depicts ESHA immediately adjacent the property and the National Wetlands Inventory (NWI) depicts a stream immediately adjacent the property; therefore, a BA is required for this site. The City GIS ESHA and Marine Resource Overlay is included as Exhibit C.

DESKTOP REVIEW

In addition to aerial photographs and topographic maps, the biologists reviewed the following resources before visiting the property –

1. The US. Fish and Wildlife Services (USFWS), NWI,[1]

2. The U.S. Department of Agriculture Soil Conservation Service's Web Soil Survey,

3. The California Department of Fish and Wildlife's (CDFW) Special Animals,[2] Fully Protected Animals,[3] State and Federally Endangered and Threatened Animals of California,[4] lists,

4. The CDFW Special Vascular Plants, Bryophytes, and Lichens,[5] and State and Federally Listed Endangered, Threatened, and Rare Plants of California,[6] lists,

5. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (IREP),[7]

1 http://www.fws.gov/wetlands/Data/Mapper.html
2 CAL. Fish & Wildlife, Special Animals, July 2024
3 CAL. Fish & Wildlife, Fully Protected Animals, May 2003
4 CAL. Fish & Wildlife, State & Federally Endangered & Threatened Animals of California, July 2024
5 CAL. Fish & Wildlife, Special Vascular Plants, Bryophytes, & Lichens, July 2024
6 CAL. Fish & Wildlife, State & Federally Listed Endangered, Threatened, & Rare Plants of California, July 2024
7 California Native Plant Society, Inventory of Rare and Endangered Plants, Accessed July 2024

6. The CDFW's California Natural Diversity Database (CNDDB) and the Biogeographic and Observation System (BIOS),[8] and

7. The USFWS Proposed and Candidate Species System.[9]

The CNPS IREP tracks the status of hundreds of plant species and includes information on the distribution, ecology, and conservation status of California's rare, threatened, and endangered plants and is widely accepted as the standard for information on the status of the flora of California. The CNPS recognizes more than 1600 plant taxa (species, subspecies, and varieties) as rare, threatened, or endangered in California, more than 500 additional species that have limited distribution, and approximately 55 additional species for which more information is needed. The CNDDB is part of a nationwide network overseen by NatureServe. The CNDDB includes locations and natural history information on special-status plants and animals, and natural communities throughout California. The data help drive conservation decisions, aid in the environmental review of projects and land use changes, and provide baseline data helpful in recovering rare, threatened, and endangered species. The goal of the CNDDB is to provide the most current information available on the state's most imperiled elements of natural diversity and to provide tools to analyze these data. BIOS is the system used to visualize and interpret data.

The biologists conducted the CNDDB, BIOS, and IREP reviews by searching the U.S. Geological Service's 7.5-minute quadrangles of Calabasas, Canoga Park, Malibu Beach, Moorpark, Newbury Park, Oak Mountain, Point Dume, Santa Susana, Simi, Thousand Oaks, Topanga, and Triunfo Pass. These 12 quadrangles cover the entire Simi Hills and the Santa Monica Mountains and parts of the Santa Susana Mountains. The species on the CDFW lists referenced above are those of greatest conservation need and are commonly called special-status species. Special-status species include those protected by the State Endangered Species Act,[10] the Federal Endangered Species Act,[11] the California Fish and Game Code,[12] as well as all other species that appear on the lists. Because the CDFW considers the species on these lists to be those of greatest conservation need, the biologists include an analysis of all special-status species that are known to occur in the Santa Monica Mountains. Biologists also rely on these lists for current species designations.

SURVEY METHODOLOGY

Biologist and GIS technician Mira Falicki loaded the USFWS NWI, the CNPS IREP, and CNDDB BIOS data into ESRI's GIS Collector App for in-field use. Biologists, Ken Wimer and Mason Townley conducted field surveys on June 29, 2022, and Andrew Forde visited the property on August 6, 2024. Surveys were conducted on an adjacent property by Biologists Mason Townley and Thomas O'Conney on December 17, 2021, and March 24, 2022, respectively. Rebecca Clarke visited the property to perform a wetland delineation on July 8, 2025. The survey buffer for the adjacent property overlaps the subject property and used the same survey methods. The biologists conducted botanical surveys across the entire property

8 CAL. Fish & Wildlife, Wildlife & Habitat Data Analysis Branch, California Natural Diversity Database, Accessed April 2024

9 US Fish and Wildlife Service, Sacramento Fish & Wildlife Office, Proposed & Candidate Species, Threatened & Endangered Species System, Accessed April 2024

10 CAL. Fish & Game Code §§ 2050-2097

11 16 U.S.C. §§ 1531-1544

12 CAL. Fish & Game Code §§ 3511, 4700, 5050, & 5515

per CNPS guidelines and compiled a plant inventory.[13] They also mapped plant communities and the locations of native trees, streams, and wetlands if present. The biologists conducted the wildlife surveys by searching in and around trees and shrubs for wildlife, signs of wildlife, burrows, dens, cavities, and bird nests, looked under rocks, wood, and other surface debris, and used binoculars to identify wildlife on and adjacent the property. The biologists also mapped the locations of special-status species; if present, and any resources that could potentially be used by them, and compiled lists of species observed or otherwise detected. The survey area included the property and a 200-foot buffer.

PARKLANDS

The nearest parkland is Cold Creek Valley Preserve 599 feet southeast of the property. A map depicting the property's location in relation to parklands is included as Exhibit D.

WATERSHED

The United States is divided and sub-divided into successively smaller hydrologic units, which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrological units are arranged or nested within each other, from the largest geographic area (regions) to the smallest geographic area (cataloging units). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrological unit system. The property and survey area are within the Big Sycamore Canyon-Frontal Santa Monica Bay Watershed. A map depicting the property's location within the watershed is included as Exhibit E.

STREAMS & WETLANDS

The Code of Federal Regulations defines "waters of the U.S." as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.[14] The code defines wetlands as "areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The 1987 Wetland Delineation Manual provides technical guidance and procedures for identifying and delineating wetlands that may be subject to regulatory authority under Section 404 of the Clean Water Act.[15] In the arid west, the ACOE uses the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region." The supplement is designed for use with the 1987 manual and provides guidance and information specific to the Arid West Region.[16] Where differences occur, the supplement takes precedence. The manual and supplement recommend use of the "National List of Plant Species that Occur in Wetlands" for hydrophytic classification of plants and refer to the Natural Resources Conservation Service (NRCS) for hydric soil classifications.[17] The ACOE revised the plant list and renamed it the National Wetland Plant List in 2018.[18] The methodology in the manual and the supplement is a three-parameter test that defines wetlands by hydrophytic vegetation, hydric soils, and hydrology. In the Coastal Zone, the California Coastal Commission requires that only one parameter be met.

13 CNPS Botanical Survey Guidelines, California Native Plant Society, June 2, 2001

14 33 C.F.R. §§ 320 – 330

15 Environmental Lab., 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1

16 U.S. Army Corps of Engineers, 2008. Regional Supplement to Corp of Engineers Wetland Delineation Manual: Arid West Region. Vicksburg, MS

17 Reed, P. B. 1988. National List of Plant Species that Occur in Wetlands: 1988 National Summary, Biological Report 88(24), USFWS, Washington, DC

18 U.S. Army Corps of Engineers, 2020. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/, U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes under the authority of the California Fish and Game Code.[19] The CDFW has adopted the USFWS definition and classification system of wetlands. The USFWS defines wetlands as "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly non-drained hydric soil; and (3) the substrate is saturated with water or covered by shallow water at some time during the growing season of each year." The definition includes swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated salt flats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers, and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric. The Code of Regulations defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel with banks and supports fish and other aquatic life including watercourses with surface or sub surface flow that supports or has supported riparian vegetation."[20] This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW authority extends between the top of each bank and to the outer edge of contiguous riparian vegetation and sometimes floodplains. Bank is defined as the "slope or elevation that bounds the bed of the stream in a permanent or long-standing way, and that confines the stream water up to its highest level."[21] Riparian vegetation includes species listed on the "National Wetland Plant List" defined as OBL, FACW, or FAC.

The USFWS NWI depicts Encinal Canyon Creek adjacent the property's northwest boundary. The NWI is based on the analysis of high-altitude imagery and states "a margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection may result in revision of the wetland boundaries or classification established through image analysis." The NWI is included as Exhibit F. Rebecca Clarke visited site on July 8th, 2025 to perform a wetland delineation and assess the location of the stream on site. She performed an ACOE three-parameter test and determined that the stream does not cross the parcel boundaries. The stream has well-defined banks, a well-defined bed, flowing water, and supports native riparian vegetation. The location of the stream, per site-specific study, is depicted in Exhibit G. The Arid West Data Forms are included as Appendix A.

PLANT COMMUNITIES

Plant communities are typically dependent on or affected by such factors as geographical location, elevation, soil/substrate types and chemistry, precipitation rates, and many other factors and often drastically through human disturbance and development. Using the alliance classification system outlined in the Manual of California Vegetation, Second Edition (MCV),[22] it was determined that two plant communities occur on the property and another 5 within the survey area.
Non-native Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) and Ruderal communities dominate the property and the vacant parcels to the north and south. Native plant communities, associated with Encinal Canyon Creek,

19 CA. Fish & Game Code §§ 1600 – 1616
20 14 C.C. R. § 1.72
21 People v. Osborn, 116 Cal. App. 4th 764, 11 Cal. Rptr. 3d 14 (2004)
22 *Manual of California Vegetation, Second Edition (Sawyer et. al, 2009)*

occur immediately west, adjacent the property. These native plant communities include California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance) and Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). A small patch of Laurel Sumac Scrub (*Malosma laurina* Shrubland Alliance) also occurs within the survey area. The rest of the survey area is developed. The extents of the native and non-native plant communities are depicted in Exhibit G. Photographs depicting the alliances and condition of the property are included as Exhibit H. The Plant Inventory is included as Exhibit I. The communities are described below.

Ruderal

This community does not conform to any alliances described in the MCV; rather, it refers to the often-herbaceous species that are first to colonize land disturbed by natural or human causes, or species adapted to negatively altered growing conditions, such as compacted soils. The property and the vacant parcels to the north and south, appear to have been cleared as far back as 1947 before the first housing tracts occurred along the coastal bluff area and is currently cleared for fuel modification purposes. Ruderal species dominate the eastern side of the parcel outside of the riparian corridor, and include native and non-native grasses and forbs, such as annual brome (*Bromus* sp.), red brome (*Bromus madritensis*), short pod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), carnation spurge (*Euphorbia terracina*), cliff aster (*Malacothrix saxatilis*), Bermuda buttercup (*Oxalis pescaprae*), and common stork's-bill (*Erodium cicutarium*). This community dominates the property and covers approximately 0.4 acres of land within the survey area. This alliance falls within existing fuel modification zones and is cleared on an annual basis.

Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance)

This alliance has eucalyptus (*Eucalyptus* spp.) as dominant in the tree layer which is sparse to open to continuous with sparse to intermittent shrub and herbaceous layers. Requires >80% relative cover in the tree layer. Introduced species planted as individuals or as windrows or groves. Found equally in upland and bottomland areas. Within the survey area, blue gum eucalyptus (*Eucalyptus globulus*), which may have been planted as a windrow or naturally recruited from plantings elsewhere. This alliance covers approximately 0.38 acres of land within the survey area. This alliance falls within existing fuel modification zones; its understory is cleared on an annual basis.

Mustard - Thistle (*Brassica nigra* – *Salsola tragus* Herbaceous Semi Natural Alliance)

This alliance is primarily dominated by carnation spurge in the herb layer which is nearly continuous; it forms a mosaic in places with other species trading in dominance, such as black mustard and Russian thistle. This alliance also falls within existing fuel modification zones and is cleared on an annual basis.

California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance)

This alliance is dominated/co-dominated by California sycamore and coast live oak (>30%) with an open to intermittent canopy and an herbaceous layer that is sparse or grassy. It occurs along the banks of Encinal Canyon Creek. Native and non-native component species include blue gum eucalyptus, poison oak (*Toxicodendron diversilobum*), mousehole tree (*myoporum laetum*), toyon (*Heteromeles arbutifolia*), arroyo willow (*Salix lasiolepis*), Mexican fan palm (*Washingtonia robusta*),

umbrella palm (*Cyperus involucratus*), ice plant (*Carpobrotus edulis*), and red brome. This community covers approximately 0.88 acres of land within the survey area.

Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance)

Sandbar willow (*Salix exigua*) dominant or co-dominant in the tall shrub/low tree canopy. Component species include elderberry (*Sambucas nigra*), poison oak, and California sycamore. In places, poison oak is dominant at total low cover. willows are less than 30 ft. high, and the canopy is open to continuous. The herbaceous layer is variable. This community covers approximately 0.04 acres of land within the survey area.

Laurel Sumac Scrub (*Malosma laurina* Shrubland Alliance)

Laurel sumac is dominant or co-dominant in the shrub canopy. Emergent trees or tall shrubs may be present at low cover and are less than 15 feet. The association is >50% absolute cover of laurel sumac or > 30% relative cover if co-dominant with California buckwheat or black sage in the shrub canopy. It often occurs on steep slopes with shallow, fine-textured soils. This community is limited within the survey area to a small dense patch adjacent an SFR north of the subject property and covers approximately 0.01 acres of land.

Developed/Ornamental

Parts of the survey area are developed and included SFR, landscaped areas, parking areas, and paved residential street. Man-made structures and landscaped areas provide habitat for a variety of wildlife, including nesting birds.

NATIVE TREE PROTECTION ORDINANCE

The Native Tree Protection Ordinance outlined in the City of Malibu LCP is designed to preserve and protect native trees including alder (*Alnus rhombifolia*), preserve oak (*Quercus* sp.), California bay (*Umbellularia californica*), southern California black walnut, California sycamore (*Platanus racemose*), and toyon. Trees protected by this ordinance must have at least one trunk with a diameter measuring 6 inches or more or a combination of two trunks with diameters totaling 8 inches or more as measured four and one ½ foot above natural grade. The biologist's observed California sycamore and coast live oak trees within the area dominated by California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance) that meet the protected tree definition. There are no protected trees on the property. The nearest protected trees are on the property to the southwest. The two trees are depicted in Exhibit J.

COMMON WILDLIFE

The plant communities associated with Encinal Canyon Creek provides cover and foraging habitat for a variety of common wildlife species including hawks, owls and bats. The mature trees also provide opportunities for nesting birds and roosting bats. The plant communities on the property provide little cover and limited foraging habitat. Species observed or otherwise detected within the survey area included monarch (*Danaus plexippus*), California treefrog (*Pseudacris cadaverina* Great Basin fence lizard (*Sceloporus occidentalis longipes*), side-blotched lizard (*Uta stansburiana elegans*), black phoebe (*Sayornis nigricans*), California towhee (*Melozone crissalis*), acorn woodpecker (*Melanerpes formicivorus*), common raven (*Corvus corax*), Allen's hummingbird (*Selasphorus sasin*), song sparrow (*Melospiza melodia*), lesser goldfinch (*Spinus psaltria*), oak titmouse

(*Baeolophus inornatus*), Cassin's kingbird (*Tyrannus vociferans*), and California ground squirrel (*Otospermophilus beecheyi*), among others. Other common species are likely to occur, especially birds and bats during spring and fall migration. The Wildlife Inventory is included as Exhibit K.

SPECIAL-STATUS SPECIES

Special-status species include those protected by the State Endangered Species Act,[23] the Federal Endangered Species Act,[24] fully protected species, and others protected by the California Fish and Game Code.[25] The CNDDB BIOS and the CNPS IREP revealed that several special-status species are documented as occurring within 2 miles of the property including Santa Susana tarplant (*Deinandra minthornii*), Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*), Plummer's mariposa-lily (*Calochortus plummerae*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Busck's gallmoth (*Carolella busckana*), American bumblebee (*Bombus pensylvanicus*), Crotch's bumble bee (*Bombus crotchii*), monarch (*Danaus plexippus*) - California Overwintering Population 1, and southwestern pond turtle (*Actinemys pallida*). The monarch overwintering site is depicted as occurring at Encinal Canyon Creek, south of the property. According to the databases, there are no records of special-status species on the property. The BIOS map is included as Exhibit L. Exhibit M includes all the special-status species returned by the databases, a brief description of habitat associations and requirements, and statements regarding potential for occurrence based on known habitat associations and other factors.[26]

Special-Status Vascular Plants, Bryophytes, & Lichens

Key factors to consider when evaluating potential for special-status vascular plants, bryophytes, and lichens to occur are geographic location, elevation, vegetation, vegetation structure, and microhabitats. Another key factor is soil types and chemistry. The U.S. Department of Agriculture Soil Conservation Service produces soil maps and reports for most areas in the U.S. including the Santa Monica Mountains National Recreation Area. The Santa Monica Mountains National Recreation Area map depicts Pachic Argixerolls (coastal) and Lockwood-Urban land complex on the property. The typical profile of Pachic Argixerolls is described as gravelly loam (A - 0 to 9 inches), gravelly clay loam (Bt - 9 to 24 inches), overlying unweathered bedrock (Crt - 24 to 33 inches). Parent material is colluvium and/or residuum derived from shale. It is moderately well drained and has surface pH 6.5. Minor components include Gullied Land and Elder, and Coastal. This soil type is mostly associated with Encinal Canyon Creek and extends onto the property. The Lockwood series is described as gravelly loam (A – 0 to 4 inches), gravelly clay loam (Bt - 4 to 13 inches), and gravelly sandy clay loam (Btk - 13 to 82 inches). It is well drained, and the parent material is alluvium derived from shale. It has a surface pH 7.4. Urban Land is described as areas with structures, streets, parking lots, and associated landscaped areas. This soil type dominates the property. A soil map is included as Exhibit N.

Based on the geographic location, elevation, plant communities, soils, soil chemistry, and site-specific surveys, the biologists determined that the special-status vascular plants, bryophytes, and lichens returned by the databases and others considered in this assessment are not expected to occur on the property and only have low potential to occur elsewhere

23 CAL. Fish & Game Code §§ 2050-2097
24 U.S.C. §§ 1531-1544
25 CAL. Fish & Game Code §§ 3511, 4700, 5050, & 5515
26 Transient and vagrant species are not addressed. Transients are species that pass through a geographical area and vagrants are species that are recognized as being outside their normal range.

within the survey area. Santa Susana tarplant is not expected because there are no sandstone outcrops. The biologists determined that Sonoran maiden fern and mesa horkelia had potential to occur within the survey area during desktop review; however, they did not observe these species during surveys. Plummer's mariposa lily is not a CNPS list 1 or 2 species and not protected by the City of Malibu LCP, regardless, it's not expected to occur due lack of suitable substrates.

Special-Status Wildlife

Based on the geographic location, elevation, plant communities, soils, soil chemistry, and site-specific surveys, the biologists determined that the majority special-status wildlife species returned by the databases and others considered in this assessment are not expected to occur on the property or have low potential to occur elsewhere within the survey area. Busck's gallmoth and American bumblebee are also not protected by the City of Malibu LCP. These species are not expected to occur at the property but could occur within the survey area. Crotch's bumble bee is a federal candidate for listing. This species is not expected to occur on the property or within the survey area due to lack of food plants. During desktop review, the biologists determined that monarch had high potential to occur at the property due the overwintering site to the south. The biologists observed them flying near the property during the surveys. The monarch is a candidate for federal listing as endangered. They are diurnal insects in the order Lepidoptera which, like many other insects, undergo multiple life stages. Eggs are laid exclusively on milkweed (*Asclepias* spp.) which then provides food for the larvae. The final life stage consists of metamorphosis into butterflies. Mature monarchs disperse through a wide variety of habitats and produce multiple breeding generations throughout the spring and summer months. The last annual generation does not become sexually mature, however, until after they have finished migrating to overwintering grounds in Mexico or the Southern California coast (generally October through March) and begun returning north (excluding some resident populations).[27] Historically, conifers, such as Monterey pine, were preferred as overwintering habitat on the west coast (*Pinus radiata*), but introduced eucalyptus species are now mostly favored, particularly blue gum (*Eucalyptus globulus*). Microclimate elements are important for overwintering habitat selection, however, and not all scattered or individual trees of these species are used. Elements such as filtered light, wind speeds of less than four miles per hour (mph), and nearby freshwater sources appear to be important criteria for selection. There is some evidence that they will also switch tree species mid-season based on climatic conditions and may prefer mixed species groves.[28] It is unlikely that monarchs would use the Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) on the subject property as an overwintering site due the fact that the trees are in a row and are somewhat relatively exposed. Southwestern pond turtle is not known to occur in Encinal Canyon Creek. The creek where it occurs south of Pacific Coast Highway appears to lack ponds, that are necessary to survive when flows cease. The biologists determined that the species has low potential to occur within the survey area.

NESTING BIRDS

The Migratory Bird Treaty Act protects most migratory birds breeding in the US. The Act specifically states that it is illegal "...for anyone to take... any migratory bird... nests, or eggs." "Take" means to harass, harm, pursue, hunt, shoot, wound,

27 Jepsen, S.; Schweitzer, D.F.; Young, B.; Sears, N.; Ormes, M.; Black, S.H. 2015. Conservation status and ecology of the Monarch butterfly in the United States. Arlington, VA: NatureServe and Portland, OR: The Xerces Society for Invertebrate Conservation.

28 Griffiths J., Villablanca, F. 2015. Managing monarch butterfly overwintering groves: making room among the eucalyptus. California Fish and Game 101(1):40-50; 2015

kill, trap, capture, or collect, or attempt to engage in any such conduct.[29] The California Fish & Game Code protects the nest or eggs of all birds and specifically states, "that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird."[30] The Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill".[31]

The CDFW recognizes the breeding season in southern California as occurring between February and September; however, several species can nest outside of that timeframe.[32] For example, Anna's hummingbird nests mid-December to mid-August and mourning doves typically nest February to September but can nest year-round.[33] The plant communities that occur on and adjacent the property are suitable for nesting birds, especially passerines. The mature eucalyptus trees could also be potentially used by raptors. Adjacent structures can also be used by certain species.

CONNECTIVITY - LINKAGES & CORRIDORS

The National Park Service, CDFW, and the Santa Monica Mountains Conservancy have expressed concerns about the adverse effects of urbanization on wildlife, particularly the fragmentation of habitat areas, which prevents the freedom of movement that species need. Preservation of linkages between large blocks of core habitat is of the utmost importance in the Santa Monica Mountains and preservation through linkages is a major concern. In general, a linkage is a feature that connects at least two blocks of habitat.[34] The assumed function of a linkage is to facilitate dispersal of individuals between blocks of habitat, allowing for long-term genetic interchange and for re-colonization of blocks of habitat from which populations have been locally extirpated.[35] There are two types of linkages, Landscape Linkages and Connectivity Choke Point Corridors. A Landscape Linkage may or may not be constricted, but it is essential to maintain the connectivity function of a particular region. A Connectivity Choke Point Corridor is a narrow, often short, and impacted corridor between blocks of habitat. This type of linkage typically requires that wildlife move through a choke point structure. Choke point structures include culverts, underpasses, overpasses, or tunnels that were not specifically designed for movement, but incidentally provide movement opportunities through otherwise impenetrable barriers.[36] The property is located south of Pacific Coast Highway with SFR's to the west and east. There are no corridors or choke point corridors that connect the property to larger blocks of habitat. The culvert under Pacific Coast Highway is not suitable for movement.

ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The City of Malibu LCP defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem." ESHA includes native habitats, which contribute to the viability of species protected by the State and Federal endangered species acts or those that are "fully protected" or recognized as "species of special concern" by the State. Any habitats with plant species on list 1B or list 2

29 U.S.C. §§ 703-712, Migratory Bird Treaty Act of 1918 as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989.

30 CAL. Fish & Game Code § 3503

31 CAL. Fish & Game Code § 86

32 CAL. Fish & Wildlife, Personal Communication, 2023

33 CAL. Fish & Game, Wildlife & Habitat Data Analysis Branch, California's Wildlife, Volume II: Birds, 1988 – 1990, Paul J. Baicich and J. O. Harrison. A Guide to the Nests, Eggs, and Nestlings of North American Birds, 1997.

34 Harris, L.D., & P. Gallagher, 1989. New Initiatives For Wildlife Conservation: The Need For Movement Corridors, In Preserving Communities and Corridors. Defenders of Wildl., Washington D.C (G. Mackintosh ed.)

35 Rosenberg, D. K., B. R. Noon, and E. C. Meslow, 1997. Biological Corridors: Form, Function, and Efficacy. Bioscience: November: 677

36 Forman, R.T., 2003. Road Ecology: Science and Solutions. Island Press: Washington, D.C.

of the California Native Plant Society's Inventory of Rare and Endangered Plants or habitats that are rare or valuable from a local, regional, or statewide basis including wetlands and streams are ESHA.[37]

The property and survey area falls entirely within the fuel modification zones of legally existing SFR. With exception of streams and wetlands, areas within the fuel modification zones of legally existing SFR do not meet the ESHA definition. Encinal Canyon Creek and the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance) and Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance) that dominate it, meet the ESHA definition. The true extent of ESHA occurring within the survey area is depicted in Exhibit O.

IMPACT ANALYSIS

The proposed project includes construction of a 1,527 sq. ft. single-family residence (SFR), septic system, fire department walkway, other associated infrastructure, and fuel modification. Construction of the SFR is not expected to directly affect ESHA (including stream and wetlands,) special-status species, or protected trees. Construction could indirectly impact these resources, and it could directly affect nesting birds. Fuel modification for the proposed SFR falls within an area that is already encompassed within fuel modification zones of adjacent SFR; additional adverse impacts are not expected.

ESHA Impacts

A typical fuel-modification zone extending 200 feet from the proposed SFR will extend across 1.26 acres of ESHA. The ESHA consists of Encinal Canyon Creek, the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance) and the Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). The ESHA is located within the fuel modification zones of existing SFR. The fuel-modification zone for the proposed SFR will not extend beyond existing fuel modification zones; therefore, additional adverse impacts are not expected. Exhibit O depicts the proposed fuel modification zone and existing fuel modification zones.

Stream Impacts

Construction of the SFR will not directly affect Encinal Canyon Creek, the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia* Woodland Alliance), or the Arroyo Willow Thickets; however, it has potential to affect these resources through stormwater run-off and erosion during the construction phase. Without appropriate control measures in place, sediment, debris, and pollutants can be transported to the creek and have wide-ranging detrimental impacts. Recommendations are included below that will reduce this potential.

Protected Tree Impacts

There are two trees southwest of the subject property and others associated with Encinal Canyon Creek that meet the protected tree definition. Construction of the proposed SFR will not affect these trees or those associated with Encinal Canyon Creek. The fuel-modification zone for the proposed SFR will encompass these protected trees and those associated with the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa* - *Quercus agrifolia*

37 City of Malibu Local Coastal Plan, Local Implementation Plan, Chapter 4.1; City of Malibu Local Coastal Plan, Land Use Plan, Chapter 3.1

Woodland Alliance); however, the trees are already located within the fuel modification zones of existing SFR. Exhibit O depicts the proposed fuel modification zone and existing fuel modification zones. Recommendations are included below to ensure their protection.

Special-Status Plant Species Impacts

The biologists determined that the special-status vascular plants, bryophytes, and lichens returned by the databases and others considered in this assessment are not expected to occur on the property and have low potential to occur elsewhere within the survey area at best. The proposed project is not expected to affect special-status plant species.

Special-Status Wildlife Species Impacts

The biologists determined that the majority of the special-status wildlife species returned by the databases and others considered in this assessment are not expected to occur on the property and have low potential to occur elsewhere within the survey area at best. The biologists observed monarchs flying near the property and determined that San Diegan tiger whiptail had moderate potential to occur during desktop review but did not observe any during the site visits. The Eucalyptus Groves (*Eucalyptus* spp. Woodland Semi-Natural Alliance) where it occurs downstream of the survey area is used by monarch as overwintering sites, but overwintering is unlikely at the edge of the grove that occurs on the subject property due linearity and exposure of the trees in that area. The fuel-modification zone for the proposed SFR will not extend beyond existing fuel modification zones; therefore, additional adverse impacts are not expected. The proposed project is not expected to affect special-status wildlife species.

Nesting Bird Impacts

The potential for birds to nest within the survey area throughout much of the year is high; however, take of bird nests can be avoided by scheduling the work activities to occur outside the CDFW-defined breeding season, preceded by a nest survey or surveys. Avoidance recommendations are provided below.

ALTERNATIVES

An alternatives analysis for any project should consider both impact avoidance/reduction, as well as the feasibility for beneficial use of the property. Economic viability, site geology, availability of infrastructure and utilities, jurisdictional boundaries, location of natural resources, consistency with general plans and local coastal plans are all factors that must be considered when addressing alternatives. Because the proposed project is located within an ESHA buffer, the development envelope is limited to 10,000 sq. ft. or 25% of the parcel size. A previous proposal development proposal exceeded the 25% and has now been redesigned. The proposed development is less than 25% of the size of the parcel. The site plans are included as Exhibit P for comparison.

RECOMENDATIONS, AVOIDANCE STRATEGIES, & MITIGATION MEASURES

This section includes recommendations, avoidance strategies, and mitigation measures that if included as part of the proposed Project, will eliminate or reduce the potential for adverse impacts on the ESHA, Encinal Canyon Creek, protected trees, special-status species, and nesting birds.

1. **Erosion Control and Best Management Practices Plan**
    a. A licensed professional shall prepare an Erosion Control and Best Management Practices Plan and be submitted to the City of Malibu certifying that the plan as in conformance with all necessary requirements. The plan should ensure that there are no direct or indirect impacts to Encinal Canyon Creek using appropriate devices, including but not limited to, silt fence, straw wattles, and/or sandbags. A long-term run-off and treatment plan should also be prepared and included as part of the project.

2. **Fuel-Modification Plan**
    a. A Fire Department stamp-approved Fuel Modification Plan shall be submitted to the City of Malibu as part of the proposed project. The plan shall include, but not limited to, fire hydrants, in-house, roof top, eave sprinkler systems, and other fire suppression devices.

    b. The Fire Department does not typically require fuel modification of riparian vegetation; however, a note on the plan shall exclude the California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) and the Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance).

    c. If fuel modification within the California Sycamore - Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance) is required, it shall be limited to dead-wooding and pruning of eucalyptus trees and removal of non-native species.

3. **Nesting Bird Survey & Protection Plan**
    a. Initial vegetation clearance shall be scheduled to occur outside the nesting season of birds as defined by the CDFW (February 15 through August 30), if feasible. Regardless of timing, a qualified biologist should conduct a nesting bird survey or surveys before any work activities are scheduled to occur.

    b. If work activities are scheduled to occur outside of the nesting season, a biologist who is familiar with nesting ecology and chronology of southern California species should conduct a survey seven (7) days and again three (3) days before the activities are scheduled to begin. The biologist should survey a 300-ft radius around the work area to account for nesting raptors.

c. If work activities cannot be scheduled outside of nesting season, a series of general nesting surveys should also be conducted, which begin 31 days before any scheduled activities, then one week apart with the final survey being conducted two (2) days before work commencement.

d. If the biologist determines that there are active nests within or adjacent the work area, they should establish a clearly marked 100-ft. exclusion buffer for passerine nests and a 300-ft. buffer for raptor nests. Exclusion buffers may be reduced at the consulting biologist's discretion.

4. Stream & Tree Protection Plan

a. A fence shall be placed at the limits of the California Sycamore – Coast Live Oak Riparian Woodlands (*Plantanus racemosa - Quercus agrifolia* Woodland Alliance).

A sign shall be attached to the fence that states –

Environmentally Sensitive Habitat Area – Access Prohibited

b. A sign shall also be placed at the southern boundary of the property or 5 feet from the canopies of the trees, if permission is granted by the adjacent property owner.

The sign shall state -

Protected Trees – No Access or Storage Allowed within 5 feet of Oak Tree Canopies.

c. A biologist shall direct and monitor the installation of the fence and signs to ensure that it is done in an appropriate manner.

5. Pre-Construction Biological Survey

a. A pre-construction biological survey shall be conducted within 24 hours of scheduled work activities, including site preparation, vegetation removal, and grubbing.

6. Vegetation Removal, Grubbing, & Grading of Construction Site

a. Laborers shall use hand-held tools to remove vegetation from the construction site. This will provide wildlife a chance to escape and reduce the potential of direct mortality from heavy equipment.

b. A biologist shall monitor vegetation removal so that they can capture and relocate wildlife as necessary.

c. Initial grubbing and grading shall occur three (3) to seven (7) days after vegetation has been cleared from the construction site. The delay between vegetation clearance and grubbing and grading activities will allow wildlife a chance to escape and reduce the potential of them being crushed by heavy machinery.

d. A biologist shall monitor initial grading and grubbing so that they can capture and relocate wildlife as necessary.

7. Initial Fuel-Modification

a. Initial fuel modification shall only be implemented after the construction phase of the project is completed or as directed by the Fire Department.

b. Initial fuel modification activities shall be conducted using hand-held tools and per the specifications of the Fire Department, to avoid injury/mortality of wildlife.

c. A biologist shall monitor initial fuel modification activities so that they can capture and relocate wildlife as necessary.

REPORT PREPARATION

This report was prepared by Andrew McGinn Forde and Miranda Anocibar and reviewed by Ashley Martinez. Biologist and GIS technician Mira Falicki prepared all exhibits containing maps and any acreage calculations.



Exhibit A - Project Location



Project Parcel

LA County Parcels

Proposed Structures

Main Building

Development Area
(1,527 Sq. Ft)

Proposed Fuel Modification Zones

Zone A (20ft)

Zone B (100ft)

Zone C (200ft)

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Exhibit B - Site Plan

*Note that entirety of development lies within existing fuel modification zones.



Project Parcel

LA County Parcels

ESHA

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Exhibit C- City ESHA. GIS and Marine Resources Overlay



Project Parcel

Parklands

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Exhibit D - Parklands



Exhibit E - Watersheds



Project Parcel

NWI Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Forested/ Shrub Wetland
- Riverine

*The USFWS objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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Exhibit F - National Wetlands Inventory



Project Parcel

LA County Parcels

CDFW Jurusdictional Stream Top of Bank

Soil Test Point

Vegetation Community

Arroyo willow thickets (0.04 acres)

California sycamore- coast live oak riparian woodlands (0.76 acres)

Developed/Ornamental (11.72 acres)

Eucalyptus groves (0.53 acres)

Upland mustard fields (0.06 acres)

Laurel sumac scrub (0.01 acres)

Ruderal (0.46 acres)

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Exhibit G - Natural Resources



Photo 1 - Eucalyptus groves



Photo 2 - Ruderal (foreground), laurel sumac shrub (back)



Photo 3 - Mustard fields (foreground), oak-sycamore woodland (background)



Photo 4 - Ruderal

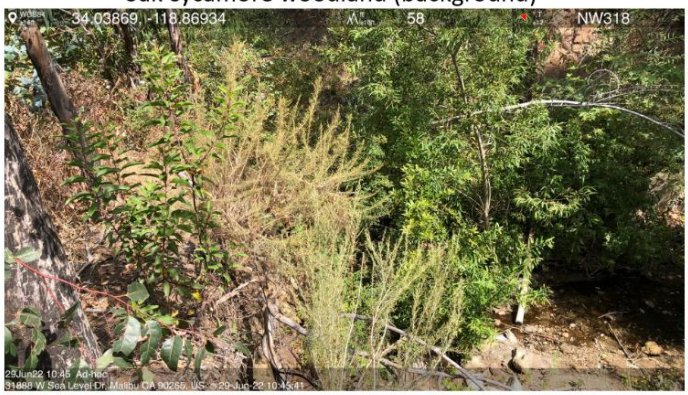


Photo 5 - Arroyo willow thickets



Photo 6 - Stream



Plant Inventory

Asterisk (*) indicates species not native to California

Latin Name	Common Name
Eudicots	**Flowering Plants**
Aizoaceae	**Fig-marigold family**
Drosanthemum floribundum (Haw.) Schwantes *	Ice plant
Amaranthaceae	**Amaranth family**
Amaranthus albus L. *	Tumbleweed
Anacardiaceae	**Sumac family**
Malosma laurina (Nutt.) Nutt. ex Abrams	Laurel sumac
Toxicodendron diversilobum (Torrey & A. Gray) E. Greene	Poison oak
Arecaceae	**Palm family**
Washingtonia robusta H. Wendl. *	Mexican fan palm
Asteraceae	**Sunflower family**
Malacothrix saxatilis (Nutt.) Torr. & A. Gray	Cliff aster
Venegasia carpesioides DC.	Canyon sunflower
Brassicaceae	**Mustard family**
Hirschfeldia incana (L.) Lagr.-Fossat *	Wild mustard, Shortpod mustard
Cyperaceae	**Sedge family**
Cyperus involucratus Rottb. *	Umbrella palm
Euphorbiaceae	**Spurge family**
Euphorbia terracina L. *	Geraldton carnation weed
Fagaceae	**Beech/Oak family**
Quercus agrifolia Née var. *agrifolia*	Coast live oak
Lamiaceae	**Sage family**
Salvia leucophylla Greene	San Luis purple sage
Myrtaceae	**Myrtle family**
Eucalyptus globulus Labill *	Blue gum eucalyptus

Oxalidaceae	**Wood sorrel family**
Oxalis pes-caprae L. *	Bermuda buttercup
Platanaceae	**Plane-tree family**
Platanus racemosa Nutt.	California sycamore
Rosaceae	**Rose family**
Heteromeles arbutifolia (Lindl.) M. Roem.	Toyon
Salicaceae	**Willow family**
Salix lasiolepis Benth.	Arroyo willow
Scrophulariaceae	**Figwort family**
Myoporum laetum G. Forst. *	Ngaio tree
Solanaceae	**Nightshade family**
Nicotiana glauca Graham *	Tree tobacco
Monocots	**Grasses And Allies**
Poaceae	**Grass family**
Bromus madritensis L. ssp. *rubens* (L.) Husn. *	Red brome
Elymus condensatus J. Presl	Giant wild rye

Exhibit I - Plant Inventory



Project Parcel

LA County Parcels

Protected Tree

Protected Tree Canopy

Tree Number	Species	Trunk(s) (Single/Multiple)	Cumulative DBH (in.)	Protected (Yes/No)	Status
1	Coast live oak	Multiple	58	Yes	Healthy
2	Coast live oak	Multiple	21	Yes	Heathy

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Exhibit J - Tree Map

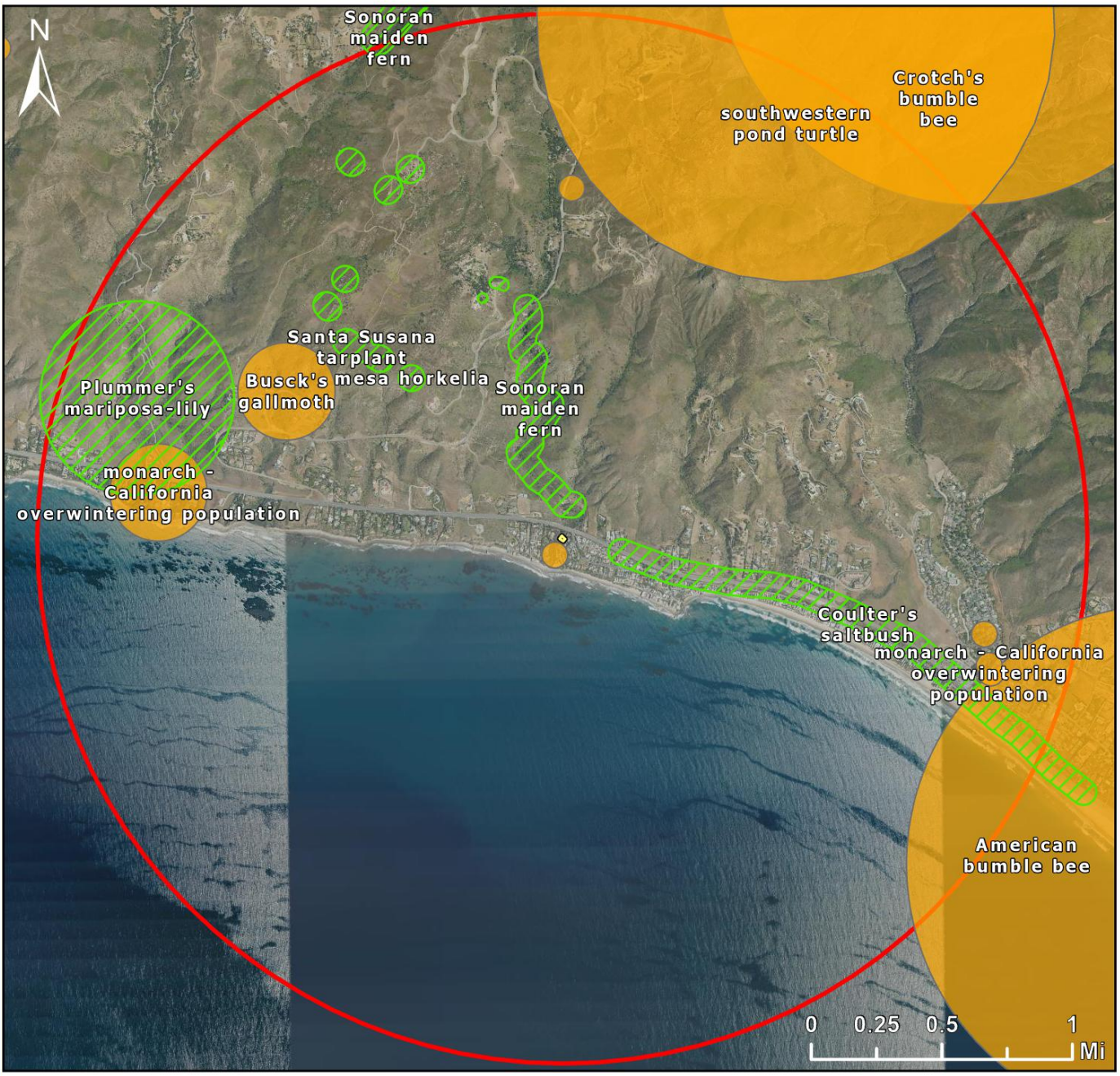
Wildlife Inventory

INVERTEBRATES		
Mymphalidae	Monarch	*Danaus plexippus*
	Painted lady	*Vanessa cardui*
Vespidae	Yellow jacket	*Vespula sp.*
REPTILES		
Phrynosomatidae	*Uta stansburiana elegans*	Western side-blotched lizard
	Sceloporus occidentalis longipes	Great Basin fence lizard
AMPHIBIANS		
Hylidae	*Pseudacris cadaverina*	California treefrog
BIRDS		
Laridae	*Larus californicus**	California gull*
Accipitridae	*Buteo jamaicensis**	Red-tailed hawk*
	*Buteo lineatus**	Red-shouldered hawk*
Columbidae	*Zenaida macroura*	Mourning dove
Trochilidae	*Calypte anna*	Anna's hummingbird
	Selasphorus sasin	Allen's hummingbird
Tyrannidae	*Sayornis nigricans*	Black phoebe
	Tyrannus vociferans	Cassin's kingbird
Corvidae	*Aphelocoma californica*	California scrub-jay
	Corvus brachyrinchous	American crow
	Corus corax	Common raven
Hirundinidae	*Tachycineta bicolor*	Tree swallow
Picidae	*Melanerpes formicivorus*	Acorn woodpecker
Paridae	*Baeolophus inornatus*	Oak titmouse
Aegithalidae	*Psaltriparus minimus*	Bushtit
Troglodytidae	*Thryomanes bewickii*	Bewick's wren
	Troglodytes aedon	House wren
Turidae	*Sialia mexicana*	Western bluebird
Mimidae	*Mimus polyglottos*	Northern mockingbird

Sturnidae	*Sturnus vulgaris***	European starling**
Parulidae	*Setophaga coronata*	Yellow-rumped warbler
Emberizidae	*Melozone crissalis*	California towhee
	Zonotrichia leucophrys	White-crowned sparrow
	Junco hyemalis	Dark-eyed junco
	Melospiza melodia	Song sparrow
Icteridae	*Icterus bullockii*	Bullock's oriole
Fringillidae	*Carpodacus mexicanus*	House finch
	Spinus psaltria	Lesser goldfinch
Passeridae	*Passer domesticus***	House sparrow**
MAMMALS		
Geomyidae	*Thomomys bottae*****	Valley pocket gopher****
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel

Exhibit K - Wildlife Inventory

* = Flyovers (species observed flying over property or within the immediate vicinity)
** = Non-Native Species
*** = Scat Detections
**** = Mound, hole, burrow, den, stick house, (as appropriate to species)



Project Parcel

California Natural Diversity Database

Fauna

Flora

Radius Search (2 Miles)

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SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD	OCCURRENCE POTENTIAL (See notes at end of table for sources of information)
	Federal Status	State Status	CNPS Global Rank/ State Rank		
Astragalus brauntonii Parish Braunton's milk-vetch	FE January 1997	--	1B.1 G2/S2	4 m - 640 m Perennial Herb January - August	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED It occurs in closed-cone coniferous forest, chaparral, coastal sage, valley and foothill grasslands, and recent burn or disturbed areas usually in association with sandstone with carbonate layers or down-wash sites (into which the seeds have drifted). Carbonate outcrops are extremely rare within its current range, and as a result, are naturally rare. The property and survey area appear to lack suitable habitat elements.
Astragalus pycnostachyus Gray var. *lanosissimus* (Rydb.) Munz & McBurn. Ventura marsh milk-vetch	FE May 2001	SE April 2000	1B.1 G2T12/S1	1 m - 35 m Perennial Herb June - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Rediscovered near Oxnard in 1997 and known from only one natural occurrence composed of 30-50 reproductive plants. It occurs in coastal dunes and edges of salt or brackish marshes and swamps. The property and survey area appear to lack suitable habitat elements.
Astragalus tener Gray var. *titi* (Eastw.) Barneby Coastal dunes milk-vetch	FE August 1998	SE February 1982	1B.1 G2T1/S1	1 m - 50 m Annual Herb March - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal bluff scrub with sandy soils, coastal dune, and mesic coastal prairie habitats. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD	OCCURRENCE POTENTIAL (See notes at end of table for sources of information)
	Federal Status	State Status	CNPS Global Rank/ State Rank		
Atriplex coulteri (Moq.) D. Dietr. Coulter's saltbush	--	--	1B.2 G2/S2	3 m - 460 m Perennial Herb March-October	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with coastal dune, coastal scrub, coastal bluff scrub, and valley and foothill grasslands with alkaline or clay soils. The property and survey area appear to lack suitable habitat elements.
Atriplex parishii Wats. Parish's brittlescale	--	--	1B.1 G1G2/S1	25 m - 1900 m Annual Herb June - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in chenopod scrub, playas, and vernal pool habitats on alkaline soils. The property and survey area appear to lack suitable habitat elements.
Atriplex serenana A. Nels. var. *davidsonii* (Standl.) Munz Davidson's saltscale	--	--	1B.2 G5T1/S1	10 m - 200 m Annual Herb April - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal bluff and coastal scrub on alkaline soils. The property and survey area appear to lack suitable habitat elements.

Atriplex pacifica A. Nels. South coast saltscale	-- 	-- 	1B.2 G4/S2	0 m - 140 m Annual Herb March - October	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal bluff scrub, coastal dunes, costal scrub, and playas. The property and survey area appear to lack suitable habitat elements.
SCIENTIFIC NAME COMMON NAME	**STATUS (October 2024) Federal Status**	**State Status**	**CNPS Global Rank/ State Rank**	**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
Baccharis malibuensis Beauchamp & Henrickson Malibu baccharis	- -	- -	1B.1 G1/S1	150 m - 305 m Perennial Shrub (Deciduous) August	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with coastal scrub, chaparral, cismontane woodland, and riparian woodland on Conejo Volcanic exposures.[1] The property and survey area appear to lack suitable habitat elements.
California macrophylla (Hook.&Arn.) Aldas, Navarro, Vargas, Saez & Aedo Round-leaved filaree	- -	- -	1B.1 G2/S2	10 m - 1220 m Annual Herb March - May	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is associated with clay soils in cismontane woodland and grassland. Grass cover is generally low. The property and survey area appear to lack suitable habitat elements.

[1] Conejo Volcanics occur in western Simi Valley from Big Mountain south through Mountclef Ridge in Santa Rosa Valley, the Conejo Hills, and the western Santa Monica Mountains to the ocean and west through the Malibu Creek watershed and upper Topanga Creek watershed. Skeletal limestone occurs as interbeds and neptunian dikes within the sequence of submarine andesitic / basaltic flows and hyalobreccias of the Conejo Volcanics. The Calabasas Formation, which overlies it, is made up of alternating layers of clayey to silty sandstone and silty shale with some areas having layers of breccia and lenses of chert in the shale.

Calochortus clavatus S. Watson var. *gracilis* Ownbey Slender mariposa lily	- -	- -	1B.2 G4T2T3/S2S3	320 m - 1000 m Perennial Herb (Bulbiferous) March - June	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs in shaded canyons and grassy slopes in chaparral and oak woodlands habitats, often associated with serpentine soils. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Centromadia parryi (Greene) Greene ssp. *australis* (Keck) B.G. Baldwin Southern tarplant	--	--	1B.1 G3T2/S2	0 m - 425 m Annual Herb May - November	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs along margins of salt marsh and swamps, vernal pools, and vernally mesic valley and foothill grasslands. The property and survey area appear to lack suitable habitat elements.
Chaenactis glabriuscula DC var. *orcuttiana* (Greene) H.M. Hall Orcutt's pincushion	--	--	1B.1 G5T1/S1	< 100 m Annual Herb January - August	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs on coastal dunes and in sandy coastal bluff scrub. The property and survey area appear to lack suitable habitat elements. There are no coastal dune or coastal bluff scrub habitats.

Chloropyron maritimum (Benth.) A. Heller ssp. *maritimum* Salt marsh bird's-beak	FE September 1978	SE July 1979	1B.2 G4?T1/S1	0 m - 30 m Annual Herb (Hemiparasitic) May - October	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in coastal dunes, salt marshes, and swamps. The property and survey area appear to lack suitable habitat elements. There are no coastal dunes, salt marshes, or swamps.
Chorizanthe parryi Wats. var. *fernandina* (Wats.) Jeps. San Fernando Valley spineflower	FC May 2004	SE August 2001	1B.1 G2T1/S3	150 m - 1035 m Annual Herb April - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Occurs in open coastal scrub and grassland on sandy soil. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Chorizanthe parryi S. Watson var. *parryi* Parry's spineflower	--	--	1B.1 G3T3/S3	Wide Elevation Range Annual Herb May - June	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs on dry slopes and flats in sandy soil, typically in coastal scrub, chaparral, grassland, and oak woodland or in edges between these habitats. The property and survey area appear to lack suitable habitat elements.

Deinandra minthornii (Jeps.) B.G. Baldwin Santa Susana tarplant	--	SR November 1978	1B.2 G2/S2	280 m - 760 m Shrub (Deciduous) July - October	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs in chaparral and coastal scrub habitats in association with sandstone outcroppings and rocky areas. The property and survey area appear to lack suitable habitat elements.
Didymodon norrisii Norris' beard moss	--	--	2.2 G2G3/S2/S3	600 m - 1973 m Bryophyte	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPEXTED Occurs in seasonally wet sheet drainages within cismontane woodland and lower montane coniferous forest. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Delphinium parryi Gray ssp. *blochmaniae* (Greene) Lewis & Epl. Dune larkspur	--	--	1B.2 G4T2/S2	0 m - 200 m Perennial Herb April - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with maritime chaparral and coastal dune habitats. The property and survey area appear to lack suitable habitat elements. Maritime chaparral and coastal dune habitats are lacking

Dithyrea maritima A. Davids. Beach spectaclepod	--	ST February 1990	1B.1 G2/S1	3 m - 50 m Perennial Herb (Rhizomatous) March - May	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal dune and coastal scrub habitats with sandy soils. The property and survey area appear to lack suitable habitat elements.
Dudleya blochmaniae (Eastw.) Moran ssp. *blochmaniae* Blochman's dudleya	--	--	1B.1 G2T2/S2	5 m - 450 m Perennial Herb April - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It mostly occurs in coastal bluff scrub, coastal scrub, and grasslands on open, rocky slopes in shallow clays derived from ultramafic rocks, over serpentine. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Dudleya cymosa (Lemaire) Britton & Rose ssp. *agourensis* K. Nakai Agoura Hills dudleya	FT January 1997	--	1B.2 G5T1/S2	200 m - 500 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is restricted to a band of late Pleistocene dissected gravels at road level, east of Kanan Rd, which climbs in elevation west to ~405 meters near Reyes Adobe Rd in an area dominated by chaparral and cismontane woodland habitat. The property and survey area appear to lack suitable habitat elements.

Dudleya cymosa (Lem.) Britt. & Rose ssp. *marcescens* Moran Marcescent dudleya	FT January 1997	SR November 1978	1B.2 G5T2/S2	150 m - 520 m Perennial Herb April - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with chaparral on lower reaches of sheer volcanic rock surfaces and canyon walls adjacent perennial streams dominated by live oak woodland, often with California Bay. In most locations, topographic relief has prevented deep soil formation; therefore, this dudleya may be the only flowering plant occurring in microhabitat otherwise dominated by mosses, lichens, and ferns The property and survey area appear to lack suitable habitat elements. There are no sheer volcanic surfaces.
Dudleya cymosa (Lem.) Britt. & Rose ssp. *ovatifolia* (Britt.) Moran Santa Monica Mountains dudleya	FT January 1997	--	1B.2 G5T1/S1	150 m - 1675 m Perennial Herb March - June	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs on shaded slopes and canyon bottoms on volcanic and sedimentary conglomerate rock on exposed north-facing slopes from near Westlake Village to Agoura Hills and deep canyon bottoms along lower Malibu Creek and Topanga Creek. The property and survey area appear to lack suitable habitat elements. There are no volcanic or sedimentary conglomerates exposures.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD	OCCURRENCE POTENTIAL (See notes at end of table for sources of information)
	Federal Status	State Status	CNPS Global Rank/ State Rank		
Dudleya multicaulis (Rose) Moran Many-stemmed dudleya	--	--	1B.2 G2/S2	15 m - 790 m Perennial Herb April - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with clay soils in chaparral, coastal scrub, and valley and foothill grassland habitats. The property and survey area appear to lack suitable habitat elements.
Dudleya parva Rose & Davids. Conejo dudleya	FT January 1997	--	1B.2 G2/S2	60 m - 450 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Found in coastal scrub and valley and foothill grassland habitats, most commonly in cactus-dominated coastal sage scrub in association with rocky, gravelly, clay, and volcanic substrates derived from the Conejo volcanics and has a limited, discontinuous distribution from the western Simi Hills, along the Mountclef Ridge north to the Conejo Grade, about 10 miles. It has not been found south of Highway 101. The property and survey area appear to lack suitable habitat elements.
Dudleya verityi K. Nakai Verity's dudleya	FT January 1997	--	1B.1 G1/S1	60 m - 120 m Perennial Herb May - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on exposures of Conejo Volcanics in chaparral, cismontane woodland, and coastal scrub. Its known distribution is confined to Conejo Mountain. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD	OCCURRENCE POTENTIAL (See notes at end of table for sources of information)
	Federal Status	State Status	CNPS Global Rank/ State Rank		
Horkelia cuneata Lindl. var. *puberula* (Rydb.) Ertter & Reveal Mesa horkelia	--	--	1B.1 G4T1/S1	70 m - 810 m Perennial Herb February - September	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Found in maritime chaparral, cismontane woodland, and coastal scrub habitats with sandy or gravelly soils. The property and survey area appear to lack suitable habitat elements.
Isocoma menziesii (H. & A.) G. Nesom var. *decumbens* (Greene) G. Nesom Decumbent goldenbush	--	--	1B.2 G3G5T2T3/S2	10 m - 135 m Shrub April - November	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is associated with openings in chaparral and coastal scrub with sandy soils and in disturbed areas. The property and survey area appear to lack suitable habitat elements.
Lasthenia glabrata Lindl. ssp. *coulteri* (Gray) Ornduff Coulter's goldfields	--	--	1B.1 G4T2/S2	1 m - 1220 m Annual Herb February - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in coastal salt marshes and swamps, playas, grasslands, and vernal pools, usually on alkaline soils. The property and survey area appear to lack suitable habitat elements.

Lupinus paynei Payne's bush lupine	--	--	1B.1 G1Q/S1	185 m - 855 m Perennial Shrub March – April (May – July)	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with sandy soils in coastal scrub, riparian scrub, and valley and foothill grasslands. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Monardella hypoleuca A. Gray ssp. *hypoleuca* White-veined monardella	--	--	1B.3 G4T2T3/S2S3	50 m - 1525 m Herb April - December	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species typically occurs in chaparral and cismontane woodland in rich soil of shady canyon bottoms of the southern Santa Monica Mountains often growing with *Lonicera subspicata*, *Baccharis plummerae*, and *Artemisia douglasiana*. It also occurs on sandy soils on slopes and bluffs on the southern facing slopes of the Las Posas Hills in Santa Rosa Valley. A population in fact occurs on property owned by Forde Biological Consultants. There are no shady canyon bottoms or sandy slopes or bluffs.
Monardella sinuata Elvin & A.C. Sanders ssp. *sinuata* Southern curly-leaved monardella	--	--	1B.2 G3T2/S2	< 300 m Annual Herb April - September	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species occurs on sandy soil in chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub. The property and survey area appear to lack suitable habitat elements.

Nama stenocarpum Gray Mud nama	--	--	2B.2 G4G5/S1S2	5 m - 500 m Annual/Perennial Herb January - July	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in muddy margins of freshwater marshes, swamps, lakes, and rivers. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Navarretia ojaiensis Elvin, J.M. Porter & L.M. Johnson Ojai navarretia	--	--	1B.1 G1/S1	275 m - 620 m Annual Herb May - July	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is associated with openings in chaparral and coastal scrub, and in valley and foothill grassland habitats. The property and survey area appear to lack suitable habitat elements.
Nolina cismontana Dice Chaparral nolina	--	--	1B.2 G2/S2	140 m - 1275 m Perennial Shrub (Evergreen) March - July	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED This species is found in coastal sage scrub and chaparral habitats on sandstone and gabbro substrates. The property and survey area appear to lack suitable habitat elements.

Orcuttia californica Vasey California Orcutt grass	FE August 1993	SE September 1979	1B.1 G1/S1	15 m - 660 m Annual Herb April - August	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found in vernal pools. The property and survey area appear to lack suitable habitat elements. There are vernal pools.
Pentachaeta lyonii Gray Lyon's pentachaeta	FE January 1997	SE January 1990	1B.1 G2/S2	30 m - 630 m Annual Herb March - August	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs mostly in pocket grassland in chaparral, coastal sage scrub, road/trail edges and sites transitional to shrublands with rocky and clay soils of volcanic origin. The property and survey area appear to lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (October 2024)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Quercus dumosa Nutt. Nuttall's scrub oak	--	--	1B.1 G3/S3	15 m - 400 m Shrub February - August	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on sandy soil and clay loam in closed-cone coniferous forest, chaparral, and coastal scrub. The property and survey area appear to lack suitable habitat elements.

Senecio aphanactis Greene Chaparral ragwort	--	--	2B.2 G3?/S2	15 m - 800 m Annual Herb January - April	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is found on drying alkaline flats within woodland, chaparral, and coastal scrub habitats. The property and survey area appear to lack suitable habitat elements.
Sidalcea neomexicana Gray Salt spring checkerbloom	--	--	2B.2 G4?/S2S3	15 m -1530 m Perennial Herb March - June	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is associated with mesic chaparral, coastal scrub, low montane coniferous forest, Mojavean desert scrub, and playas on alkaline substrates. The property and survey area appear to lack suitable habitat elements.
Spermolepis lateriflora G.L. Nesom Western bristly scaleseed	--	--	2A G5/SH	0 m - 5 m Annual Herb March - April	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in Sonoran Desert scrub in rocky or sandy soils. Presumed extirpated in California. CNDDB and CNPS records are historical occurrences.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD	OCCURRENCE POTENTIAL (See notes at end of table for sources of information)
	Federal Status	State Status	CNPS Global Rank/ State Rank		
Suaeda esteroa Ferren & Whitmore Estuary seablite	- -	- -	1B.2 G3/S2	0 m - 5 m Perennial Herb May - January	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species occurs in coastal salt marshes and swamps. The property and survey area appear to lack suitable habitat elements.
Thelypteris puberula (Baker) C. Morton var. *sonorensis* A.R. Smith Sonoran maiden fern	- -	- -	2B.2 G5T3/S2	50 m - 610 m Perennial Herb (Rhizomatous) N/A	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY - LOW This species is associated with meadows, seeps, and streams. The property lacks suitable habitat elements. Encinal Canyon Creek is suitable but not observed by the biologists.
Tortula californica Bartr. California screw moss	- -	- -	1B.2 G2?/S2	10 m - 1460 m Moss N/A	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW This species is associated with sandy soil in chenopod scrub and grassland. The property and survey area appear to lack suitable habitat elements.

STATUS KEY:

Federal
FE - Federally Endangered
FT - Federally Threatened
FC - Federal Candidate

State
SE - State Endangered
ST - State Threatened
SR - State Rare
SC - State Candidate
CNPS California Rare Plant Rank

Rank 1A - Plants Presumed Extinct in California
Rank 1B - Plants Rare, Threatened, or Endangered in California and Elsewhere
Rank 2 - Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
Rank 3 - Plants About Which We Need More Information - A Review List
Rank 4 - Plants of Limited Distribution - A Watch List

.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Potential for Occurrence is based on professional experience, what is known about habitat associations and requirements of the species and known occurrences in the region. Sources of information consisted of the California Natural Diversity Database and California Native Plant Society Inventory of Rare and Endangered Plants.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present, and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present, and species is known to occur frequently in the region
Moderate Potential = Suitable habitat is limited, and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out) Not Expected = Suitable habitat and substrate absent and/or area of interest is located outside known geographical and elevation ranges.

Global Rank (G Rank) reflects the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct, or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors. G5 = Secure - Common; widespread and abundant.
G? = Inexact Numeric Rank
GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it. SX = Presumed Extirpated
SH = Possibly Extirpated
S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors. S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [1]
	Federal Status	State Status	CDFW (Season/Region Global Rank/State Rank	
INVERTEBRATES				
Streptocephalus woottoni Riverside fairy shrimp	FE August 1993	--	-- G1G2/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This species is only found in deep, cool lowland vernal pools that retain water through the warmer weather of late spring and in ditches and road ruts. The property and survey area lack suitable habitat elements. There are no vernal pools.
Danaus plexippus **Monarch** **(Overwintering Population)**	**FC** **December 2020**	**-** **-**	**--** **G5/S3**	**BASED ON DESKTOP REVIEW – HIGH** **BASED ON SITE-SPECIFIC STUDY – OBSERVED** **Critical features of winter sites are conifer and eucalyptus groves.** **The property lacks suitable habitat elements. The survey area has suitable habitat elements.**
Bombus crotchii Crotch bumble bee	--	SC (Endangered) June 2019	-- G3G4/S1S2	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW Open grassland and scrub habitats. Food plants include Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia. The property and survey area lack suitable habitat elements, food plants are lacking.

[1] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY
	Federal Status	**State Status**	**CDFW (Season/Region) Global Rank/State Rank**	
FISH				
Oncorhynchus mykiss irideus Southern steelhead	FE August 1997	--	SSC G5T1Q/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Young hatch and typically remain in fresh water for 1 - 3 years then swim to the ocean, staying 1 - 2 years before returning to their native streams. The species is not known to occur in Encinal Canyon Creek.
Gila orcutti Arroyo chub	--	--	SSC G2/S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers, and Malibu and San Juan creeks and introduced to other rivers and creeks. The species is not known to occur in Encinal Canyon Creek.
Eucyclogobius newberryi Tidewater goby	FE February 1994	--	SSC G3/S2S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs in cool brackish water of lagoons; favoring salinities less than 10 ppt. Favorable habitat includes shallow open water with emergent vegetation. The species is not known to occur in Encinal Canyon Creek.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY
	Federal Status	State Status	CDFW (Season/Region) Global Rank/State Rank	
REPTILES				
Actinemys pallida Southwestern pond turtle	--	--	SSC G3G4/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Associated with permanent or nearly permanent water bodies. May be active year-round. Most often seen basking above the water line. The species is not known to occur in Encinal Canyon Creek.
Phrynosoma blainvillii Coast horned lizard	--	--	SSC G3G4/S3S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW The species occurs throughout the foothills and coastal plains from Los Angeles area to northern Baja California. It frequents areas with open vegetation such as chaparral or coastal sage scrub. The property and survey area lack suitable habitat elements. The biologists did not observe this species at the site, but the species is very cryptic.
Aspidoscelis tigris stejnegeri San Diegan tiger whiptail	--	--	SSC G5T5/S3	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY - LOW Occurs in valley-foothill hardwood, valley-foothill hardwood-conifer, valleyfoothill riparian, mixed conifer, pine-juniper, chaparral, desert scrub, desert wash, alkali scrub, and annual grassland. The property and survey area consists of marginally suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY
	Federal Status	State Status	CDFW (Season/Region) Global Rank/State Rank	
Anniella stebbensi Southern California legless lizard	--	--	SSC G3/S3	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in sparsely vegetated areas of dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks in loose soil and leaf litter. Lives mostly underground. Most active during the morning and evening. The property and survey area lack suitable habitat elements. The biologists did not observe the species at the property or within the survey area, but it lives mostly underground or under leaf litter and other surface objects.
Arizona elegans occidentalis California glossy snake	--	--	SSC G5T2/S2	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Inhabits arid scrub, rocky washes, grasslands, chaparral. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing. The property and survey area lack suitable habitat elements.
Salvadora hexalepis virgultea Coast patch-nosed snake	--	--	SSC G5T4/S2S3	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in semi-arid brush and chapparal in canyons, rocky hillsides, and plains. The property and survey area lack suitable habitat elements.
SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season/Region)** **Global Rank/State Rank**	

Thamnophis hammondii Two-striped garter snake	--	--	SSC G4/S3S4	BASED ON DESKTOP REVIEW - MODERATE BASED ON SITE-SPECIFIC STUDY – LOW Found in streams & pools often in rocky areas in oak woodland, chaparral, brushland, and coniferous forest. The property lacks suitable habitat elements. The survey area consists of marginally suitable habitat elements.
Thamnophis sirtalis ssp. South coast garter snake	--	--	SSC (From Ventura to San Diego) G5T1T2/S1S2	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW Associated with permanent or semi-permanent bodies of water. The property lacks suitable habitat elements. The survey area consists of marginally suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season/Region)** **Global Rank/State Rank**	
AMPHIBIANS				
Anaxyrus californicus Arroyo toad	FE August 1995	--	SSC G2G3/S2S3 --	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in washes, arroyos and riparian areas with willows, sycamores, oaks, and cottonwoods along exposed sandy substrates. Tadpoles sift fine sediments for food and are extremely dependent on this specialized habitat. The species is not known to occur in Encinal Canyon Creek.

Rana aurora draytonii California red-legged frog	FT May 1996	--	SSC G2G3/S2S3 --	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in many habitats, including aquatic, riparian, and upland habitats. They prefer slow moving or deep standing ponds, pools, and streams. They are active all year but will in dry years estivate in moist refuges until the late fall rains. The species is not known to occur in Encinal Canyon Creek.
Taricha torosa torosa Coast Range newt	--	--	SSC (Monterey County to South) G4/S4 --	BASED ON DESKTOP REVIEW – LOW BASED ON SITE-SPECIFIC STUDY – LOW It occurs in wet valley-foothill hardwood, hardwood-conifer, mixed conifer, oak woodlands, coastal scrub, chaparral, and annual grasslands. They summer in moist habitats under woody debris, or in rock crevices and animal burrows. Adults migrate in large numbers from terrestrial locations to ponds, reservoirs, and sluggish pools in streams to breed. The species is not known to occur in Encinal Canyon Creek.
SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season/Region)** **Global Rank/State Rank**	
Spea hammondii Western spadefoot	--	--	SSC G3/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED It occurs in grasslands, chaparral, and pine-oak woodlands preferring open areas with sandy or gravelly soils. Species require vernal or pools of intermittent streams for breeding. They are typically active October to May. Breeding occurs August - May about 1 - 2 days after heavy rains. The species is not known to occur in Encinal Canyon Creek.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY
	Federal Status	State Status	CDFW (Season) Global Rank/State Rank	
BIRDS				
Elanus leucurus White-tailed kite	- -	--	FP (Nesting) G5/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Inhabits grassland, pastures and other herbaceous habitat mostly in cismontane California. For breeding, requires dense clumps of trees or tall shrubs, surrounded by grassland and other open habitats. The property and survey area lack suitable habitat elements.
Aquila chrysaetos Golden eagle	- -	- -	FP/WL (Nesting) G5/S3	POTENTIAL NEST SITES ABSENT – MAY FORAGE OVER SITE Rolling foothills, mountain areas, sage-juniper flats, and desert habitats with secluded cliffs and overhanging ledges and large trees used for cover. The property and survey area lack suitable habitat elements.
Haliaeetus leucocephalus Bald eagle	Delisted August 2007 FT (Rev.) August 1995 FE March 1967	SE (Rev.) October 1980 SE June 1971	FP (Nesting & Wintering) G5/S2	NOT EXPECTED Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. About half of the wintering population is in the Klamath Basin. More common at lower elevations; not found in the high Sierra Nevada. Fairly common as a local winter migrant at a few favored inland waters in southern California. Largest numbers occur at Big Bear Lake, Cachuma Lake, Lake Mathews, Nacimiento Reservoir, San Antonio Reservoir, and along the Colorado River. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY
	Federal Status	State Status	CDFW (Season) Global Rank/State Rank	
Circus cyaneus Northern harrier	- -	- -	SSC (Nesting) G5/S3	NOT EXPECTED Frequents meadows, grasslands, open rangelands, desert sinks, and both fresh and saltwater wetlands. More widespread in winter, foraging in sparse scrub and agricultural areas including fallow fields. The property and survey area lack suitable habitat elements.
Buteo swainsoni Swainson's hawk	- -	ST April 1983	-- G5/S3	POTENTIAL NEST SITES ABSENT Breeds in isolated stands of trees in juniper-sage flats, riparian areas, and in oak savannah, forages in grasslands, suitable grain fields, alfalfa fields, and livestock pastures.
Falco peregrinus anatum Peregrine falcon	Delisted August 1999 FE June 1970	Delisted November 2009 SE June 1971	FP (Nesting) G4T4/S3S4 --	POTENTIAL NEST SITES ABSENT Breeds mostly in woodland, forest, and coastal habitats. Migrants occur along the coast in spring and fall.
Laterallus jamaicensis coturniculus California black rail	--	ST June 1971	FP G3G4T1/S1	NOT EXPECTED It occurs in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass.

Rallus longirostris obsoletus California clapper rail	FE October 1970	SE June 1971	-- G5T1/S1	NOT EXPECTED Locally common yearlong in coastal wetlands and brackish areas around San Francisco, Monterey, and Morro bays. Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Rallus longirostris levipes Light-footed clapper rail	FE October 1970	SE June 1971	FP G5T1T2/S1	NOT EXPECTED Requires emergent or brackish emergent wetlands and tidal sloughs dominated by pickleweed, cord grass and bulrush.
Rallus longirostris yumanensis Yuma clapper rail	FE March 1967	ST February 1978 SE June 1971	-- G5T3/S1	NOT EXPECTED In coastal saline emergent wetlands along southern California from Santa Barbara Co. to San Diego Co. Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.
Charadrius alexandrinus nivosus Western snowy plover	FT April 1993	- -	SSC (Nesting) G3T3/S2	NOT EXPECTED Primarily occurs and nests on coastal beaches, sand spits, dune-backed beaches, sparse dunes, beaches at creek and river mouths, saltpans at lagoons and estuaries. Less commonly, on bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars.

Rynchops niger Black skimmer			SSC (Nesting Colony) G5/S2	NOT EXPECTED A common summer resident at the Salton Sea. Usually arrives by late April and departs by October, breeding in most recent years. Increasingly frequent visitor to coastal estuaries and river mouths of southern California, and accidental at a few other interior locations.
Sterna antillarum browni California least tern	FE October 1970	SE June 1971	FP (Nesting Colony) G4T2T3Q/S2S3	NOT EXPECTED A summer resident, it arrives at breeding grounds along marine and estuarine shores late April in southern California. Feeds in shallow estuaries or lagoons where small fish are abundant.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT November 2014	SE March 1988 ST June 1971	-- (Nesting) G5T3Q/S1	NOT EXPECTED Nearly extirpated in southern California, now a rare summer resident of extensive valley, foothill and desert riparian habitats along river bottoms. Requires densely foliaged deciduous trees and shrubs, especially willows, for nesting and mature cottonwoods for foraging.
Asio otis Long-eared owl	--	--	SSC (Nesting) G5/S3?	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs in the state year-round, although seasonal status varies regionally, breeds from February through July. Uncommon yearlong resident throughout the state except the Central Valley and Southern California deserts where it is an uncommon winter visitor. Riparian habitat required; also uses live oak thickets and other dense stands of trees. The property and survey area lack suitable habitat elements.

Asio flammeus Short-eared owl	--	--	SSC (Nesting) G5/S3	MAY FORAGE OVER SITE DURING MIGRATION & WINTER A rare winter resident found in open areas with few trees, such as annual and non-native grasslands, irrigated pasture, and both estuarine and freshwater emergent wetlands. Does not nest in Southern California.
Athene cunicularia hypugea Western burrowing owl	--	--	SSC (Burrow Sites & Winter Sites) G4/S3	NOT EXPECTED Year-round resident throughout much of the state in open dry grassland and desert habitats, and in forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Breeding season is March to August but can begin February and extend into December. Usually nests in mammal burrows that they modify. The property and survey area lack suitable habitat elements.
SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Empidonax traillii extimus Southwestern willow flycatcher[2]	FE March 1995	SE August 1991	SSC (Nesting) G5T1T2/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Summer resident. Breeds in dense riparian vegetation near surface water or saturated soil. Riparian patches used vary in size and shape, and may be a relatively dense, linear contiguous stand or an irregularly shaped mosaic with open areas. The property and survey area lack suitable habitat elements.

[2] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for southwestern willow flycatcher and is very familiar with its habitat requirements and life history.* [3] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for least Bell's vireo and is very familiar with its habitat requirements and life history.*

Lanius ludovicianus Loggerhead shrike	- -	- -	SSC (Nesting) G4/S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Found in arid grassland, open savannah, agricultural areas, and both coastal and desert scrub, often near areas of barren soil, including overgrazed land. Requires scattered thorny shrubs for nest placement and for hanging prey. The property and survey area lack suitable habitat elements.
Vireo bellii pusillus Least Bell's vireo[3]	FE May 1986	SE October 1980	SSC (Nesting) G5T2/S2	NOT EXPECTED Frequents riparian habitats and require dense thickets of willow and other low shrubs for nesting. The dense riparian thickets they occupy are usually impenetrable, with ground cover in the shrub layer being nearly 100%.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Progne subis arboricola Purple martin	--	--	SSC (Nesting) G5/S3	NOT EXPECTED An uncommon to rare, local summer resident in a variety of wooded, lowelevation habitats throughout the state; a rare migrant in spring and fall, absent in winter. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas fir, and redwood. The property consists of elements suitable for the occurrence of this species; however, in southern California it is now only a rare and local breeder on the coast and in interior mountain ranges.
Riparia riparia Bank swallow	-- SE June 1989		-- (Nesting) G5/S2S3	MAY FORAGE OVER SITE DURING MIGRATION Restricted to riparian habitats during summer and open habitats during migration. Requires vertical banks, bluffs, or cliffs with fine-textured or sandy soils for nesting. It nests along a small section of the Sacramento and Feather rivers and other isolated areas. Species not known to nest in the region.

Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	--	--	SSC (San Diego & Orange counties) G5T3Q/S3	NOT EXPECTED Coastal race found in arid parts of westward-draining slopes of southern California; numbers reduced in recent decades. Frequents desert succulent shrub, Joshua tree, and desert wash habitats. Nest usually built in cholla or other large, branching cactus, in yucca, or in stiff-twigged, thorny shrub or small tree.
Polioptila californica California gnatcatcher[3]	FT March 1993	--	SSC G3T2/S2	NOT EXPECTED Obligate resident of arid coastal scrub. California buckwheat, coastal sage, and patches of prickly pear cactus are favored.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Setophaga petechia Yellow warbler	- -	- -	SSC G5/S3S4	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY - LOW Occurs as a migrant and summer resident from late March through early October; breeds from April to late July in riparian woodlands from coastal and desert lowlands up to 2500 m in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. The property and survey area lack suitable habitat elements.

[3] *Andrew McGinn Forde holds a USFWS permit and CDFW MOU authorizing surveys for California gnatcatcher and is very familiar with its habitat requirements and life history.*

Icteria virens Yellow-breasted chat	- -	- -	SSC G5/S3	NOT EXPECTED Occurs as a migrant and in summer primarily from late March to late September in coastal California and in foothills of the Sierra Nevada. Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. In migration, may be found in lower elevations of mountains in riparian habitat. Breeds late April through early August.
Passerculus sandwichensis beldingi Belding's savannah sparrow	- -	SE August 1974	-- G5T3/S3	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs year-round in salt marsh usually in the upper littoral zone. It nests in dense pickleweed. The property and survey area lack suitable habitat elements.
Ammodramus savannarum Grasshopper sparrow	- -	- -	SSC (Nesting) G5/S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Occurs nearly year-round in extensive, dense grasslands, especially those with a variety of grasses and tall forbs and scattered low shrubs for singing perches. The property and survey area lack suitable habitat elements.
SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY**
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank**	
Agelaius tricolor Tricolored blackbird	- -	ST March 2019	SSC (Nesting Colony) G2G3/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED Feeds in grassland and cropland habitats and breeds near fresh water in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs March through November. The property and survey area lack suitable habitat elements.

Xanthocephalus xanthocephalus Yellow-headed blackbird	- -	- -	SSC (Nesting) G5/S3	NOT EXPECTED Breeds commonly, but locally, east of Cascade Range and Sierra Nevada, in Imperial and Colorado River valleys, in the Central Valley, and at selected locations in the coast ranges west of the Central Valley. Occurs as a migrant and local breeder in deserts and along the Orange County coast. Nests in fresh emergent wetland with dense vegetation and deep water, often along borders of lakes or ponds. Forages in emergent wetland and moist, open areas, especially cropland and muddy shores of lacustrine habitat. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [4]
	Federal Status	**State Status**	**CDFW (Season)** **Global Rank/State Rank**	
MAMMALS[5]				
Sorex ornatus salicornicus Southern California saltmarsh shrew	--	--	SSC G5T1?/S1	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED The Southern California salt marsh shrew is confined to coastal salt marshes in Los Angeles, Orange, and Ventura counties. The property and survey area lack suitable habitat elements.

[4] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

[5] *Andrew McGinn Forde holds a CDFW MOU authorizing capture of bats using a variety of techniques including hand-held nets, mist nets, and harp traps. He is familiar with the life history and habitat requirements of bats.*

Macrotus californicus California leaf-nosed bat	--	--	SSC G4/S3 --	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Preferred habitats are caves, mines, and rock shelters, mostly in Sonoran Desert scrub. It does not hibernate. Winter roosts are geothermically heated. Mating takes place in the fall. Pups born June. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season)** **Global Rank/State Rank**	
Antrozous pallidus Pallid bat	- -	--	SSC G5/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – LOW BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES LIKELY ABSENT - LOW Throughout California except high Sierra Nevada. Habitat includes grassland, shrubland, woodland, and conifer forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, under bridges, bird and bat boxes, and occasionally hollow trees and buildings. Non-migratory. Birth occurs late June, nursing continues into August. The property lacks suitable habitat elements but could potentially roost within the survey area.

Euderma maculatum Spotted bat	- -	-- 	SSC G4/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Occupied habitats include arid deserts, grasslands, and mixed conifer forests. Prefers sites with adequate roosting habitat, such as cliffs. Feeds over water and along washes. Pups are born late May to early June. Nursing continues into August. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season)** **Global Rank/State Rank**	
Lasiurus blossevillii Western red bat	--	--	SSC G5/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Occurs from Shasta Co. south to Mexico, west of Sierra Nevada/Cascade crest and deserts. Feeds over scrublands, grasslands, open woodlands, and croplands. Roosts in foliage of forest and woodland trees. Pups born June. Nursing into August. Migrates to south of range to hibernate. The property and survey area lack suitable habitat elements.

Corynorhinus townsendii Townsend's big-eared bat	-- 	SC December 2013	SSC G3G4/S2	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Found throughout California except subalpine and alpine habitats. Roosts in caves, mines, tunnels, buildings, and other human-made structures. It prefers mesic habitats where it gleans vegetation or captures moths and beetles in flight. Pups are born in May or June, nursing continues into August. The property and survey area lack suitable habitat elements.
Eumops perotis californicus Greater bonneted bat	-- 	-- 	SSC G5T4/S3S4	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Prefers open arid areas. Crevices, high buildings, trees, and tunnels required for roosting and maternal sites. Pups are born late June through September. Nursing continues into early November. Does not migrate or hibernate. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**			**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season)** **Global Rank/State Rank**	

Nyctinomops femorosaccus Pocketed free-tailed bat	--	--	SSC G4/S3	BASED ON DESKTOP REVIEW - POTENTIAL ROOST SITES LIKELY ABSENT – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - POTENTIAL ROOST SITES ABSENT – NOT EXPECTED Prefers rocky desert areas with high cliffs or rock outcrops. Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Prefers rock crevices in cliffs as roosting sites. Maternity sites include rock crevices, caverns, or buildings. Pup usually born early July. The property and survey area lack suitable habitat elements.
Bassariscus astutus Ringtail	--	--	FP G5/S3S4	BASED ON DESKTOP REVIEW - POTENTIAL DEN SITES LIKELY ABSENT - LOW BASED ON SITE-SPECIFIC STUDY - DEN SITES ABSENT – NOT EXPECTED Ideal habitat consists of a mix of forest and shrub land associated with rocky or riparian habitats. Its principal habitat requirements seem to be den sites among boulders or in hollows of trees with sufficient food in the form of rodents and other small animals. The property and survey area lack suitable habitat elements.
Taxidea taxus American badger	--	--	SSC G5/S3	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - DEN SITES ABSENT – NOT EXPECTED Prefers dry open stages of most shrub, forest, and herbaceous habitats, with friable soils. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS** **(October 2024)**	**POTENTIAL FOR OCCURRENCE,** **HABITAT NOTES, & LIFE HISTORY** [5]

	Federal Status	State Status	CDFW (Season) Global Rank/State Rank	
Perognathus longimembris brevinasus Los Angeles pocket mouse	--	--	SSC G5T1T2/S1S2	BASED ON DESKTOP REVIEW - LOW BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Occurs in lower elevation grassland, alluvial sage scrub, and coastal sage scrub. The property and survey area lack suitable habitat elements.
Neotoma lepida intermedia San Diego desert woodrat	--	--	SSC G5T3T$/S3S4	BASED ON DESKTOP REVIEW - EXPECTED BASED ON SITE-SPECIFIC STUDY - PRESUMED PRESENT Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats with rocky outcrops and substrates. Houses are constructed with twigs, sticks, cactus parts, and rocks, and are used for nesting, food caching, and predator escape. The site/survey area consists of suitable habitat elements and the biologists observed woodrat houses in the rock outcrops, presume present.
Microtus californicus stephensi South coast marsh vole	--	--	SSC G5T1T2/S1S2	BASED ON DESKTOP REVIEW - NOT EXPECTED BASED ON SITE-SPECIFIC STUDY - NOT EXPECTED This subspecies occurs from Santa Barbara County south to Orange County in coastal salt marshes dominated by pickleweed. The property and survey area lack suitable habitat elements.
Lepus californicus bennetti San Diego black-tailed jackrabbit	--	--	SSC G5T3T$/S3S4	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED Abundant at lower elevations in herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats. The property and survey area lack suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (October 2024)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [5]
	Federal Status	State Status	CDFW (Season) Global Rank/State Rank	
Puma concolor Mountain lion	--	SC (Endangered) February 2020	--	BASED ON DESKTOP REVIEW – NOT EXPECTED BASED ON SITE-SPECIFIC STUDY – NOT EXPECTED The property and survey area lack suitable habitat elements. The property is south of Pacific Coast Highway between existing SFR.

Status Key:
Federal
FE - Federally Endangered
FT - Federally Threatened
FC - Federal Candidate
State
SE - State Endangered
ST - State Threatened
SC - State Candidate California Department of Fish and Wildlife
FP - Fully Protected
SSC - Species of Special Concern
WL - Watch List

Potential for Occurrence: Based on professional experience, knowledge of habitat associations, and known occurrences in the region.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present and species is known to occurs frequently in the region
Moderate Potential = Suitable habitat is limited and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out)
Not Expected = Suitable habitat is absent or species is not expected to occur during the "season of concern"

The official federal listing of Endangered and Threatened animals is published in the Federal Register, 50 CFR 17.11. The official state Endangered and Threatened animals list is contained in the California Code of Regulations, Title 14, Section 670.5. A state candidate species is one that the Fish and Game commission had formally noticed as being under review by the Department for addition to the State list. A federal candidate species is one for which a proposed regulation has been published in the Federal Register.

Fully Protected: This classification was the State's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts; white-tailed kite, golden eagle, trumpeter swan, northern elephant seal and ring-tailed cat are the exceptions. The white-tailed kite and the golden eagle are tracked in the CNDDB; the trumpeter swan, northern elephant seal and ringtail cat are not. The Fish and Game Code sections dealing with Fully Protected species state that these species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003 the code sections dealing with fully protected species were amended to allow the Department to authorize take resulting from recovery activities for state-listed species. More information on Fully Protected species and the take provisions can be found in the Fish and Game Code, (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93. The category of Protected Amphibians and Reptiles in Title 14 has been repealed.

California Species of Special Concern: It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long term viability. Not all "Species of Special Concern" have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a "Threatened" or "Endangered" species under the State and/or Federal Endangered Species Acts.

Global Rank (G Rank) is a reflection of the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors. G5 = Secure - Common; widespread and abundant. G? = Inexact Numeric Rank

GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it. SX = Presumed Extirpated
SH = Possibly Extirpated
S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors. S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

LA County SBS = Los Angeles County Sensitive Bird Species (Season/Region of concern)



Project Parcel

LA County Parcels

NRCS Soil Type

Pachic Argixerolls, coastal, 30 to 75 percent slopes

Lockwood-Urban land complex, 0 to 15 percent slopes

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Exhibit N - Soil Map



- Project Parcel
- LA County Parcels
- CDFW Jurisdictional Stream Top of Bank
- Protected Tree
- Protected Tree Canopy

Habitat Type

- ESHA
- Non-ESHA

Proposed Development

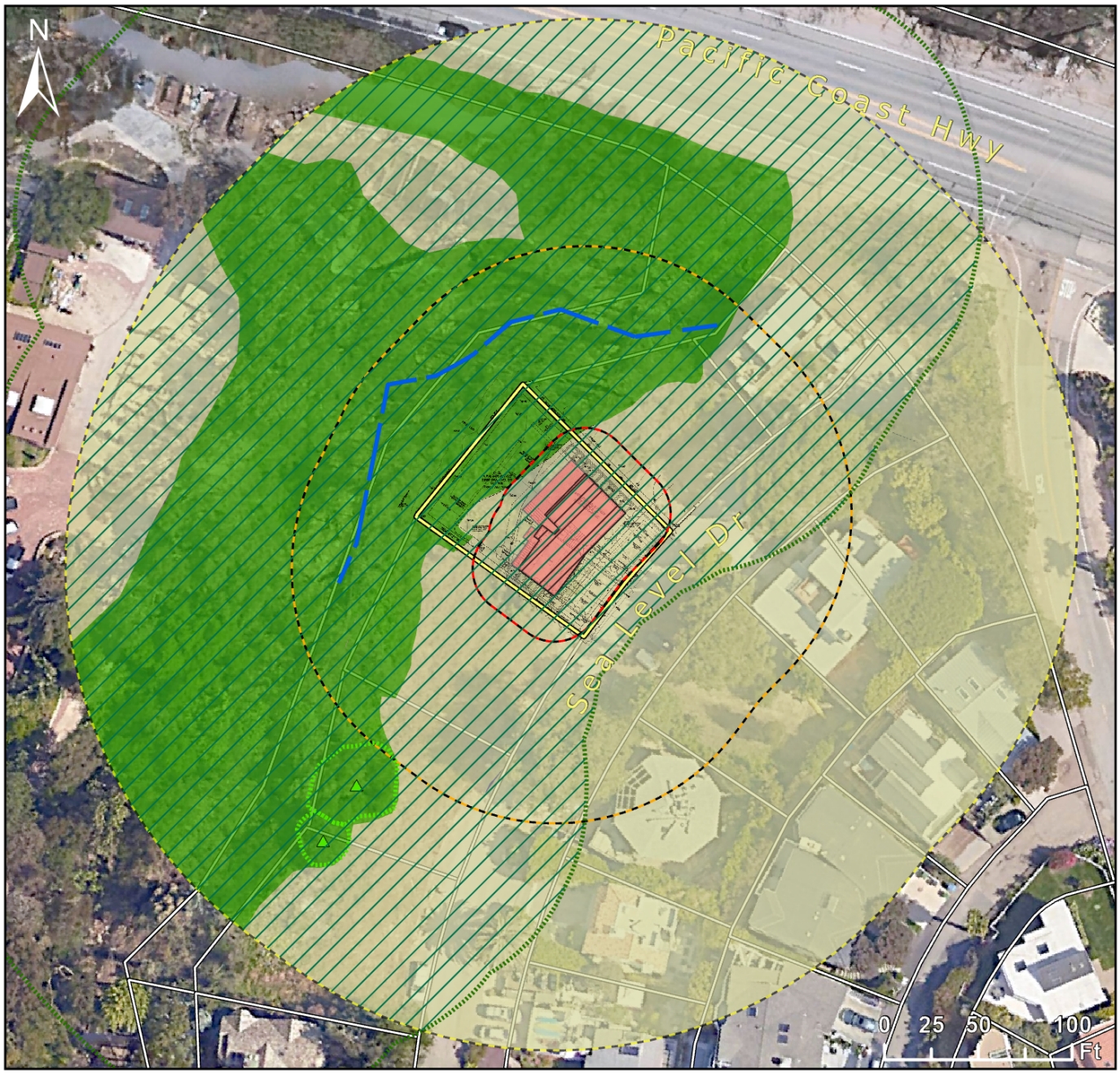
- Main Building
- Development Area

Proposed Fuel Modification Zones

- Zone A (20ft)
- Zone B (100ft)
- Zone C (200ft)

	ESHA (acres)	Non-ESHA (acres)
Footprint + Zone A	0.003	0.093
Zone B	0.41	0.58
Zone C	0.85	1.65
Total Impact	1.26	2.32

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Project Parcel
LA County Parcels
CDFW Jurusdictional Stream Top of Bank
Protected Tree
Protected Tree Canopy

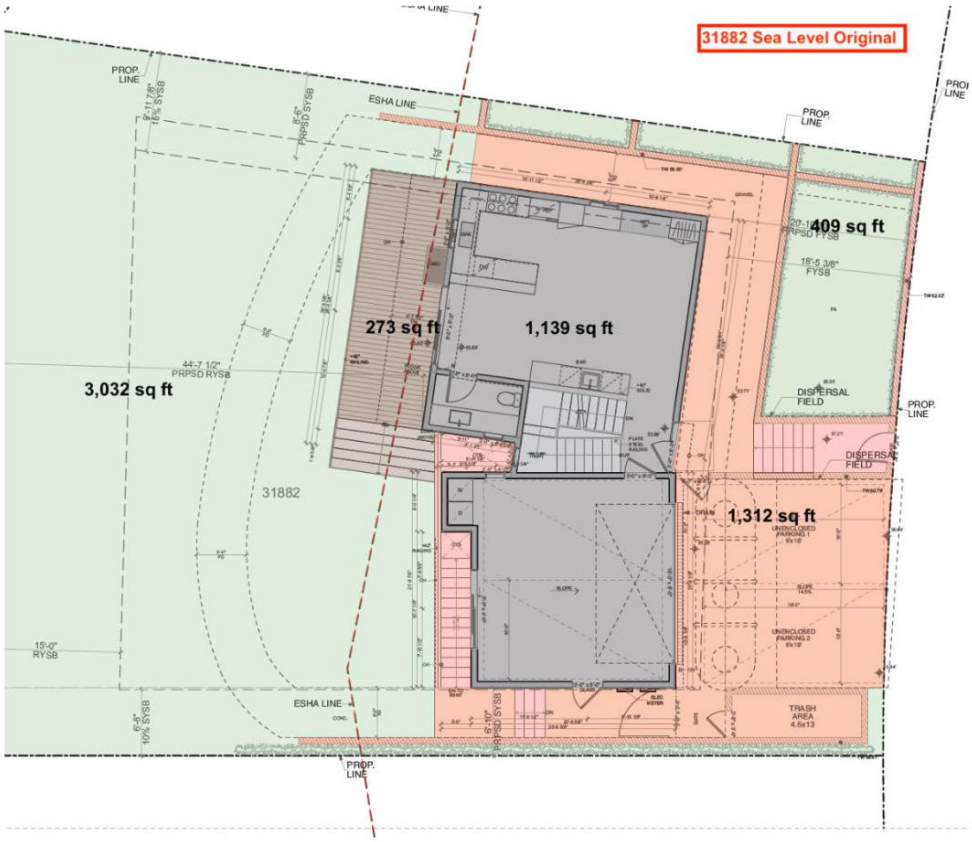
Proposed Development
Main Building
Development Area

Proposed Fuel Modification Zones
Zone A (20ft)
Zone B (100ft)
Zone C (200ft)

Habitat Type
ESHA within Fuel Modification Zones (1.26 Acres | 54,886 Sq. Ft.)
Non-ESHA
ESHA Buffer (100ft)
Fuel Modification Overlap in ESHA Buffer (2.26 Acres | 111,380 Sq. Ft.)

Forde Biological Consultants

Exhibit Q - ESHA Buffer Overlap



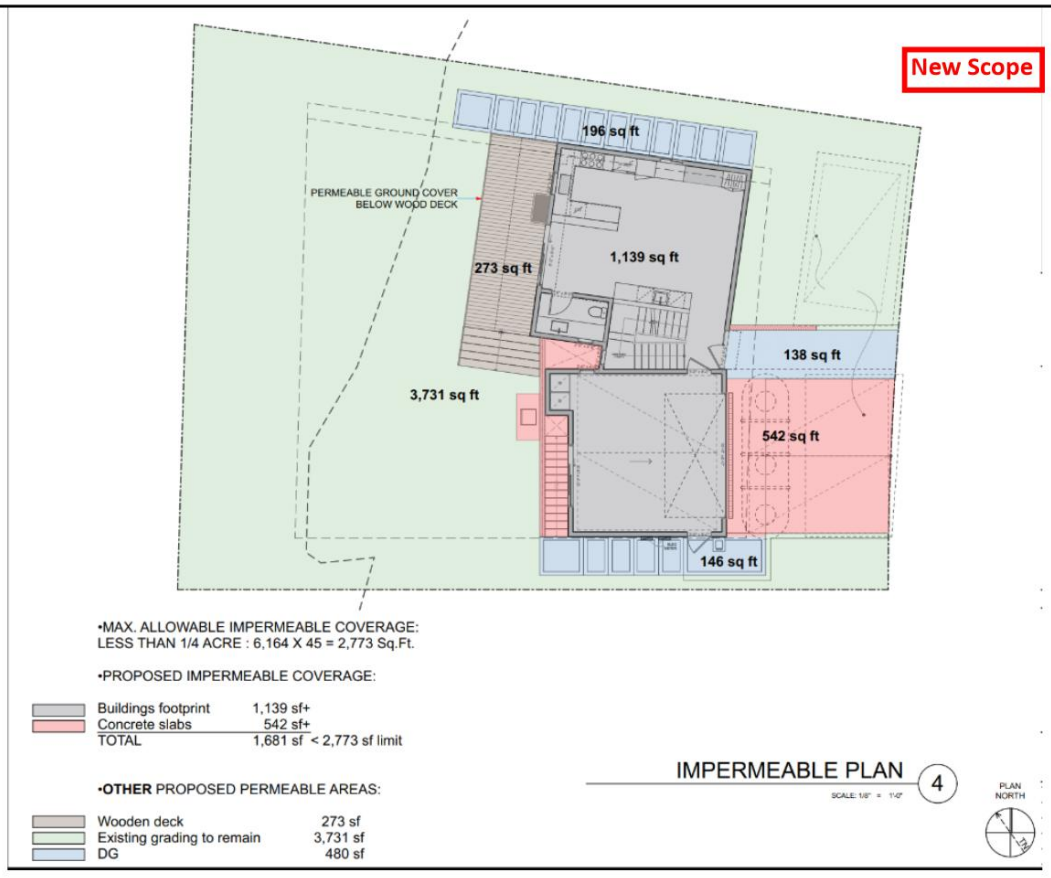


Exhibit P - Site Plan Scope Change

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level Drive City/County: Malibu/Los Angeles County Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loam	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level [City/County: Malibu/Los Angeles Cou Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loa	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level [City/County: Malibu/Los Angeles Cou Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loa	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 31870, 31888, and 31882 Sea Level [City/County: Malibu/Los Angeles Cou Sampling Date: 7/8/2025

Applicant/Owner: Jonathan Nokano, Jeff Peterson State: CA Sampling Point: UP1

Investigator(s): Rebecca Clarke Section, Township, Range: Township 1 South, Range 18 West

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 0-15

Subregion (LRR): LRR C Lat: 34.038703 Long: -118.869387 Datum: WGS 84

Soil Map Unit Name: Lockwood-Urban land complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalptus globulus	50	Y	FACU
2. Malosma laurina	10	N	FACW
3. Quercus agrifolia	30	N	FACU
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Nicotiana glauca	5	N	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Hirschfeldia incana	3	N	FAC
2. Solanum nigrum	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	18	x 3 =	54
FACU species	82	x 4 =	328
UPL species	0	x 5 =	0
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks:

SOIL

Sampling Point: UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	60	10YR 5/1	40		M	Clay loa	
10-18	10YR 5/1	70	10YR 4/1	30		M	Sandy cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: