CONTRA COSTA COUNTY DEPARTMENT OF CONSERVATION AND DEVELOPMENT

COMMUNITY DEVELOPMENT DIVISION

30 Muir Road

Martinez, CA 94553-4601 Phone: 925-655-2700 Fax: 925-655-2758



AGENCY COMMENT REQUEST

Ve request your comments regarding the attached applic	Date 09/05/25 cation currently under review.
INTERNAL ✓ Building Inspection Grading Inspection ✓ Advance Planning Housing Programs Trans. Planning Telecom Planner ALUC Staff HCP/NCCP Staff County Geologist HEALTH SERVICES DEPARTMENT ✓ Environmental Health Hazardous Materials PUBLIC WORKS DEPARTMENT Engineering Services Special Districts Traffic Flood Control (Full-size) LOCAL ✓ Fire District San Ramon Valley – (email) rwendel@srvfire.ca.qov ✓ Consolidated – (email) fire@cccfpd.org ✓ Sanitary DistrictWest County Wastewater ✓ Water District EBMUD ✓ City of Richmond School District(s) LAFCO Reclamation District # East Bay Regional Park District Diablo/Discovery Bay/Crockett CSD ✓ MAC/TAC El Sobrante MAC Improvement/Community Association ✓ CC Mosquito & Vector Control Dist (email) OTHERS/NON-LOCAL	Please submit your comments to: Project Planner Maria Lara-Lemus Phone #_925-655-2904 E-mail Maria.Lara-Lemus@dcd.cccounty.us County File #_CDVR25-01044 Prior to September 30, 2025 ***** We have found the following special programs apply to this application: Landslide Active Fault Zone (A-P) Liquefaction Flood Hazard Area 60-dBA Noise Control CA EPA Hazardous Waste Site High or Very High FHSZ **** **** **** **AGENCIES: Please indicate the applicable code section for any recommendation required by law or ordinance. Please send copies of your response to the Applicant and Owner. Comments: None Below Attached
CHRIS (email only: nwic@sonoma.edu) CA Fish and Wildlife, Region 3 – Bay Delta Native American Tribes ADDITIONAL RECIPIENTS El Sobrante Planning and Zoning	Print Name Signature DATE Agency phone #



Planning Application Summary

County File Number: CDVR25-01044 File Date: 9/3/2025

Applicant:

moji hakimi mhakimi@mac.com 2 tunnel rd (925) 683-3072 berkeley, CA 94705

Property Owner:

ADAM MORGENTHALER adam.morgenthaler@gmail.com

41 HELTSLEY PL (408) 891-6012 EL SOBRANTE, CA 94803 165

Project Description:

The applicant requests approval of a variance to allow a 12-foot secondary front setback (where 15 feet is the minimum required) to replace an existing deck.

Project Location: (Address: 41 HELTSLEY PL, EL SOBRANTE, CA 94803 165), (APN: 426243037)

Additional APNs:

General Plan Designation(s): RLM Zoning District(s): R-7

Flood Hazard Areas: X AP Fault Zone: NO

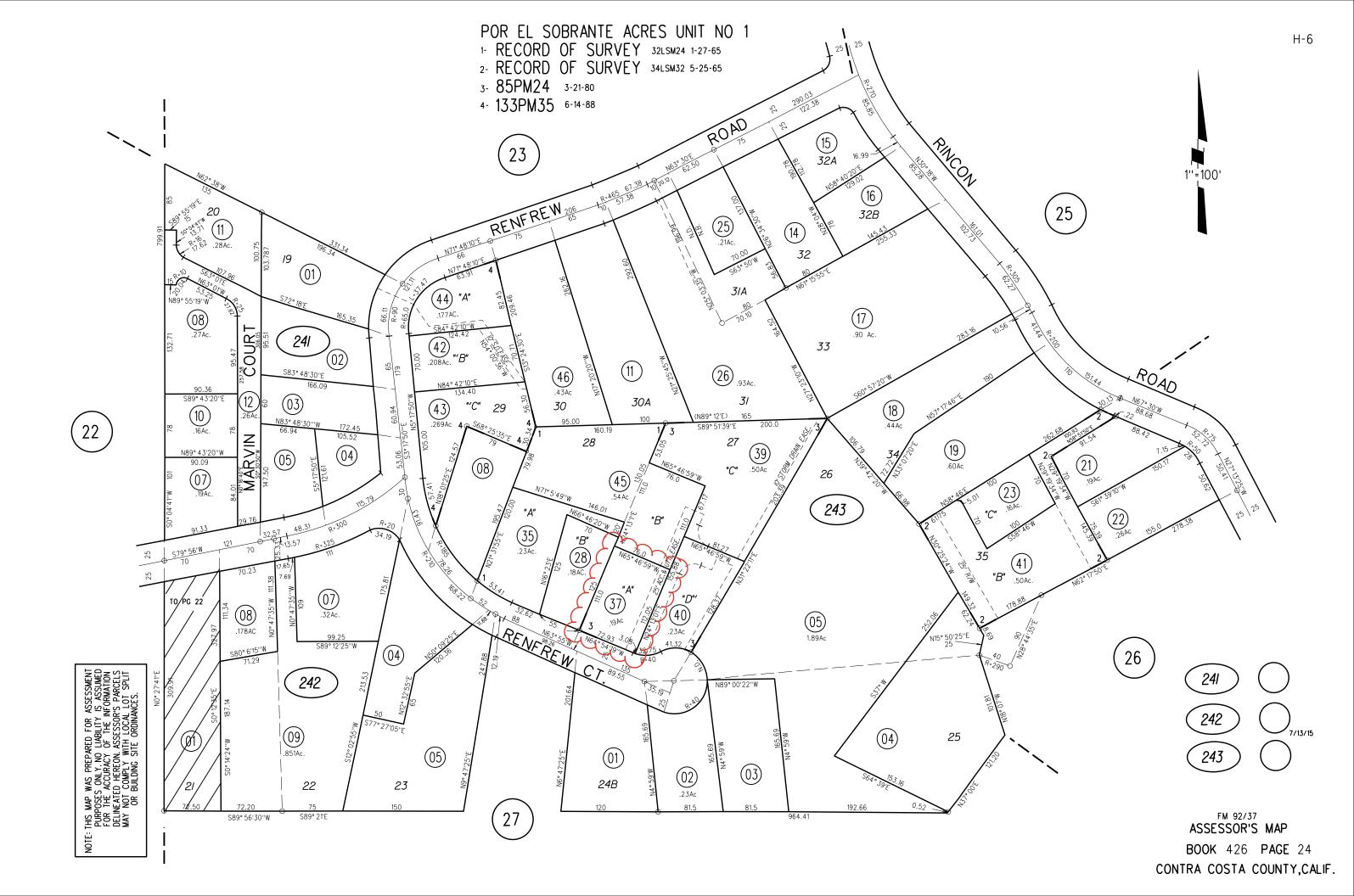
60-dBA Noise Control: NO MAC/TAC: El Sobrante MAC

Sphere of Influence: Richmond Fire District: CONSOLIDATED FIRE

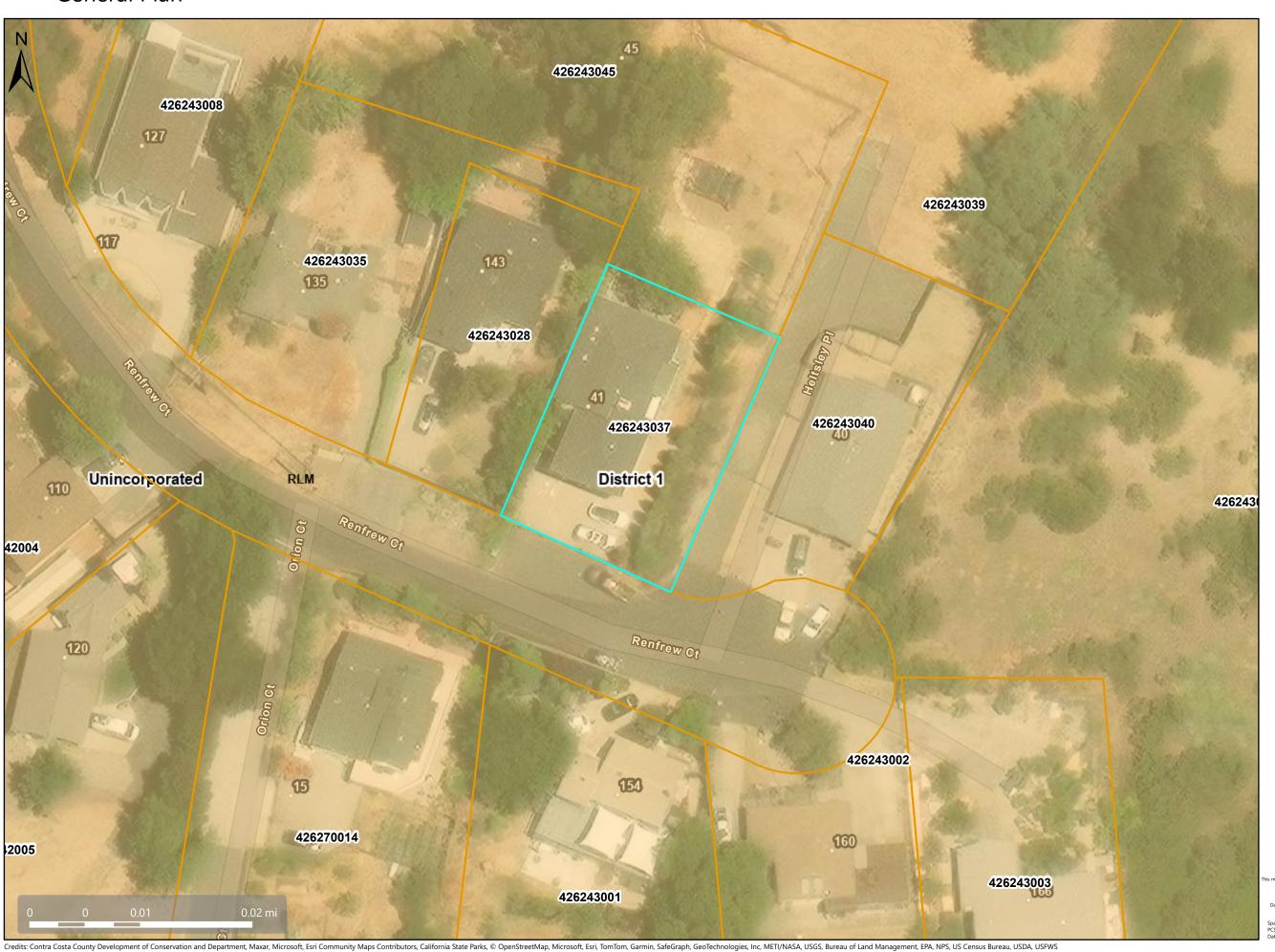
Sanitary District: WEST CO WASTEWATER Housing Inventory Site: NO

Specific Plan: N/A

Fees:					
Fee Item	Description	Account Code	Total Fee	Paid	
052B	Notification Fee (\$30)	002606-9660-REV-000-5B052B	30.00	30.00	
HSDR	Environmental Health Fee (\$57)	002606-9660-REV-000-5BHSDR \$5.00	57.00	57.00	
VRS0044	Zone Variance - DCD	002606-9660-REV-000-5B0044	3250.00	3250.00	
		Total:	3337.00	3337.00	



General Plan

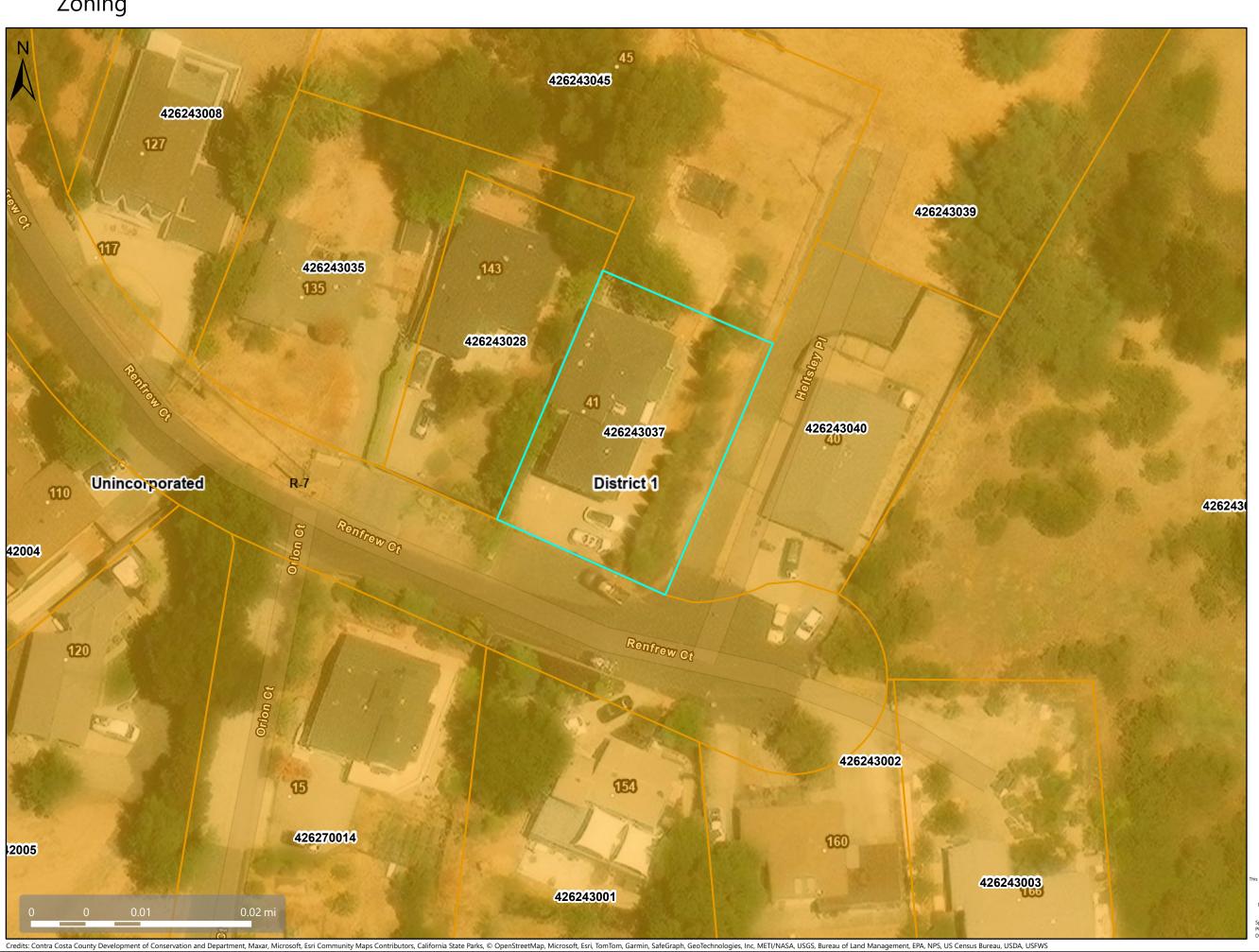


Map Legend Assessment Parcels General Plan RLM (Residential Low-Medium Density) (3-7 du/na) Unincorporated Board of Supervisors' Districts

Address Points

is a user generated, static output from an internet mapping application and is intended for reference. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION. CCMap is maintained by Contra Costa County Department of Information Technology, County GIS. layers contained within the CCMap application are provided by various Contra Costa County Department Please direct all data inquires to the appropriate department.

Zoning



Map Legend Assessment Parcels Zoning ZONE_OVER R-7 (Single Family Residential) Unincorporated Board of Supervisors' Districts **Address Points**

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Orthophotography



Map Legend Assessment Parcels Unincorporated Board of Supervisors' Districts **Address Points**

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64' Long Second-Story Balcony Repair/Rebuild Project

RECEIVED on 09/03/2025 CDVR25-01044
By Contra Costa County Department of Conservation and Development

41 Heltsey PI, El Sobrante, CA 94803

ASSESSOR'S PARCEL# 426-243-037-6

TYPE R-3 OCCUPANCY:

CONSTRUCTION TYPE: TYPE - V

BUILDING MATERIAL: Framing: Pressure-treated lumber

> Decking: Composite (Trex or equivalent) Footings: Concrete w/ Rock Veneer

Hardware/Fasteners: Corrosion-resistant (HDG Typ.)

Guardrails/Handrails: Aluminum

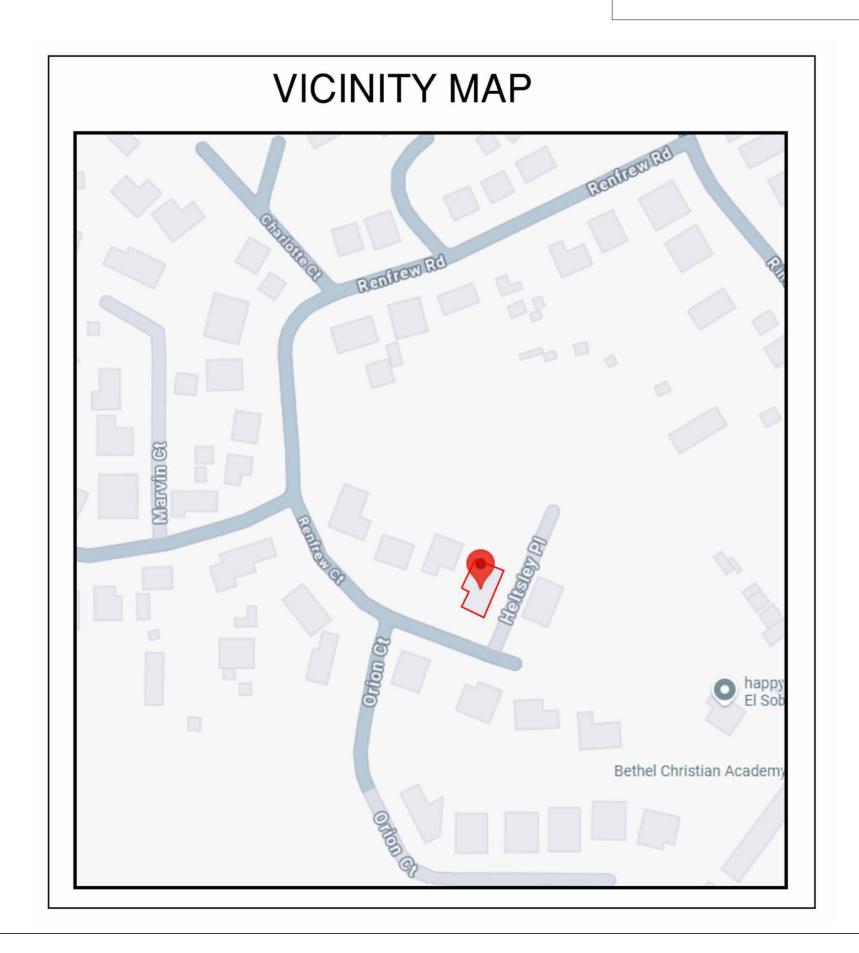
SQUARE FOOTAGE

OF DECK:

800 SQ. FT.

BUILDING CODE: CALIFORNIA BUILDING CODE 2022 CODE (IBC 2021)

SHEET NO.	SHEET NAME:	SCALE:
AA-01	General notes	N/A
AA-02	Site (Plot) Plan	N/A
AA-03	Topographic Contours Map	1/8" = 1'-0"
AA-04	Context Photo Page	1" =10'-0"
AA-05	Site Plan - Existing	N/A
AR-01	Deck Demolition Plan	3/16" = 1'
AR-02	Site Plan - Proposed Structures	3/16" = 1'
AR-03	Proposed Deck Plan	3/16" = 1'
AR-04	Proposed deck visualization	N/A
AR-05	Proposed deck visualization	N/A
S-01	Structural Engineer Drawings	As dispayed
S-02	Structural Engineer Drawings	As dispayed
S-03	Structural Engineer Calculations Sheets	N/A
S-04	Structural Engineer Calculations Sheets	N/A
S-05	Structural Engineer Calculations Sheets	N/A
ST-01	Proposed Deck Plan	3/8" = 1'
ST-02	Foundation Layout Plan - Proposed Deck	3/8" = 1'
ST-03	Column Layout Plan - Proposed Deck	3/8" = 1'
ST-04	Beam Framing Plan - Proposed Deck	3/8" = 1'
ST-05	Deck Framing Plan - Joists	3/8" = 1'
ST-06	Deck Framing Plan - Diagonal Bracing	3/8" = 1'
ST-07	Deck Boards Plan	3/8" = 1'
ST-08	Front Elevation	3/8" = 1'
ST-09	Side Elevation 1 - Railing Structural Details	3/8" = 1'
ST-10	Side Elevation 2	3/8" = 1'
EL-01	Lighting Layout Plan	3/8" = 1'
EL-02	Lighting Detail	N/A
EL-03	Lighting Layout Elevation	3/8" = 1'



Project Team Architect

Quinn & Adam Morgenthaler (408) 891-6012

Owner

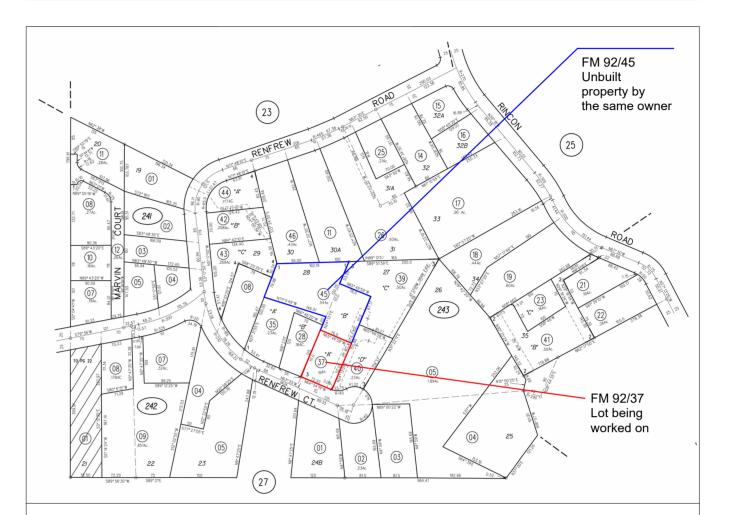
Zen Life Design +57 (314) 503-6394 Adam.Morgenthaler@gmail.com Notyuriy@gmail.com

Structural Engineer

Andersen Engineering (415) 250-8473 erik@andersen-engineering.com Allcurrents@gmail.com

Electrical Engineer

AC3 LLC Electric (510) 390-6002



FM 92/37 **ASSESSOR'S MAP BOOK 426 PAGE 24** CONTRA COSTA COUNTY, CALIFORNIA

DATE & APPROVAL

IS RE DATE

Project Name

64' Long Second-Story Balcony Repair/Rebuild Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Existing balcony is a cantilevered structure extending 4' beyond the outside wall. The existing balcony has become weathered/rotted due to elements and is in need of repair

Repair of the existing deck as built is not possible due to the extent of rotting joists which precludes re-use or sistering. Instead it is proposed that the existing balcony will be demolished. Joists will be cut flush with side of house and damage repaired as needed prior to start of rebuild. The new structure will be attached via ledger board, extend 10' from the existing structure and be supported by new posts placed in existing yard.

Sheet Title

Cover Sheet

Scale

VALUE ENGINEERING REVISIONS ISSUED FOR ISSUANCE OF PERMIT Project number **ISSUED FOR PRICING ISSUED FOR PERMIT** Drawn by 3 C 2025-08-18 ISSUED FOR OWNER REVIEW 1 A 2025-07-21 ISSUED FOR OWNER REVIEW

DESCRIPTION

Adam Morgenthaler

AA-01

2025-08-18

Zen Life Design

General Notes:

- 1. The Contract for construction shall generally follow the general conditions of AIA contract A201, 2017 version.
- 2. The Contractor shall keep the jobsite clean and safe at all times and shall leave the premises clean and orderly, and ready for occupancy.
- 3. Contractor shall provide work completely and in accordance with current applicable codes.
- 4. Contractor shall be responsible for any damage incurred through any errors or omissions within their work to this property or to the adjacent private and/or publicly owned properties.
- 5. Contractor shall not perform any work that will result in a change order without prior written approval from owner. Change orders must be provided in writing and shall be for either additions or subtractions to the construction contract. Change orders must be signed by the owner before the work proceeds.
- 6.Contractor to review all design changes or substitutions with the Owner & structural engineer and receive approval for all changes.
- 7. Written dimensions take precedence over scale. Do not scale the drawings.
- 8. Contractor to verify all field conditions and measurements before starting construction. Alert architect of all discrepancies and/or variation before proceeding with work.
- 9. Contractor to report on the progress of work to the owner at a minimum, on a bi-weekly basis or more frequently as conditions warrant. Meetings with the owner shall be scheduled to allow for time required to provide appropriate response to any questions or site conditions.
- 10. Contractor shall arrange for a meeting after determining the project dimensional layout for review by the architect and owner.
- 11.Code upgrade work not required by building inspectors is to be reviewed with the architect and owner to determine course of action. If the contractor believes code upgrade is necessary and it has not been required by the building inspector, the architect and owner shall determine whether the work is to be undertaken.
- 12.Install all equipment, fixtures, and materials per manufacturer's recommendations.
- 13. Contractor to coordinate with owner for owner-provided materials and products.
- 14.CRC317.3.1 fasteners for preservative-treated wood: "fasteners, including nuts and washers, for preservative-treated wood shall be of hot-dipped, zinc-coated galvanized steel, stainless steel, silicon bronze or copper. coating types and weights for connectors in contact with preservative-treated wood shall be in accordance with the connector manufacturer's recommendations. in the absence of manufacturer's recommendations, a minimum of ASTM A653 type G185 zinc-coated galvanized steel, or equivalent, shall be used.
- 15.All cuts of pressure treated lumber are to be treated with Copper-Green Wood Preservative prior to installation. Alternatives by owner approval only.
- 16. Joist tape to be used on all horizontal members prior to installation of any other pieces atop. Ensure all joist tops, beams, and ledger boards are clean and dry. Remove dirt, sawdust, and debris for best adhesion. Fold overhangs down each side. If overhang >1cm trim excess
- 17. Alignment of the posts with bases is critical and shall be off by no more than 1 inch from center in any direction.
- 18.Install decking with spacing per manufacturer's recommendations.
- 19.All joist hangers, diagonal braces, blocking/bridging, and structural mounting hardware must be secured using approved, manufacturer-specified structural fasteners (not drywall or generic screws) such as galvanized or stainless steel nails, screws, or bolts, to ensure code compliance and maximum load-bearing safety.
- 20. Seams of decking boards are to be randomly staggered without a evident pattern.
- 21. Miter cuts for decking are to be 90° ± 2° to avoid the appearance of end stepping. End joining of the decking shall be on a shared joist with adequate spacing as defined by the manufacturer to enable thermal expansion and contraction

64' Long Second-Story Balcony Repair/Rebuild Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

DATE & APPROVAL

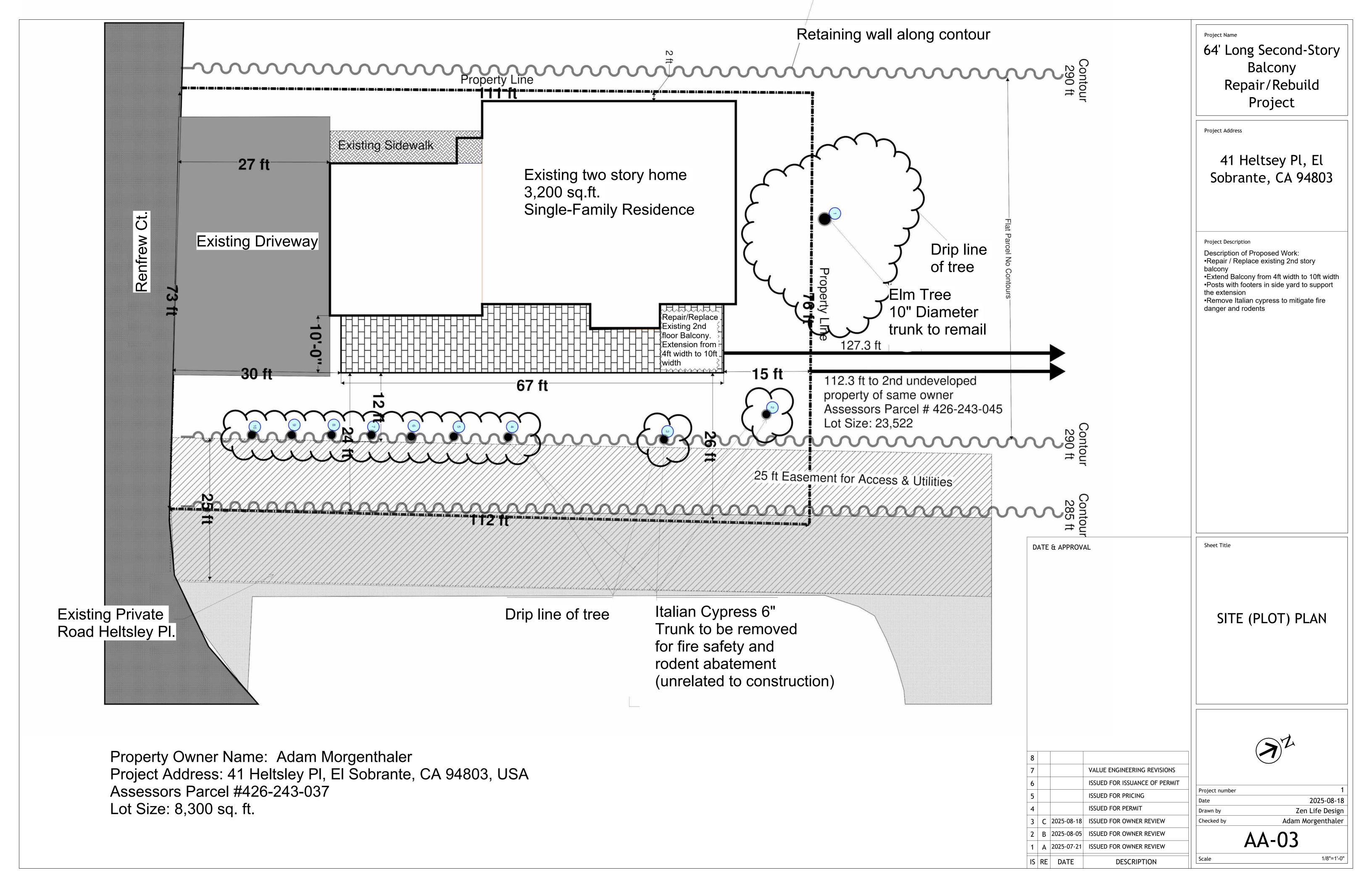
GENERAL NOTES

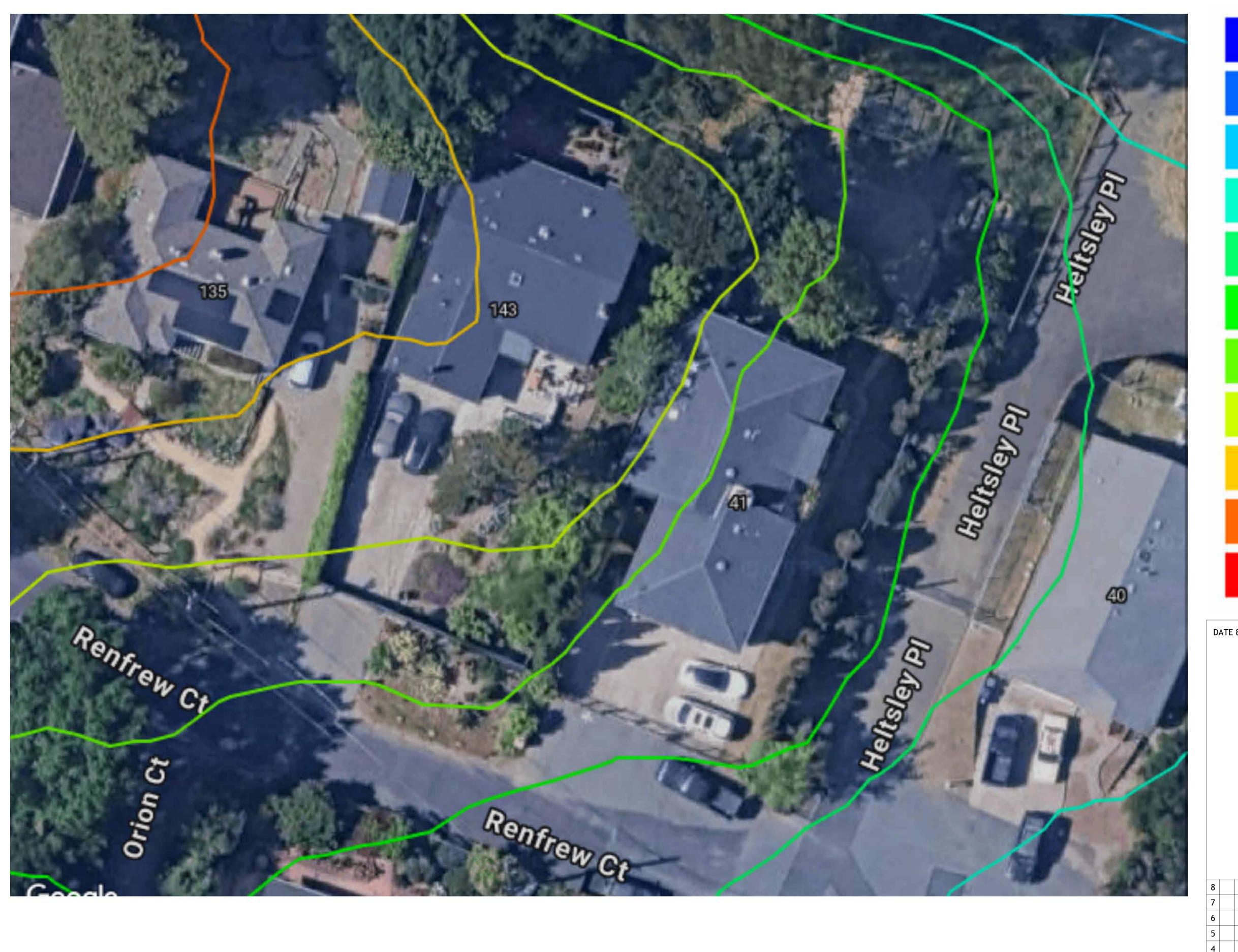
Sheet Title

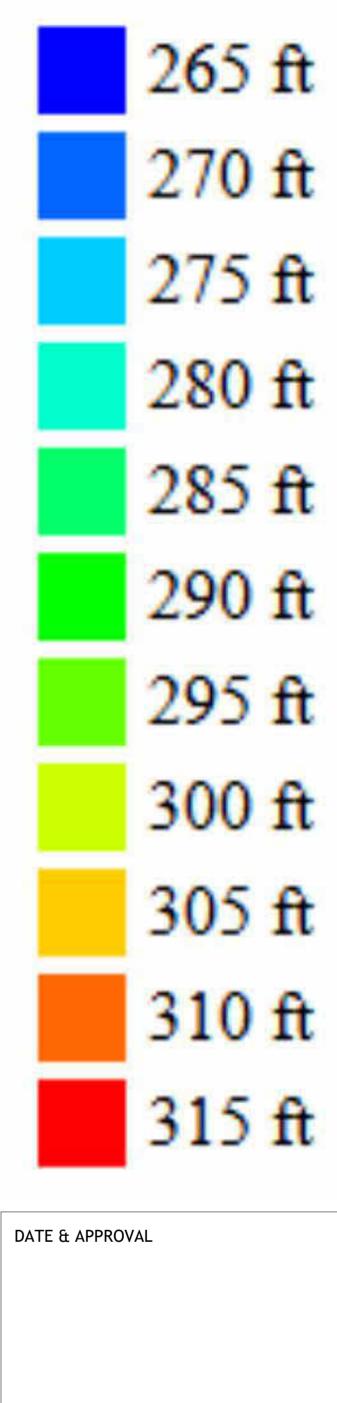
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Project number Zen Life Design Adam Morgenthaler Checked by **AA-02**

2025-08-18







Project Name 64' Long Second-Story Balcony Repair/Rebuild Project Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

TOPOGRAPHIC **CONTOURS MAP**

Sheet Title

8			
7			VALUE ENGINEERING REVISIONS
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AA-U4

1"=10'-0"



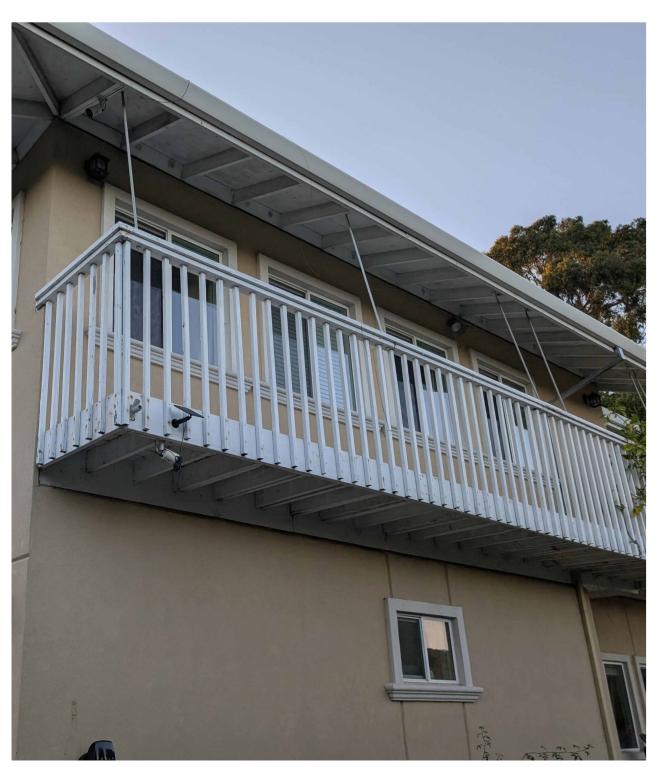
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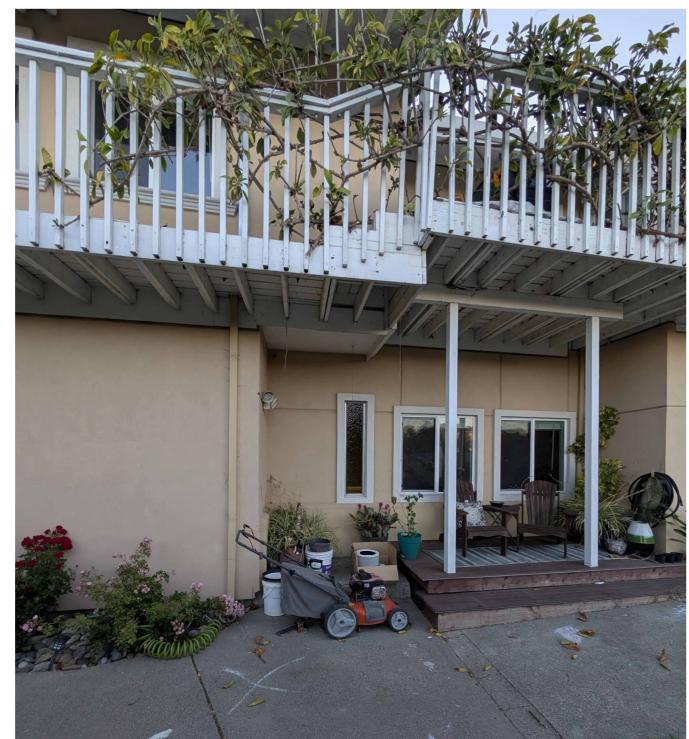
64' Long Second-Story
Balcony
Repair/Rebuild
Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description







DATE & APPROVAL

CONTEXT PHOTO PAGE

Sheet Title

8			
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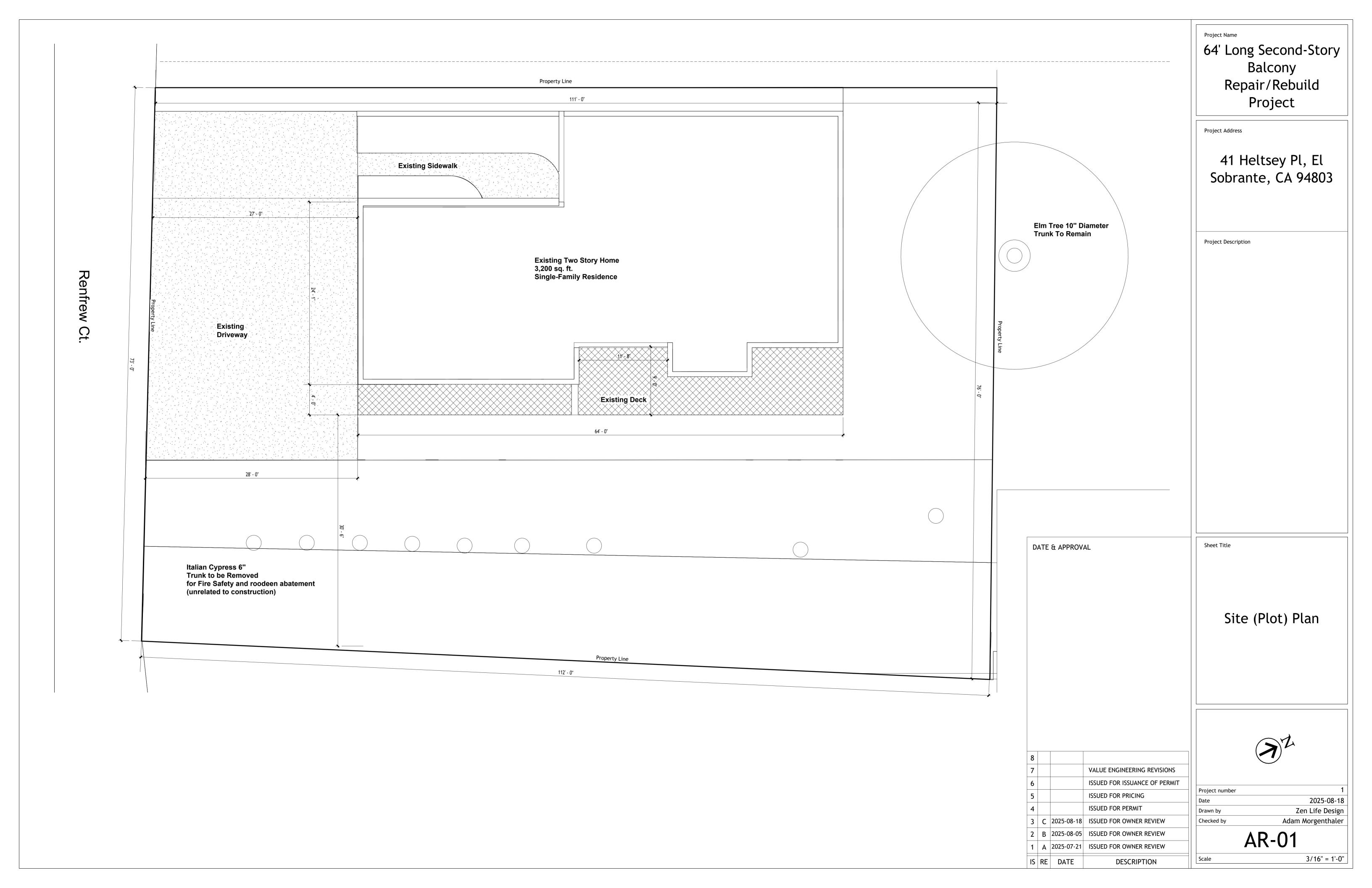
Project number 1

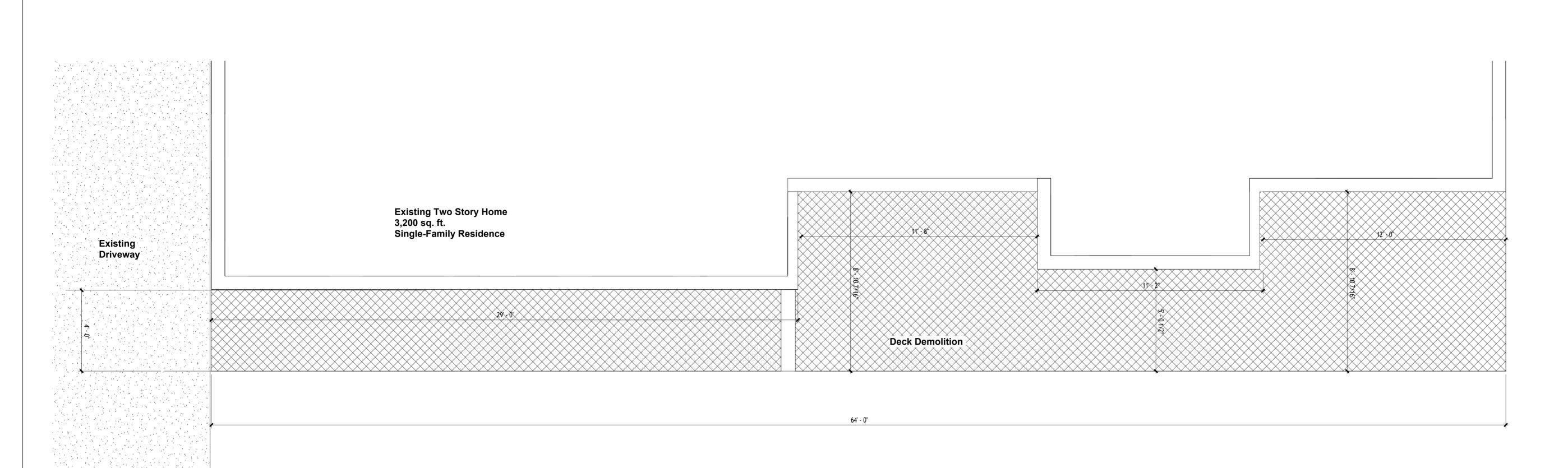
Date 2025-08-18

Drawn by Zen Life Design

Checked by Adam Morgenthaler

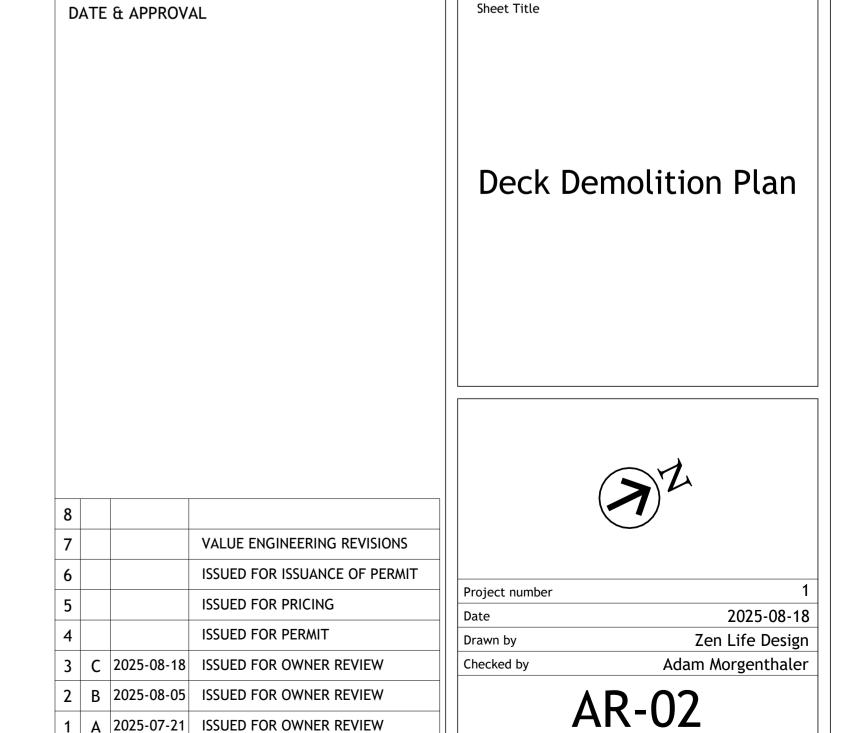
AA-05





NOTES

- 1) Contractor is responsible for coordinating all demolition with new construction, ensuring all utilities are safe, and restoring disturbed surfaces to original or better condition. Immediately report any unforeseen conditions to the owner/engineer for direction.
- 2) No access through the house for demolition. Use of ladders and scaffolding required for access.
- 3) Do not walk/stand on existing structure. All weight bearing must be independently ground supported.
- 4) Place tarps/canvas on ground in demolition area to catch falling debris.
- 5) Cut existing cantilevered joists flush with inside edge of exterior wall (refer to structural engineering drawings for details)
- 6) To comply with CalGreen's 65% waste diversion requirement, re-useable boards to be provided to homeowner while deteriorated ones will be disposed of as construction debris at approved local landfill or transfer station. Records to be maintained for estimated re-used materials vs disposed materials.
- 7) Remove debris and demolished building materials promptly and store in designated containers or protected staging areas. Segregate wood, metal, and other recyclable construction debris to maximize recycling per state (CalGreen) and county requirements. Salvage materials when feasible.
- 8) Dispose of all pressure treated wood as hazardous waste.



DESCRIPTION

IS RE DATE

3/8" = 1'-0"

Project Name

Project Address

Project Description

64' Long Second-Story

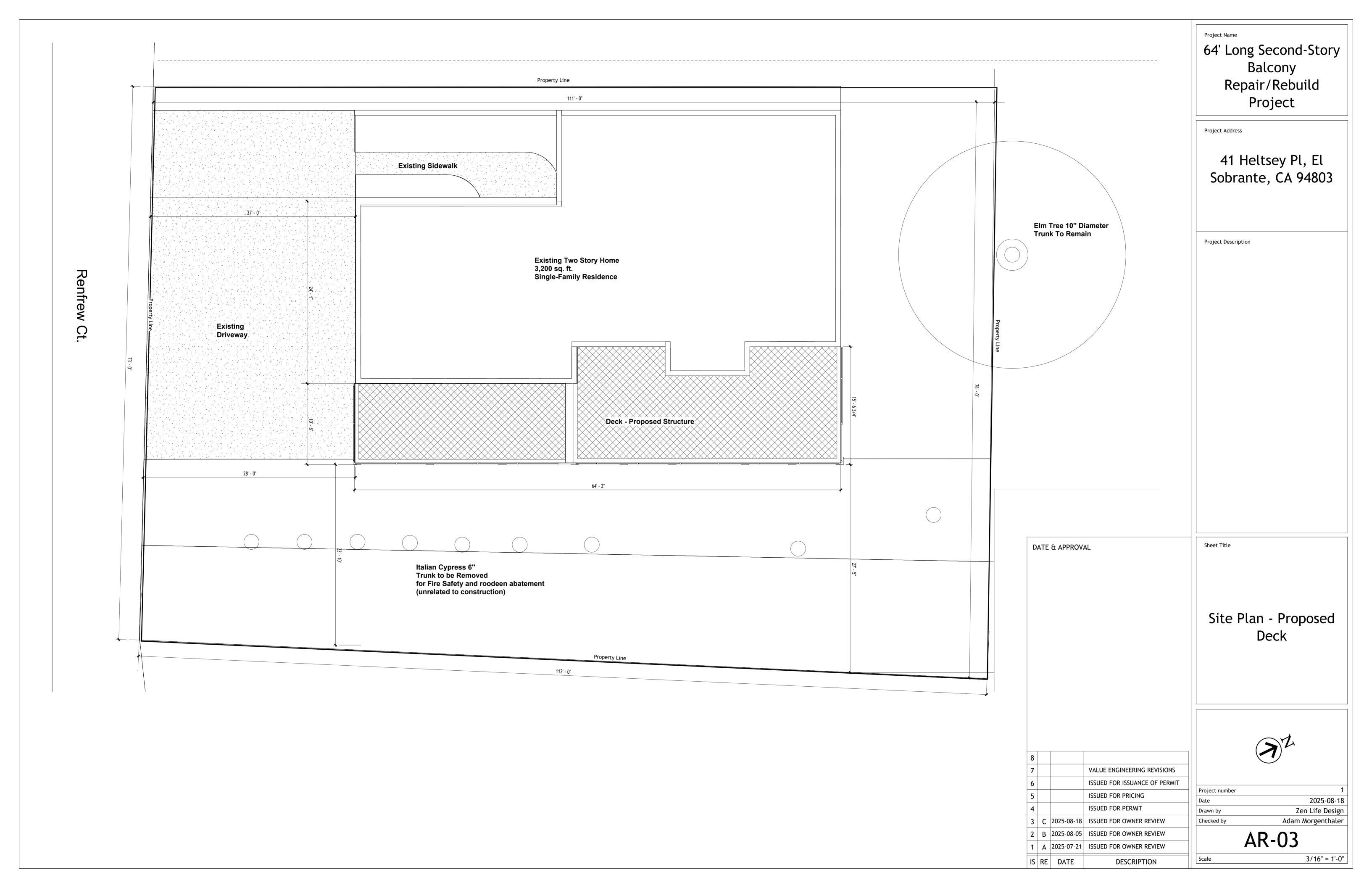
Balcony

Repair/Rebuild

Project

41 Heltsey Pl, El

Sobrante, CA 94803





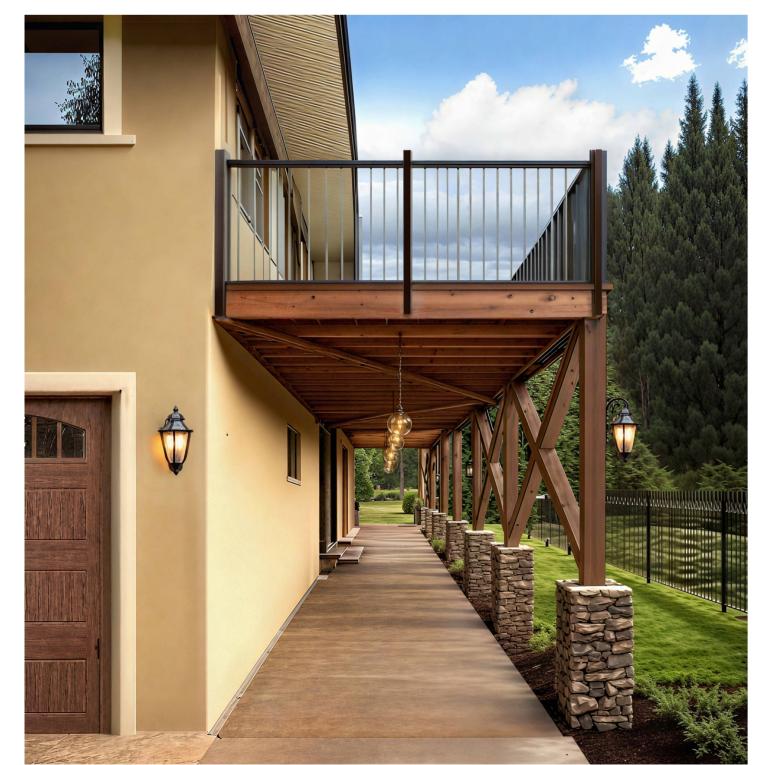
Project Name

64' Long Second-Story
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Repair/Rebuild
Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description





DATE & APPROVAL

Sheet Title

3D VISUALIZATION - Proposed Deck

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Project Name

64' Long Second-Story
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41 Heltsey Pl, El Sobrante, CA 94803

Project Description

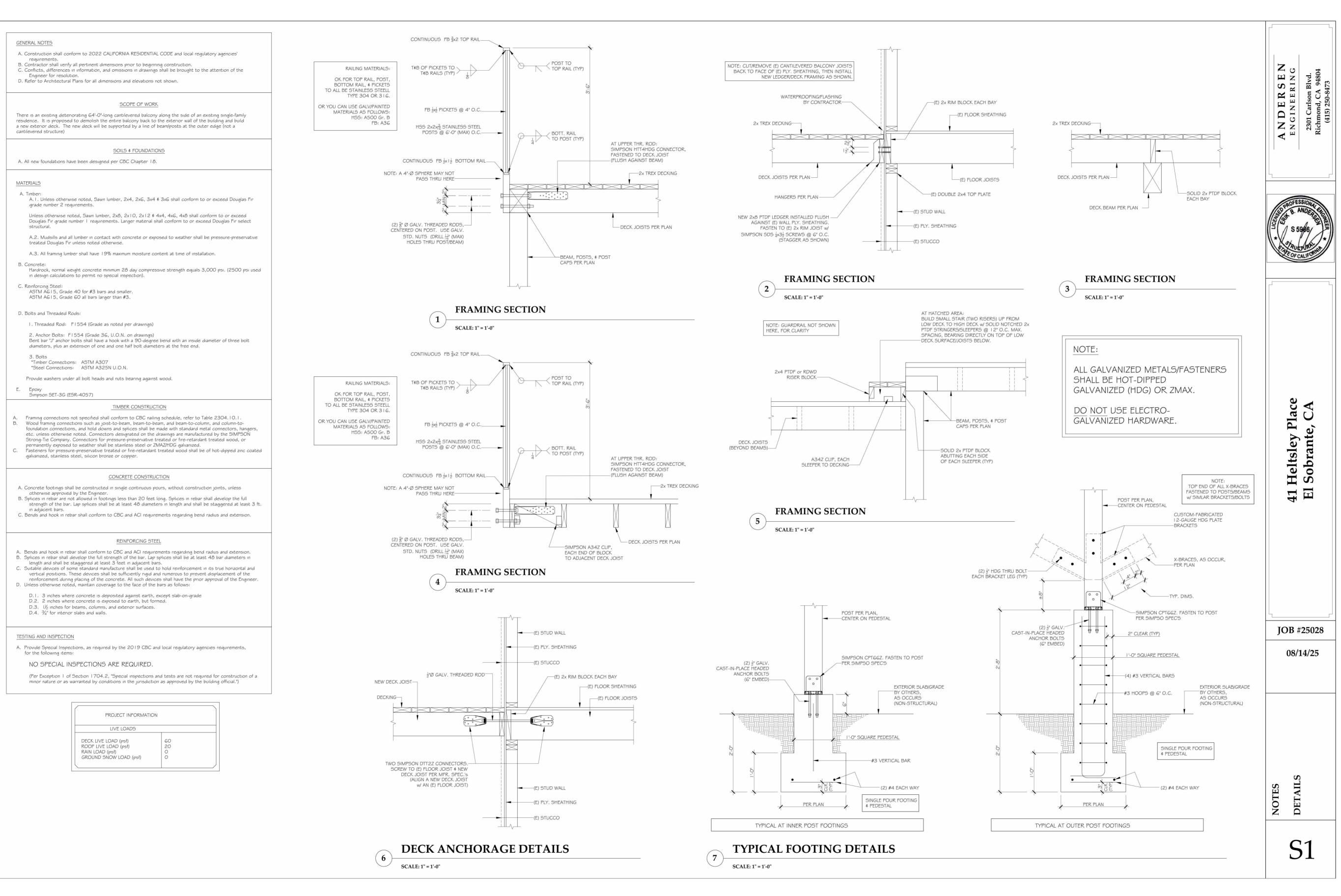
DATE & APPROVAL

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	Date	2025-08-18
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	Checked by	Checker
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64' Long Second-Story
Balcony
Repair/Rebuild
Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

Sheet Title

Project number

Scale

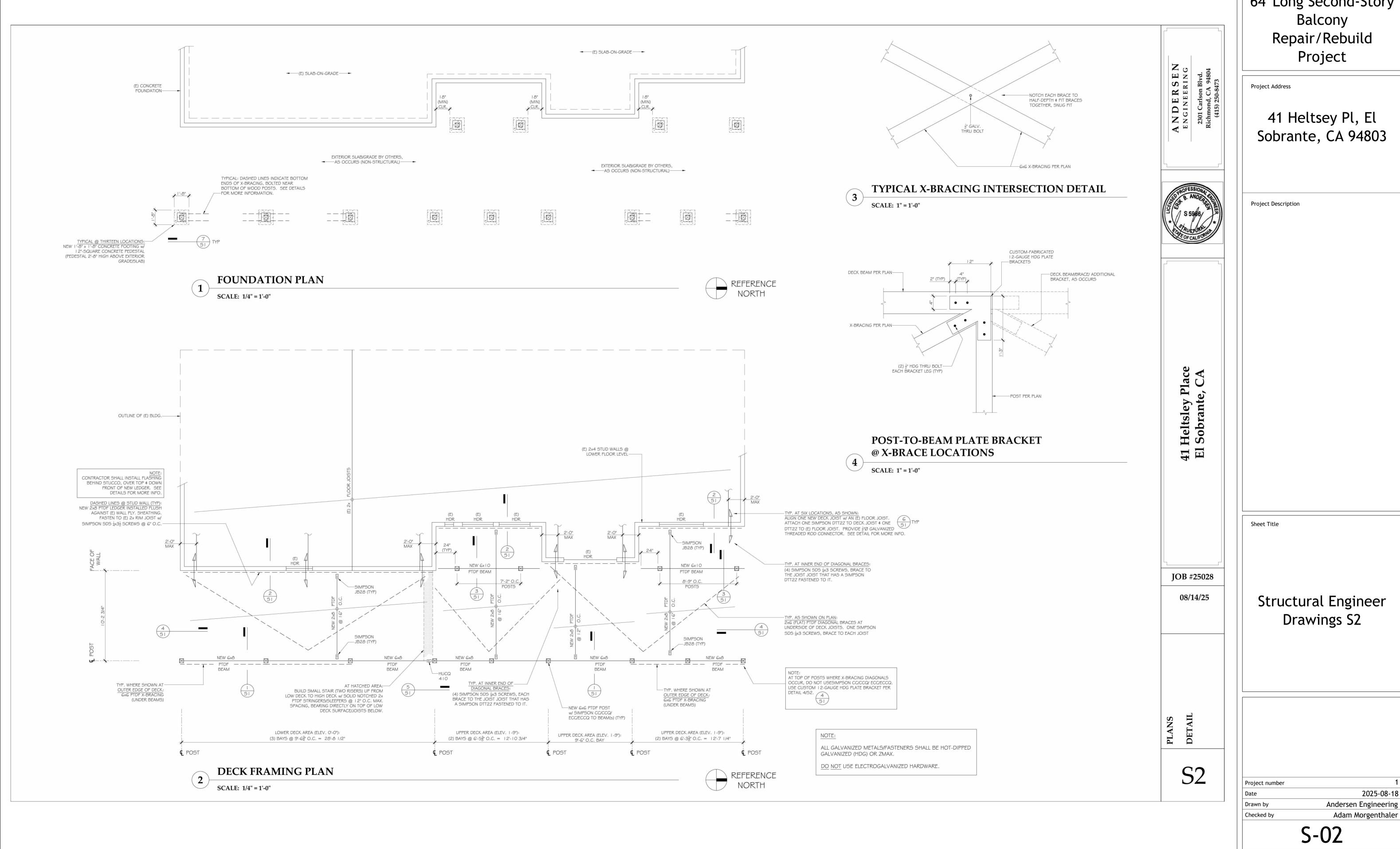
Structural Engineer
Drawings S1

Date 2025-08-18

Drawn by Andersen Engineering

Checked by Adam Morgenthaler

S-01



Project Name 64' Long Second-Story

Scale

Date = Job No.

14-Aug-25 25028

41 Heltsley Place, El Sobrante, CA New/Replacement Exterior Deck

Loads: **Exterior Deck** Dead Loads =

2x Decking framing

5 psf 3 psf

Total (psf) 8.0 psf Live Load (psf) 60 psf



41 Heltsley Place, El Sobrante, CA

							Job No.		25028
Beam Type	Type		Fb (ksi)	Fv (ksi)	E (ksi)	Fc // (ksi)	Fc (ksi)	EC (ksi)	pcf
Doug Fir #1		1	varies	varies	1700	0.925	·	1600	36
Doug Fir #2		2	varies	varies	1600	0.925		1600	36
GLULAM (24F-V4)		3	2.40	0.265	1800	1.65		1600	36
PSL Parallam 2.0E		4	2.90	0.29	2000	0.5	0.	75 1000	45
Steel		5	23.76	14.40	29000	22		22000	490
LVL Microllam 1.9E		6	2.6	0.285	1900	2.51	0.7	75	41.5
LSL TimberStrand 1.55l	E	7	2.325	0.31	1550	2.05	0	.8	44
TJI		8	varies	varies	varies				
RFPI		9	varies	varies	varies				1
Note: Fb values for 2x n	naterial includ	e 1.15 repe	titive member fact	or.					

	Beam No from				Multiple	
Beam Ref on plans	table	Beam Name	Length (ft)	Length (in)	Members	
F1 - deck joist	3	2x08 no1	10	120	1	
LOADS	Uniform loads (plf)				Point Load from	Left (k)
Self Weight	2.7			Distance (ft)		
DL	11.0	=8(1.33')	Ci=	DL		
LL	80.0	=60(1.33')	0.80	LL		
Total	93.7			Total	0.0	
PROPERTIES	Beam Type	1	E (ksi)	1700.00	a (in)	0
	lx (in4)	48	Depth (in)	7.25	b (in)	120
	Sx (in3)	13	A (in2)	11		
REACTIONS (k)		Left	Right			
	DL	0.07	0.07			
	LL	0.40	0.40			
	Total	0.47	0.47	Fv (ksi)	fv (ksi)	
SHEAR (k)	Total (k)	0.41	0.41	0.180	0.057	< Fv pass
MOMENT (in-k)	Uniform	Point Load Max	Total	Fb (ksi)	fb (ksi)	
Moment (in-k	14.06	0	14.06	1.10	1.07	< Fb pass
DEFLECTION (in)	ΔTL (in)	0.260	L/in TL	461		pass > 240
	Δ LL (in)	0.222	L/in LL	540		pass > 360

Project Name

64' Long Second-Story Balcony Repair/Rebuild Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

Sheet Title

Structural Engineer Calculations Sheets

Project number

2025-08-18 Andersen Engineering Adam Morgenthaler

S-03

Scale

41 Heltsley Place, El Sobrante, CA

Job No.

25028

	Beam No from				Multiple	
Beam Ref on plans	table	Beam Name	Length (ft)	Length (in)		
F2 - deck beam	14	6x08 no1	9.5	114		1
LOADS	Uniform loads (plf)				Point Load from	n Left (k)
Self Weight	10.3			Distance (ft)		
DL	40.0	=8(5')	Ci=	DL		
LL	300.0	=60(5')	0.80	LL		
Total	350.3			Total	0.0	
PROPERTIES	Beam Type	1	E (ksi)	1600.00	a (in)	0
	Ix (in4)	193	Depth (in)	7.50	b (in)	114
	Sx (in3)	52	A (in2)	41		
REACTIONS (k)		Left	Right			_
	DL	0.24	0.24			
	LL	1.43	1.43			
	Total	1.66	1.66	Fv (ksi)	fv (ksi)	
SHEAR (k)	Total (k)	1.45	1.45	0.170	0.053	< Fv pass
MOMENT (in-k)	Uniform	Point Load Max	Total	Fb (ksi)	fb (ksi)	
Moment (in-k)	47.42	0	47.42	0.96	0.92	< Fb pass
DEFLECTION (in)	ΔTL (in)	0.208	L/in TL	549		pass > 240
	Δ LL (in)	0.178	L/in LL	641		pass > 360

	Beam No from				Multiple	
Beam Ref on plans	table	Beam Name	Length (ft)	Length (in)	Members	
F3 - deck beam	15	6x10 no1	10	120		1
LOADS	Uniform loads (plf)				Point Load fro	m Left (k)
Self Weight	13.1			Distance (ft)		
DL	60.0	=8(7.5')	Ci=	DL		
LL	450.0	=60(7.5')	0.80	LL		
Total	523.1			Total	0.0	
PROPERTIES	Beam Type	1	E (ksi)	1600.00	a (in)	0
	1x (in4)	393	Depth (in)	9.50	b (in)	120
	Sx (in3)	83	A (in2)	52		out the asset of the second second
REACTIONS (k)		Left	Right			_
	DL	0.37	0.37			
	LL	2.25	2.25			
	Total	2.62	2.62	Fv (ksi)	fv (ksi)	
SHEAR (k)	Total (k)	2.20	2.20	0.170	0.063	< Fv pass
MOMENT (in-k)	Uniform	Point Load Max	Total	Fb (ksi)	fb (ksi)	
Moment (in-k)	78.46	0	78.46	1.08	0.95	< Fb pass
DEFLECTION (in)	Δ TL (in)	0.187	L/in TL	641		pass > 240
	Δ LL (in)	0.161	L/in LL	745		pass > 360

CONSIDER A 24" (MAX) BEAM CANTILEVER: $M = (44 \#/in)(24'')^2(\frac{1}{2})$ = 12672 #in $F_b = \frac{12672 \#in}{83 in^3}$ = 152 pri = 1080 pri

PROJECT PAGE CLIENT **DESIGN BY** JOB NO. DATE: **REVIEW BY** Wood Post, Wall Stud, or King Stud Design Based on NDS INPUT DATA **DESIGN SUMMARY** USE: 1 - 4" x 4" DOUGLAS FIR-LARCH No. 2 Effective Length (NDS 3.7) Le x-x = 11 ft, (strong axis bending) 1. CHECK VERTICAL LOADS: fc < Fc'? Le y-y = 11 ft, (weak axis bending) 273 psi < [Satisfactory] $P_{DL} = 480$ lbs AXIAL LOAD 2. CHECK BENDING LOADS: fb < Fb' ? P_{LL} = 2860 lbs P = 3,340 lbs 0 psi < [Satisfactory] LATERAL LOAD w = 0 plf $\left(\frac{f_c}{F_c}\right)^2 + \left(\frac{1}{1 - f_c/F_{cEx}}\right) \frac{f_{bx}}{F_{bx}} \le 1$ 3. CHECK INTERACTION lbs, at ft, from bottom Max Section M = 0 ft-lbs, at 11.00 ft from bottom 0.732 [Satisfactory] Max Section V = 0 s, at top end SPECIES (1 = DFL, 2 = SP, 3 = LSL, 4 = PSL) 1 DOUGLAS FIR-LARCH 4. CHECK SHEAR LOADS: f_v < F_v'? GRADE (1, 2, 3, 4, 5, or 6) 4 No. 2 0 psi < 180 psi [Satisfactory] SECTION 1 pcs, b = 4 in 5. MAXIMUM HORIZONTAL DEFLECTION 0.00 WET / DRY ? (1 = DRY, 2 = WET) 1 DRY ANALYSIS COLUMN BASIC DESIGN STRESSES: COMPRESSIVE STRESS $F_c = 1350$ psi MODULUS OF ELASTICITY BENDING STRESS (X-Axis) SHEAR STRESS (X-Axis) $F_V = 180$ psi COLUMN PROPERTIES: STANDARD DRESSED SIZE dy = 3.50 in dx = 3.50 in $A = 12.25 \text{ in}^2$ SECTION PROPERTIES Abt. x-x LENGTH-DEPTH RATIO Le x-x / dy = 37.7Le y-y / dx = 37.7ADJUSTMENT FACTORS: E, DURATION (NDS 2.3.2) MODULUS OF ELASTICITY E'_{min} = 580 ksi MOISTURE FACTOR 1.00 COLUMN PARAMETER c = 0.80TEMPERATURE FACTOR $R_B = N/A$ 1.00 BEAM PARAMETER INCISING FACTOR 1.00 1.00 1.00 SIZE FACTOR 1.15 **BUCKLING VALUES** F_{CE} = 335 psi FLAT USE FACTOR $F_{bE} = N/A$ $F_b = N/A$ **COLUMN STABILITY** 0.205 $F_c^* = 1553$ psi REPETITIVE (1.15 or 1.0) 1.00 BEAM STABILITY ADJUSTED PROPERTIES: F_c' = 319 psi MODULUS OF ELASTICITY E' = 1600 ksi **AXIAL STRESS** F_{bx}' = 1350 psi F_v' = 180 psi BENDING STRESS (X-Axis) SHEAR STRESS ACTUAL STRESSES: **AXIAL STRESS** $f_{\rm C} = 272.7$ psi SHEAR STRESS $f_V = 0$ psi BENDING STRESSES $f_{bx} = 0.0$ psi

Project Name 64' Long Second-Story Balcony

Repair/Rebuild Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

Sheet Title

Structural Engineer **Calculations Sheets**

Project number

2025-08-18 Andersen Engineering Drawn by Adam Morgenthaler

S-04

Scale

Andersen Engineering

2301 Carlson Blvd. Richmond, CA 94804 (415) 250-8473

JOB # 25028

TYPICAL FOOTING - SOIL BELLEUNG

Andersen Engineering

2301 Carlson Blvd. Richmond, CA 94804 (415) 250-8473

JOB # 25028

TYPICHE DECK LEDGER CONVECTION

NEW WE FIRST LEDGER INSTALLED DIRECTLY AGAINST (=) ZX PUM JOIST. FASTEN W/ SIMPSON SDS 4 x 3/2 @ 6" o.c.

$$W_{ALLOW} = (3+60)(5' TELB)$$

$$W_{ALLOW} = (190 \% 505)(\frac{12''}{6''})$$
SOS SCREENS

Andersen Engineering

2301 Carlson Blvd. Richmond, CA 94804 (415) 250-8473

JOB # 25028

STEEL GUATEDRAIL TYP. POST: HSS2×2×1/8 POSTS @ 6-0" (MAK) O.C. M = (0.2k)(42") = 8.4 kin Mn = (0.797 n3)(36 ksi)

> DUE TO BOLT HOLES Fy = 36 kgi (STAINLESS OPTION - TYPE 304 OF 316)

ACCOUNTS FOR REDUCED

SECTION STRENGTH

TOP RAIL: FB 4x2 M= (0.2 k X72" X4)

3.6 kin

Mn_ (0.75)(2)2

16.1 kin

SK-

ANCHORAGE TO DECK: (2) 1/8" THEU BOLTS C 34" (MIN)
SPACING, THEU POST & PIM TO DECK FRAMING.

64' Long Second-Story Balcony Repair/Rebuild

Project

Project Address

Project Name

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

OK

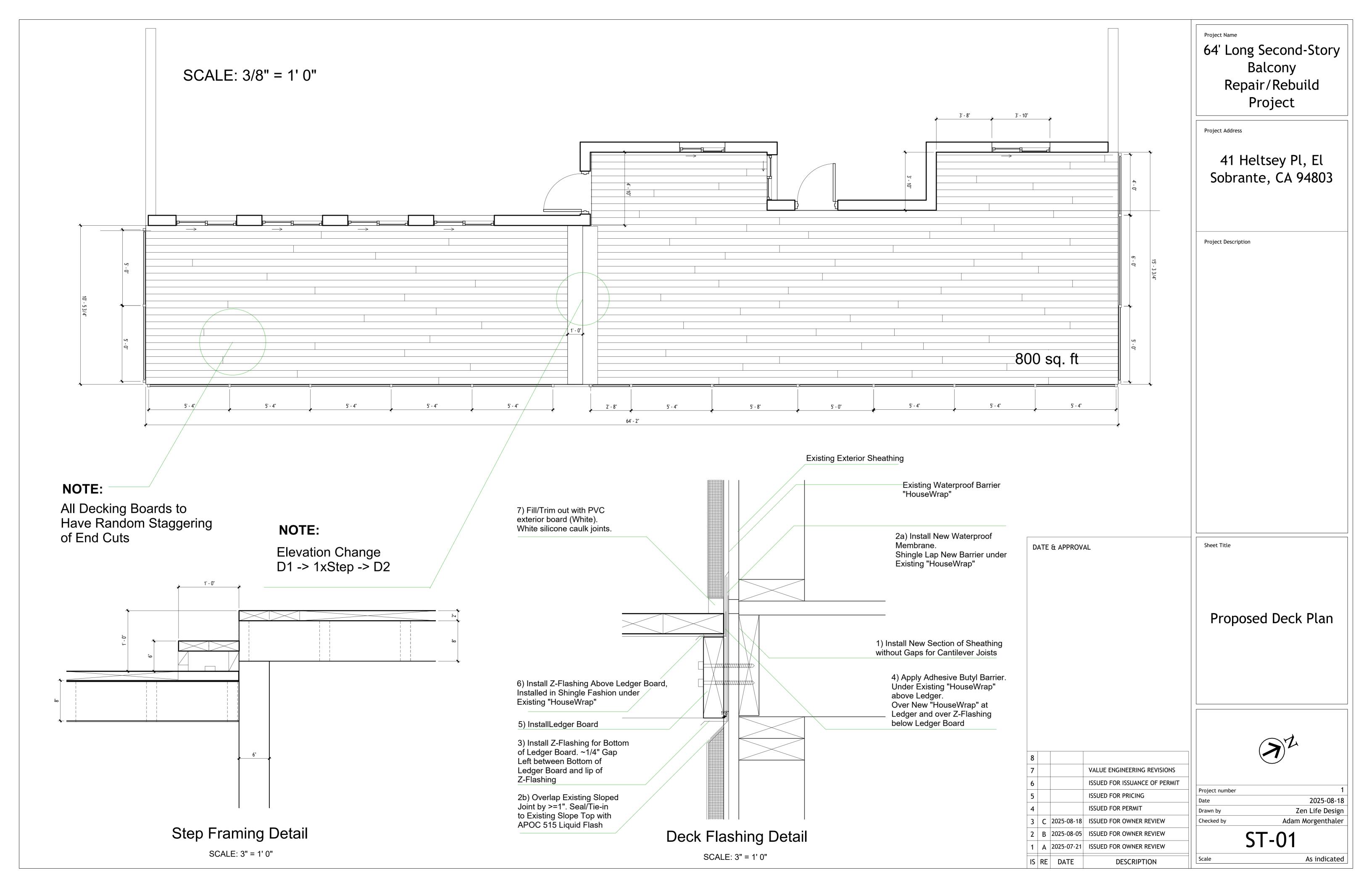
Structural Engineer **Calculations Sheets** Copy 1

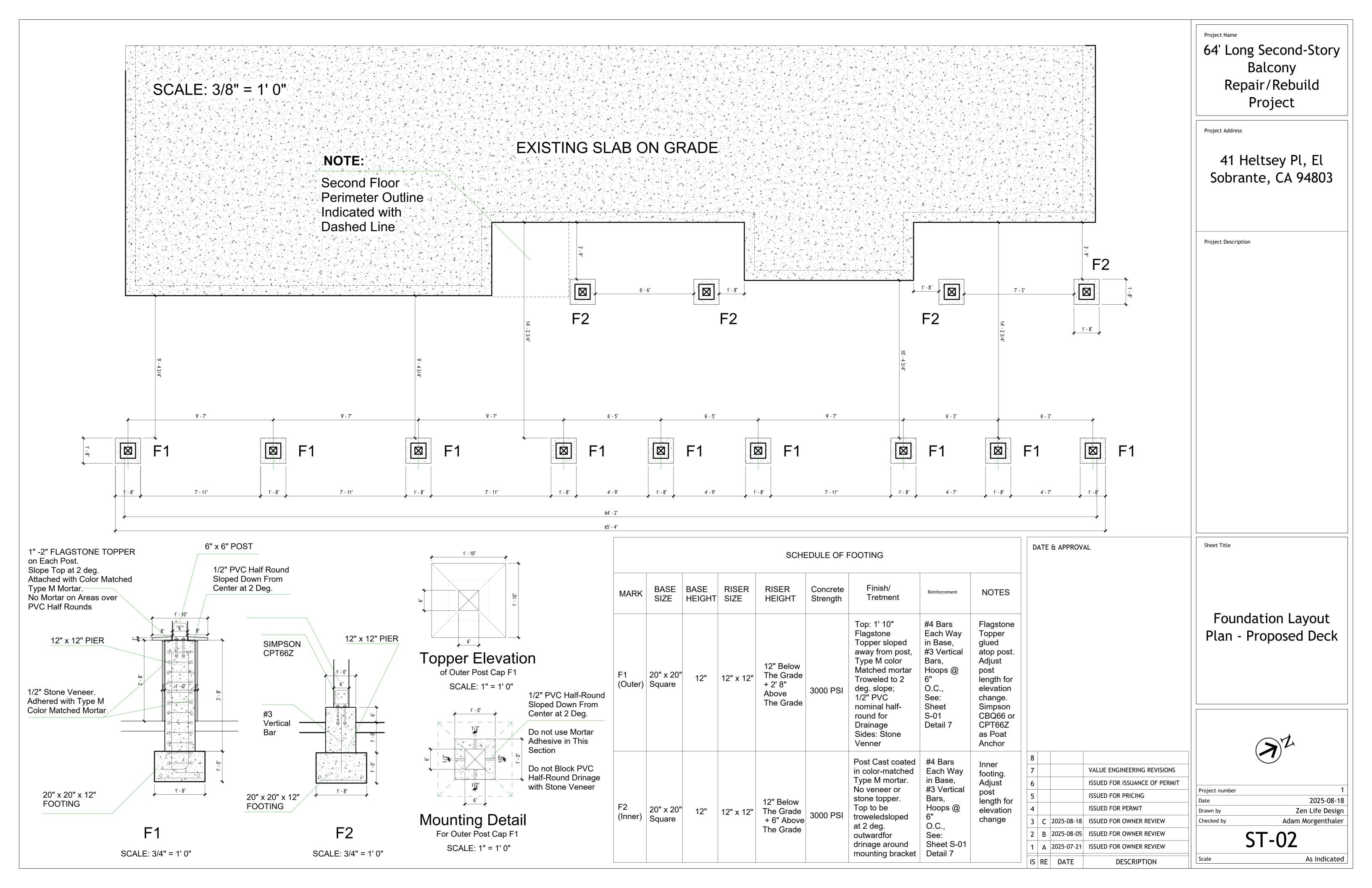
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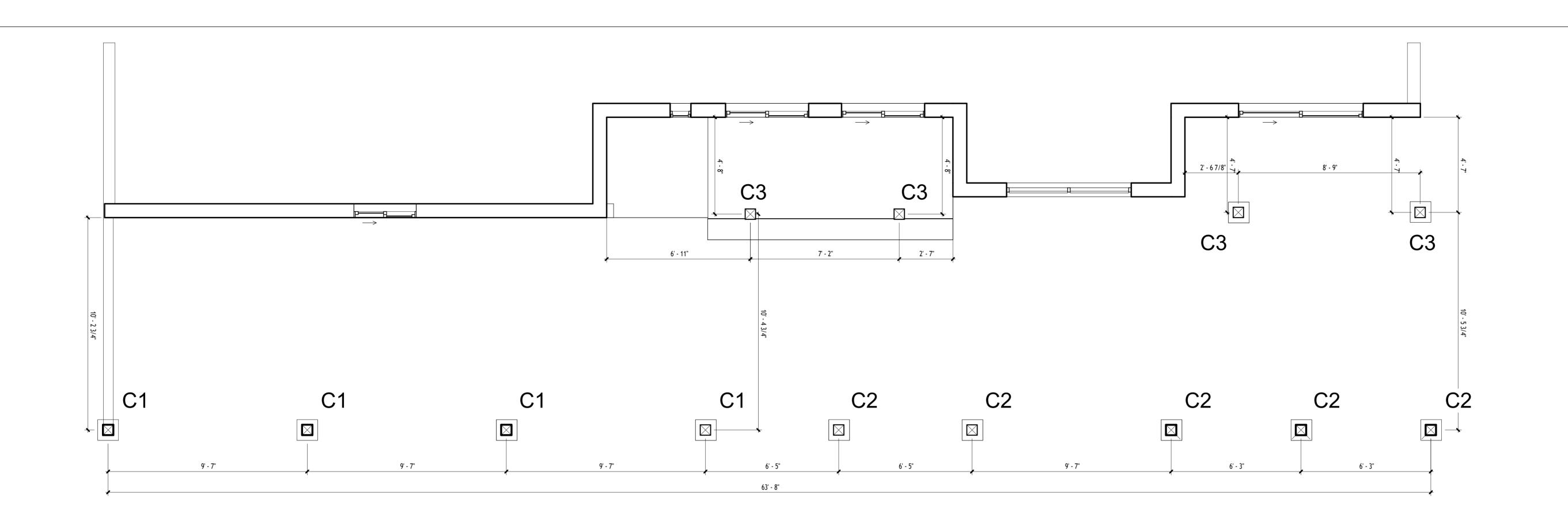
Andersen Engineering Adam Morgenthale

S-05

2025-08-18







Project Name

64' Long Second-Story Balcony Repair/Rebuild Project

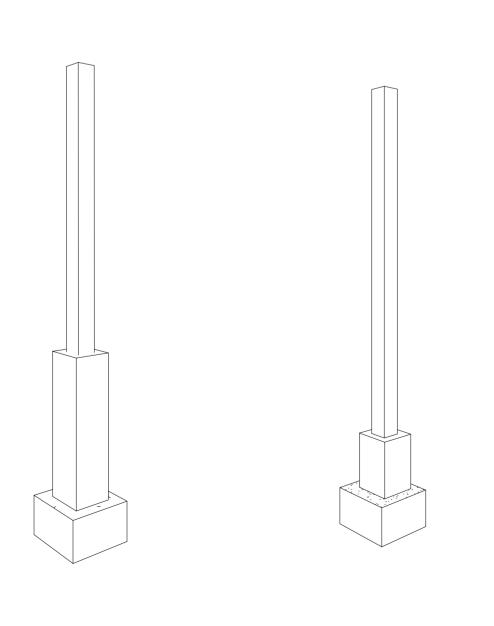
Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description

New posts to be installed. Post height dictated by footing type and height of deck. Deck has 2 levels (Refer to ST-07 D1 and D2).

C1 corresponds to outer posts supporting deck at D1 height atop elevated footings. C2 corresponds to outer posts supporting deck at D2 height with elevated footings. C3 corresponds to inner posts supporting deck at D2 height with lower footings (See S-01 Detail 7)."



C1/C2

C3

SCHEDULE OF COLUMNS MARK **WIDTH** DEPTH HEIGHT DESCRIPTION 6x6 Post Sopporting D1 6" 6" Outter coulumn Starting 2' 8" above ground 6x6 Post Sopporting D2 C2 6" 6" 8' 10" Outter coulumn Starting 2' 8" above groundand 6x6 Post Sopporting D2 Inner coulumn **C**3 6" 6" 10' 10" Starting 6" above groundand

*Column Height may vary according to the distance between Footing Heigth and Deck Height

Sheet Title

COLUMN LAYOUT PLAN - Proposed Deck



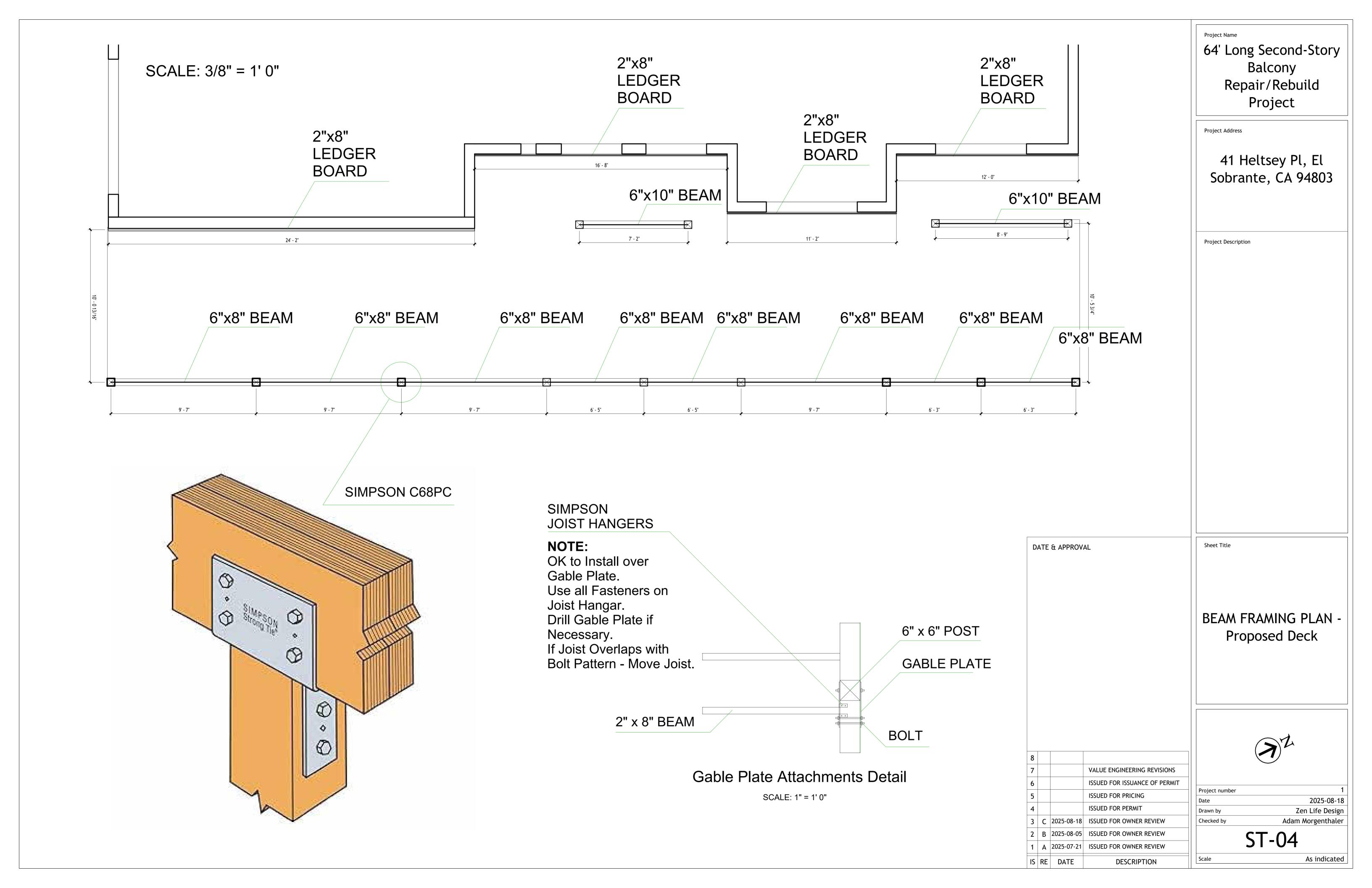
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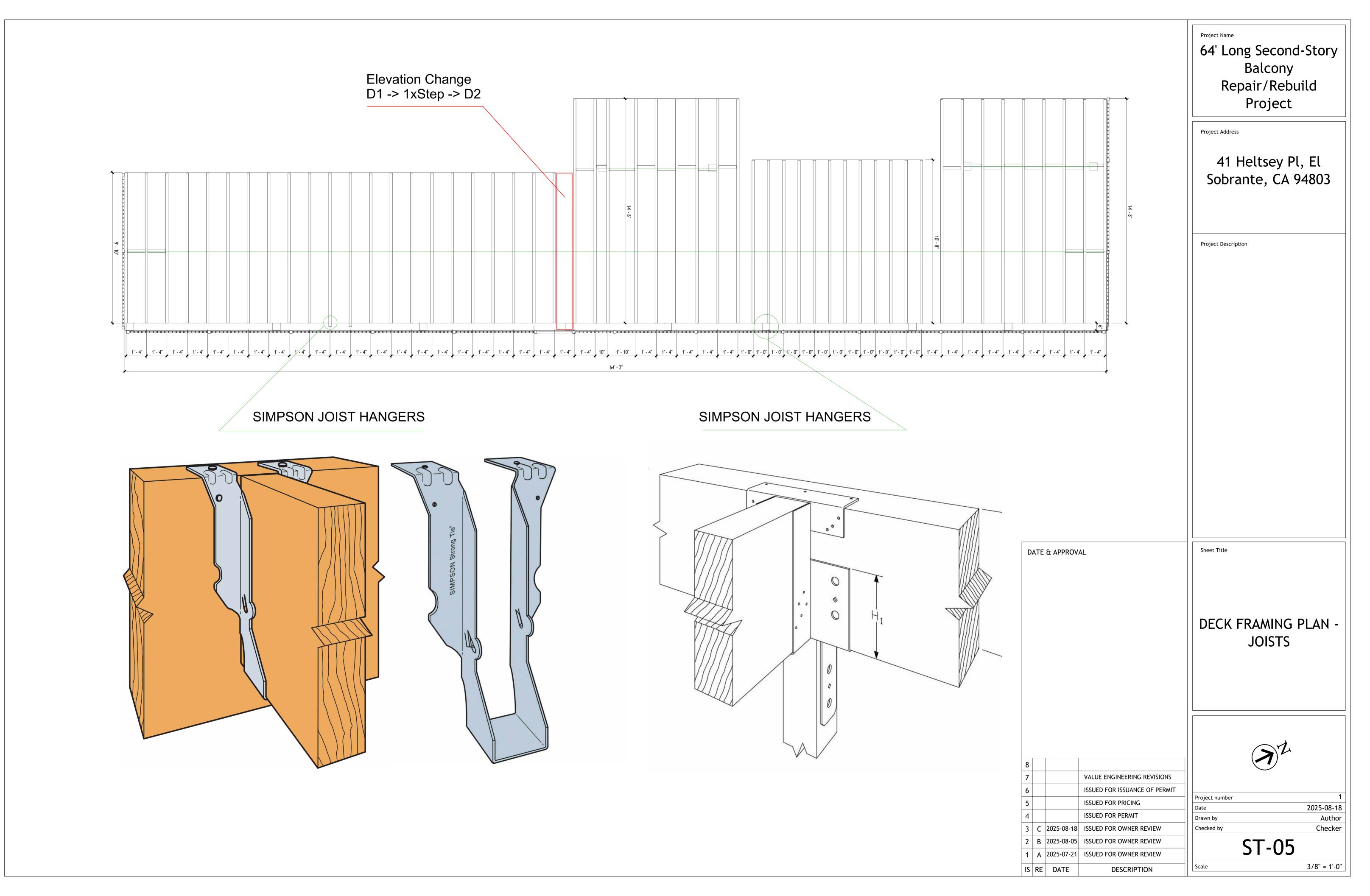
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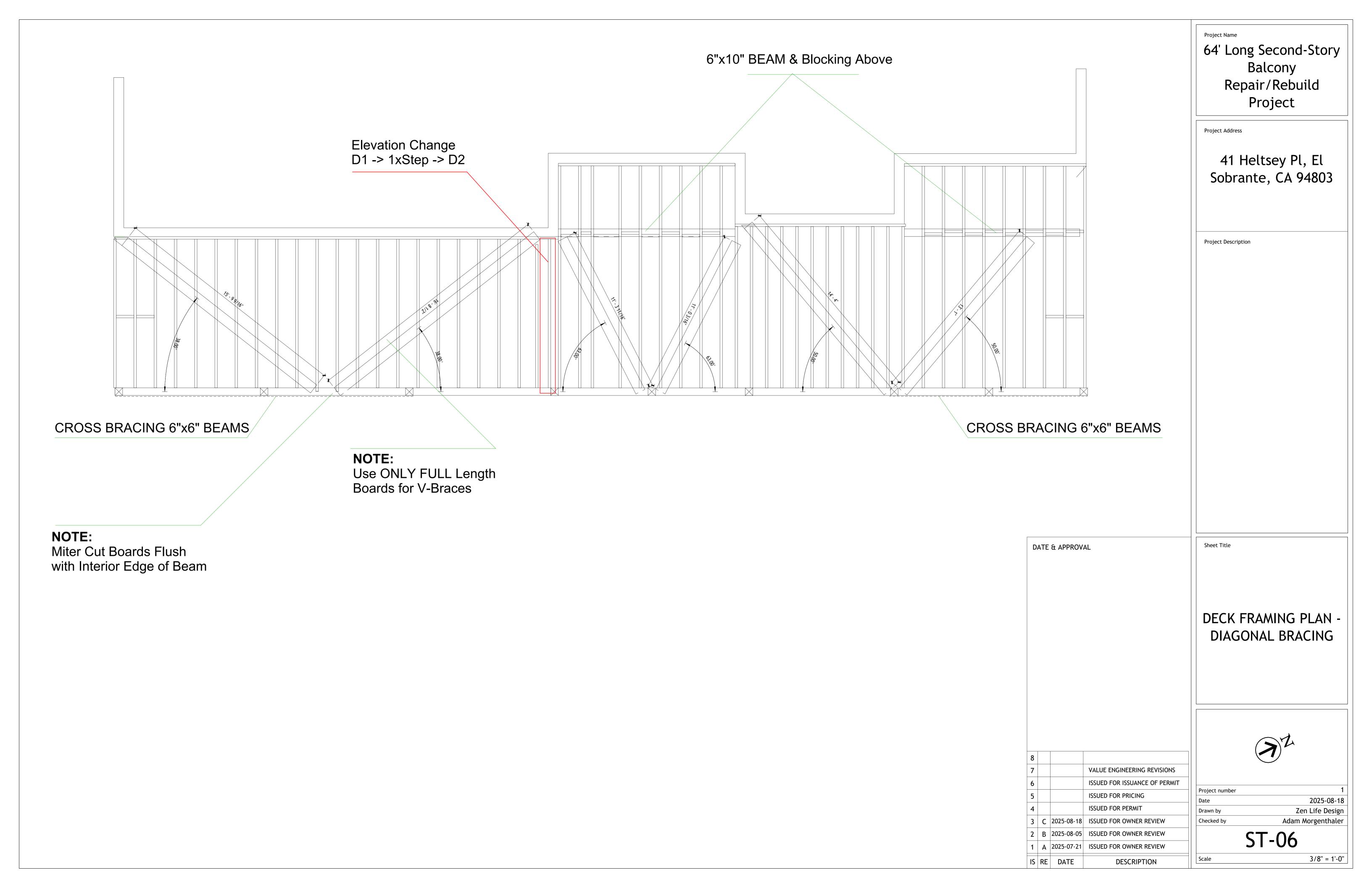
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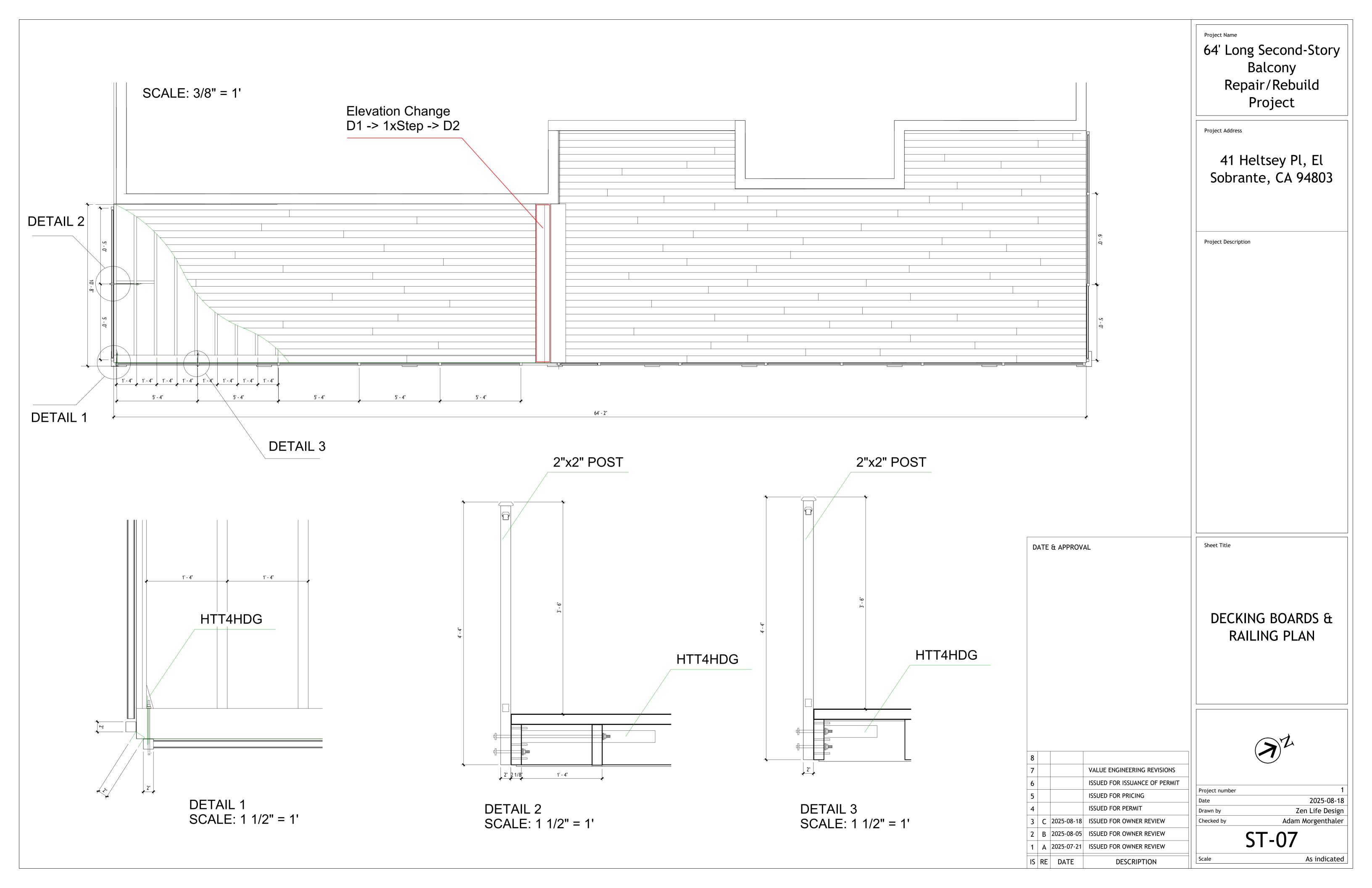
ST-03

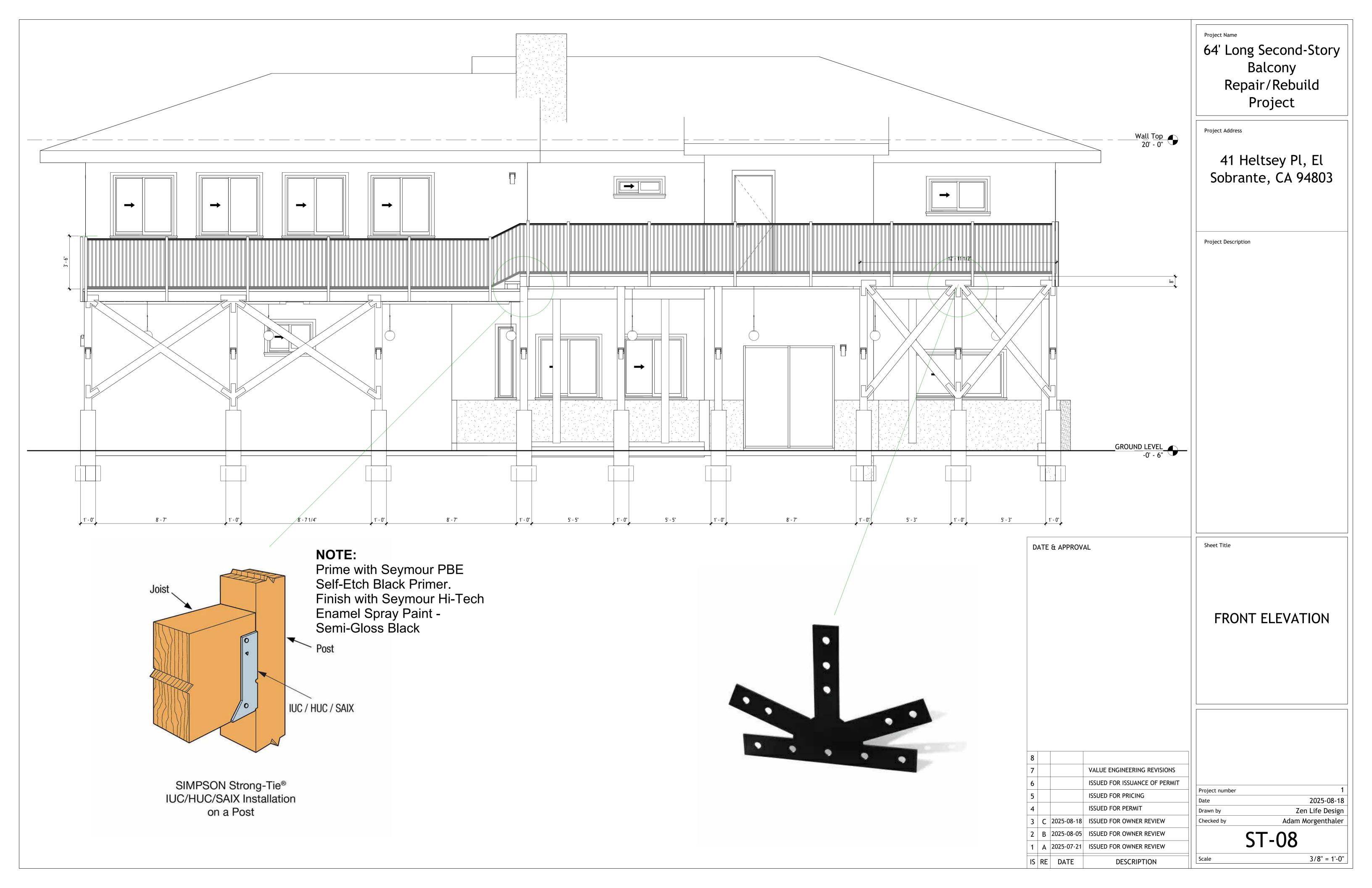
3/8" = 1'-0"

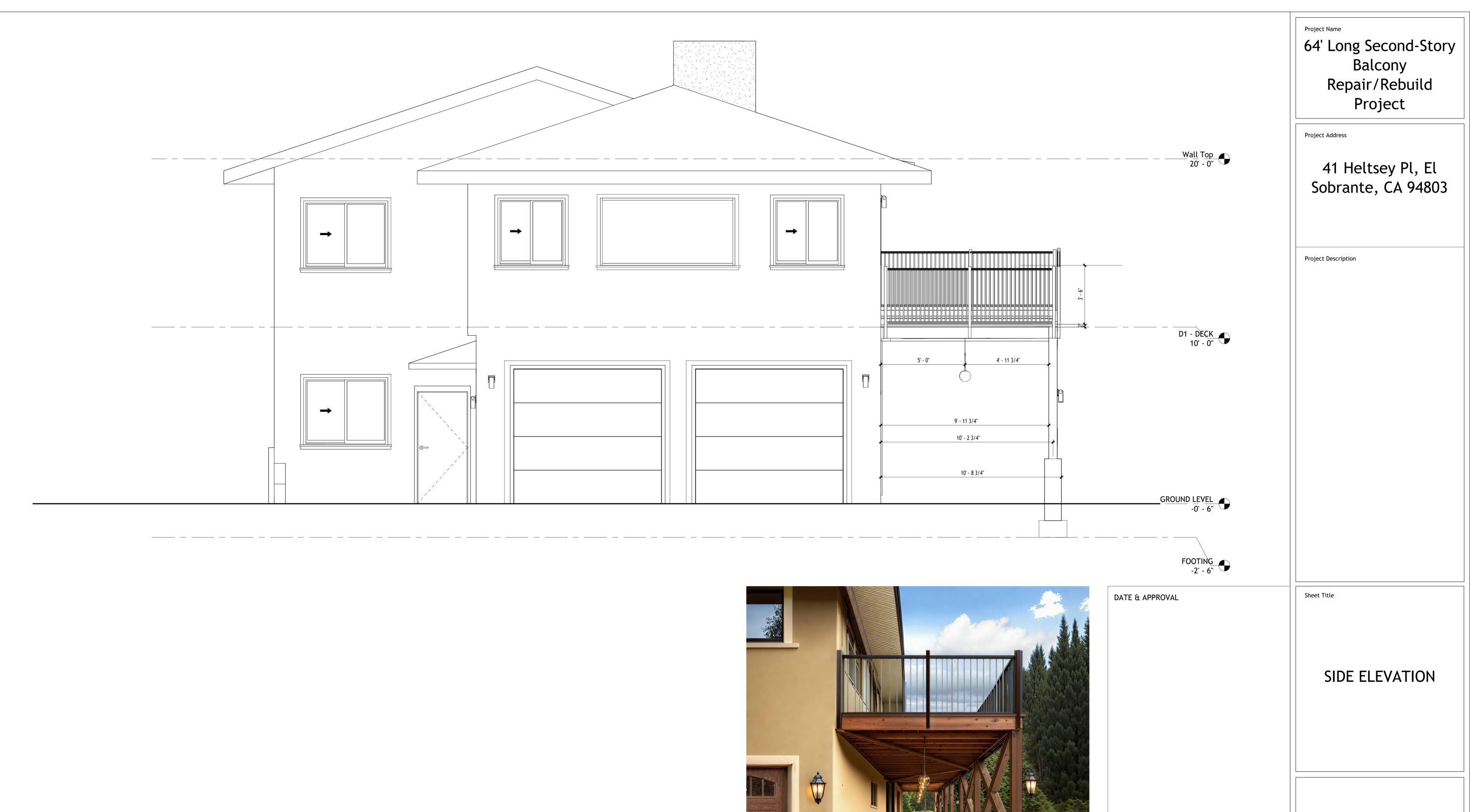












Project number 1

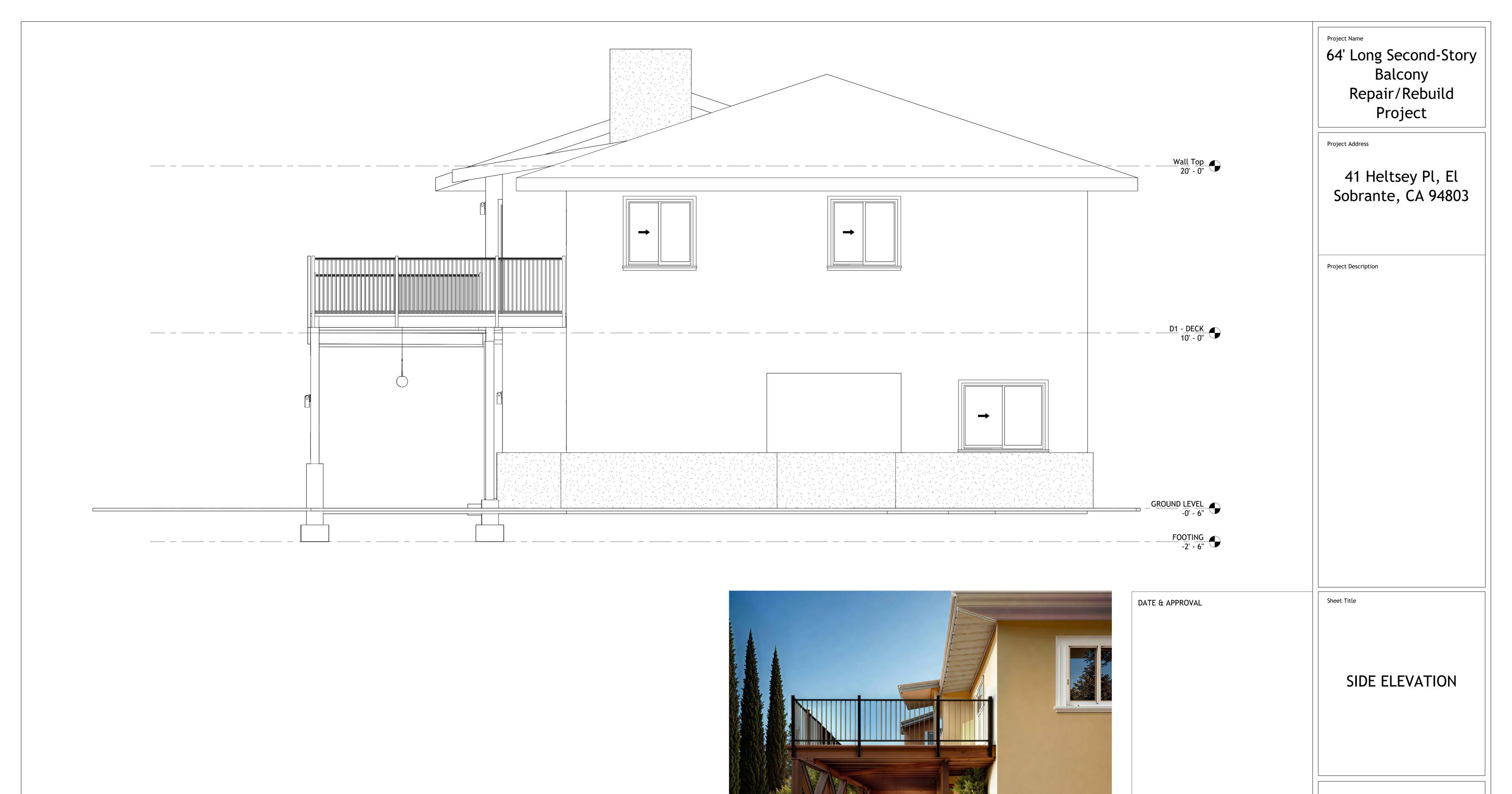
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Checked by Adam Morgenthaler

ST-09

3/8" = 1'-0"



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2 B 2025-08-05 ISSUED FOR OWNER REVIEW

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Scale

Checked by

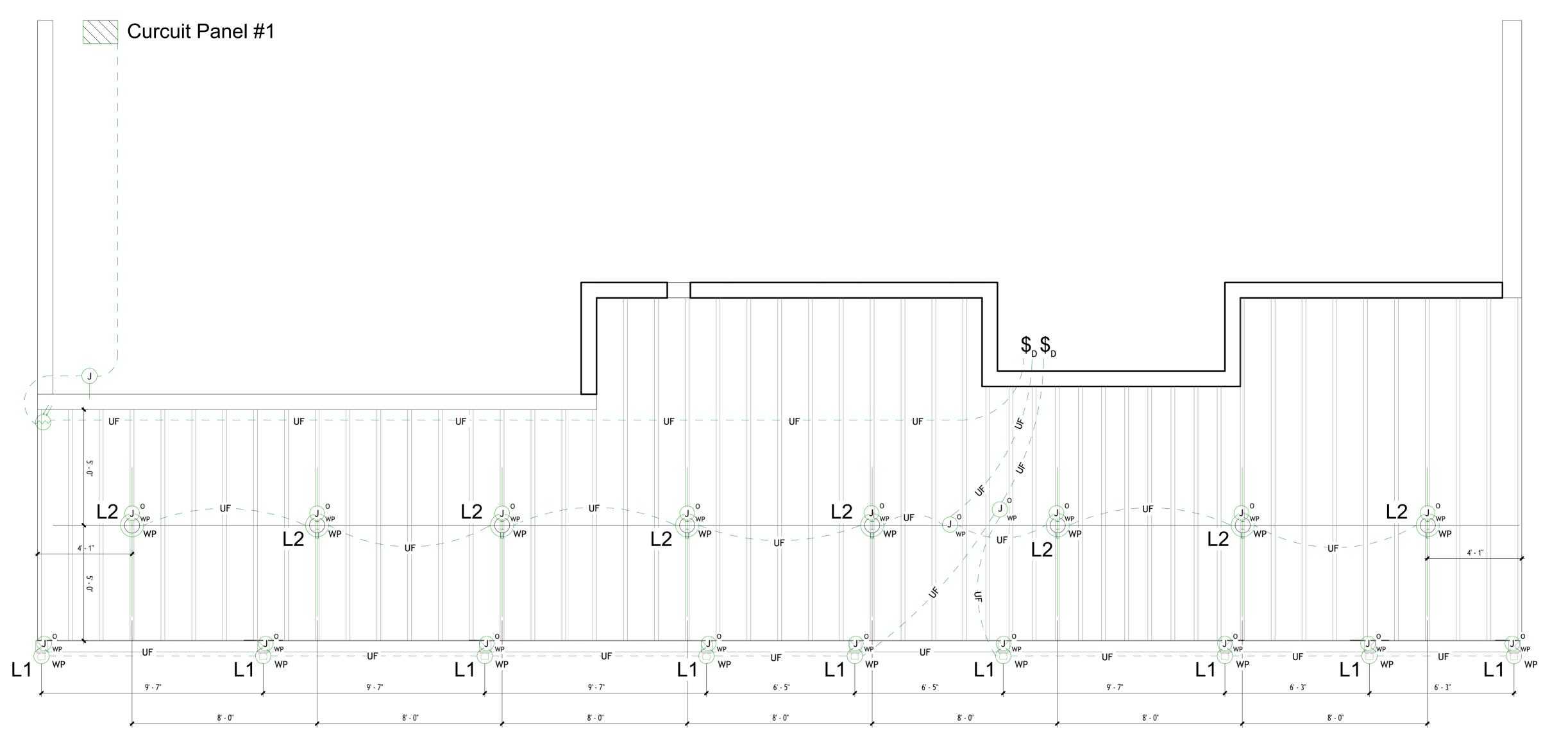
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3/8" = 1'-0"

Zen Life Design

Adam Morgenthaler

ST-10



DATE & APPROVAL

TOTAL TOTAL Watts SUBTOTAL Volts VISUAL DISCRIPTION MARK COUNT MAX Watts Watts | Amps Outdoor Wall Sconce 540 Matte Black with L1 Clear Glass 120 8.5 1,020 Glass Globe 60 480 L2 Pendants

SCHEDULE OF LIGHTING



Lights Layout Plan

Project Name

Project Address

Project Description

Summary of Scope:

Supply: 120 Vac

Total fixtures: 17

Installation:

Sheet Title

64' Long Second-Story

Balcony

Repair/Rebuild

Project

41 Heltsey Pl, El

Sobrante, CA 94803

Bulbs: A19, E26, dimmable, 4000K neutral white, ~100 W equivalent (≈ 1600 lm)

Total run length (loop out and back to switch): ~150 ft

Exterior/under-deck; use outdoor-rated

Photocell mounted on canopy/box with swivel stem aimed away from fixture light.

junction boxes, fittings, and UF cable staples/clamps

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Project number	1
Date	2025-08-18
Drawn by	Zen Life Design
Checked by	Adam Morgenthaler
	FI -01

LL-01

Scale

3/8" = 1'-0"

Brand: Home Decorators Collection Sconce Finish: Aged Iron 17.38" H Weight: 6.33 lb Lantern Listed) Voltage: 120V Socket/base: E26 L1 - Mounting Detail SCALE: 1/2" = 1' 0"

JOIST

Model: Brimfield 3-Light Outdoor Wall Lantern

L1

Product ID: 204294432

Materials: Metal; Glass/Lens Type: Seedy

Shade: Clear Seeded Glass panels

Fixture dimensions (body): 11" D x 9" W x

Mounting type: Wall mount; Sconce Type: Wall

Location rating: Outdoor; Water Resistant, Waterproof, Weather Resistant; UL Listed (1-UL

Power type: Hardwired Max wattage: 60 W

Dimming: With compatible dimmable bulb Light sources supported: Incandescent, L

UF Cable secured

with U-Nails or cable

Brand: Zanritelit

Model: 006outdoor pendant light

ASIN: B0CRYBQW1G Materials: Aluminum, Glass Finish: Sand Black (matte) Shade: Amber Glass, Globe

Fixture dimensions (body): 9.1" L x 9.1" W x

L2

13" H

Overall height (max): 35.03" (with chain)

Chain length: 20" adjustable

Canopy diameter: 4" Weight: 3.69 lb

Mounting type: Ceiling mount; hanging

Location rating: IP65

Voltage: 120 V

Power type: Hardwired Socket/base: E26 Max wattage: 60 W

Dimming: With compatible dimmable bulb Light sources supported: LED, CFL,

L2 - Mounting Detail

SCALE: 1" = 1' 0"

incandescent, halogen

Make: BELL

Model: PRB57550WH Internet/SKU: 202284522

Material: Nonmetallic, high-impact PVC

Color/finish: White

NEMA rating: NEMA 3R (raintight; protects from

Junction Boxes

rain, sleet, dust; not submersible)

Listing: UL Listed

Volume: 13.5 in³ (221 cm³)

Product dimensions: H 4.38 in × W 4.25 in × D

1.13 in

Outlet/entry count: 5 outlets

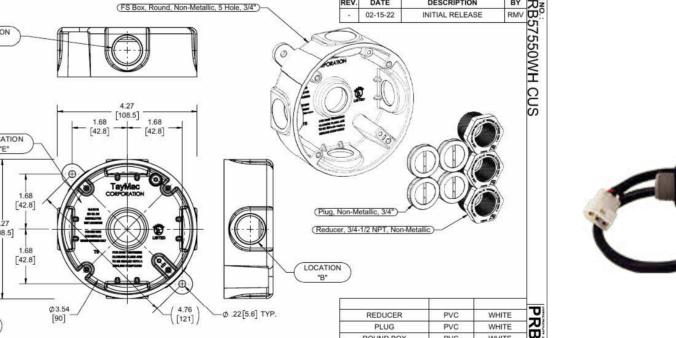
Thread sizes supported: 3/4 in NPT at A, B, C, D, E locations; includes reducers for 1/2 in Mounting: Box with integral hubs; includes

ground screw installed

Cover/fixture compatibility: Houses cluster covers and lampholders; can be used as a

weatherproof junction box







DATE & APPROVAL

Photocell

Internet/SKU: Varies by distributor; Intermatic

Material: UV-resistant polycarbonate housing;

locations when properly installed (typical use on

Listing: UL Listed (UL 773), cCSAus; California

Load ratings: 15 A tungsten (1800 W) at 120 V;

stainless hardware; cadmium sulfide (CdS)

photo sensor; bimetallic thermal switch

Color/finish: Gray housing with black

NEMA rating: Raintight; suitable for wet

Voltage/frequency: 120 VAC, 50/60 Hz

8.3 A, 1000 VA magnetic ballast at 120 V

delay to prevent nuisance switching

approx. 3–15 fc (factory set)

Control type: Thermal (bimetal), SPST; fail

mode ON; built-in 30-90 s turn-on/turn-off time

Light levels: Turn ON approx. 1–5 fc; Turn OFF

Stem/thread: 1/2"-14 NPSM threaded stem with

Temperature range: -40 °C to +70 °C operating

threaded hub/opening on a weatherproof box or

swivel mount; includes gasket and locknut

Leads: 9 in. (approx.) 18 AWG wire leads

Mounting: Stem-and-swivel through 1/2"

luminaire; aim sensor away from stray light

Cover/fixture compatibility: For outdoor

boxes (use supplied gasket/locknut)

Make: Intermatic

Model: K4221C

catalog K4221C

swivel/stem hardware

Title 20 compliant

outdoor luminaires and boxes)

Sheet Title

Lights Detail

4" Round Non-Metallic Weatherproof Box with (5) 1/2 in. Holes, Gray. Model # WRB550PG Pre-painted with	3'- 10"	JOIST JOIST	WRB550PG Pre-painted with Krylon Fusion All-In- One. Color = Brick	Ø3.54 (4.76) Ø .22[5.6] TYP.	REDUCER PVC WHITE PLUG PVC WHITE ROUND BOX PVC WHITE DESCRIPTION MATERIAL FINISH LIST OF PARTS THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE TITLE: PLASTIC ROUND BOX ADAPTER
Krylon Fusion All-In- One. Color = Brick	Round Weatherproof Box Hubbel PRB57550WH. Pre-painted with Krylon Fusion All- In-One. Color = Coffee Bean	Chain and integrated cable	Captive hook, Clevis pin, or Carabiner. SS, HDG, PC, SB, Cu	NOTES: 1. ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS] 2. BOX VOLUME: 13.5 IN ³ [221.0 CM ³] 3. UL LISTED KNOCKOUTS TRADE SIZE LOCATION 3/4" NPT A, B, C, D, E	TOLERANCE UNLESS OTHERWISE SPECIFIC XXX DECIMAL ± .005 ANGLE ± 2° APP. BY: N.S. FATE: 0.2 1E 22 ANGLE ± 2° NATE: 0.2 1E 22

4 in. Round Non-

Weatherproof Box

_with (5) 1/2 in.

-Holes, Gray.

Metallic

Model #

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Project number 2025-08-18 Zen Life Design Adam Morgenthaler Checked by **EL-02**

As indicated Scale

luminaires, junction and lampholder boxes; compatible with 1/2" hubs on weatherproof

Project Name

Project Address

Project Description

Summary of Scope:

Supply: 120 Vac

Total fixtures: 17

staples/clamps

64' Long Second-Story

Balcony

Repair/Rebuild

Project

41 Heltsey Pl, El

Sobrante, CA 94803

Bulbs: A19, E26, dimmable, 4000K neutral

white, ~100 W equivalent (≈ 1600 lm)

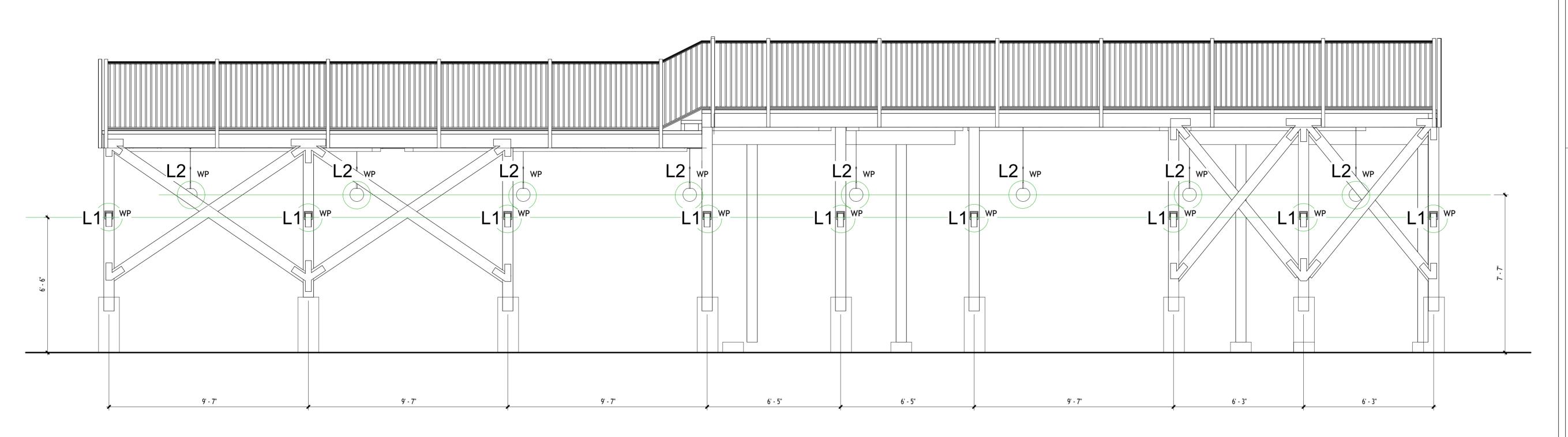
Total run length (loop out and back to switch): ~150 ft

Exterior/under-deck; use outdoor-rated

Photocell mounted on canopy/box with

swivel stem aimed away from fixture light.

junction boxes, fittings, and UF cable

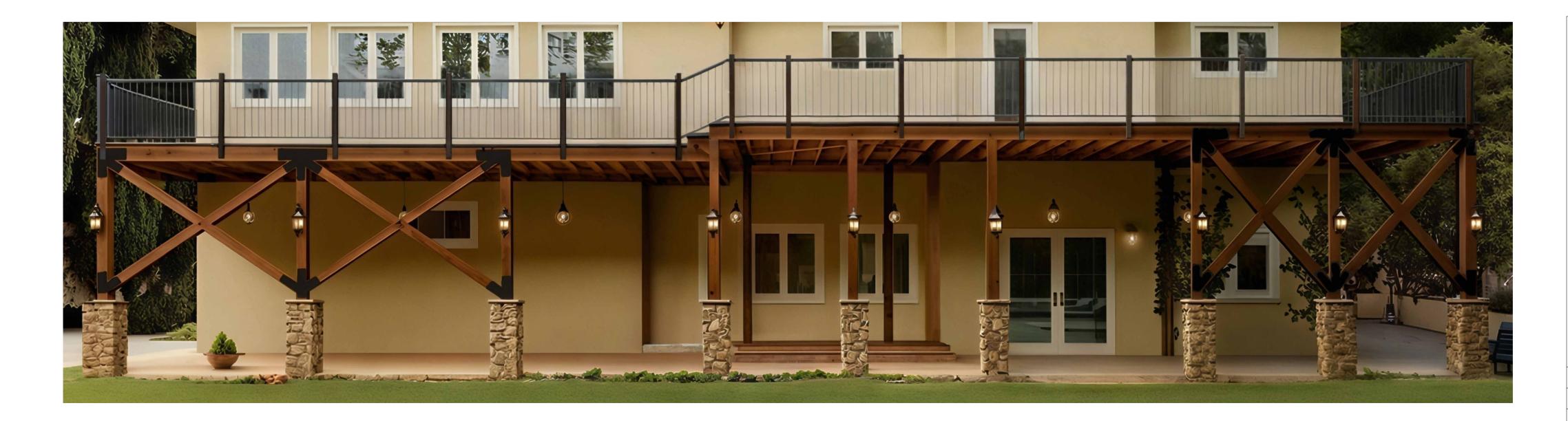


64' Long Second-Story
Balcony
Repair/Rebuild
Project

Project Address

41 Heltsey Pl, El Sobrante, CA 94803

Project Description



DATE & APPROVAL

Sheet Title

Lighting Layout Elevation

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Project number 1

Date 2025-08-18

Drawn by Zen Life Design

Checked by Adam Morgenthaler

EL-03

3/8" = 1'-0"