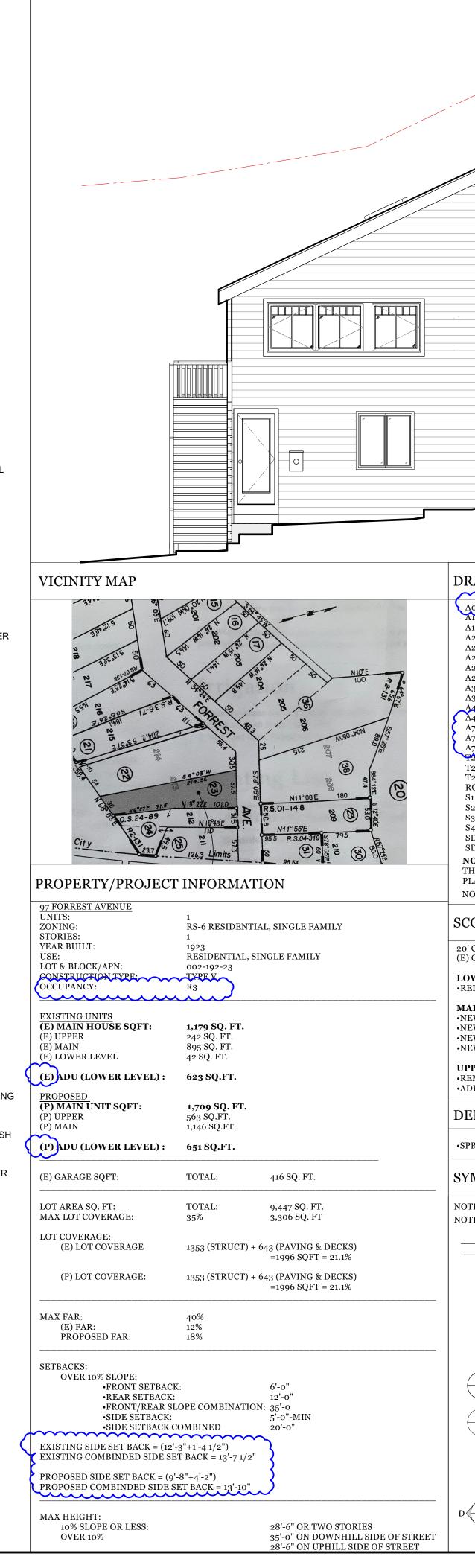
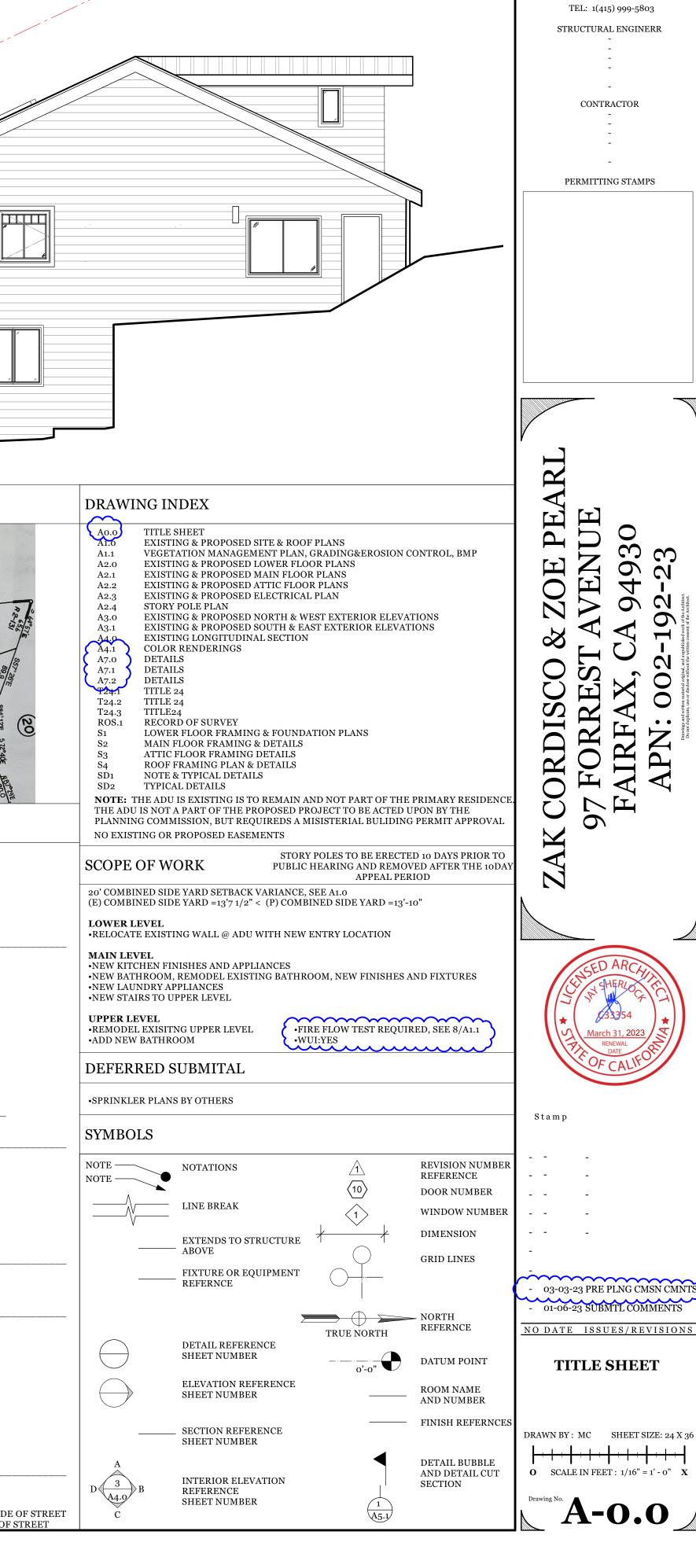
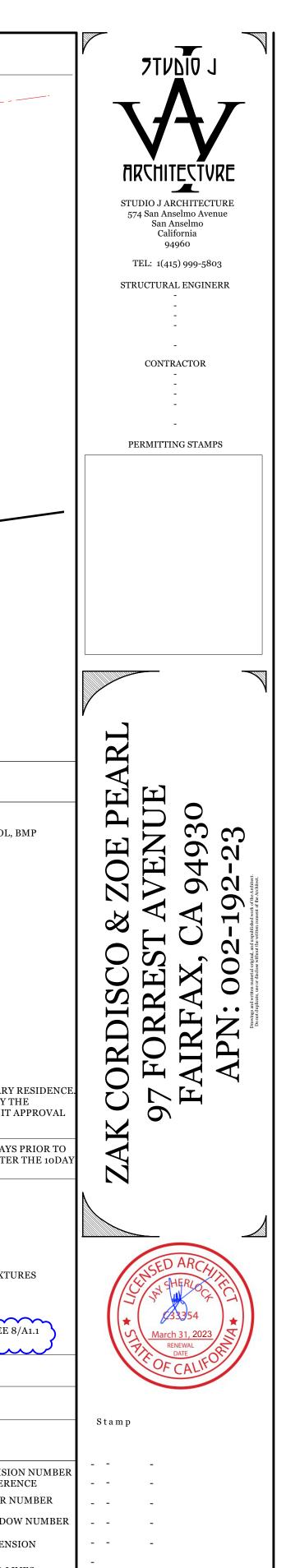
# GENERAL NOTES 1- ALL CONSTRUCTION, REGARDLESS OF DETAILS ON PLANS, SHALL COMPLY WITH 2019 CALIFORNIA BUILDING CO 2019 CALIFORNIA ELECTRICAL CODE, 2019 CALIFORNIA MECHANICAL CODE, 2019 CALIFORNIA PLUMBING CODE, 2 CALIFORNIA ENERGY CODE. 2019 FIRE CODE. 2019 CALIFORNIA GREEN BUILDING STANDARDS. AND LOCAL MUNIC CODES, REGARDLESS OF WHAT IS SHOWN, OR NOT SHOWN, IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SI COMPLY WITH ALL OTHER APPLICABLE STATE OR LOCAL ORDINANCES. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY. 2- ALL DIMENSIONS ARE TO FACE OF STUD, U.N.O. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AN SHALL ALLOW FOR THICKNESS OF ALL FINISHES INCLUDING GYPSUM BOARD, TRIM, CARPET, TILE, ETC. 3- GRID LINES (IF SHOWN) ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY IMPLY STRUCTURAL COLUMN 4- ALL SYSTEMS AND ASSEMBLIES SHALL BE FOR COMPLETE AND FULLY FUNCTIONAL OPERATION EVEN IF NOT I DESCRIBED IN THE CONTRACT DOCUMENTS. IN THE EVENT CERTAIN FEATURES OF CONTSRUCTION ARE NOT FUI SHOWN ON THE DRAWINGS, OR CALLED FOR IN THE SPECS. THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER OF SIMILAR CONDITIONS SHOWN OR CALLED FOR, OR SHALL BE INSTALLED PER ACCEPTED INDUST: 5- INSTALL ALL MATERIALS, EQUIPMENT, FIXTURES, APPLIANCES, AND ACCESSORIES IN CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. VERIFY ALL SUCH REQUIREMENTS PRIOR TO STAR THE WORK IN THE AREAS WHERE THEY OCCUR. 6- ALL WORK SHALL BE INSTALLED PLUMB, LEVEL AND TRUE IN ACCORDANCE WITH THE CONTRACT DOCUMENT 7- UNLESS OTHERWISE NOTED ALL CONNECTIONS SHALL BE CONCEALED. THE USE OF SURFACE FASTENERS SHAI APPROVED BY THE ARCHITECT. ALL EXTERIOR FASTENERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS ST 8- BEFORE REMOVING WALLS OR EXST. CONST. G.C. SHALL INSPECT EXST. FRAMING AND PROVIDE ADEQUATE TEMPORARY SHORING. G.C. SHALL NOTIFY ARCHITECT OF ANY LOAD BEARING CONSTRUCTION INDICATED TO BE REMOVED PRIOR TO PROCEEDING WITH DEMOLITION. 9- SAFE TEMPORARY SHORING AND BRACING NECESSARY TO SUPPORT THE INCOMPLETE STRUCTURE IS THE CONTRACTORS RESPONSIBILITY 10- ALL NEW/ REPLACEMENT EXTERIOR DOORS SHALL BE FIRE RESISTIVE & RATED 20 MINUTES MININUM. 11- MINIMUM HABITABLE ROOM IS 7' BY 7' 12- MINIMUM HABITABLE ROOM HEIGHT IS 7'6"

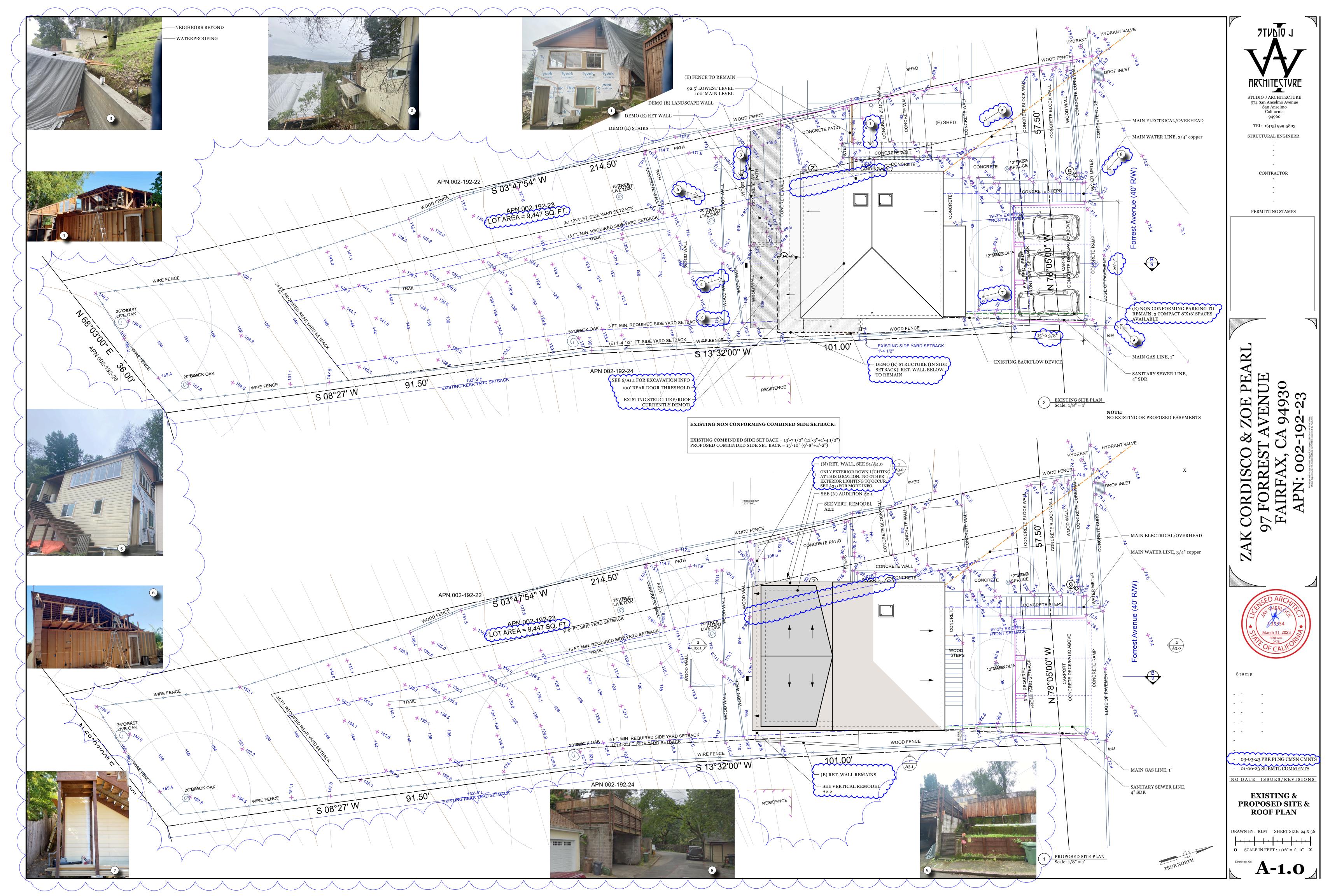
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STANDARDS.	ALUM	ALUMINUM	FWC	FABRIC Y
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9- SAFE TEMPORARY SHORING AND BRACING NECESSARY TO SUPPORT THE INCOMPLETE STRUCTURE IS THE CONTRACTORS RESPONSIBILITY	BSMT BM	BASEMENT BEAM	FIN FF	FINISH / FINISHE
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12- MINIMUM HABITABLE ROOM HEIGHT IS 7'6"	BPL BLW	BEARING PLATE BELOW	FA FDR	FIRE ALA
VERIFY CONDITIONS: 13- THE GENERAL CONTRATOR (G.C.) SHALL REVIEW ALL DOCUMENTS AND VERIFY DIMENSIONS AND FIELD	B/M BTWN	BENCH MARK BETWEEN	FE FEC	FIRE EX
CONDITIONS AND SHALL CONFIRM, THAT WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC., SHALL	BVL	BEVEL (ED)	FEC	FIRE EX
BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION. G.C. SHALL NOT PROCEED ON ASSUMPTIONS.	BIT BLK	BITUMINOUS BLOCK	FH FPRF	FIRE HY
14- THESE DRAWINGS MAY NOT BE TO SCALE AND ARE FOR ILLUSTRATION PURPOSES ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, LAYOUTS AND EXISTING CONDITIONS PRIOR TO EXECUTING THE WORK	BLKG	BLOCKING	FR	FIRE RA
15- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER GRAPHIC SCALE SHOWN. DIMENSIONS SHOULD NOT BE DETERMINED BY TAKING MEASUREMENTS FROM SCALED DRAWINGS. IF ADDITIONAL DIMENSIONS ARE NEEDED THEY	BD BOC	BOARD BOTTOM OF CURB	FRT FXD	FIRE RE
SHOULD BE REQUESTED FROM THE ARCHITECT.  16- DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.	BOT	воттом	FIX	FIXTURE
	BOS BRDG	BOTTOM OF STEEL BRIDGING	FLG FL	FLANGE FLASHIN
UTILITIES: 17- G.C. SHALL NOTIFY THE ARCHITECT OF ANY EXISTING UTILITIES, NOT COVERED IN THE CONSTRUCTION /	BTU	BRITISH THERMAL UNIT	FHMS	FLAT HE
DEMOLITION DOCUMENTS, WHICH MAY INTERFERE WITH THE INSTALLATION/COMPLETION OF SCOPE OF WORK. THE G.C. SHALL DISCUSS THE REMOVAL OF THESE UTILITIES WITH THE ARCHITECT AND THE BUILDING INSPECTOR PRIOR	BRZ BLDG	BRONZE BUILDING	FHWS FLEX	FLAT HE FLEXIBL
TO PROCEEDING WITH WORK. WHEN REMOVAL IS APPROVED BY THE ARCHITECT AND THE BUILDING INSPECTOR, G.C. SHALL DISCONNECT THE SPECIFIED UTILITY, CUT BACK TO THE SOURCE (OR PERIMETER OF PROJECT SITE) AND CAP.	BUR	BUILT UP ROOFING	FLR FD	FLOOR I
ALL BUILDING PENETRATIONS RESULTING FROM THIS REMOVAL OR THIS CONSTRUCTION SHALL BE SEALED WITH NEW CONSTRUCTION TO MATCH EXISTING BUILDING FINISHES.	CAB	CABINET	FLG	FLOORIN
	CATV CPT	CABLE TELEVISION CARPET	FLUOR FT	FLUORE FOOT, FI
DISCREPANCIES: 18- IN CASE OF DISCREPANCIES OR CONFLICTS IN INFORMATION OR REQUIREMENTS WITHIN SPECS, OR BETWEEN THE	CSMT	CASEMENT	FTG	FOOTING
DRAWINGS AND SPECS, THE MOST EXPENSIVE REQUIREMENT SHOWN OR SPECIFIED SHALL BE THE BASIS OF THE CONTRACT FOR CONSTRUCTION.	CI CS	CAST IRON CAST STONE	FDTN FRZR	FOUNDA FREEZE
19- IN CASE OF CONFLICT BETWEEN ARCHITECT'S AND ENGINEER'S DRAWINGS IN LOCATING MATERIALS/EQUIPMENT, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION	CIP	CAST-IN-PLACE	FURR	FURRING
SAFETY & PROTECTION OF SITE:	CB CLG	CATCH BASIN / CORNER BEAD CEILING	FURN	FURNAC
20- CONTRUCTION METHODS: NEITHER THE ARCHITECT OR THE OWNER SHALL BE RESPONSIBLE FOR CONSTRUCTION	CEM CTR	CEMENT	GA	GAGE O
MEANS, METHODS OR TECHNIQUES, SEQUENCES OR PROCEDURES OF THE CONTRACTOR; SAFETY PRECAUTIONS AND PROGRAMS OF THE CONTRACTOR OR FAILURE OF THE CONTRACTOR TO PERFORM THE WORK IN ACCORDANCE WITH	C/C	CENTER CENTER TO CENTER	GALV GI	GALVAN GALVAN
THE CONTRACT DOCUMENTS. 21- SITE CONDITIONS INCLUDING LANDSCAPING SHALL BE PROTECTED BY THE CONTRACTOR. SIGNIFICANT	CER CT	CERAMIC CERAMIC TILE	GSM GWH	GALVAN GAS WA
LANDSCAPING INCLUDING BUT NOT LIMITED TO ROOT SYSTEMS SHALL BE PROTECTED AND ARE NOT INTENTED TO BE DAMAGED, CUT, RELOCATED OR REMOVED UNLESS SPECIFIED IN DRAWINGS.	CHFR	CHAMFER(ED)	GSKT	GASKET
22- CONTRATOR TO PROTECT THE EXISTING CONDITIONS: PROTECT AND SECURE SITE, BUILDING, MATERIALS AND EQUIPMENT FROM THEFT, VANDALISM AND UNAUTHORIZED ENTRY. PROTECT EXISTING LANDSCAPING, WINDOWS,	CIRC CO	CIRCULAR, CIRCUMFERENCE CLEAN-OUT	GC GLB	GENERA GLASS E
INTERIOR AND EXTERIOR WALLS AND DOORS FROM DAMAGE DURING CONSTRUCTION. PROTECT FINISHED FLOORS	CLR	CLEAR	GFRG	GLASS F
FROM DIRT, WEAR AND DAMAGE.	CCTV CLO	CLOSED-CIRCUIT TELEVISION CLOSET	GL GCMU	GLASS (
WATER PROOFING: 23- ALL PENETRATIONS SHALL BE SEALED FOR WATER TIGHT PERFORMANCE. INSTALL POLYURETHANE BASED	CW	COLUMN COLUMN	GB	GRAB BA
SEALANT AT ALL PENETRATIONS AND JOINTS. FOR JOINTS LARGER THAN 1/2" SEALANT SHALL BE INSTALLED OVER APPROVED SOLID BACKER ROD.	COL COMB	COLUMN COMBINATION OR COMBINE	GR GVL	GRAVEL
24- ARCHITECT IS NOT LIABLE FOR WATER PROOFING ISSUES. BY USING THESE PLANS THE CONTRACTORS TAKES ALL LIABILITY FOR DAMAGE CAUSED BY WATER PROOFING ISSUES.	COMP CONC	COMPOSITE CONCRETE	GND GFI	GROUNI GROUNI
FRAMING/FINISH NOTES	CMU	CONCRETE MASONRY UNITS	GT	GROUT
25- UNLESS NOTED OTHERWISE, ALL FRAMING LUMBER SHALL BE: FSC CERTIFIED DOUGLAS FIR STANDARD GRADE	CONN CONST	CONNECTION CONSTRUCTION	GYP GWB	GYPSUN GYPSUN
(MIN. FB=950 PSI) 26- UNLESS NOTED OTHERWISE, ALL EXPOSED (UNPAINTED) FINISH LUMBER SHALL BE: DOUGLAS FIR SELECT OR	CJ CONT	CONTROL JOINT CONTINUOUS	HDCP	HANDICA
BETTER GRADE S4S. 27- USE 5/8" TYPE WR GYP. BD. ("GREEN BOARD") AT ALL WET LOCATIONS. EXCEPT BEHIND TILE IN SHOWERS. D. USE	CONV	CONVECTION	HDBD	HARDBO
5/8" TYPE 'X' GYP. BD. AT ALL BLINDWALLS AND IN FIRE RATED ASSEMBLIES. 28- ATTACH ALL GYP.BD. TO STUDS WITH A MIN. OF 1-3/4" LONG STEEL DRYWALL NAILS WITH 0.102" DIA. SHANK AND	COORD CORR	COORDINATE CORRUGATED	HDWR HDWD	HARDWA HARDWO
0.29" DIA. HEAD, SPACED 7" O.C. , U.N.O. 29- ALL WOOD TO BE LEFT EXPOSED TO WEATHER SHALL BE NON ARSENIC CONTAINING COPPER AZOLE TREATED	CNTR	COUNTER	HDR	HEADER
WOOD OR REDWOOD (DOES NOT INCLUDE SIDING MATERIAL). ALL CONNECTORS, HARDWARE, SCREWS AND NAILS FOR SAME SHALL BE HDG OR STAINLESS STEEL.	CTSK C	COUNTERSINK COURSES	HTR HTG	HEATER HEATING
30-WOOD IMBEDDED INTO THE GROUND IN DIRECT CONTACT WITH THE EARCH AND USED FOR SUPPORT OF THE	CPL	COVER PLATE	HVAC	HEATING
STRUCTURE SHALL BE TREATED WOOD 31- PROVIDE NON-COMBUSTIBLE MATERIAL WITHIN 18" AT ALL SURFACES OF HEAT PRODUCING EQUIPMENT AS PER	CULV	CUBIC CULVERT	HD	AND AIR HEAVY D
CODE REQUIREMENTS. 32- PROVIDE FIRE BLOCKING AND DRAFT STOPS IN CONCEALED CAVITIES IN ACCORDANCE WITH CRC R302.11.	DPR	DAMPER	HT HP	HEIGHT HIGH PC
33- PROVIDE SOLID BLOCKING & BACKING AT ALL RAILS, CABINETS, AND MOUNTING OF EQUIPMENT AND ACCESSORIES (EG TOWEL BARS, SHELVES, ETC.).	DP	DAMPPROOFING	HC	HOLLOV
ADDITIONS:	DL Db	DEAD LOAD DECIBEL	HM HORIZ	HOLLOV HORIZO
34- GROUND MUST BE GRADED TO SLOPE 6 INCHES WITHIN THE FIRST 10 FEET (5%) FROM ANY STRUCTURE	DKG	DECKING	HB	HOSE BI
FOUNDATION. CRC R401.3 35- ALL NEW/REPLACEMENT EXTERIOR EGRESS DOORWAYS SHALL BE PROVIDED WITH LEVEL LANDINGS ON BOTH	DEMO DMT	DEMOLISH, DEMOLITION DEMOUNTABLE	HW HR	HOT WA
SIDES OF EACH DOORWAY AND WITH THRESHOLDS WHICH DO NOT EXCEED 1 1/2" IN HEIGHT FOR OUT-SWINGING DOORS, 7 %" FOR IN-SWINGING DOORS. OTHER EXTERIOR DOORS MAY HAVE NO MORE THAN TWO STEPS UP TO AN	D DET	DEPTH, DRYER DETAIL	HYD	HYDRAN
IN-SWINGING DOOR WITH A MAXIMUM OF 7 3/4" HEIGHT IN VERTICAL RISE. OTHER OUT-SWINGING EXTERIOR DOORS MAY SWING OVER A LANDING WHICH IS A MAXIMUM OF 7 1/4" IN HEIGHT FROM THE TOP OF THE THRESHOLD TO THE	DIAG	DIAGONAL	IN	INCH, IN
TOP OF A LANDING. RESIDENTIAL LANDINGS MUST BE AT LEAST 36"X 36", OR THE WIDTH OF THE DOOR, WHICHEVER IS GREATER.	DIA DIFF	DIAMETER DIFFUSERS	INCL INFO	INCLUDI INFORM
36- PROVIDE AN ATTIC ACCESS PANEL LOCATED IN THE HALLWAY THAT IS AT LEAST 20" X 30" WITH 30" MINIMUM	DIM	DIMENSION	ID	INSIDE D
CLEARANCE OVERHEAD. IF ANY APPLIANCES (WATER HEATER OR FURNACE) ARE LOCATED IN THE ATTIC, THE OPENING MUST BE AT LEAST 22" X 30". (CBC 1209)(CPC 509.4)	DW DISP	DISHWASHER DISPOSAL	INST INSUL	INSTALL INSULAT
37- PROVIDE ATTIC VENTILATION AT A RATIO OF 1/150 OF THE SQ. FT. OF THE AREA SERVED OR 1/300 OF THE SQ. FT. OF THE AREA SERVED IF 50% OF THE VENTS ARE ABOVE THE EAVES AND ARE BALANCED AT THE EAVES.	DIST	DISTANCE	INT	INTERIO
38- UNDER FLOOR VENTS MUST BE PROVIDED WITH AT LEAST 1 SQ. FT. OF VENTILATION FOR EVERY 150 SQ. FT. OF AREA PER CRC R408. VENTS MUST BE COVERED WITH 1/4" WIRE MESH SCREENING.	DO DIV	DITTO DIVISION	INV	INVERT
39- SHOW THE LOCATION OF AN 18" X 24" MINIMUM CRAWL SPACE ACCESS DOOR. PROVIDE ACCESS TO ALL UNDER-FLOOR AREAS.	DR	DOOR	JAN IT	JANITOF
40- ALL ROOF COVERINGS MUST BE A CLASS A ASSEMBLY AND THE ROOF SHEATHING MUST HAVE A RADIANT BARRIER. WHEN REQUIRED (NOT REQUIRED FOR THIS PROJECT)	DBL DN	DOUBLE DOWN	JT JF	JOINT JOINT FI
THEN REQUIRED (NOT REQUIRED FOR THIS I ROSECT)	DWR DWG	DRAWER DRAWING	JST	JOIST
	DSP	DRY STAND PIPE	KPL	KICK PL
	DF	DRINKING FOUNTAIN	KD KIT	KILN-DR KITCHEN
	EA	EACH FACE	KO	KNOCK
	EF E	EACH FACE EAST	KD	KNOCKE
	EB EWC	EDGE BAND	LAB LACQ	LABORA LACQUE
	EWH	ELECTRIC WATER COOLER ELECTRIC WATER HEATER	LAM	LAMINA
	ELEC EP	ELECTRIC, ELECTRICAL ELECTRICAL PANEL	LAV LC	LAVATOR
	EL	ELEVATION (SURVEY)	LH	LEFT HA
	ELEV EMER	ELEVATOR EMERGENCY	L LOA	LENGTH LENGTH
	ENCL ENGR	ENCLOSE ENGINEER	LT	LIGHT
	ENGR FO	ENGINEER FOLIAL	LTG LTW/T	LIGHTIN

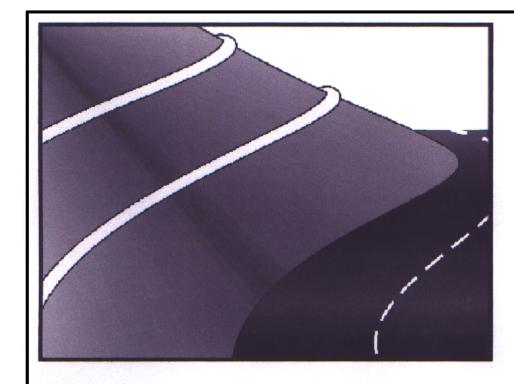
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	ABBRE	VIATIONS							CONCEPTUAL IMA	GE)
	ABV AFF	ABOVE ABOVE FINISHED FLOOR	EXC EXEC	EXCAVATE EXECUTIVE	LTL LOC	LINTEL LOCATION	SAN SCHED	SANITARY SCHEDULE		
	ASC	ABOVE SUSPENDED CEILING	EXH	EXHAUST	LKR	LOCKER	SLNT	SEALANT		
	AP ACT	ACCESS PANEL ACOUSTIC CEILING TILE	EX EXIST	EXHAUST FAN EXISTING	LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL	SCL SSK	SELF-CLOSING SERVICE SINK		
	ACOUS ADH	ACOUSTICAL ADHESIVE	EJ EXP	EXPANSION JOINT EXPANSION, EXPOSED	LVR LP	LOUVER LOW POINT	SHT SHTG	SHEET SHEETING OR SHEATHING		
	ADJ	ADJACENT, ADJUSTABLE	EXT	EXTERIOR	LB	POUND	SH	SHELVING, SHELF		
	AGGR A/C	AGGREGATE AIR CONDITIONING	EXTR	EXTRUDED	MACH	MACHINE	SHWR SIM	SHOWER SIMILAR		
	ALT ALUM	ALTERNATE ALUMINUM	FAB FWC	FABRICATE FABRIC WALL COVERING	MH MFR	MANHOLE MANUFACTURER	SOG SL	SLAB ON GRADE SLOPE		
	AB	ANCHOR BOLT	FB	FACE BRICK	MB	MARKER BOARD	SD	SMOKE DETECTOR		
	ANOD APPD	ANODIZED APPROVED	FOC FOF	FACE OF CONCRETE FACE OF FINISH	MSRY MO	MASONRY MASONRY OPENING	SC SCWD	SOLID CORE SOLID CORE WOOD DOOR		
	APROX ARCHT	APPROXIMATE ARCHITECT, ARCHITECTURAL	FOM FOS	FACE OF MASONRY FACE OF STUDS	M/L MATL	MATCHLINE MATERIAL	STC	SOUND TRANSMISSION COEFFICIENT		
	AD	AREA DRAIN	FCU	FAN COIL UNIT	MAX	MAXIMUM	S	SOUTH		
	ASPH	ASPHALT	FAS FLD DIM	FASTEN OR FASTENER FIELD DIMENSION	MECH MED	MECHANICAL MEDIUM	SPKR SPEC	SPEAKER SPECIFICATION		
	BSMT BM	BASEMENT BEAM	FIN FF	FINISH / FINISHED FINISHED FLOOR	MEMB MTL	MEMBRANE METAL	SPR SQ	SPRINKLER SQUARE		
	BRG	BEARING	FO	FINISHED OPENING	MEZZ	MEZZANINE	SF	SQUARE FOOT/FEET		
	BPL BLW	BEARING PLATE BELOW	FA FDR	FIRE ALARM FIRE DOOR	MLWK MIN	MILLWORK MINIMUM	SI SY	SQUARE INCH/INCHES SQUARE YARD		
	B/M BTWN	BENCH MARK BETWEEN	FE FEC	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET	MIR MISC	MIRROR MISCELLANEOUS	SS STD	STAINLESS STEEL STANDARD		
١.	BVL	BEVEL (ED)	FHC	FIRE HOSE CABINET	MOD	MODULAR	STA	STATION		
	BIT BLK	BITUMINOUS BLOCK	FH FPRF	FIRE HYDRANT FIREPROOF(ED)	MON MLD	MONUMENT MOULDING	STL STOR	STEEL STORAGE		
	BLKG BD	BLOCKING BOARD	FR FRT	FIRE RATING FIRE RETARDANT TREATED	MTD MOV	MOUNTED MOVABLE	STR STRUC	STRINGER STRUCTURE, STRUCTURAL	F	
	BOC	BOTTOM OF CURB	FXD	FIXED	MUL	MULLION	SUB	SUBSTITUTE		
	BOT BOS	BOTTOM BOTTOM OF STEEL	FIX FLG	FIXTURE FLANGE	NLR	NAILER	SA SUSP	SUPPLY AIR SUSPENDED		
	BRDG BTU	BRIDGING BRITISH THERMAL UNIT	FL FHMS	FLASHING FLAT HEAD MACHINE SCREW	NAT NRC	NATURAL NOISE REDUCTION COEFFICIENT	SYM SYN	SYMMETRICAL SYNTHETIC		
	BRZ	BRONZE	FHWS	FLAT HEAD WOOD SCREW	NOM	NOMINAL	SY	SYSTEM	=	
	BLDG BUR	BUILDING BUILT UP ROOFING	FLEX FLR	FLEXIBLE FLOOR	NPS NS	NOMINAL PIPE SIZE NON-SLIP	S TAP	TACKABLE ACOUSTICAL PANEL		
	CAB	CABINET	FD FLG	FLOOR DRAIN FLOORING	N N/A	NORTH NOT APPLICABLE	TECH TEL	TECHNICAL TELEPHONE		
	CATV	CABLE TELEVISION	FLUOR	FLUORESCENT	NIC	NOT IN CONTRACT	TEMP	TEMPERATURE/TEMPORARY		
	CPT CSMT	CARPET CASEMENT	FT FTG	FOOT, FEET FOOTING	NTS NO.	NOT TO SCALE NUMBER	TERM TC	TERMINATE TERRA COTTA/TOP OR CURB		
	CI CS	CAST IRON CAST STONE	FDTN FRZR	FOUNDATION FREEZER	ОС	ON CENTER	TZ THK	TERRAZZO THICK, THICKNESS		
	CIP	CAST-IN-PLACE	FURR	FURRING	OPNG	OPENING	THRES	THRESHOLD	VICINITY MAP	
	CB CLG	CATCH BASIN / CORNER BEAD CEILING	FURN	FURNACE, FURNITURE	OPP OH	OPPOSITE OPPOSITE HAND	TPD TOL	TOILET PAPER DISPENSER TOLERANCE		61.71-
.	CEM CTR	CEMENT CENTER	GA GALV	GAGE OR GAUGE GALVANIZED	ORN OZ	ORNAMENTAL OUNCE	T&G TOC	TONGUE AND GROOVE TOP OF CONCRETE	15 m	Was Soul
	C/C	CENTER TO CENTER	GI	GALVANIZED IRON	OD	OUTSIDE DIAMETER (DIMENSION)	TOV	TOP OF EXT. MASONRY VENEER	38,9%	Well St.
	CER CT	CERAMIC CERAMIC TILE	GSM GWH	GALVANIZED SHEET METAL GAS WATER HEATER	OA OH	OVERALL OVERHEAD	TOF TOM	TOP OF FINISH TOP OF MASONRY	ansate of	Can.
'	CHFR CIRC	CHAMFER(ED) CIRCULAR, CIRCUMFERENCE	GSKT GC	GASKET GENERAL CONTRACTOR	PNT	PAINT	TOS TOW	TOP OF STEEL TOP OF WALL	2 861/1058	N.S.
	CO	CLEAN-OUT	GLB	GLASS BLOCK	PTD	PAINTED	TB &S	TOP, BOTTOM AND SIDES	Coal N 3xx	Top Con
	CLR CCTV	CLEAR CLOSED-CIRCUIT TELEVISION	GFRG GL	GLASS FIBER REINFORCED GYPSUM GLASS OR GLAZING	PR PNL	PAIR PANEL	T TRTD	TREAD TREATED	) 3-92-1481 11-92	THE PROPERTY OF
	CLO	CLOSET COLD WATER	GCMU GB	GLAZED CONCRETE MASONRY UNIT GRAB BAR	PAR PRKG	PARALLEL PARKING	TWD TYP	TREATED WOOD TYPICAL	3 15065 7 107	
	COL	COLUMN	GR	GRADE	PBD	PARTICLE BOARD			*	
	COMB COMP	COMBINATION OR COMBINE COMPOSITE	GVL GND	GRAVEL GROUND	PART PSGR	PARTITION PASSENGER	UC UNFIN	UNDERCUT UNFINISHED	34 8 B	34.03'W
	CONC	CONCRETE CONCRETE MASONRY UNITS	GFI GT	GROUND FAULT INTERRUPTOR GROUT	PVMT PED	PAVEMENT PEDESTAL	UV	UNIT VENTILATOR UNLESS OTHERWISE NOTED	NG*27E 91.5	N 13° 22'E
	CONN	CONNECTION	GYP	GYPSUM	PERF	PERFORATE	UON,UNC	URINAL	30.5.24-89 F	N N IS
	CONST CJ	CONSTRUCTION CONTROL JOINT	GWB	GYPSUM WALLBOARD	PERI PERP	PERIMETER PERPENDICULAR	VAC	VACUUM	City	(B) 22 126.3 L
	CONT	CONTINUOUS	HDCP	HANDICAPPED HARDBOARD	PH	PHASE	VA	VALVE		
	CONV COORD	CONVECTION COORDINATE	HDBD HDWR	HARDBOARD HARDWARE	PLAM PL	PLASTIC LAMINATE PLATE	VB VAR	VAPOR BARRIER VARIABLE	PROPERTY/PROJECT	T INFO
	CORR CNTR	CORRUGATED COUNTER	HDWD HDR	HARDWOOD HEADER	PLBG PLYWD	PLUMBING PLYWOOD	VENT VIF	VENTILATION VERIFY IN FIELD	97 FORREST AVENUE UNITS:	1
2	CTSK	COUNTERSINK	HTR	HEATER	PEN	PLYWOOD END NAIL	VERM	VERMICULITE	ZONING: STORIES:	RS-6 R
	C CPL	COURSES COVER PLATE	HTG HVAC	HEATING HEATING, VENTILATION,	PNEU PT	PNEUMATIC POINT	VERT VG	VERTICAL VERTICAL GRAIN	YEAR BUILT: USE:	1923 RESID
	CULV	CUBIC CULVERT	HD	AND AIR CONDITIONING HEAVY DUTY	PVC LB	POLY VINYL CHLORIDE POUND	VEST VB	VESTIBULE VINYL BASE	LOT & BLOCK/APN: CONSTRUCTION TYPE:	002-19
			HT	HEIGHT	PSF	POUNDS PER SQUARE FOOT	VCT	VINYL COMPOSITION TILE	OCCUPANCY:	R <sub>3</sub>
$ \mathbf{S} $	DPR DP	DAMPER DAMPPROOFING	HP HC	HIGH POINT HOLLOW CORE	PSI PC	POUNDS PER SQUARE INCH PRECAST	VWC	VINYL WALL COVERING	EXISTING UNITS (E) MAIN HOUSE SQFT:	1 150 1
	DL Db	DEAD LOAD DECIBEL	HM HORIZ	HOLLOW METAL HORIZONTAL, HORIZON	PREFAB PREP	PREFABRICATED PREPARE	WSCT WR	WAINSCOT WASTE RECEPTACLE,	(E) MAIN HOUSE SQFT: (E) UPPER (E) MAIN	<b>1,179</b> S 242 SQ 895 SQ
	DKG	DECKING	НВ	HOSE BIB	PT	PRESSURE TREATED		WATER RESISTENT	(E) MAIN (E) LOWER LEVEL	895 SQ. 42 SQ.
	DEMO DMT	DEMOLISH, DEMOLITION DEMOUNTABLE	HW HR	HOT WATER HOUR	PROJ PR	PROJECT/PROJECTED PROPERTY,	WH WSTO	WATER HEATER WATER STOP (@ CONC JOINT)	(E) ADU (LOWER LEVEL):	623 S
	D DET	DEPTH, DRYER DETAIL	HYD	HYDRANT	OP QTY	PROPOSED QUANTITY	WP WSTRP	WATERPROOF, WATERPROOFING WEATHERSTRIP	PROPOSED (P) MAIN UNIT SQFT:	1,709
	DIAG	DIAGONAL	IN	INCH, INCHES	QT	QUARRY TILE	WT	WEIGHT	(P) UPPER (P) MAIN	563 SQ 1,146 S
S	DIA DIFF	DIAMETER DIFFUSERS	INCL INFO	INCLUDING INFORMATION	QTR	QUARTER	WWF WO	WELDED WIRE FABRIC OR MESH WHERE OCCURS	(P) ADU (LOWER LEVEL):	651 SC
G	DIM DW	DIMENSION DISHWASHER	ID INST	INSIDE DIMENTION INSTALLATION	RAD R	RADIATOR RADIUS	WF W	WIDE FLANGE WIDTH, WASHER, WEST, WATER	(E) CARAGE COETT	mom:
,	DISP	DISPOSAL	INSUL	INSULATE, INSULATION	RLG	RAILING	WDW	WINDOW	(E) GARAGE SQFT:	TOTAI
$_{\rm A}$	DIST DO	DISTANCE DITTO	INT INV	INTERIOR INVERT	RWL REC	RAIN WATER LEADER (DS) RECESSED	W/ W/0	WITH WITHOUT	LOT AREA SQ. FT: MAX LOT COVERAGE:	TOTAI 35%
•	DIV DR	DIVISION DOOR	JAN	JANITOR	RDWD REF	REDWOOD REFERENCE (ALSO SEE RE)	WD WB	WOOD WOOD BASE	MAX LOT COVERAGE:  LOT COVERAGE:	35%
	DBL	DOUBLE	JT	JOINT	RFL	REFLECTED	WPT	WORKING POINT	(E) LOT COVERAGE	1353 (\$
•	DN DWR	DOWN DRAWER	JF JST	JOINT FILLER JOIST	RFRG RE	REFRIGERATOR REGARDING, REFER TO	WI	WROUGHT IRON	(P) LOT COVERAGE:	1353 (8
	DWG DSP	DRAWING DRY STAND PIPE	KPL	KICK PLATE	REG REINF	REGISTER REINFORCED, REINFORCING	&	AND AT		
	DSP	DRINKING FOUNTAIN	KD	KILN-DRIED	RELOC	RELOCATED	@	ANGLE	MAX FAR:	40%
	EA	EACH	KIT KO	KITCHEN KNOCK OUT	REM REQ'D	REMOVE(D) REQUIRED	< X	BY CENTERLINE	(E) FAR: PROPOSED FAR:	12% 18%
	EF	EACH FACE EAST	KD	KNOCKED DOWN	REQ RES	REQUIRMENTS RESILIENT	<b>@</b> =	EQUAL POUND	CETD A CIZO	
	E EB	EDGE BAND	LAB	LABORATORY	RET	RETURN, RETAINING	<del>-</del> #	PROPERTY LINE	SETBACKS: OVER 10% SLOPE:	ır.
	EWC EWH	ELECTRIC WATER COOLER ELECTRIC WATER HEATER	LACQ LAM	LACQUER LAMINATE	RA RAG	RETURN AIR RETURN AIR GRILLE	PL		•FRONT SETBAC •REAR SETBACK •FRONT/REAR S	:
	ELEC EP	ELECTRICAL PANEL	LAV LC	LAVATORY LEAD-COATED COPPER	REV RH	REVISE OR REVISION RIGHT HAND			•SIDE SETBACK: •SIDE SETBACK	COMBINE
	EL	ELEVATION (SURVEY)	LC LH	LEFT HAND	R	RISER		(	EXISTING SIDE SET BACK = (12	2'-3"+1'-4 1
	ELEV EMER	ELEVATOR EMERGENCY	L LOA	LENGTH LENGTH OVERALL	RF RD	ROOF ROOF DRAIN			EXISTING COMBINDED SIDE S	ET BACK =
	ENCL ENGR	ENCLOSE ENGINEER	LT LTG	LIGHT LIGHTING	RFG RM	ROOFING ROOM			PROPOSED SIDE SET BACK = (9 PROPOSED COMBINDED SIDE S	SET BACK
	EQ	EQUAL	LTWT	LIGHTWEIGHT	RO	ROUGH OPENING				
	EST	ESTIMATE	LF	LINEAR FEET					MAX HEIGHT: 10% SLOPE OR LESS:	
									OVER 10%	
_										









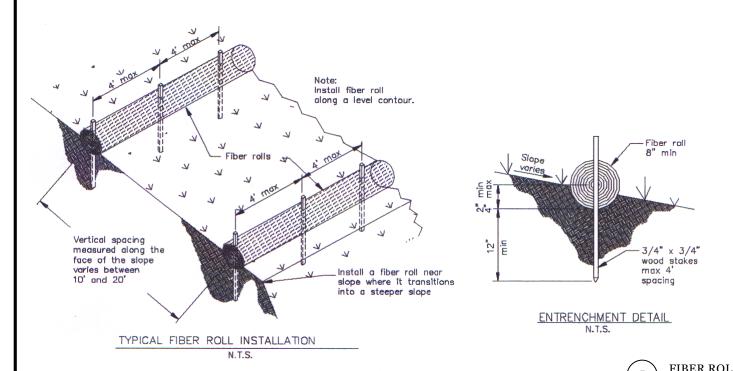


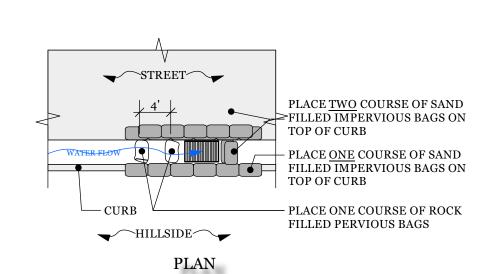
# **Description and Purpose**

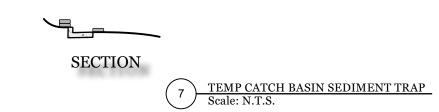
A fiber roll consists of straw, flax, or other similar materials bound into a tight tubular roll. When fiber rolls are placed at the toe and on the face of slopes, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff. By interrupting the length of a slope, fiber rolls can also reduce erosion.

# **Suitable Applications**

Fiber rolls may be suitable:









Application #: 23-0016

The Vegetation Management Plan submitted for review by the Ross Valley Fire Department is approved with the following conditions:

Please do not remove any tree that requires a permit from the town without first securing such permit.

Please note that all vegetation within the 30 foot zone shall be irrigated. Seasonal grasses within the 30 foot zone are not permitted unless regularly irrigated. If not kept as green grass the area

Every effort shall be taken to ensure erosion control efforts are in compliance with standards established by Town regulations.

The approved plan is to last the life of the property. Any changes to the plan now or in the future will

The approved plan is to last the life of the property. Any changes to the plan now or in the future will require Fire Department review. It is recommended that if the applicant has plans to landscape in the future that those plans be intermingled into this plan.

Vegetation shall be maintained to ensure address numbers are visible from both angles of approach.

Minimum standards shall be in place prior to final fire clearance.

If you have any questions about any of the items listed above please call me. I am available to meet

If you have any questions about any of the items listed above please call me. I am available to meet with you on site to help you develop a plan. Please contact me to schedule (415) 453-1289 Ext 21 if you desire my assistance.

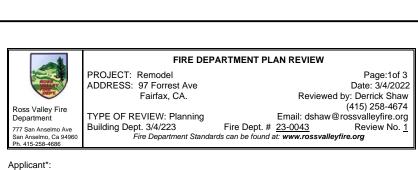
Sincerely,

Derrick Shaw
Fire Inspector

Committed to the protection of life, property, and environment.

SAN ANSELMO • FAIRFAX • ROSS • SLEEPY HOLLOW

HEADQUARTERS: 777 San Anselmo Avenue, San Anselmo, CA 94960 TEL: (415) 258-4686 FAX: (415) 258-4689 www.rossvalleyfire.org



Applicant\*:
Address:
\*Applicant is responsible for distributing these Plan Review comments to the Design Team.

Occupancy Class: R-3 Fire Flow Req: 500 GPM Sprinklers Required: YES

Type of Construction: V-B On-site Hyd. Req: NO Fire Alarm Required: NO

Bldg Area: sf + 1830 Turn-Around Req: NO Permits Required: SPR, VMP on File

Stories: + 2 Fire Flow Test Required: YES

Height: Wildland Urban Interface: YES

The project listed above has been reviewed and determined to be:

( ) APPROVED (no modifications required)

( X ) Complete AS NOTED (minor modifications required - review attached comments)

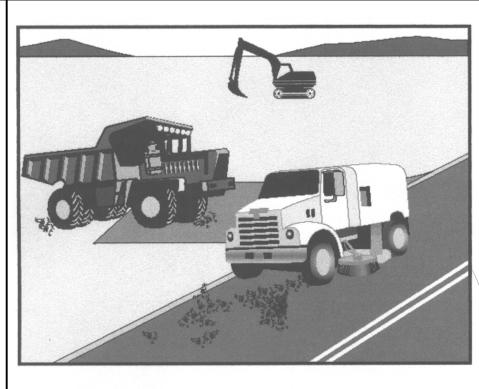
NOT APPROVED (revise per attached comments and resubmit)

NOTE: Please review the comments and make corrections and/or add notes as required. Changes and/or add notes shall be clouded and referenced by date on a legend. Approval of this plan does not approve any omission or deviation from the applicable regulations. Final approval is subject to field inspection. Approved plans shall be on site and available for review at all

Inspections required:

( ) Access/Water Supply prior to delivery of combustibles (X) Defensible Space/Vegetation Management Plan (X) Sprinkler Hydro/Final





# **Description and Purpose**

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

# Suitable Applications

Sweeping and vacuuming are suitable anywhere sediment is tracked from the project site onto public or private paved streets and roads, typically at points of egress. Sweeping and vacuuming are also applicable during preparation of paved surfaces for final paving.

# Limitations

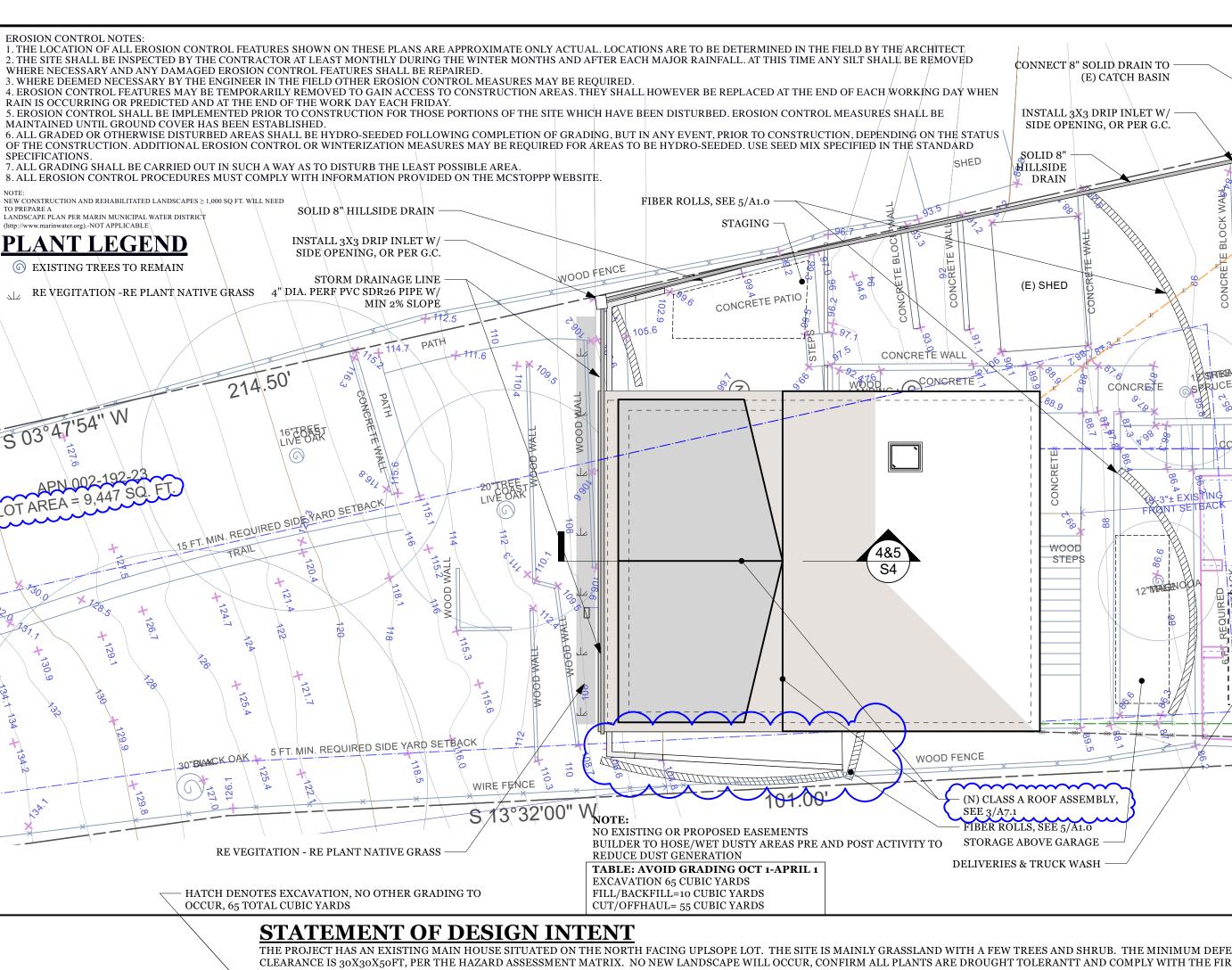
Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked (caked soil may need to be scraped loose).

# Implementation

- Controlling the number of points where vehicles can leave the site will allow sweeping and vacuuming efforts to be focused, and perhaps save money.
- Inspect potential sediment tracking locations daily.
- Visible sediment tracking should be swept or vacuumed on daily basis.

1-7=30X30X30FT.  $8-14 \neq 30X30X50FT$ . 15-25 > = 50X50X100

4 CLEAN PAVED SURFACES
Scale: N.T.S.



SECTION AND

HYDRANT VALVE

STUDIO J ARCHITECTURE

574 San Anselmo Avenue San Anselmo

California

STRUCTURAL ENGINERR

CONTRACTOR

PERMITTING STAMPS

Stamp

03-03-23 PRE PLNG CMSN CMNTS

01-06-23 SUBMTL COMMENTS

O DATE ISSUES/REVISIONS

**VEGETATION** 

MANAGEMENT PLAN

**GRADING & EROSION** 

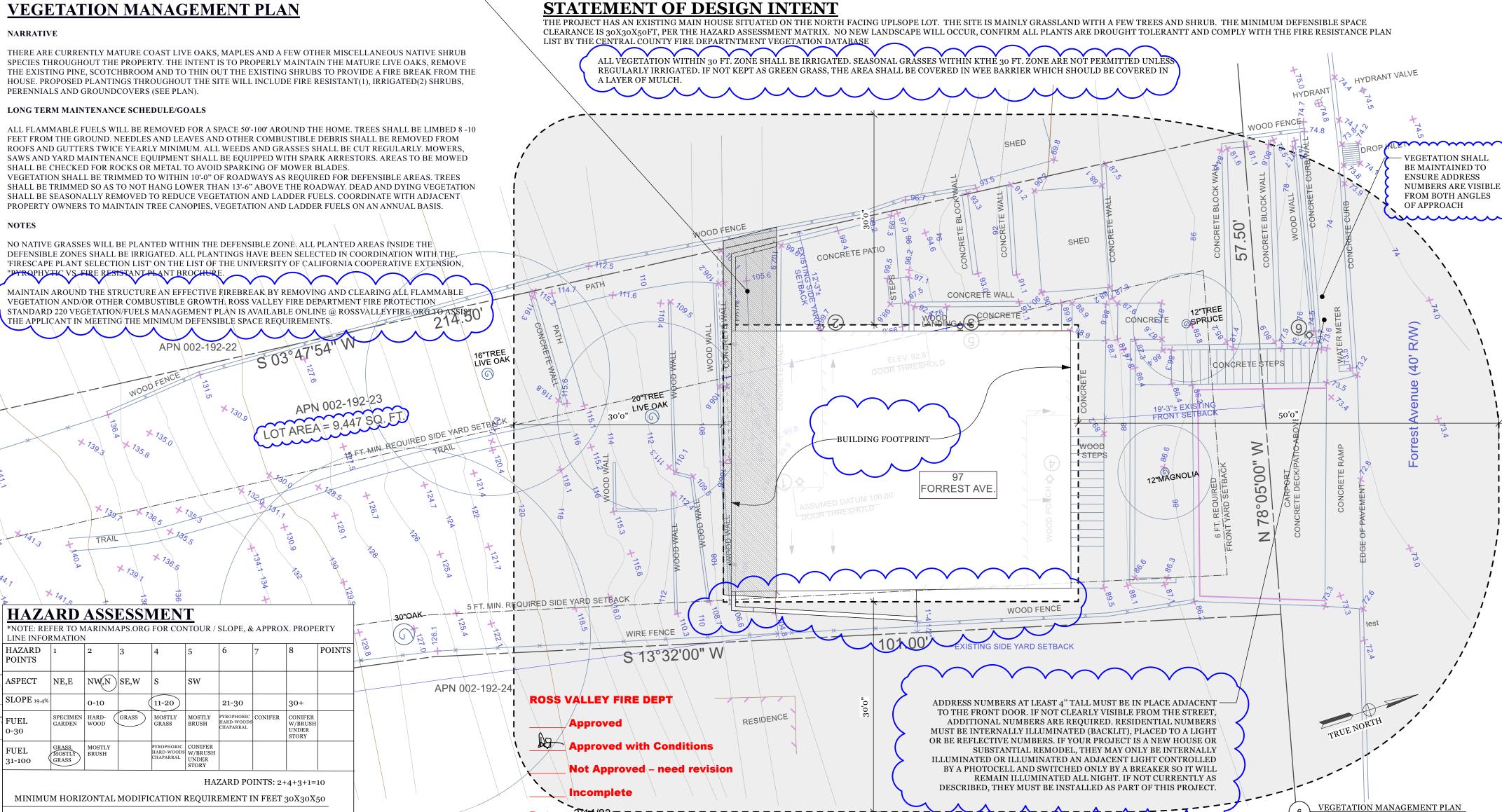
CONTROL, BMP

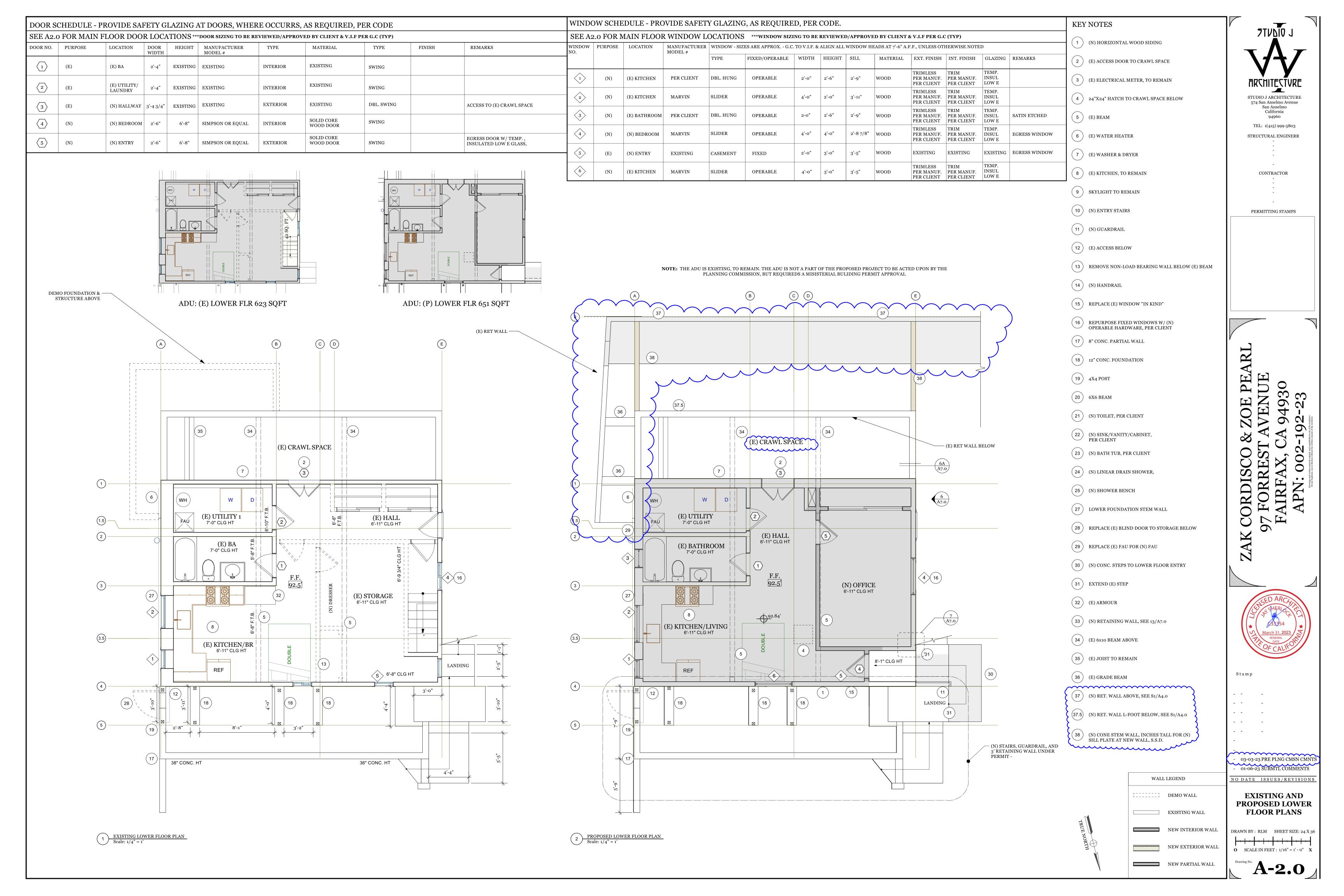
DRAWN BY: RLM SHEET SIZE: 24 X 36

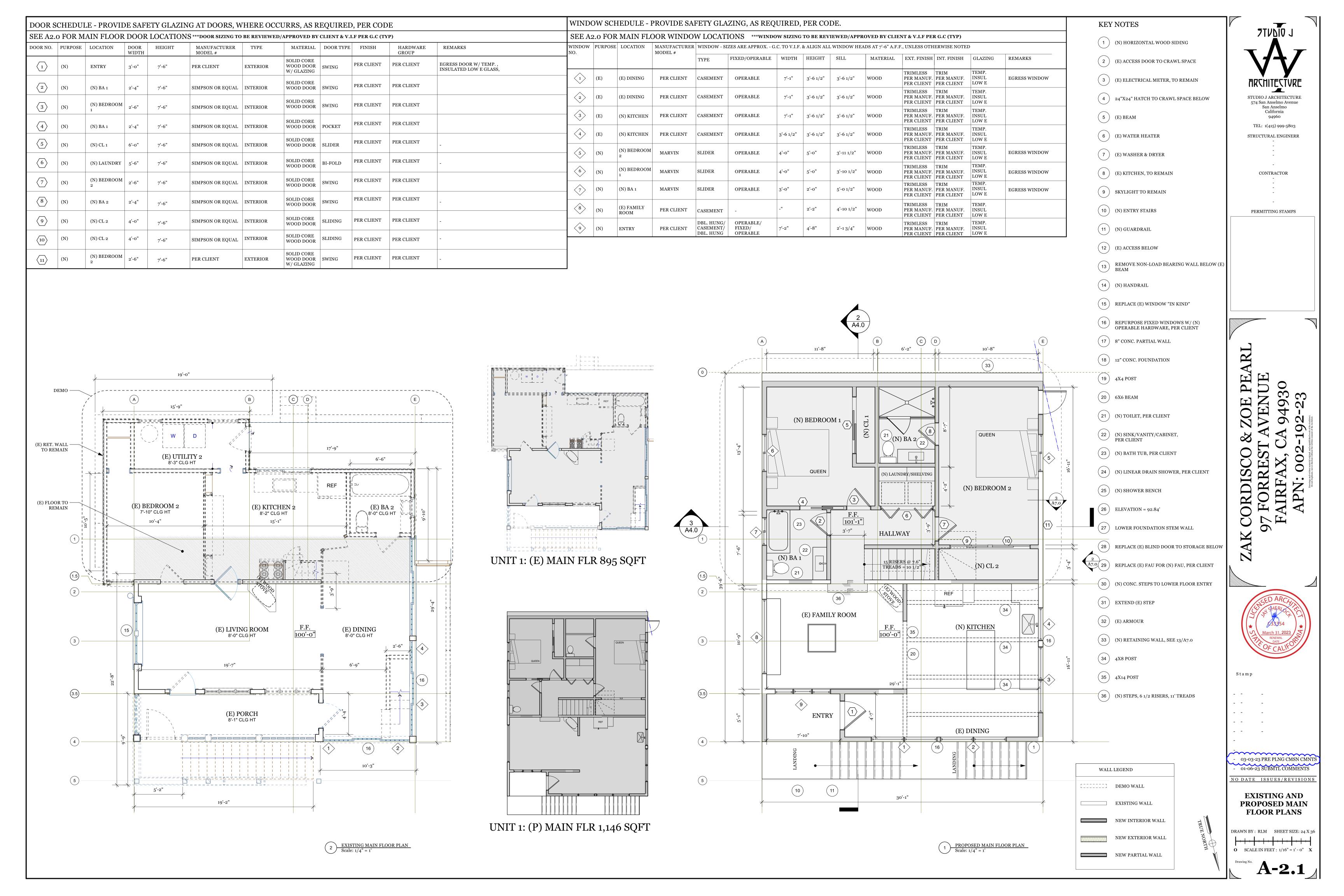
O SCALE IN FEET:  $1/16'' = 1' - 0'' \times X$ 

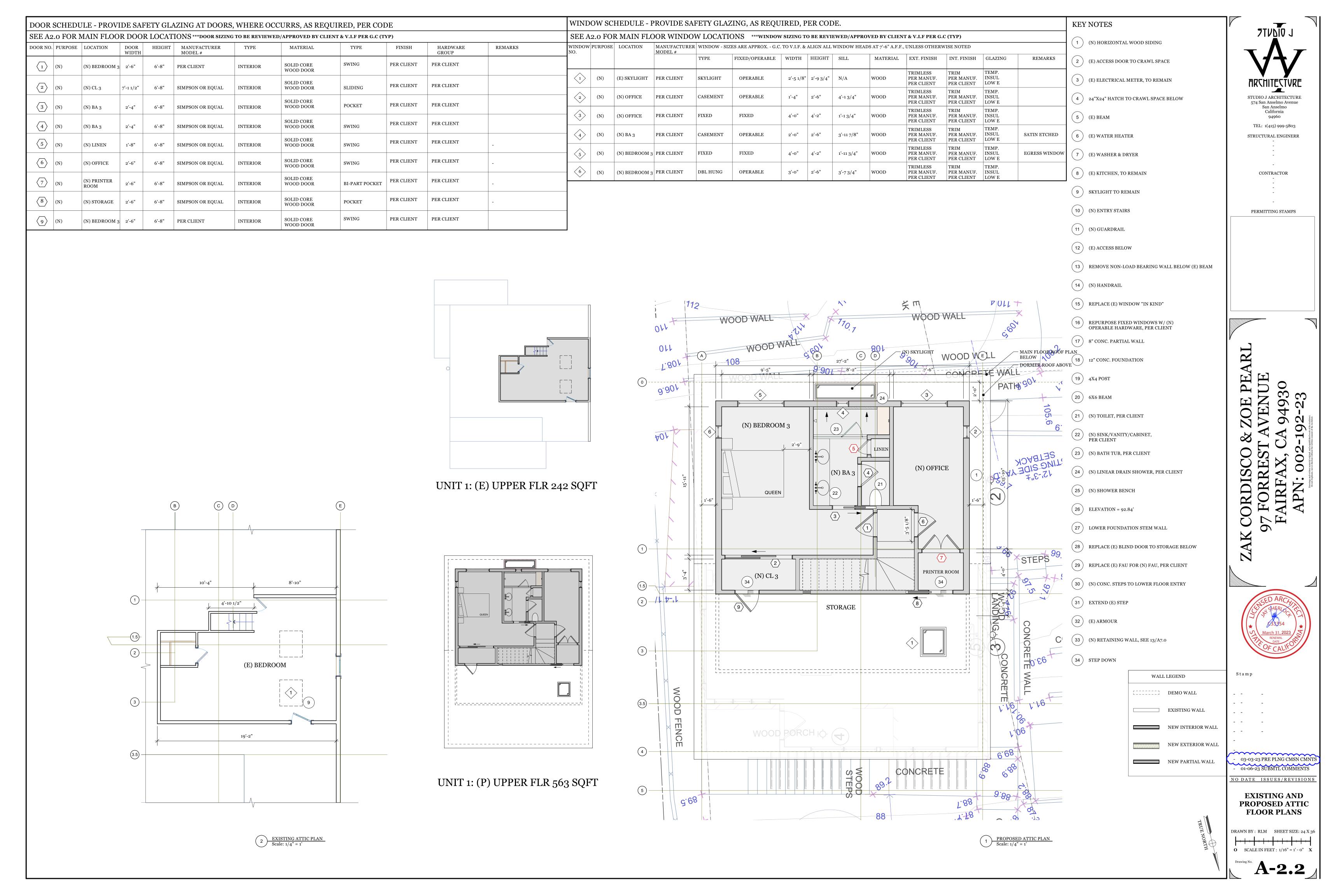
MORE INFO

BMP & EROSION CONTROL PLAN









ELECTRIC & PLUMBING NOTES 1. CONTRACTOR TO SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AS SHOWN; VERIFY LOCATION OF OUTLETS IN RELATION TO STRUCTURE AND OTHER ELEMENTS

1. RECESSED LIGHT FIXTURES IN THE BUILDING ENVELOPE SHALL BE IC AND AIRTIGHT LISTED.

3. A MINIMUM OF TWO 20 AMP SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED TO SERVE COUNTER RECEPTACLES IN THE KITCHEN, PANTRY, BREAKFAST NOOK, DINING ROOM, AND PASS-THROUGHS.

4. 50% OF THE LIGHTING (BASED ON WATTAGE) SHALL BE HIGH EFFICACY (FLUORESCENT OR QUALIFYING LED). 5. COUNTERTOP RECEPTACLE OUTLETS SHALL BE INSTALLED AT EACH COUNTER SPACE 12" OR WIDER. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24", MEASURED HORIZONTALLY, FROM A RECEPTACLE OUTLET IN THAT SPACE. ONE RECEPTACLE IS REQUIRED FOR PENINSULA COUNTERS OF ANY LENGTH IN ADDITION TO ANY RECEPTACLES INSTALLED IN THE ADJOINING WALL SPACE. AT LEAST ONE RECEPTACLE IS REQUIRED FOR ISLAND COUNTERS.

6. COUNTERTOP RECEPTACLES SHALL NOT BE INSTALLED IN A FACE UP POSITION AND NOT MORE THAN 20" ABOVE NOR MORE THAN 12" BELOW THE COUNTERTOP SURFACE. 7. DISHWASHER/DISPOSAL TYPICALLY PLACED ON SEPARATE CIRCUITS.

1. SPRAY HEADS ATTACHED TO HOSES MUST BE PROVIDED WITH AN APPROVED METHOD OF BACKFLOW

2. DISHWASHERS SHALL BE CONNECTED WITH APPROVED AIR GAP DEVICES LOCATED ABOVE THE FLOOD LEVEL OF THE SINK. 3. WHEN NEW GAS PIPING IS INSTALLED OR THE EXISTING SYSTEM IS ALTERED OR A NEW GAS APPLIANCE IS

INSTALLED, A SEISMIC GAS SHUT-OFF VALVE SHALL BE INSTALLED. 4. HOT WATER PIPE MUST BE INSULATED FROM THE WATER HEATER TO EACH FAUCET

1. EXHAUST DUCTS SHALL TERMINATE A MINIMUM OF 3'-0" FROM PROPERTY LINES OR OPENINGS INTO BUILDING. 2. NEW BUILDINGS OR 'SUBSTANTIAL REMODELS' MUST BE PROVIDED WITH A RANGE HOOD CAPABLE OF 100 C.F.M. WHICH VENTS TO THE EXTERIOR OF THE BUILDING AND MEET REQUIREMENTS OF CMC 504.2 AND CMC

3. PLUMBING VENTS LOCATED WITHIN 10'-0" OF OPERABLE SKYLIGHTS SHALL EXTEND A MINIMUM OF 3'-0" ABOVE SUCH OPENINGS.

4. EXHAUST FAN (IF PROVIDED) SHALL BE SWITCHED SEPARATELY FROM — LIGHTING SYSTEM 5. GAS VENT TERMINATION SHALL MEET THE REQUIREMENTS OF CMC 802.6 & SFMC 802.6.2 6. COMBUSTION AIR SHALL MEET THE REQUIREMENTS OF CMC CHAPTER 7

ELECTRIC: 1. AT LEAST ONE 20 AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY BATHROOM RECEPTACLES. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS, SUCH AS LIGHTS, FANS, RECEPTACLES IN OTHER ROOMS, ETC. 2. AT LEAST ONE RECEPTACLE OUTLET WITHIN 3 FT OF THE OUTSIDE EDGE OF EACH BASIN SHALL BE INSTALLED. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL THAT IS ADJACENT TO THE BASIN, OR ON THE SIDE OR FACE OF THE BASIN CABINET NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP. (CEC ART.210.52(D)). 3. INSTALL GFCI PROTECTED OUTLETS FOR ALL BATHROOM RECEPTACLES. (CEC ART.210.8(A)). ALL ADDED/REPLACED 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT

RECEPTACLES. (CEC ART.406.11) 4. A MINIMUM OF ONE LUMINAIRE IN EACH BATHROOM SHALL BE HIGH EFFICACY (FLUORESCENT OR QUALIFYING LED). ALL OTHER LIGHTING SHALL BE HIGH EFFICACY OR CONTROLLED BY A MANUAL-ON VACANCY SENSOR.

1. EFFECTIVE JANUARY 1, 2014; ALL PLUMBING FIXTURES WITHIN THE BUILDING(S) THAT ARE NOT COMPLIANT SHALL BE UPGRADED WITH WATER CONSERVING PLUMBING FIXTURES. NON-COMPLIANT PLUMBING FIXTURES ARE DEFINED BY SB 407 AS FOLLOWS:

a) TOILETS THAT USE MORE THAN 1.6 GALLONS PER FLUSH b) FAUCET THAT EMITS MORE THAN 2.2 GALLONS OF WATER PER MINUTE.

c) SHOWERHEAD THAT EMITS MORE THAN 2.5 GALLONS OF WATER PER MINUTE

1. EXHAUST DUCTS SHALL TERMINATE A MINIMUM OF 3'-0" FROM PROPERTY LINES OR OPENINGS INTO BUILDING. 2. NOTE THAT BATHROOMS REQUIRE MECHANICAL VENTILATION TO THE OUTSIDE (A NON-CIRCULATING FAN) WITH A MINIMUM OF AT LEAST 50CFM.

3. PLUMBING VENTS LOCATED WITHIN 10'-0" OF OPERABLE SKYLIGHTS SHALL EXTEND A MINIMUM OF 3'-0" ABOVE 4. EXHAUST FAN (IF PROVIDED) SHALL BE SWITCHED SEPARATELY FROM — LIGHTING SYSTEM. (CEES SEC.150(K)

## 1. A MINIMUM OF 30-INCH CLEAR WIDTH FOR THE WATER CLOSET SPACE AND 24-INCH CLEARANCE IN FRONT OF THE WATER CLOSET BOWL IS REQUIRED. (CPC SEC. 407.5)

1. NEW, REPAIRED, OR ALTERED SHOWER COMPARTMENTS SHALL HAVE A MINIMUM FINISHED INTERIOR OF 1,024 SOUARE INCHES AND SHALL ALSO BE CAPABLE OF ENCOMPASSING A 30-INCH DIAMETER CIRCLE. THE MINIMÚM REQUIRED AREA AND DIMENSIONS SHALL BE MEASURED AT A HEIGHT EOUAL TO THE TOP OF THRESHOLD AT A POINT TANGENT TO ITS CENTERLINE. THE AREA AND DIMENSIONS SHALL BE MAINTAINED TO A POINT OF NOT LESS THAN SEVENTY INCHES ABOVE THE SHOWER DRAIN OUTLET WITH NO PROTRUSIONS OTHER THAN THE FIXTURE VALVE OR VALVES, SHOWERHEAD, SOAP DISHES, SHELVES AND SAFETY GRAB BARS OR RAILS. (CPC

2. SHOWER DOORS SHALL OPEN SO AS TO MAINTAIN NOT LESS THAN A 22" UNOBSTRUCTED OPENING FOR EGRESS (SWING OUTWARD). (CPC SEC. 411.6). 3. SHOWER AND TUB/SHOWER WALLS SHALL BE PROVIDED WITH A NONABSORBENT SURFACE TO A HEIGHT OF

NOT LESS THAN 6 FT. ABOVE THE FLOOR. (CRC SEC.R.307.2) 4. SHOWER AND TUB/SHOWERS SHALL BE PROVIDED WITH PRESSURE-BALANCE, THERMOSTATIC, OR

COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE CONTROLS WITH A 120 F. LIMIT. (CPC SEC.

5. SAFETY GLAZING IN WALLS ENCLOSING TUBS/SHOWERS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE A STANDING SURFACE. (CRC SEC.R308.4 ITEM 5).

6. FRAMELESS SHOWER ENCLOSURES ARE RECOMMENDED TO COMPLY WITH AMERICAN GLASS ASSOCIATION FRAMELESS SHOWER ENCLOSURE STANDARDS. PROVIDE MANUFACTURES DATA ON HINGES AND CLAMPS PRIOR

1. LIGHTING PER CEC 150.0(K) 2. ALL BEDROOMS MUST HAVE SMOKE & CARBON MONOXIDE DETECTOR, CENTRALLY LOCATED IN THE CORRIDOR AND OVER THE CENTER OF ALL STAIRWAYS

3. SMOKE DETECTOR: 1 PER LEVEL MINIMUM, 1 IN EACH BEDROOM, 1 OUTSIDE BEDROOM 4. SEPARATE METER FOR EACH UNIT AND A SEPARATE METER FOR COMMON AREAS

5. ANY NEW LIGHTS MUST BE LABELED "HIGH EFFICACY" OR HAVE A DIMMER

6. ALL NEW AND/REPLACED RECEPTACLES (BOTH REGULAR AND GFCI) IN A DWELLING UNIT MUST BE TAMPER-RESISTANT. (CEC 406.11)

7. ALL BRANCH CIRCUITS SERVING OUTLETS (BOTH RECEPTACLES AND LIGHTS) IN BEDROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS MUST HAVE ARC-FAULT CIRCUIT

INTERRUPTER PROTECTION. (CEC 210.12) 8. ELECTRICAL RECEPTACLES MUST BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6', MEASURED HORIZONTALLY, FROM AN OUTLET. THIS INCLUDES ANY WALL SPACE OF 2'

OR MORE IN LENGTH. (CEC 210.52(A)) 9. LIGHTING IN BATHROOMS, GARAGES, AND UTILITY ROOMS SHALL ALL BE HIGH EFFICACY OR CONTROLLED BY A MANUAL-ON/OCCUPANT SENSOR-OFF TYPE SWITCH.

10. ALL LUMINARIES IN ROOMS OTHER THAN KITCHEN, BATHROOMS, GARAGE, LAUNDRY ROOMS OR UTILITY

ROOMS MUST BE HIGH EFFICACY OR CONTROLLED BY A MANUALLY-ON/OCCUPANT SENSOR-OFF TYPE SWITCH OR DIMMER. CLOSETS LESS THAN 70 SF ARE EXEMPT. 11. ELECTRICAL PANELS SHALL NOT BE INSTALLED IN BATHROOMS OR IN CLOTHES CLOSETS, LINEN CLOSETS OR

STORAGE ROOMS WITH EASILY IGNITABLE COMBUSTIBLES, OR IN LOCATIONS WHICH ARE NOT READILY 12. ALL INTERIOR SPACES INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH SPACE HEATING PER CBC 1204.1

1. FOR TANK WATER HEATER: SHALL HAVE DIRECT VENT A. PROVIDE EARTHQUAKE STRAPPING SECURING THE UPPER AND LOWER 1/3'S OF WATER HEATER. B. PRESSURE RELIEF VALVE DRAIN TO TERMINATE AT EXTERIOR, NO LESS THAN 6" OR MORE THAN 12" ABOVE GROUND. C. SPECIFY SIZE AND NET OPENING AREA FOR HIGH AND LOW COMBUSTION AIR OPENINGS FOR WATER HEATER ENCLOSURE. (2010 CMC SEC 703, CPC SEC. 507.3). D. PROVIDE WATER-TIGHT PAN AND 3/4" DRAIN UNDER WATER HEATER WHEN INSTALLED WHERE WOOD FRAMING MAY BE DAMAGED BY A LEAKING WATER HEATER. E. PROVIDE ACCESS DOOR LARGE ENOUGH TO REMOVE WATER HEATER, WITH A WIDTH NO LESS THAN 24". F SHOW ON PLANS ROUTING OF WATER HEATER VENTS TO EXTERIOR AND VENT TERMINATION. G. TYPE B GAS VENTS WTH LISTED VENT CAPS TWELVE (12) INCHES OR SMALLER IN SIZE SHALL TERMINATE IN ACCORDANCE W/ CMC TABLE 5-3, PROVIDED THEY ARE LOCATED AT LEAST EIGHT (8). FEET FROM A VERTICAL WALL OR SIMILAR OBSTRUCTION. ALL OTHER VENTS SHALL TERMINATE NOT LESS THAN TWO (2) FEET ABOVE THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND AT LEAST TWO (2) FEET HIGHER THAN ANY PORTION OF A BUILDING WITHIN TEN (10) FEET. H. INSULAT THE FIRST FIVE (5) FEET OF BOTH THE HOT AND COLD WATER PIPES COMING FROM THE WATER HEATER. H. 1. NO. INSULATION SHALL BE INSTALLED CLOSER THAN SIC (6) INCHES FROM THE FLUE.

1. CLOTHES DRYER EXHAUST SHALL BE A MINIMUM 4 INCHES AND TERMINATE AT THE END OF THE BUILDING, BE EQUIPPED WITH A BACK-DRAFT DAMPER AND MEET REQUIREMENTS OF CMC 504.3/ PROVIDE 100 SQ INCHES

# MINIMUM OPENING FOR DRYERS

1. OUTDOOR LIGHTING SHALL BE HIGH EFFICACY OR CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION. SWITCHED LIGHTS MUST BE INSTALLED AT EVERY OUTDOOR ENTRANCE. 2. ALL 15- AND 20-AMP, 120-VOLT RECEPTACLES MUST BE GFCI PROTECTED. THIS MAY BE WITH A GFCI RECPTACLE

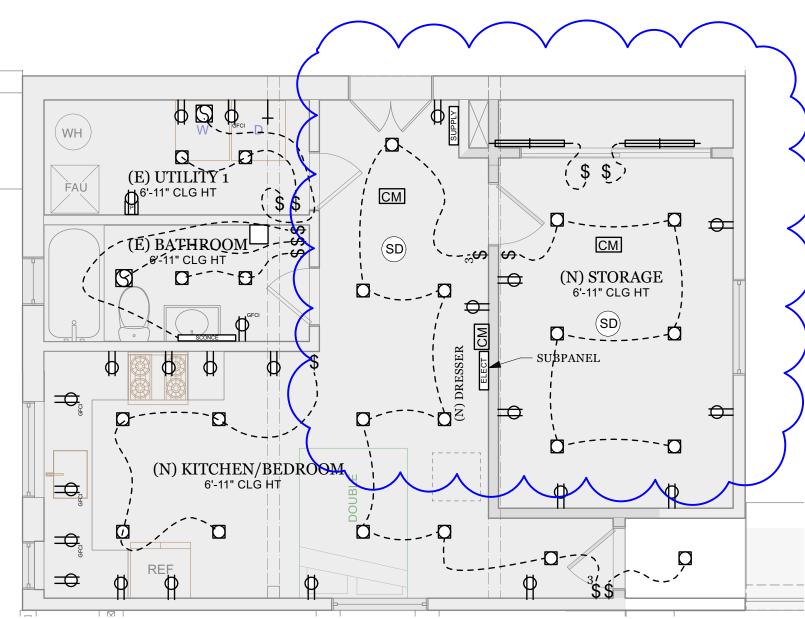
OR A GFCI BREAKER. 3. ALL 15- AND 20-AMP 120- AND 240-VOLT NONLOCKING RECEPTACLES IN WET OR DAMP LOCATIONS MUST BE LISTED AS WEATHER RESISTANT TYPE RECEPTACLES.

4. RECEPTACLES INSTALLED OUTDOORS MUST HAVE A WEATHERPROOF COVER THAT ARE ACCEPTABLE FOR DAMP LOCATION. THESE ARE GASKETED COVERS THAT SEAL THE UNIT FROM MOISTURE AND RETARD RAIN AND SNOW. 5. A RECEPTACLE IS REQUIRED AT THE FRONT AND BACK DOOR OUTSIDE EVERY HOME. THIS RECEPTACLE CAN BE MOUNTED NO HIGHER THAN 6'6" ABOVE GRADE.

6. A RECEPTACLE IS REQUIRED WITHIN THE PERIMETER OF EACH BALCONY, DECK, OR PORCH WITH A USABLE AREA OF 20 SQUARE FEET OR MORE THAT IS ACCESSIBLE FROM THE INSIDE OF THE HOME. THIS, AGAIN, CAN BE MOUNTED NO HIGHER THAN 6'6" ABOVE GRADE

7. DWELLINGS SHALL BE POSTED WITH VISIBLE ADDRESS NUMERALS WITH A MINIMUM OF 4" IN HEIGHT AND A

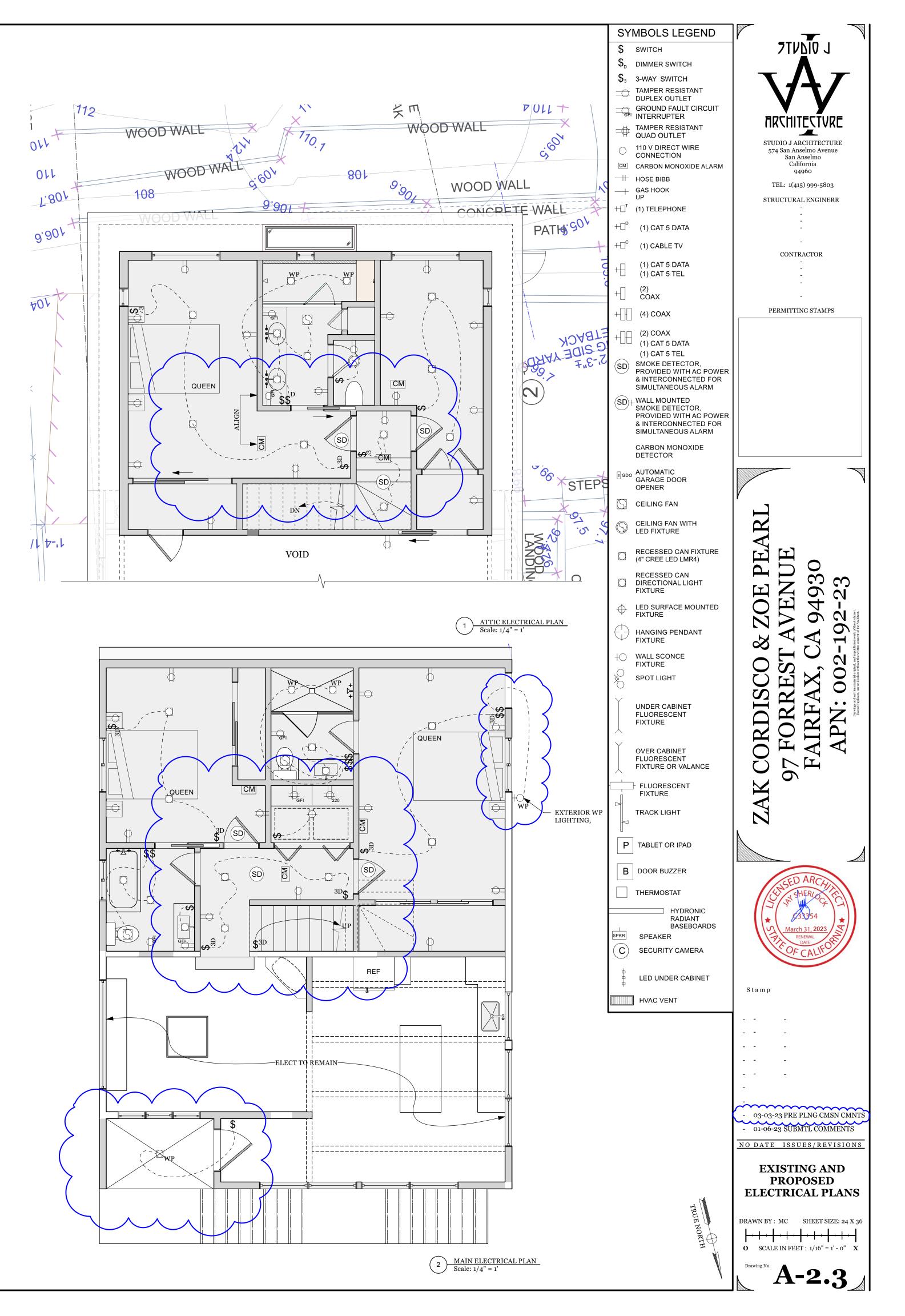
1. MINIMUM 200 SQUARE INCH VENTILATION IN GARAGE

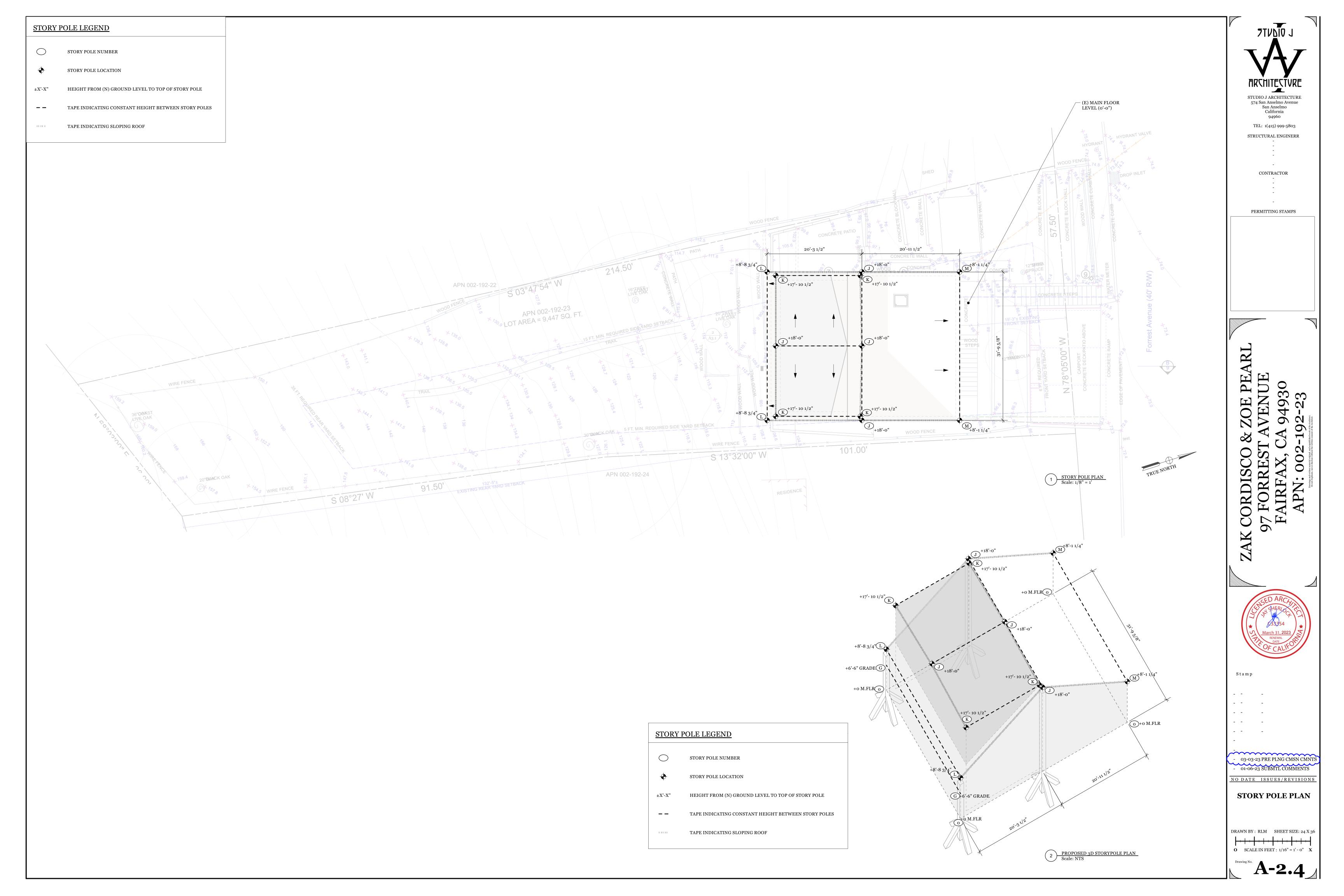


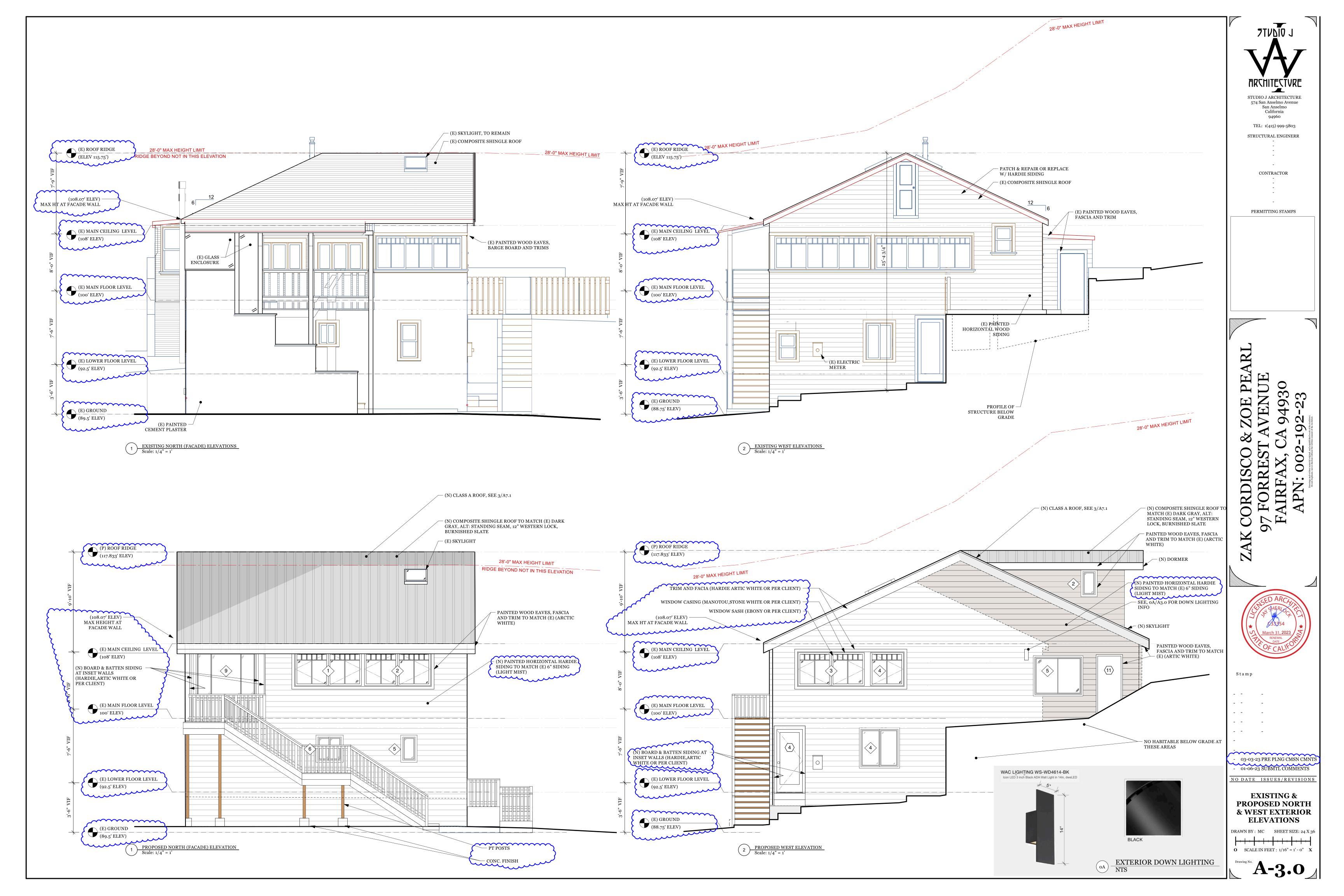
NOTE: THE ADU IS EXISTING, TO REMAIN. THE ADU IS NOT A PART OF THE PROPOSED PROJECT TO BE ACTED UPON BY THE PLANNING COMMISSION, BUT REQUIREDS A MISISTERIAL BULIDING PERMIT APPROVAL

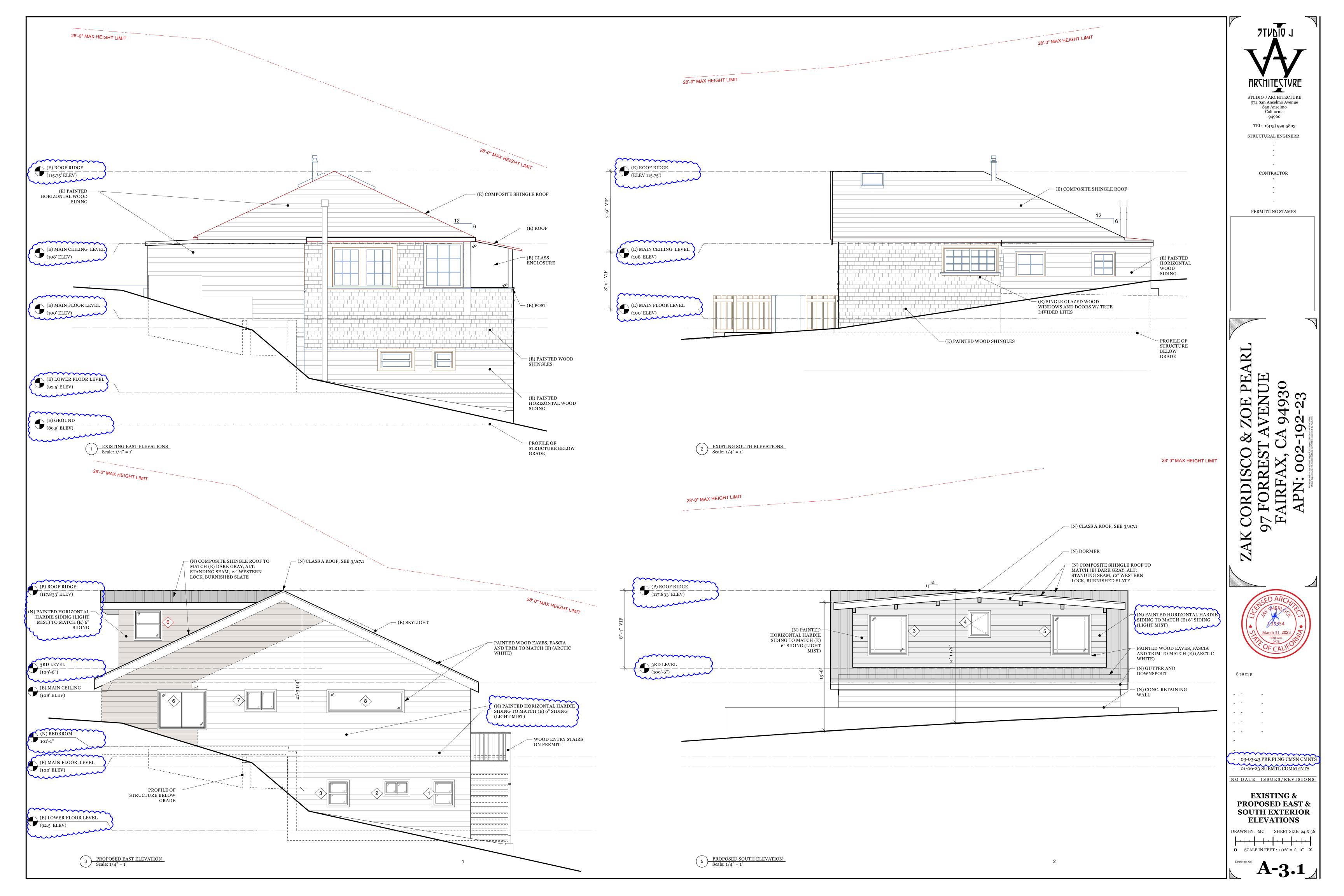
# **GENERAL NOTES**

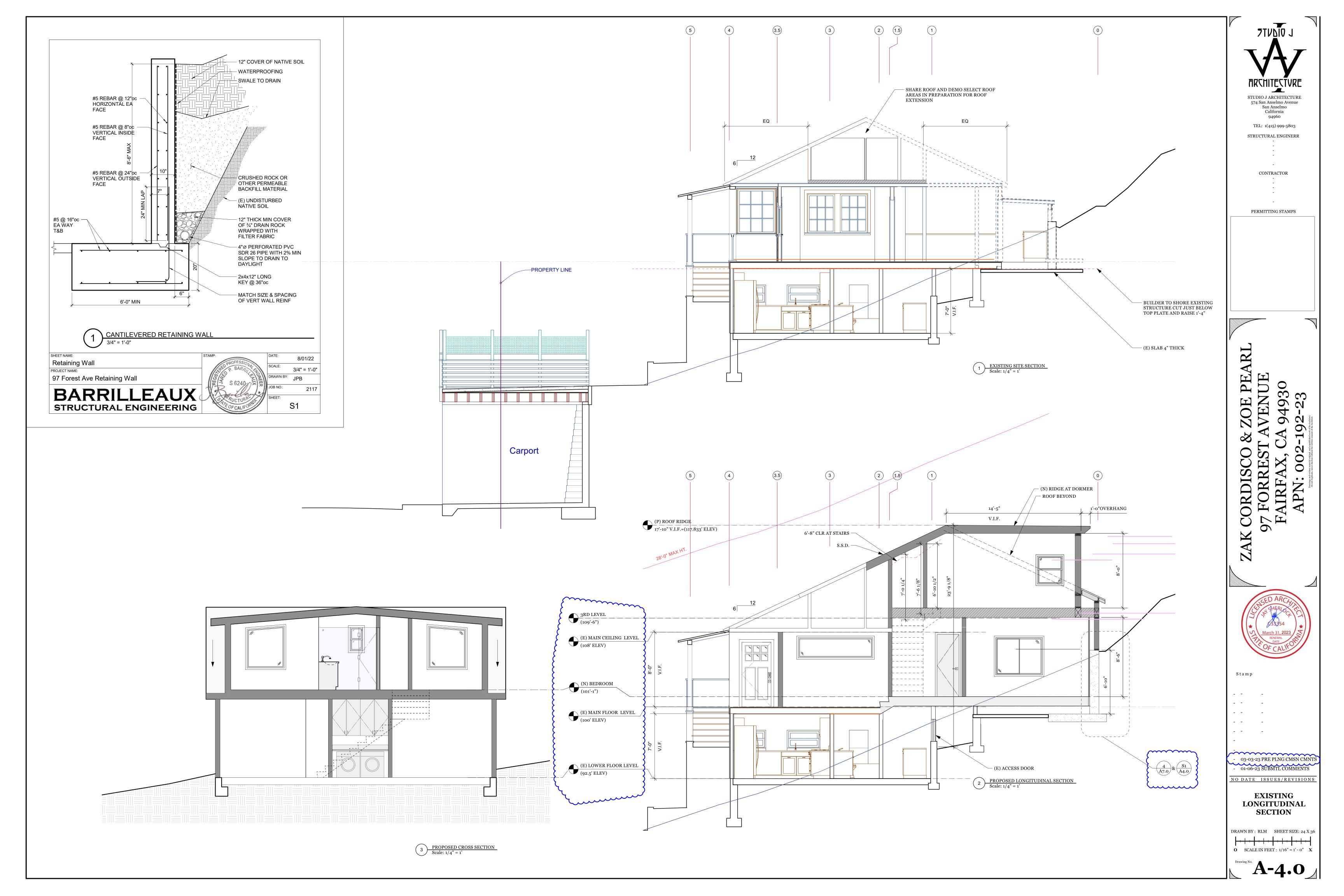
- A FIRE SPRINKLER SYSTEM SHALL BE INSTALLED THROUGHOUT BOTH BUILDINGS WHICH COMPLIES WITH THE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13-D AND LOCAL STANDARDS. SEPARATE DEFERRED PERMITS SHALL BE REQUIRED FOR THESE SYSTEMS. PLANS AND SPECIFICATIONS FOR THE SYSTEMS SHALL BE SUBMITTED BY AN INDIVIDUAL OR FIRM LICENSED TO DESIGN AND /OR DESIGN-BUILD SPRINKLER SYSTEMS.
- ALL SMOKE DETECTORS IN THE RESIDENCE SHALL BE PROVIDED WITH AC POWER AND BE INTERCONNECTED FOR SIMULTANEOUS ALARM. DETECTORS SHALL BE LOCATED IN EACH SLEEPING ROOM, OUTSIDE OF SLEEPING ROOMS CENTRALLY LOCATED IN THE CORRIDOR AND OVER THE CENTER OF ALL STAIRWAYS WITH A MINIMUM OF ONE DETECTOR PER STORY OF THE OCCUPIED PORTION OF THE RESIDENCE.

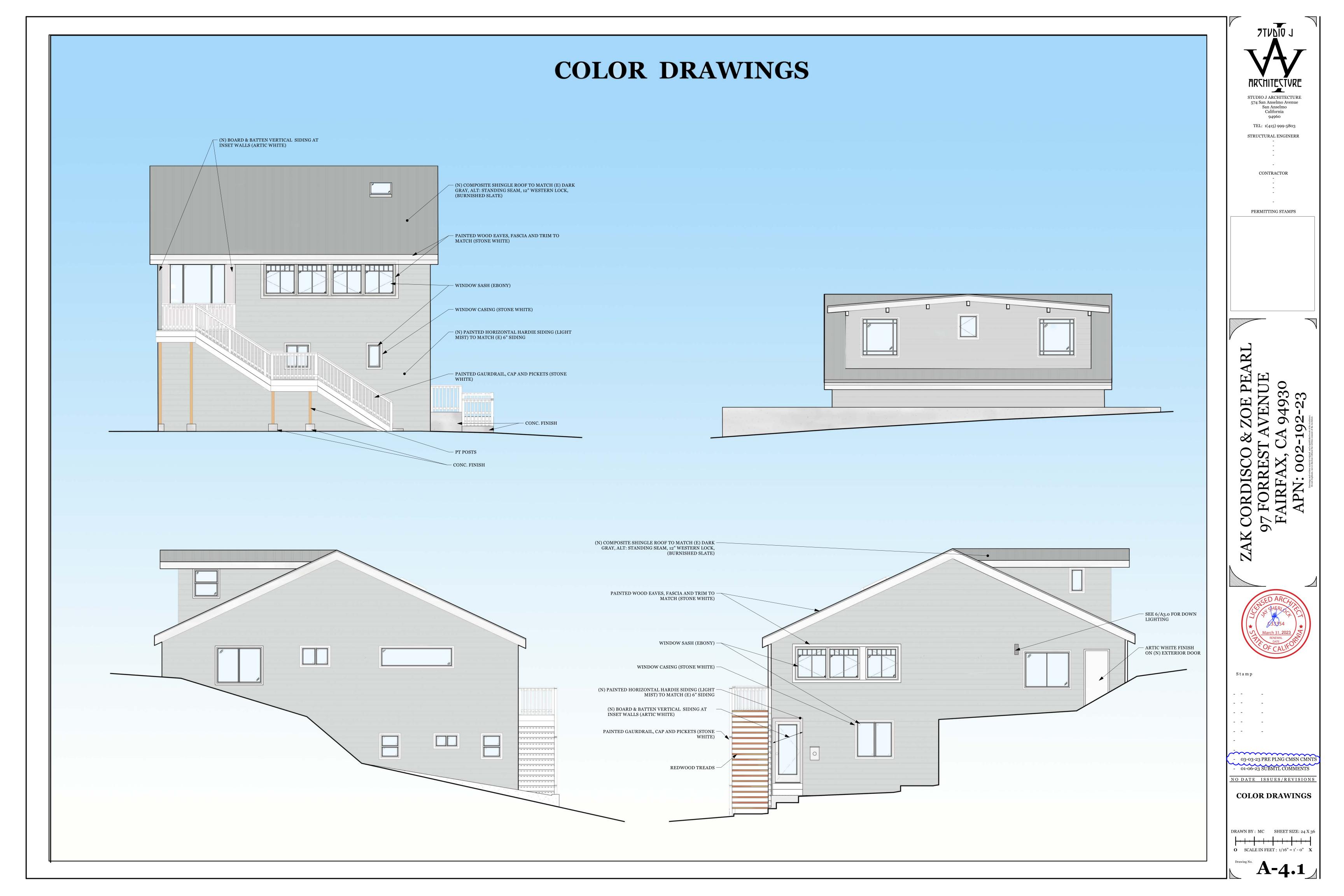


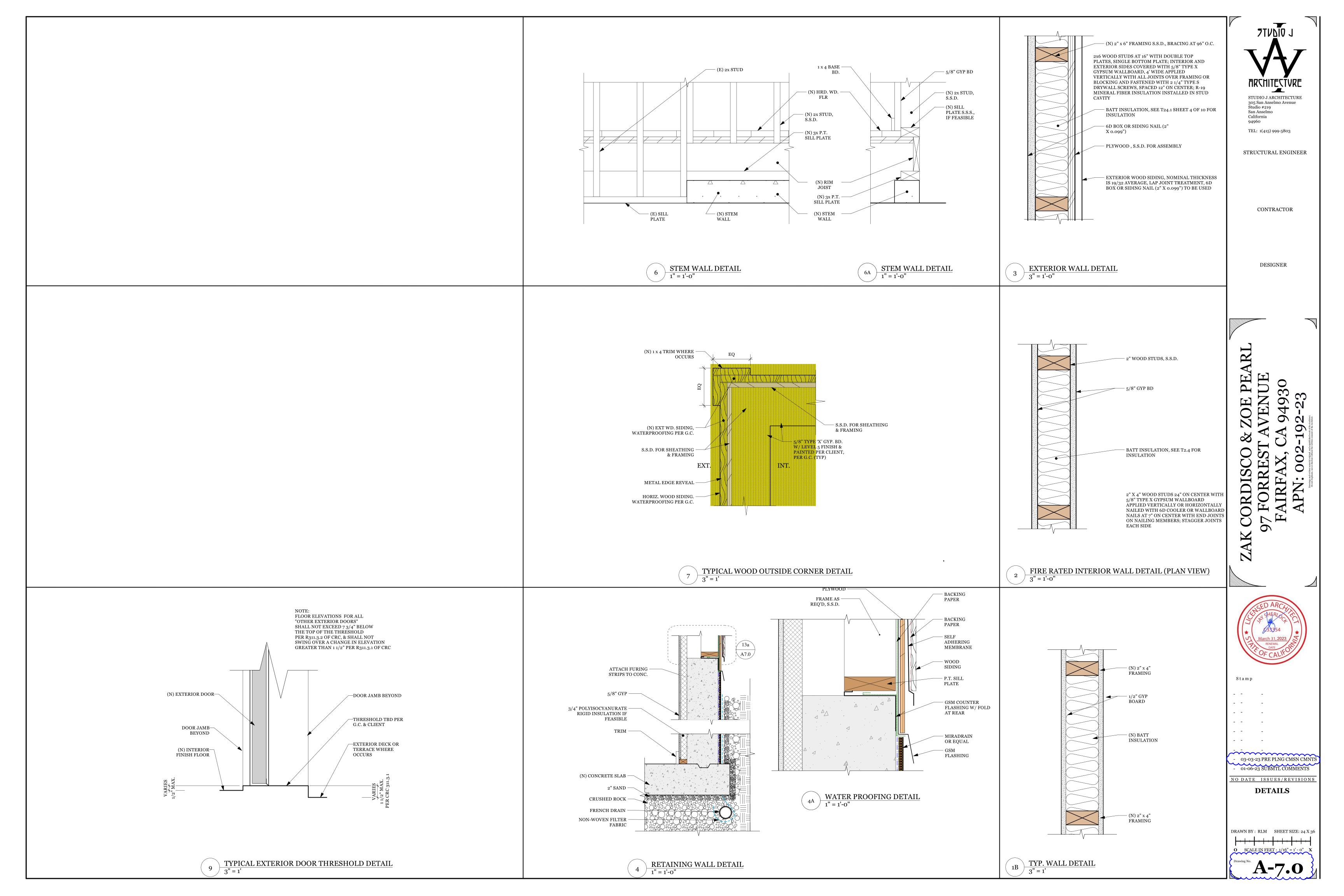


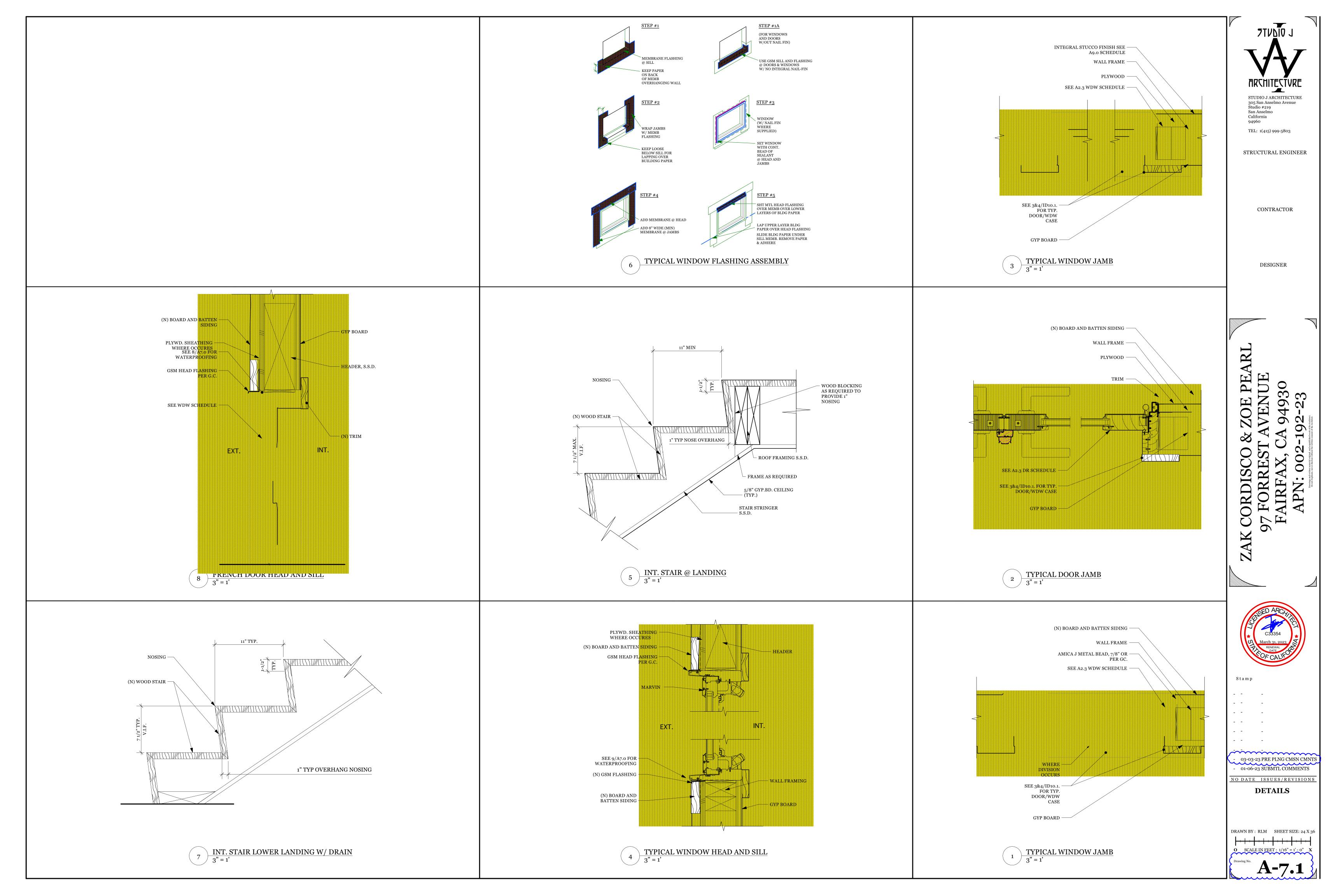


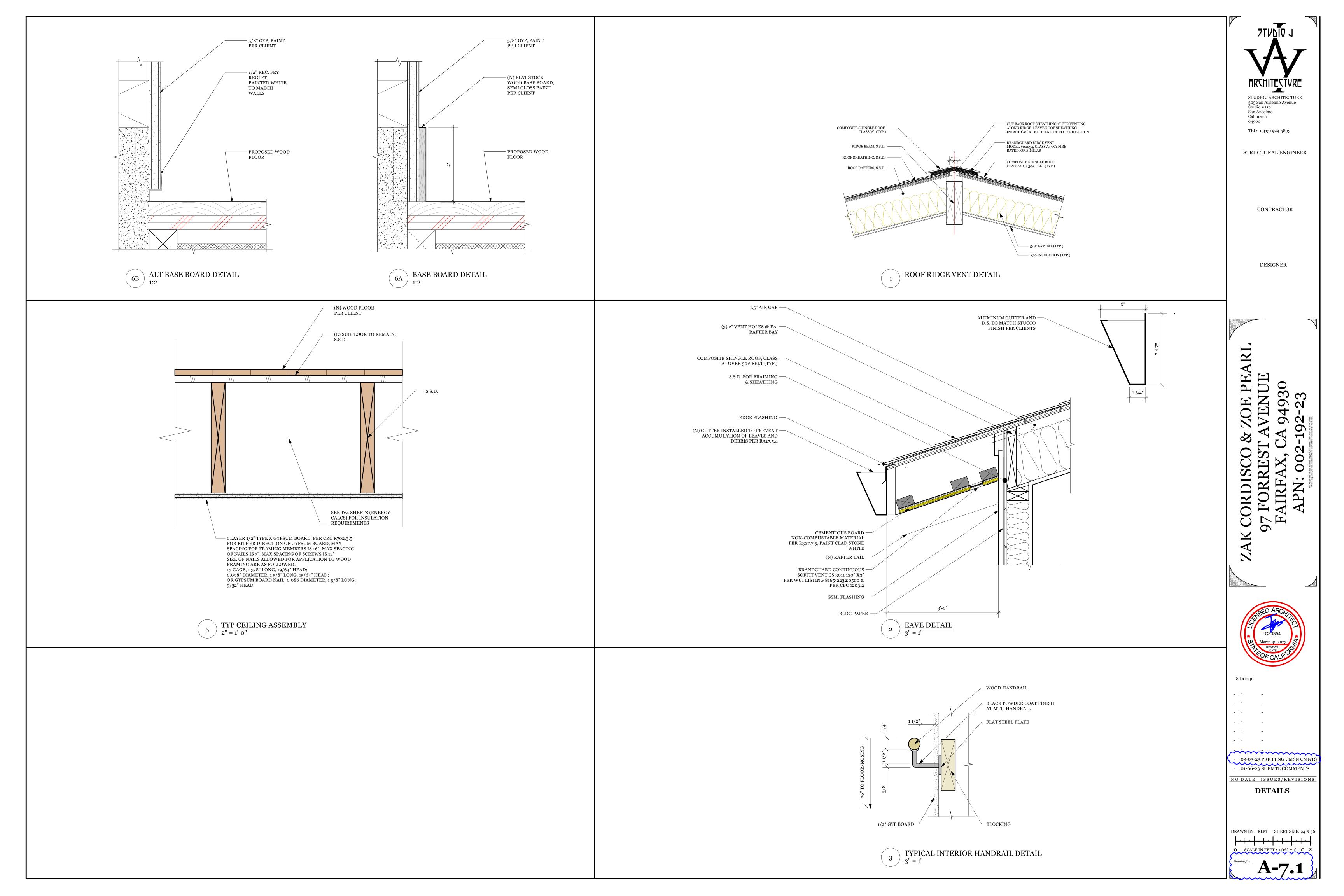












CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

GENER	AL INFORMATION				
01	Project Name	97 Forrest Ave			
02	Run Title	Title 24 Analysis			
03	Project Location	97 Forrest Ave			
04	City	Fairfax	05	Standards Version	2019
06	Zip code	94930	07	Software Version	EnergyPro 8.3
08	Climate Zone	2	09	Front Orientation (deg/ Cardinal)	15
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionAlteration	13	Number of Bedrooms	4
14	Addition Cond. Floor Area (ft <sup>2</sup> )	834	15	Number of Stories	3
16	Existing Cond. Floor Area (ft <sup>2</sup> )	1546	17	Fenestration Average U-factor	0.61
18	Total Cond. Floor Area (ft²)	2380	19	Glazing Percentage (%)	12.27%
20	ADU Bedroom Count	1	21	ADU Conditioned Floor Area	651
22	Is Natural Gas Available?	Yes			

COMPLIANCE RE	SULTS
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	Building does not incorporate Special Features

	ENERGY USE SUMMARY											
Energy Use (kTDV/ft <sup>2</sup> -yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement								
Space Heating	58.87	59.58	-0.71	-1.2								
Space Cooling	25.57	16.53	9.04	35.4								
IAQ Ventilation	1.23	1.23	0	0								
Water Heating	26.89	26.89	0	0								
Self Utilization/Flexibility Credit	n/a	0	0	n/a								
Compliance Energy Total	112.56	104.23	8.33	7.4								

Registration Number: 422-P010167485A-000-000-0000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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Schema Version: rev 20200901

CERTIFICATE	OF COMPLI	ANCE												CF1R-PRF-01I
Project Nam	e: 97 Forres	t Ave						Calcul	ation Date/Tim	<b>e:</b> 2022-10-2	4T11:55:	04-07:00		(Page 4 of 13
Calculation	Description:	Title 24	Analysis					Input	File Name: 97 F	orrest Ave.ril	od19x			
OPAQUE SUR	FACES													
01	02	2		03	04	05	;	06	07	08		09	10	11
Name	Zoı	ne	Cons	truction	Azimuth	Orient	ation Gro	ss Area (ft <sup>2</sup> )	Window and Door Area (ft2)	Tilt (deg)	Wa	II Exceptions	Status	Verified Existing Condition
Undergrour Wall	Addition	n Main		crete Wall v/R-9	n/a	n/a	а	150	n/a	n/a			New	n/a
Undergrour Wall 2	nd Existing AD		ver 6 Concrete Wall		n/a	n/a	а	90	n/a	n/a			New	n/a
To Existing m	ain Additio	on Up	_	loor No wlspace	n/a	n/a	э	333	n/a	n/a			New	n/a
To Add Mai	n Additio	on Up		loor No wlspace	n/a	n/a	a	250	n/a	n/a			New	n/a
To ADU	Existing	g Main	_	loor No wlspace	n/a	n/a	a	651	n/a	n/a			New	n/a
To ADU 2	Additio	n Main	R-0 Floo	· Crawlspac	e n/a	n/a	а	468	n/a	n/a			New	n/a
OPAOLIE SLIR	FACES - CATH	EDRAL C	FILINGS											
01	02		)3	04	05	06	07	08	09	10	11	12	13	14
Name	Zone	Const	ruction	Azimuth	Orientation	Area (ft <sup>2</sup> )	Sk <mark>y</mark> light Are <mark>a</mark> (ft <sup>2</sup>		(x Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition	Existing Construction
New Roof	Addition Up	ı	Roof No ttic	15	Front	583	0	4	0.1	0.85	No	New	n/a	
Existing Roof: Altered	Existing Main	R-30 Ro	of Attic1	15	Front	7.1	7	6	0.1	0.85	No		No	
New Roof 2	Addition Main		Roof No	15	Front	99	11	4	0.1	0.85	No	New	n/a	

Registration Number: 422-P010167485A-000-000-0000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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Ventilated 6

05

(x in 12) Reflectance Emittance

0.1

Roof

01

Attic Existing Main

02

Construction

Attic RoofExisting Main

07

Radiant

Barrier

06

Roof

0.85

08

Cool Roof

Verified Existing

Condition

CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
NO SPECIAL FEATURES REQUIRED

HERS FEATURE SUMMARY	
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer ana detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry	lysis. Additional
Ruilding-level Verifications:	

-- None - Heating System Verifications:
 Verified heat pump rated heating capacity
 HVAC Distribution System Verifications:
 Duct leakage testing
 Domestic Hot Water System Verifications:

Indoor air quality ventilation

**Verified Existing Conditions** 

Cooling System Verifications:

-- None --

BUILDING - FEATURES INFORMA	ATION					
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft <sup>2</sup> )	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
97 Forrest Ave	2380	1	4	4	0	1

ZONE INFORMATION							
01	02	03	04	05	06	07	
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2	
Addition Up	Conditioned	FAU1	583	8	DHW Sys 1	N/A	
Existing Main	Conditioned	FAU1	895	8	DHW Sys 1	N/A	
Addition Main	Conditioned	FAU1	251	8	DHW Sys 1	N/A	
Existing lower ADU	Conditioned	FAU2	651	7	DHW Sys 1	N/A	

Registration Number: 422-P010167485A-000-000-00000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Date/Time: 2022-10-24T11:55:04-07:00 (Page 5 of 13)

Calculation Description: Title 24 Analysis

Input File Name: 97 Forrest Ave.ribd19x

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Туре	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft <sup>2</sup> )	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Conditio
Window New	Window	Left	Left	105			1	7.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window New 2	Window	Rear	Back	195			1	37	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window New 3	Window	Right	Right	285			1	3	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window Alt	Window	Front:	Front	15			1	57	1.04	Table 110.6-A	0.76	Table 110.6-B	Bug Screen	Altered	Yes
Window Alt 2	Window	Left:	Left	105		$\leq N \sqrt{N}$	1	16	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	Yes
Window Alt 3	Window	Right 2	Right	285		Z	1	20	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	Yes
Window Alt 4	Window	Right 2	Right	285		رلىك	1	57	1.04	Table 110.6-A	0.76	Table 110.6-B	Bug Screen	Altered	Yes
Window New 4	Window	Front 2	Front	15			1	24.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window Existing	Window	Front: 2	Front	15			1	6	0.55	Table 110.6-A	0.67	Table 110.6-B	Bug Screen	Existing	No
Window Alt 5	Window	Front: 2	Front	15	Н	F	1	12	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	Yes
Window Alt 6	Window	Left: 2	Left	105			1	18	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	Yes
Window Alt 7	Window	Right 4	Right	285			1	16	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	Yes
Skylight	Skylight	Existing Roof: Altered	Front	15			1	7	0.55	Table 110.6-A	0.67	Table 110.6-B	None	Existing	No
Skylight 2	Skylight	New Roof 2	Front	15			1	11	0.39	NFRC	0.29	NFRC	None	New	n/a

SLAB FLOORS												
01	02	02 03 04 05		06	07	08	09	10				
Name	Zone	Area (ft <sup>2</sup> )	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated	Status	Verified Existing Condition			
Slab-on-Grade	Existing lower ADU	651	134	none	0	80%	No	Existing	No			

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CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2022-10-24T11:55:04-07:00 (Page 3 of 13)

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft <sup>2</sup> )	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Front	Addition Up	R-21 Wall	15	Front	162	0	90	none	New	n/a
Left	Addition Up	R-21 Wall	105	Left	168	7.5	90	none	New	n/a
Rear	Addition Up	R-21 Wall	195	Back	216	37	90	none	New	n/a
Right	Addition Up	R-21 Wall	285	Right	168	3	90	none	New	n/a
Front:	Existing Main	R-0 Wall	15	Front	166.5	57	90	none	Existing	No
Left:	Existing Main	R-0 Wall	105	Left	99	16	90	none	Existing	No
Left: new	Existing Main	R-21 Wall	105	Left	162	0	90	none	New	n/a
Right 2	Existing Main	R-0 Wall	285	Right	261	77	90	none	Existing	No
Front 2	Addition Main	R-21 Wall	15	Front	103	24.5	90	Ex. w/ Siding	New	n/a
Left 2	Addition Main	R-21 Wall	105	Left	90	0	90	Ex. w/ Siding	New	n/a
Rear 2	Addition Main	R-21 Wall	195	Back	120	0	90	none	New	n/a
Right 3	Addition Main	R-21 Wall	285	Right	95	00	90	Ex. w/ Siding	New	n/a
Front: 2	Existing lower ADU	R-0 Wall	15	Front	210	18	90	none	Existing	No
Left: 2	Existing lower ADU	R-0 Wall	105	Left	154	18	90	none	Existing	No
Rear:	Existing lower ADU	R-0 Wall	195	Back	120	0	90	none	Existing	No
Right 4	Existing lower ADU	R-0 Wall	285	Right	154	16	90	none	Existing	No
Existing Roof: Altered 2	Existing Main	R-30 Roof Attic	n/a	n/a	428	n/a	n/a		Altered	Yes
Raised Floor	Existing Main	R-19 Floor Crawlspace	n/a	n/a	244	n/a	n/a		Altered	No
Raised Floor 2	Addition Main	R-19 Floor Crawlspace	n/a	n/a	251	n/a	n/a		New	n/a

Registration Number: 422-P010167485A-000-000-0000000-0000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

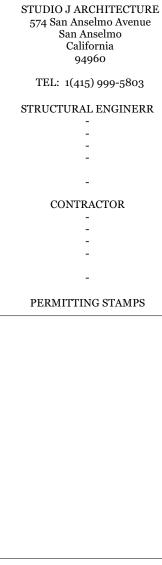
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco
R-0 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco
R-30 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O. C.	R-30	None / None	0.036	Roofing: Light Roof (Asphalt Shing Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x12 Inside Finish: Gypsum Board
R-0 Roof Attic1	Cathedral Ceilings	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.494	Roofing: Light Roof (Asphalt Shing Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-30 Roof Attic1	Cathedral Ceilings	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.042	Roofing: Light Roof (Asphalt Shing Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x4 Inside Finish: Gypsum Board
R-38 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O. C.	R-38	None / None	0.03	Roofing: Light Roof (Asphalt Shingl Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-38 / 2x12 Inside Finish: Gypsum Board

Registration Number: 422-P010167485A-000-000-0000000-0000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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ZAK CORDISCO & ZOE PEARI 97 FORREST AVENUE FAIRFAX, CA 94930 APN: 002-192-23



Stamp

- - -- - -

- 02-07-23 PRE PLNG CMSN CMNTS - 01-06-23 SUBMTL COMMENTS

NO DATE ISSUES/REVISIONS

TITLE 24

DRAWN BY: RLM SHEET SIZE: 24 X 36

O SCALE IN FEET: 1/16" = 1' - 0" X

T24.1

Project Name: 97 Forres	t Ave		Calcul	ation Date/Tir	me: 2022-10-24T1	1:55:04-07	00 (Page 7 of 13)
Calculation Description:			Input	File Name: 97	Forrest Ave.ribd19	Эх	
OPAQUE SURFACE CONSTR				1	,		
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Attic RoofExisting Main	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.05	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6
R-0 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
R-0 Floor No Crawlspace	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-O	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board
R-0 Floor Crawlspace	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-0	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board
6 Concrete Wall w/R-9	Underground Walls	Concrete / ICF / Brick	None	n/a	R-9 / None	0.127	Inside Finish: Gypsum Board Insulation/Furring: R-9 / 1.5in. wd Mass Layer: 6 in. Concrete

CERTIFICATE OF COMPLIANCE

Registration Number: 422-P010167485A-000-000-00000000-0000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CERTIFICATE OF COM	<b>IPLIANCE</b>									CF1R-PRF-01		
Project Name: 97 Forrest Ave Calculation Date/Time: 2022-10-24T11:55:04-07:00												
Calculation Descript	Calculation Description: Title 24 Analysis Input File Name: 97 Forrest Ave.ribd19x											
01	02	03	04	05	06	07	08	09	10	11		
HVAC - HEAT PUMPS	•	•		•	•			•	V.			
				Heating		Coc	oling	Zonally	Compressor			

01	UZ	05	04	US	06	07	08	09	10	11
HVAC - HEAT PUMPS										
Name	System Type	Number of Units		Heating		Coo	ling	Zonally	Compressor	HERS Verification
Name	System Type	Number of Onits	HSPF/COP	Cap 47	Cap 17	SEER	EER/CEER	Controlled	Туре	HERS VEHICACION
Heat Pump System 2	Ductless MiniSplit HP	1	8.5	24000	20000	16	13	Not Zonal	Single Speed	Heat Pump System 2-hers-htpump
HVAC HEAT PUMPS - HE	RS VERIFICATION									

05

Naı	me	Verified	Airflow	Airflow T	arget	Verifie	ed EER	Verif	ied SEER	1	d Kefrigerant Charge	Verified	I HSPF	Cap 4	٠,	Cap 17
Heat Pum 2-hers-h	np System htpump	Not Red	quired	0		Not Re	quired	Not I	Required		No	No	)	Yes		Yes
HVAC - DIS	VAC - DISTRIBUTION SYSTEMS															
01		02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	,			Duct Ins	. R-value	Duct Lo	ocation	Surfac	e Area							
Name		vne	Design	Sunnly	Return	Supply	Return	Sunnly	Return	Bypass	Duct	HERS	Status	Verified Existing	Existing Distribution	New Ducts

				Duct Ins. R-value		Duct Location		Surfa <mark>ce Area</mark>		DC					
Name	Туре	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft
Air Distributi on System 1	Unconditioned attic	Non- Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distributi on System 1-hers- dist	New	n/a	n/a	n/a

Registration Number: 422-P010167485A-000-000-0000000-0000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Date/Time: 2022-10-24T11:55:04-07:00 (Page 8 of 13)

<b>Calculation Description:</b>	Title 24 Analysis		Input I	Эх			
OPAQUE SURFACE CONSTR	RUCTIONS						
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
6 Concrete Wall	Underground Walls	Concrete / ICF / Brick	None	n/a	None / None	1.048	Inside Finish: Gypsum Board Mass Layer: 6 in. Concrete

BUILDING ENVELOPE - HERS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

WATER HEATING S	YSTEMS								
01	02	03	04	05	06	07	08	09	10
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification	Status	Verified Existing Condition	Existing Water Heating System
DHW Sys 1	Domestic Hot Water (DHW)	Standard Distribution System	DHW Heater 1 (1)	n/a	None	n/a	Existing	No	

WATER HEAT	EDC												
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
DHW Heater 1	Gas	Small Storage	1	50	0.6-EF	<= 75 kBtu/hr	0	78	n/a	n/a	n/a	Existing	No

Registration Number: 422-P010167485A-000-000-00000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.2.000 Report Generated: 2022-10-24 11:56:39

Schema Version: rev 20200901

CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

HVAC DISTRIBUTION	- HERS VERIFICATION							
01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS			
01	02	03	04
Name	Туре	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC <mark>Fa</mark> n	0.45	n/a

IAQ (INDOOR AIR QUALITY) FANS							
	01	02	03	04	05	06	07
	Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness - SRE	IAQ Recovery Effectiveness - ASRE	HERS Verification
	SFam ADU IAQVentRpt	35	0.35	Exhaust	n/a	n/a	Yes

HERS RATER VERIFICATION OF EXISTING CONDITIONS								
OPAQUE SURFACES - VERIFIED AND A	LTERED							
01	02	03	04	05				
Name	Zone	Existing Construction	Surface Type	Total Cavity R-value				

Existing Main

R-0 Roof Attic

**Wood Framed Ceiling** 

No insulation

Existing Roof: Altered 2

Registration Number: 422-P010167485A-000-000-0000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.2.000 Report Generated: 2022-10-24 11:56:39

Schema Version: rev 20200901

CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Date/Time: 2022-10-24T11:55:04-07:00 (Page 9 of 13)

Calculation Description: Title 24 Analysis Input File Name: 97 Forrest Ave.ribd19x

Compact Distribution

Not Required

Parallel Piping

Not Required

WATER HEATING - HERS VERIFICATION

DHW Sys 1 - 1/1

Pipe Insulation

Not Required

, .			•			•		•	,	
PACE CONDITIONING SYSTER	MS									
01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
FAU1	Heating and cooling system other	Heating Component 1	Cooling Component 1	HVAC Fan 1	Air Distribution System 1	n/a	Existing	No	1	1
FAU2	Heat pump heating cooling	Heat Pump System 2	Heat Pump System 2	n/a	n/a	Setback	New	No	1	1

05
Compact Distribution

Type

HVAC - HEATING UNIT TYPES	CHE	ERS	
01	02	03	04
Name	System Type	Number of Units	Heating Efficiency
Heating Component 1	Central gas furnace	1	AFUE-80

IVAC - COOLING UNIT TYPES								
01	02	03	04	05	06	07	08	
Name	System Type	Number of Units	Efficiency EER/CEER	Efficiency SEER	Zonally Controlled	Mulit-speed Compressor	HERS Verification	
Cooling Component 1	No Cooling	1	n/a	n/a	Not Zonal	Single Speed	n/a	

Registration Number: 422-P010167485A-000-000-0000000-0000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.2.000 Report Generated: 2022-10-24 11:56:39

Schema Version: rev 20200901

CERTIFICATE OF COMPLIANCE

Project Name: 97 Forrest Ave

Calculation Description: Title 24 Analysis

01	02	03	04	05	06	07	08	09	10
Name	Side of Building	Width (ft)	Width (ft)	Multiplier	Area (ft2)	U-factor	SHGC	Name	Surface (Orientation- Azimuth)
Window Alt	Front:	n/a	n/a	1	57	1.04	0.76	Standard bug screens	15
Window Alt 2	Left:	n/a	n/a	1	16	1.04	0.76	Standard bug screens	105
Window Alt 3	Right 2	n/a	n/a	1	20	1.04	0.76	Standard bug screens	285
Window Alt 4	Right 2	n/a	n/a	1	57	1.04	0.76	Standard bug screens	285
Window Alt 5	Front: 2	n/a	n/a	1	12	1.04	0.76	Standard bug screens	15
Window Alt 6	Left: 2	n/a	n/a	-  E E	18	1.04	0.76	Standard bug screens	105
Window Alt 7	Right 4	n/a	n/a	1	16	1.04	0.76	Standard bug screens	285

Registration Number: 422-P010167485A-000-000-000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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Schema Version: rev 20200901



08

**Shower Drain Water** 

Heat Recovery

Not Required

Central DHW

Distribution

Not Required

**Recirculation Control** 

Not Required

ZAK CORDISCO & ZOE PEARL 97 FORREST AVENUE FAIRFAX, CA 94930 APN: 002-192-23



Stamp

- 02-07-23 PRE PLNG CMSN CMNTS - 01-06-23 SUBMTL COMMENTS

NO DATE ISSUES/REVISIONS

TITLE 24

DRAWN BY: RLM SHEET SIZE:  $24 \times 36$ O SCALE IN FEET: 1/16" = 1' - 0" X

T24.2

CERTIFICATE OF COMPLIANCE	CF1R-PRF-01E				
Project Name: 97 Forrest Ave	Calculation Date/Time: 2022-10-24T11:55:04-07:00 (Page 13 of 13)				
Calculation Description: Title 24 Analysis	Input File Name: 97 Forrest Ave.ribd19x				
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT					
1. I certify that this Certificate of Compliance documentation is accurate and complete.					
Documentation Author Name: Jon Mitguard	Documentation Author Signature:  Jon Mitguard				
Company: Aurora Building Performance	Signature Date: 10/24/2022				
Address: 514 CSreet	CEA/ HERS Certification Identification (If applicable): RCN13475				
City/State/Zip: San Rafael, CA 94901	Phone: (451) 457-9778				
RESPONSIBLE PERSON'S DECLARATION STATEMENT					
, , ,	Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  e are consistent with the information provided on other applicable compliance documents, worksheets,				
Responsible Designer Name:  Jay Sherlock	Responsible Designer Signature:  Jay Sherlock				
Company: Studio JArchitecture	Date Signed: 10/24/2022				
Address: 305 San Anselmo	License:				
City/State/Zip: San Anselmo, CA 94960	Phone: (415) 810-6324				

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Registration Number: 422-P010167485A-000-000-0000000-00000 Registration Date/Time: 10/24/2022 16:25 HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.2.000 Report Generated: 2022-10-24 11:56:39

Schema Version: rev 20200901

CERTIFICATE OF VERIFICATION		CF3R-EXC-20-H
Existing Conditions For Residential Alteration	(Page 3 of 4)	
H. Water Heating		
	This section does not apply to this project.	
. HVAC - Heating Systems		
	This section does not apply to this project.	
I. HVAC - Cooling Systems		
	This section does not apply to this project.	
C. HVAC Distribution		
	This secti <mark>on does not apply</mark> to this project.	
Determination of HERS Verification Compliance		
	ndicate compliance with the specified verification protocol requirements in order for this	Certificate of Verification as a whole to

Registration Number: 422-P010167485A-000-001-X20000A-0000 Registration Date/Time: 2022-10-24 16:42:14 HERS Provider: CHEERS NOTICE: This document has been generated by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Report Version: 2019.1.006

Schema Version: rev 20210501

Report Generated: 2022-10-24 16:52:11

CERTI	ERTIFICATE OF VERIFICATION CF3R-EXC-20-H							
Existi	existing Conditions For Residential Alterations (Page 1 of 4)							
Projec	ct Name:	97 Forrest Ave	CF1R-PRF Calculation Date/Time:					
CF1R-	PRF Calculation Description:	97 Forrest Ave	CF1R-	PRF Input File Name:	97 Forrest Ave - AnalysisResults-BEES.xml			
A. Gen	A. General Information							
01	Project Name	97 Forrest Ave						
02	Calculation Description	AdditionAlteration						
03	Project Location	97 Forrest Ave	97 Forrest Ave					
04	CA City	Fairfax	05	Standards Version	Compliance 2019			
06	Zip code	94930	07	Software Version	EnergyPro 8.3			
08	Climate Zone	2	09	Front Orientation (deg/Cardinal)	15			
10	Building Type	Single family	11	Number of Dwelling Units	1			
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	4			
14	New Conditioned Floor Area (ft <sup>2</sup> )	834	15	Number of Stories in Building	3			
16	Existing Conditioned Floor Area (ft <sup>2</sup> )	1546	17	Fenestration Average U-factor	0.61			
18	Total Conditioned Floor Area (ft <sup>2</sup> )	2380	19	Glazing Percentage (%)	12.3			

В. Ор	aque Surfaces							
	01	02	03	04	05	06	07	08
Name		Zone	Existing Conditions	Surface Type	Azimuth	Orientation	Total Cavity R-value	Verification
Existing Roof: Altered 2		Existing Main	R-0 Roof Attic	Ceilings (below attic)	n/a	n/a	n/a	Pass
09 Verification Status			Pass - all existi	ng conditions have been v	erified			
10 Correction Notes								
Pogic	Posictration Number: 422 P0101674954 000 001 Y200004 0000 Posictration Date/Time: 2022 10 24 16:42:14 HERS Provider: CHEERS							

Registration Number: 422-P010167485A-000-001-X20000A-0000
Registration Date/Time: 2022-10-24 16:42:14
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CA Building Energy Efficiency Standards - 2019 Residential Compliance
Report Version: 2019.1.006
Report Version: rev 20210501
Residential Compliance

Existing Conditions For Residential Alterations							
Documentation Author's Declaration Statement							
1. I certify that this Certificate of Verification documentation	is accurate and complete.						
Documentation Author Name: Jon Mitguard	Documentation Author Signature:  Tow Mitaward						
Company: Aurora Building Performance	Date Signed: 2022-40-24						
Address: 514 C Street	CEA/ HERS Certification Identification (if applicable): RCN13475						
City/State/Zip: San Rafael CA 94901	Phone: (451) 457-9778						
Responsible Person's Declaration statement							
identified on this Certificate of Verification and determined these existing existing conditions compliance credit unless reported as not qualified in v  4. I will ensure that a registered copy of this Certificate of Verification shall be							
HERS Rater Information	HEERS						
HERS Rater Company Name: Aurora Building Performance							
Responsible Rater Name: Jon Mitguard	Responsible Rater Signature:  Jow Mitguard  Mate Signed:						
Responsible Rater Certification Number w/ this HERS Provider:  RCN13475	Date Signed: 2022-10-24						

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Registration Number: 422-P010167485A-000-001-X20000A-0000

Registration Date/Time: 2022-10-24 16:4

CERTIFICATE OF VERIFICATION

Registration Number: 422-P010167485A-000-001-X20000A-0000
Registration Date/Time: 2022-10-24 16:42:14
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CA Building Energy Efficiency Standards - 2019 Residential Compliance
Report Version: 2019.1.006
Schema Version: rev 20210501
Registration Date/Time: 2022-10-24 16:42:14
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Schema Version: rev 20210501

CER	TIFICATE OF VERII	FICATION						CF3R-EXC-20-F
Exist	ting Conditions Fo	or Residential Alterat	ions					(Page 2 of 4
C. Ro	ofs							
				This section does not	apply to this project.			
D. W	indows							
	01	02	03	04	05	06	07	08
	Name	Azimuth	Multiplier	Area (ft <sup>2</sup> )	U-factor	SHGC	Exterior Shading	Verification
1	Window Alt	15	1	57	1.04	0.76	Standard bug screens	Pass
V	Vindow Alt 2	105	1	16	1.04	0.76	Standard bug screens	Pass
V	Vindow Alt 3	285	1	20	1.04	0.76	Standard bug screens	Pass
V	Vindow Alt 4	285	1	<mark>5</mark> 7	1.04	0.76	Standard bug screens	Pass
V	Vindow Alt 5	15	1	12	1.04	0.76	Standard bug screens	Pass
٧	Vindow Alt 6	105	1	18	1.04	0.76	Standard bug screens	Pass
V	Vindow Alt 7	285	1	16	1.04	0.76	Standard bug screens	Pass
09	Verification Status	S	Pass - all existin	g conditions have been v	erified			
10	Correction Notes			HE	E R S			
E. Do	oors							
				This section does not	apply to this project.			
F. Ov	erhangs and Fins							
				-1				
				This section does not	apply to this project.			

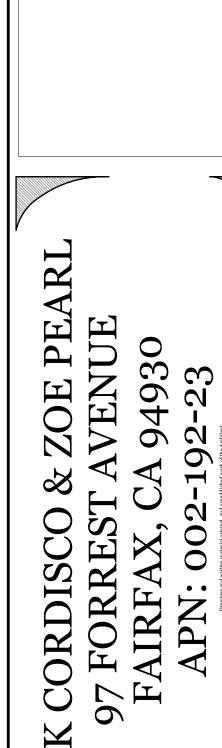
Registration Number: 422-P010167485A-000-001-X20000A-0000 Registration Date/Time: 2022-10-24 16:42:14 HERS Provider: CHEERS NOTICE: This document has been generated by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.006 Report Generated: 2022-10-24 16:52:11 Schema Version: rev 20210501

This section does not apply to this project.

G. Water Heaters

CF3R-EXC-20-H

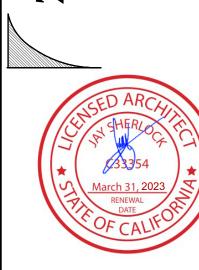


STUDIO J ARCHITECTURE 574 San Anselmo Avenue San Anselmo California

TEL: 1(415) 999-5803 STRUCTURAL ENGINERR

CONTRACTOR

PERMITTING STAMPS



Stamp

- - - -- - - -

- 02-07-23 PRE PLNG CMSN CMNTS- 01-06-23 SUBMTL COMMENTS

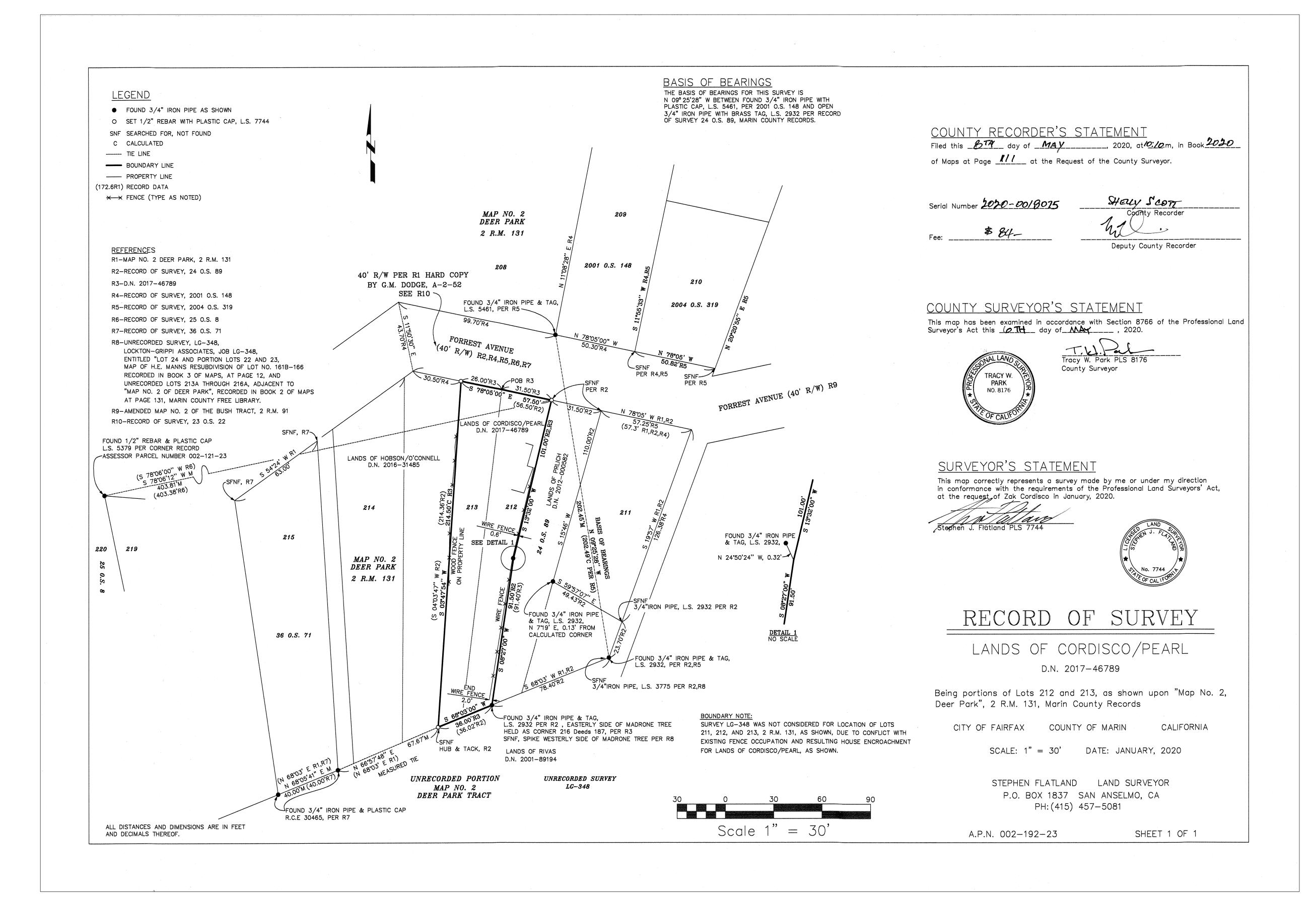
- 01-00-23 SUBMIL COMM

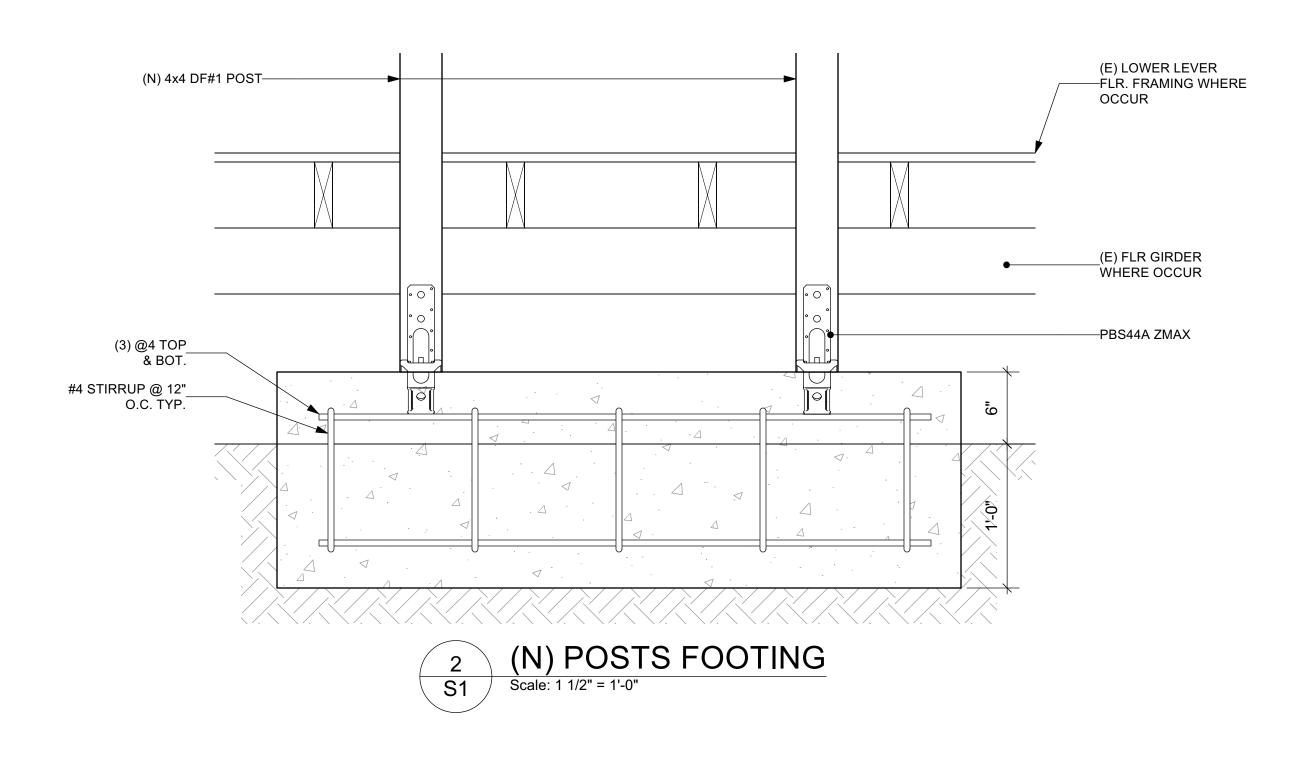
NO DATE ISSUES/REVISIONS

TITLE 24

DRAWN BY: RLM SHEET SIZE:  $24 \times 36$ O SCALE IN FEET: 1/16" = 1' - 0" X

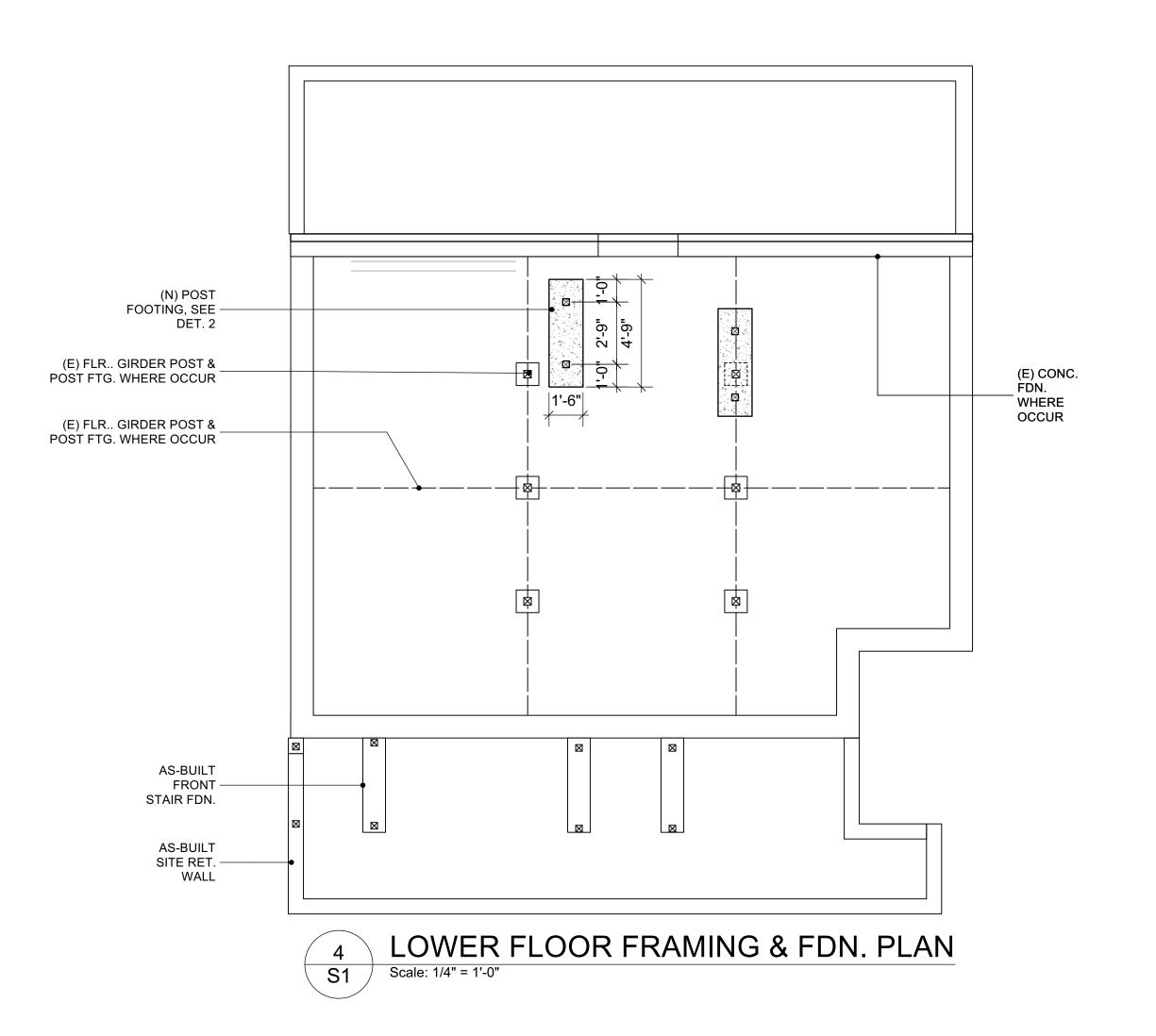
T24.3

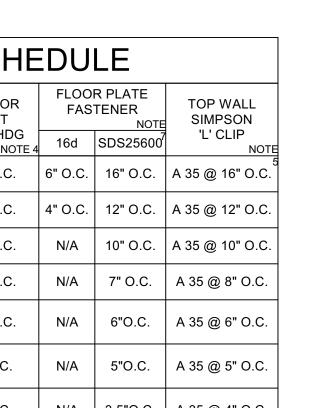




			SHEA	R WALL	SCHE	DU	LE	
WALL TYPE	WIND SHEAR CAPACITY	SEISMIC SHEAR CAPACITY	WALL SHEATHING	EDGE NAILING (E.N.)	ANCHOR BOLT		R PLATE TENER NOTE	TOP WALL SIMPSON
SYMBOL		PLF (ASD)		OR SCREWING NOTE 3	5/8"Ø HDG NOTE 4	16d	SDS25600 <sup>7</sup>	'L' CLIP NOT
	476	340	15/32" PLYWD.	10d @ 6" O.C.	32" O.C.	6" O.C.	16" O.C.	A 35 @ 16" O.C.
	714	510	15/32" PLYWD.	10d @ 4" O.C.	22" O.C.	4" O.C.	12" O.C.	A 35 @ 12" O.C.
	931	665	15/32" PLYWD.	10d @ 3" O.C.	18" O.C.	N/A	10" O.C.	A 35 @ 10" O.C.
	1218	770	15/32" PLYWD.	10d @ 2" O.C.	15" O.C.	N/A	7" O.C.	A 35 @ 8" O.C.
<u>4</u>	1428	1020	15/32" PLYWD. EA. SIDE	10d @ 4" O.C.	12" O.C.	N/A	6"O.C.	A 35 @ 6" O.C.
3/	1862	1330	15/32" PLYWD. EA. SIDE	10d @ 3" O.C.	9" O.C.	N/A	5"O.C.	A 35 @ 5" O.C.
-\frac{2}{2}-	2436	1740	15/32" PLYWD. EA. SIDE	10d @ 2" O.C.	7" O.C.	N/A	3.5"O.C.	A 35 @ 4" O.C.

- 1. SHEATHING: 15/32" (4 PLY. MIN.) CD, CC PLYWD OR OSB. w/ ALL EDGES BLOCKED.
- 2. NOT USED
- 3. TYPICAL FASTENERS: 10d COMMON w/ 12D PENETRATION MIN., NAIL FIELD @ 12" O.C. 4. 3x (or 2x w/ DBL. A.B.) AT PLATE AND 3x PANEL EDGES AT WALLS W/SHEAR > 300 LBS./FT. 5. OFFSET PANEL EDGES ON OPPOSITE SIDES OF WALL AND STAGGER PLATE SPLICE
- 6. ANCHOR BOLTS: HDG. (ASTM A-307) MIN. 7" EMBEDMENT, SPACING PER SCHED.
- W/ 3"x3"x.229" PLATE WASHER. 7. STAGGER 16d NAILS IN 2x, LAGS AT 3x PLATES WHEN NO SHEATHING CONTINUITY TO RIM JOIST.
- USE SDS25600 FOR 3x PLATE 8. PRE-DRILL 3/8" HOLES FOR LAG. PROVIDE WASHER, ADJUST LENGTH FOR 2" PENETRATION IN
- 9. CLIPS PLATE TO BLOCKS ONLY REQUIRED IF NO SHEAR SHEATHING CONTINUITY FROM WALL TO BLOCKING.





Engineer:

Seri Ngernwattana, PE 954 Castlewood Way Hayward, CA 94541 Tel:(510) 991-6890

SERI NGERNWATTANA, PE Structural & Civil Engineering

Exp. 9/30/2024

PROJECT:

Residence Addition & Remodel

97 Forest Ave. Fairfax, CA 94930 APN: 002-192-23

Owner:

Zak Cordisco & Zoe Pearl

97 Forest Ave. Fairfax, CA 94930

Architect:

STUDIO J ARCHITECTURE 547 San Anselmo Avenue San Anselmo CA 94960 TEL: 1 (415) 999-5803

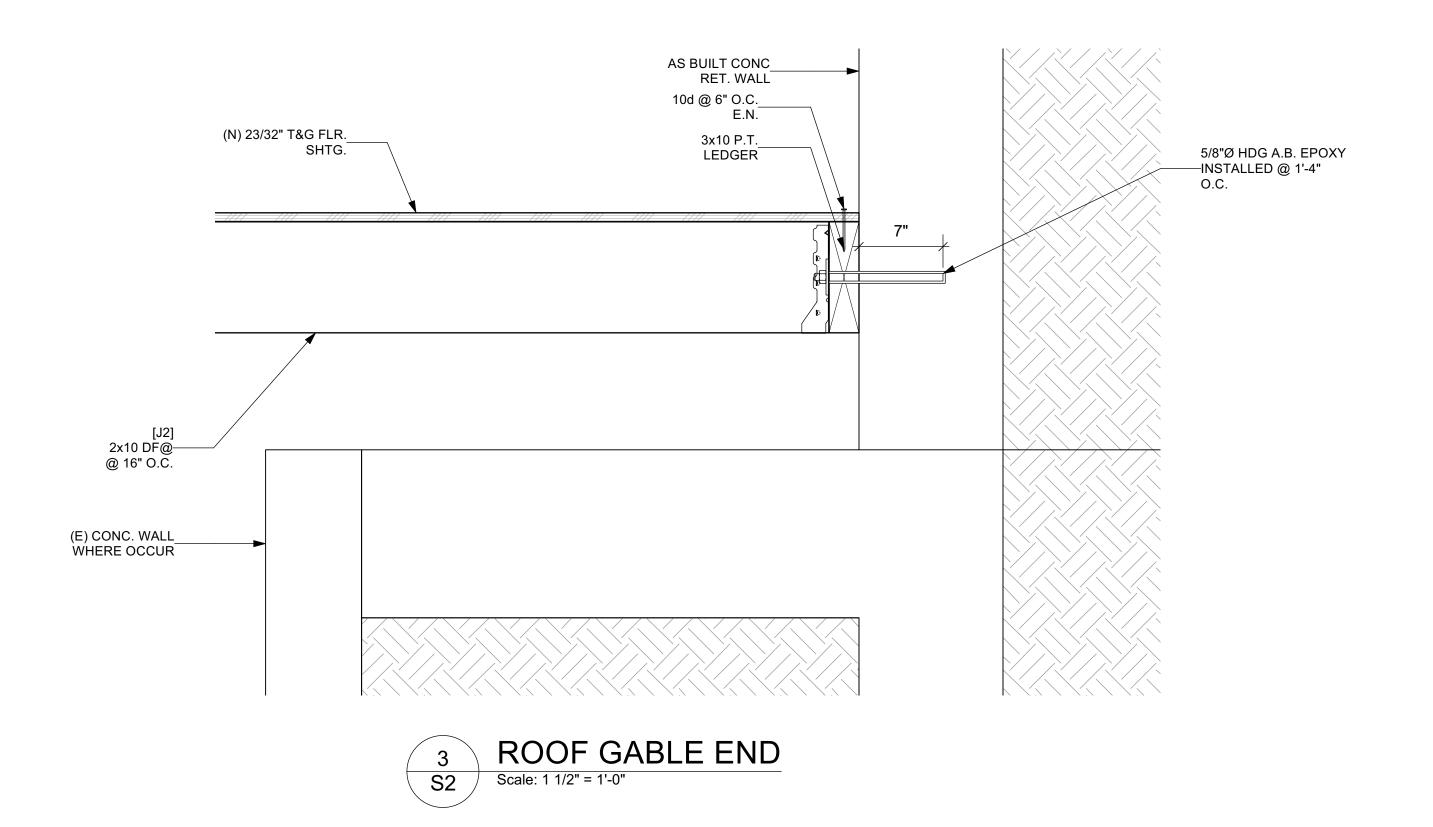
REVISION

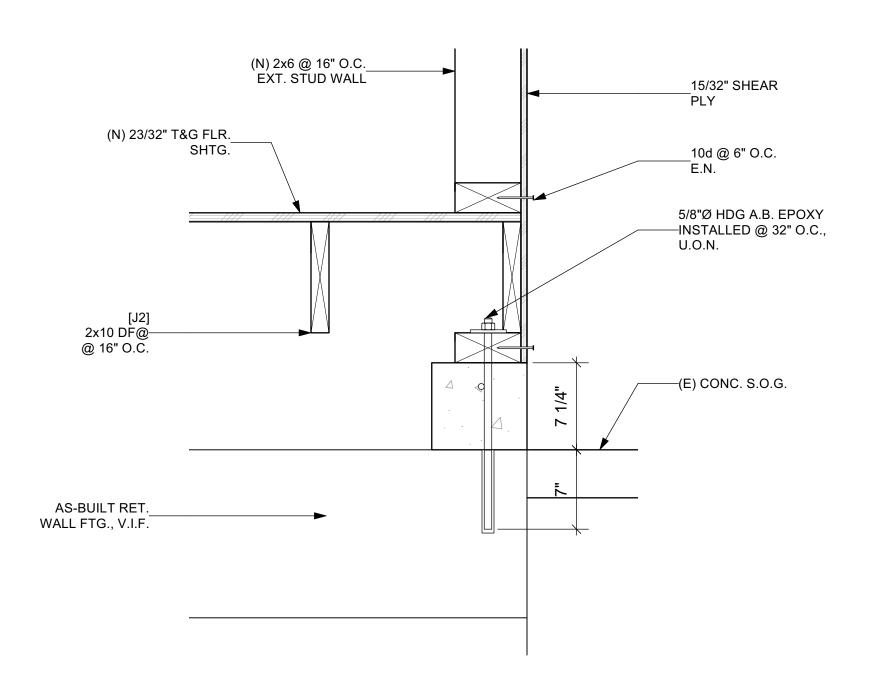
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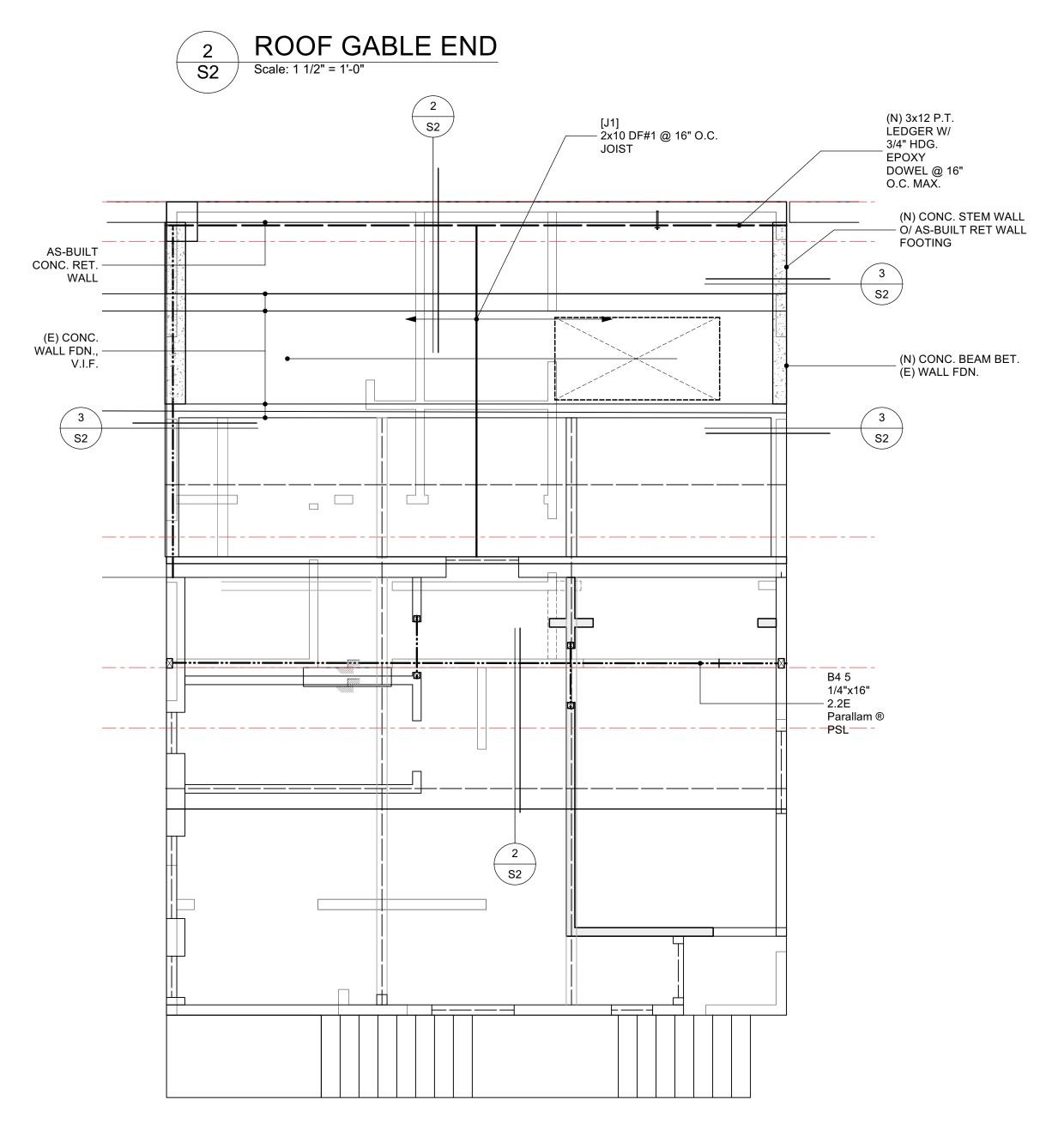
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Lower Floor Framing Foundation **Plans** 

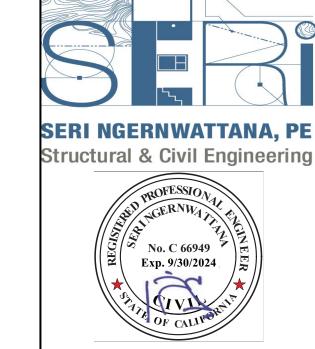
Misc. 65-10-1 PROJECT No. : SWN DRAWN BY: CHECKED BY: SWN 10/20/2022











Engineer:

Seri Ngernwattana, PE 954 Castlewood Way Hayward, CA 94541 Tel:(510) 991-6890

PROJECT:

Residence Addition & Remodel

97 Forest Ave. Fairfax, CA 94930 APN: 002-192-23

Owner:

Zak Cordisco & Zoe Pearl

97 Forest Ave. Fairfax, CA 94930

Architect:

STUDIO J ARCHITECTURE 547 San Anselmo Avenue San Anselmo CA 94960 TEL: 1 (415) 999-5803

REVISION

No. Description Date

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Main Floor

Framing &

Details

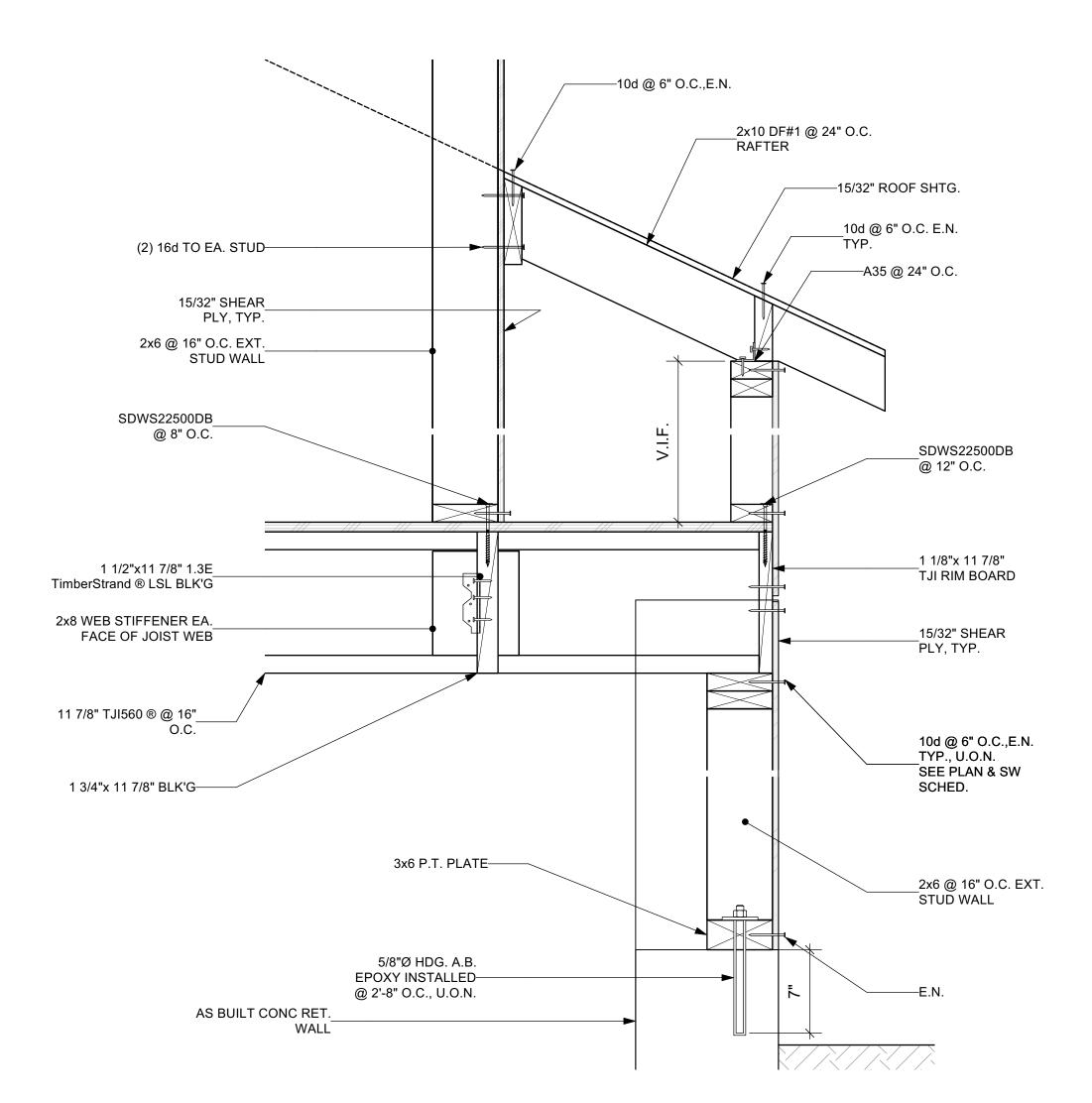
 PROJECT No. :
 Misc. 65-10-1

 DRAWN BY:
 SWN

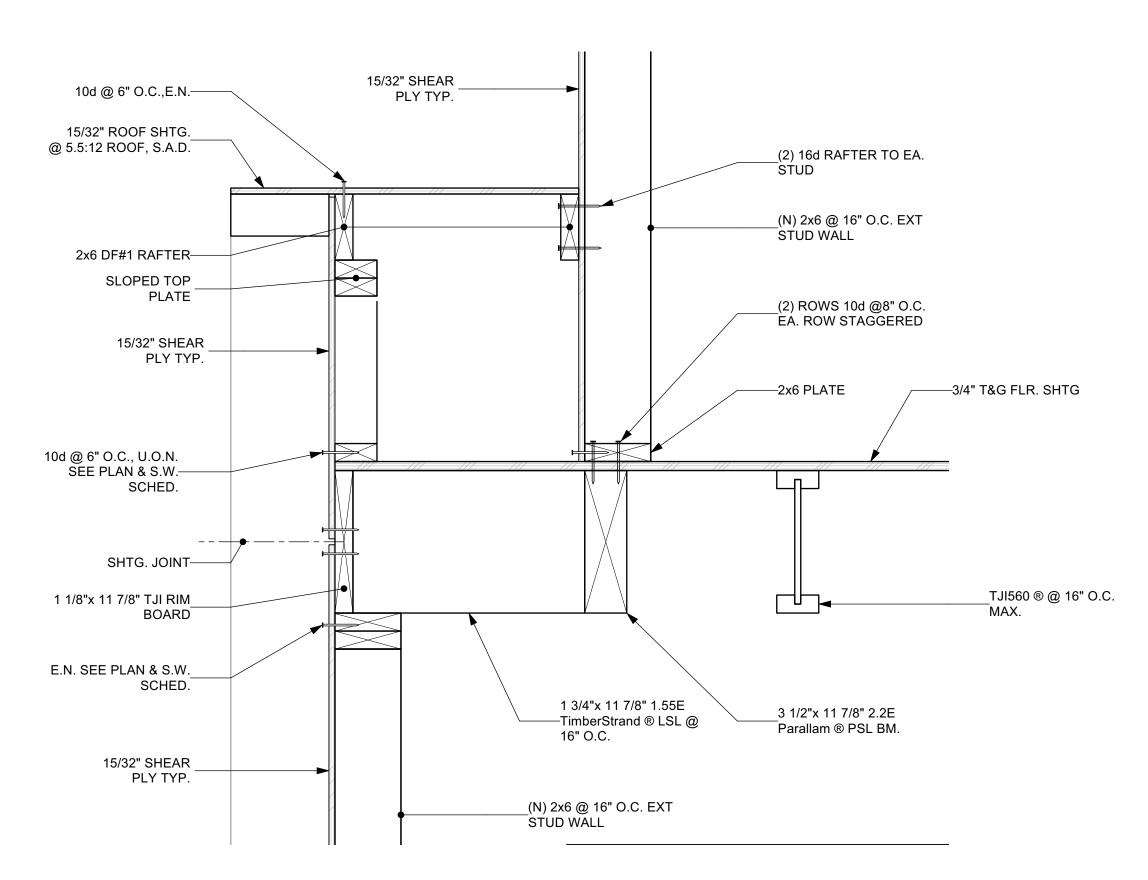
 CHECKED BY:
 SWN

 DATE:
 10/20/2022

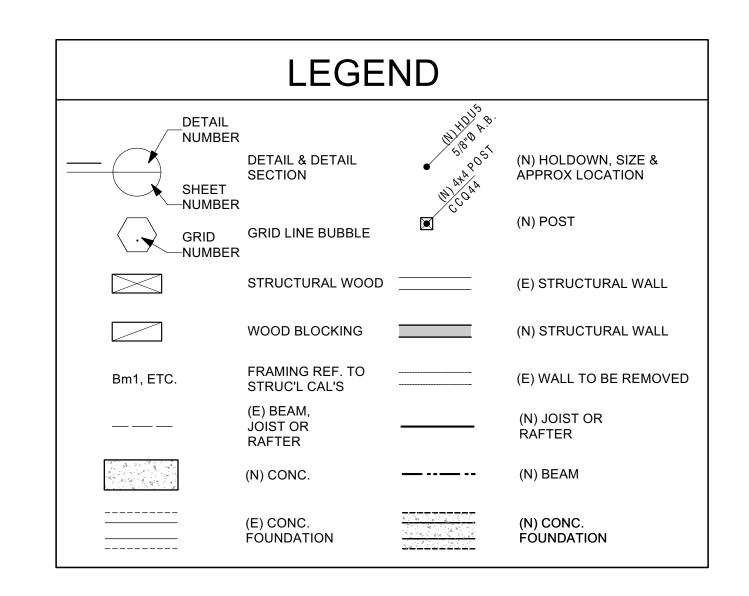
*S2* 

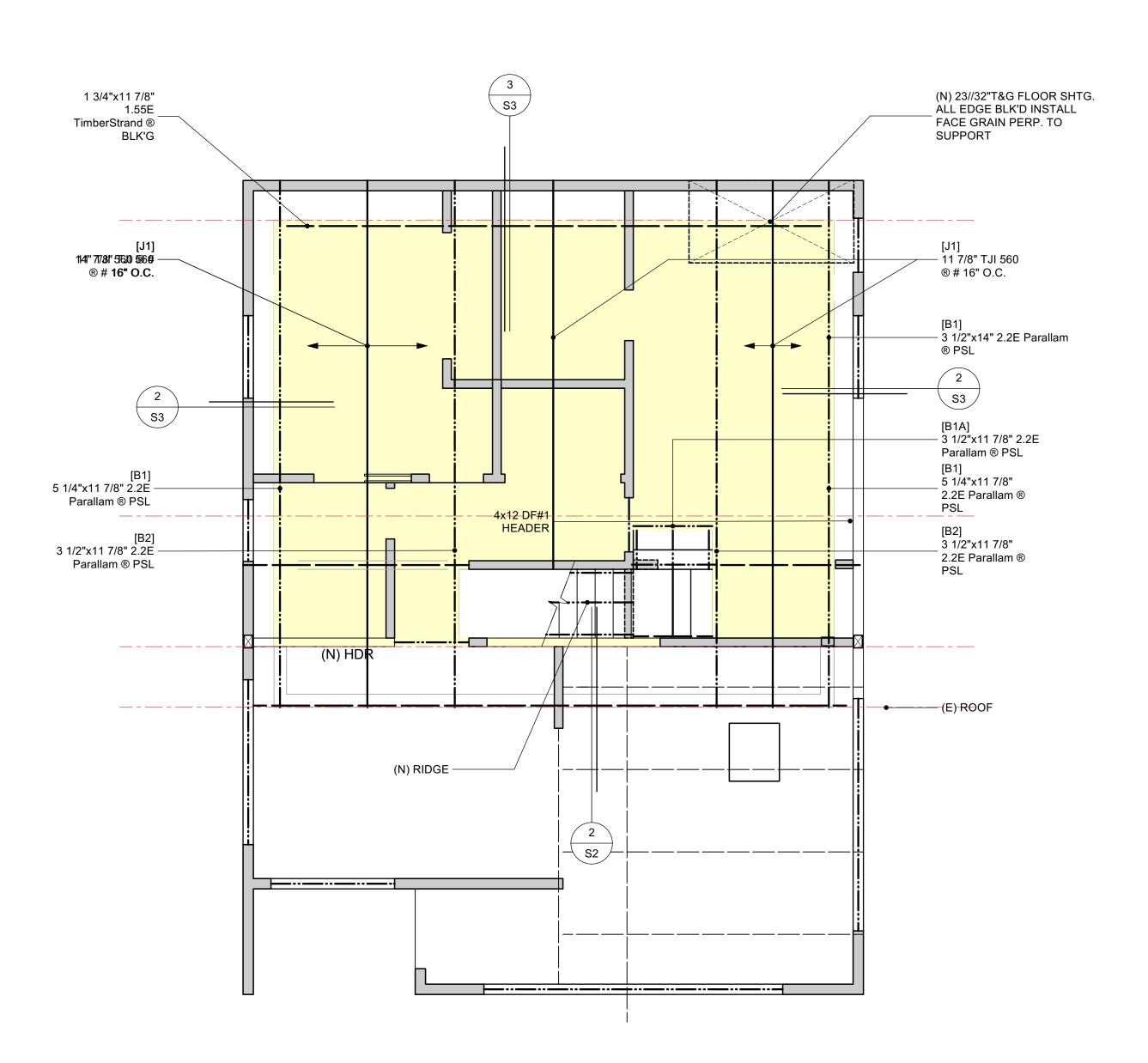


# 3 ROOF GABLE END Scale: 1 1/2" = 1'-0"

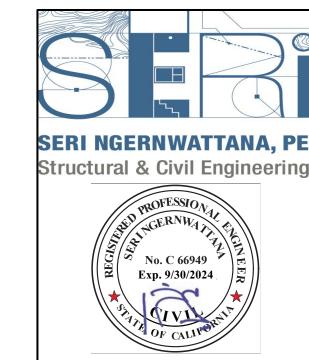












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PROJECT:

Residence Addition & Remodel

97 Forest Ave. Fairfax, CA 94930 APN: 002-192-23

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Architect:

STUDIO J ARCHITECTURE 547 San Anselmo Avenue San Anselmo CA 94960 TEL: 1 (415) 999-5803

R E V I S I O N

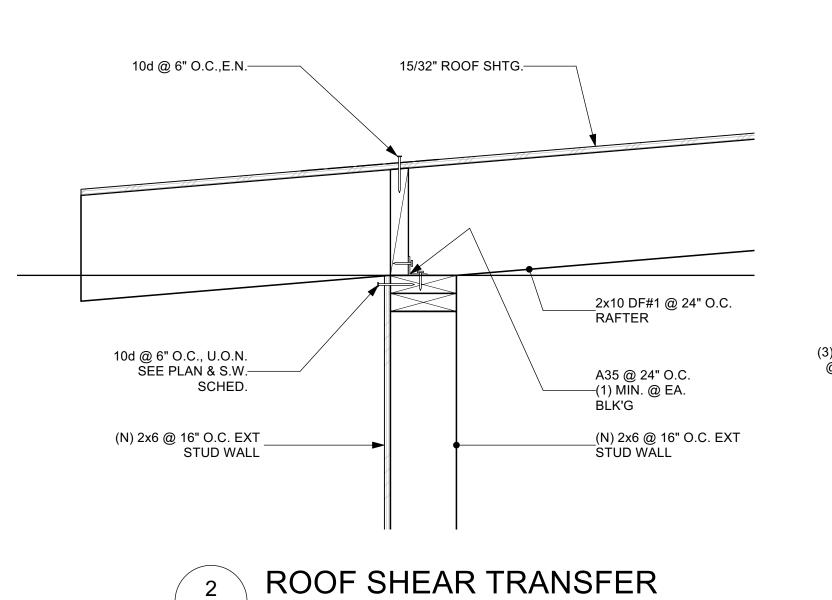
No. Description Date

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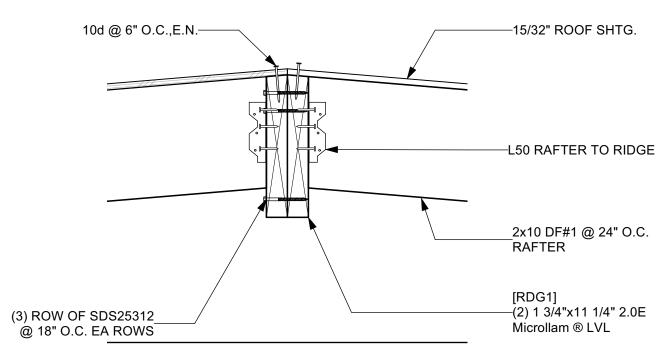
Attic Floor Framing Details

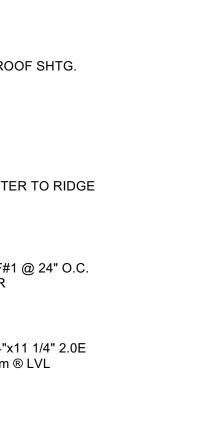
PROJECT No.: Misc. 65-10-1
DRAWN BY: SWN
CHECKED BY: SWN
DATE: 10/20/2022

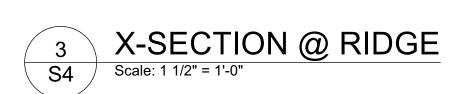
**S**3



Scale: 1 1/2" = 1'-0"



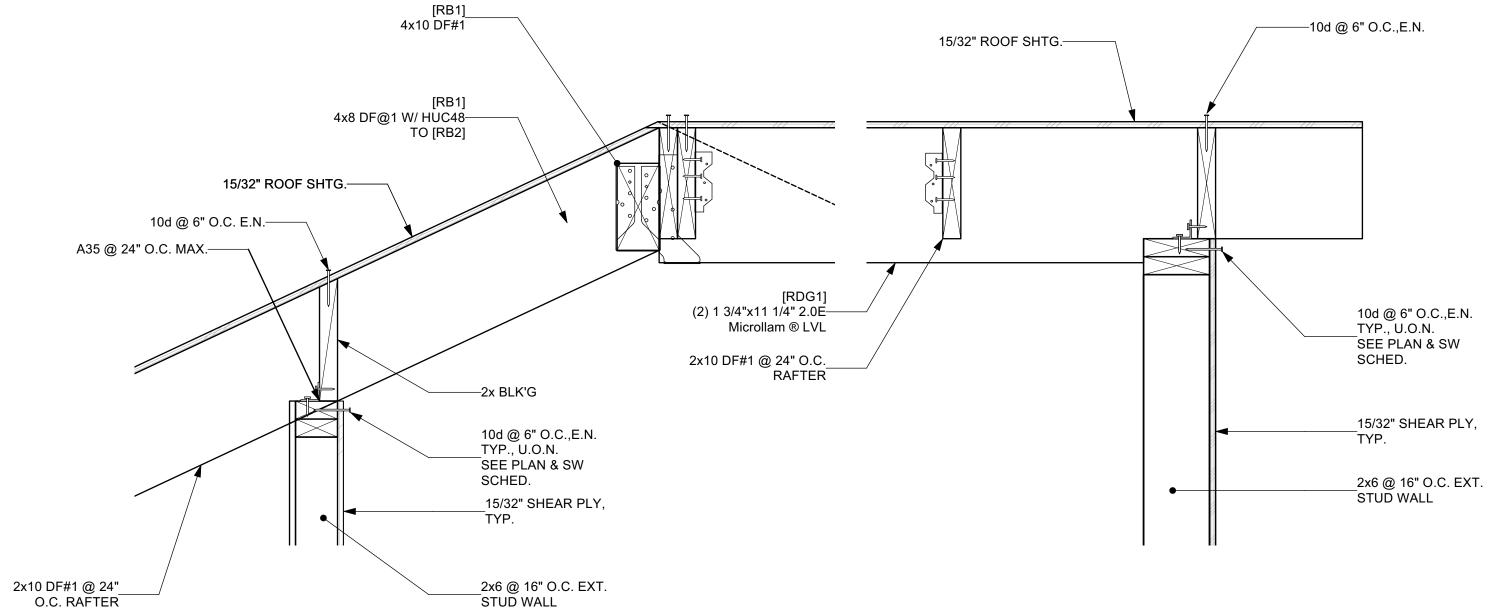


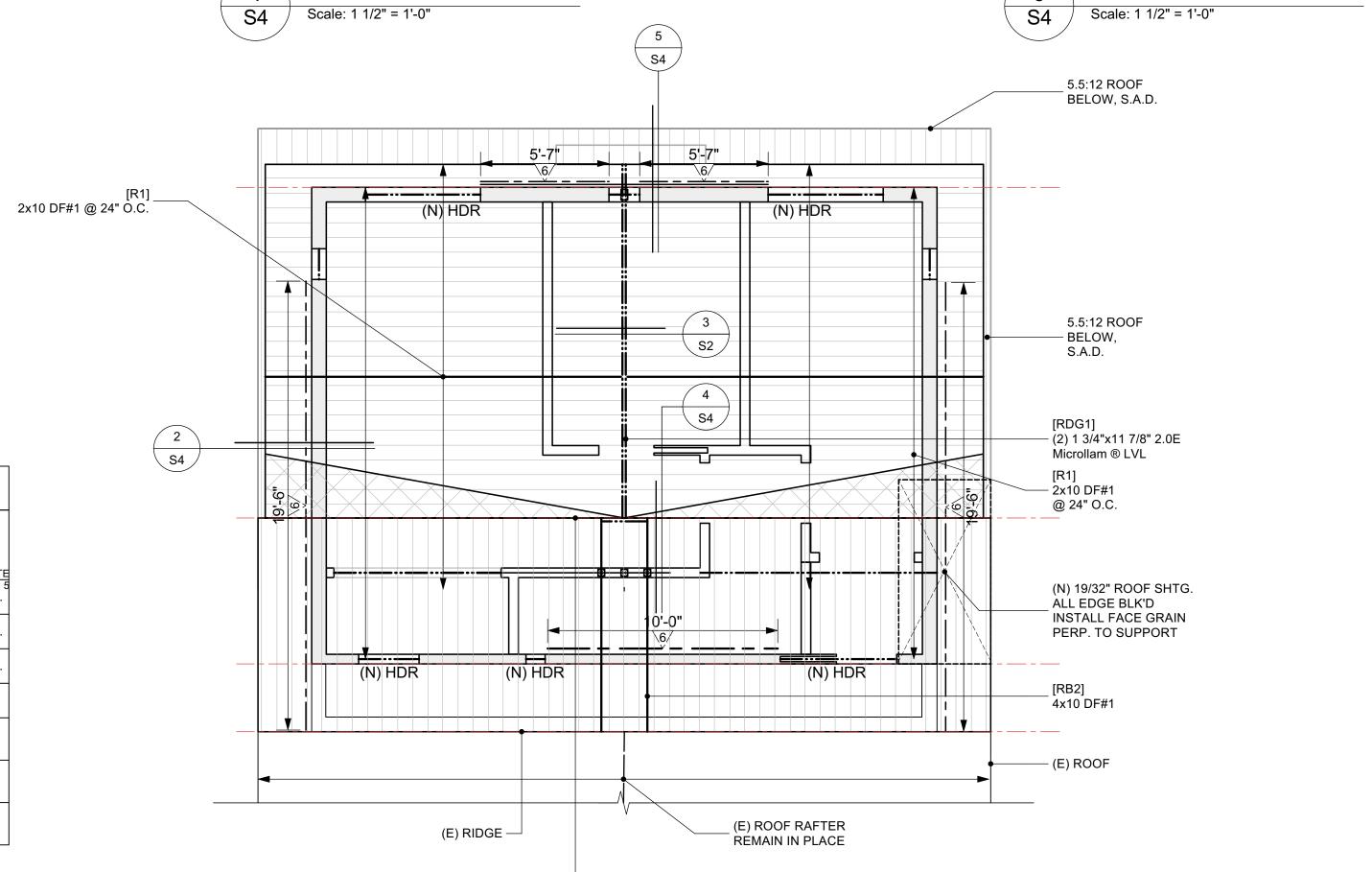


		Н	IEADER SCH	EDULE			
OPENING SIZE	EXTEIROR & INTERIOR BEARING WALL OF MULTISTORY			R BEARING WALLS AT OST LEVEL	INTERIOR NON-BEARING WALL		
	3 1/2" WALL	5 1/2" WALL	3 1/2" WALL	5 1/2" WALL	3 1/2" WALL	5 1/2" WALL	
≤ 4'-0"	4x8	6x6	4x6	6x6	4x4	4x6 FLAT	
≤6 <sup>'</sup> −0"	4x12	6x10	4x10	6x8	4x6	6x6	
≤8 <sup>'</sup> −0"	3 1/2"x9 1/2" PSL	6x12	4x12	6x10	4x8	6x8	
≤10 <sup>'</sup> -0"	3 1/2"x11 7/8" PSL	5 1/4"x11 7/8" PSL	3 1/2"x9 1/2" PSL	5 1/4"x9 1/2" PSL	4x12	6x10	

			SHEA	R WALL	SCHE	DU	LE	
WALL	WIND SHEAR CAPACITY	SEISMIC SHEAR CAPACITY	WALL SHEATHING	EDGE NAILING (E.N.)	ANCHOR BOLT		R PLATE TENER NOTE	
SYMBOL	PLF (ASD)	PLF (ASD)	MATERIAL NOTE 1	OR SCREWING NOTE 3	5/8"Ø HDG NOTE 4	16d	SDS25600 <sup>7</sup>	'L' CLIP NOTE
<u></u>	476	340	15/32" PLYWD.	10d @ 6" O.C.	32" O.C.	6" O.C.	16" O.C.	A 35 @ 16" O.C.
<u></u>	714	510	15/32" PLYWD.	10d @ 4" O.C.	22" O.C.	4" O.C.	12" O.C.	A 35 @ 12" O.C.
	931	665	15/32" PLYWD.	10d @ 3" O.C.	18" O.C.	N/A	10" O.C.	A 35 @ 10" O.C.
	1218	770	15/32" PLYWD.	10d @ 2" O.C.	15" O.C.	N/A	7" O.C.	A 35 @ 8" O.C.
4	1428	1020	15/32" PLYWD. EA. SIDE	10d @ 4" O.C.	12" O.C.	N/A	6"O.C.	A 35 @ 6" O.C.
3	1862	1330	15/32" PLYWD. EA. SIDE	10d @ 3" O.C.	9" O.C.	N/A	5"O.C.	A 35 @ 5" O.C.
2/ 2	2436	1740	15/32" PLYWD. EA. SIDE	10d @ 2" O.C.	7" O.C.	N/A	3.5"O.C.	A 35 @ 4" O.C.

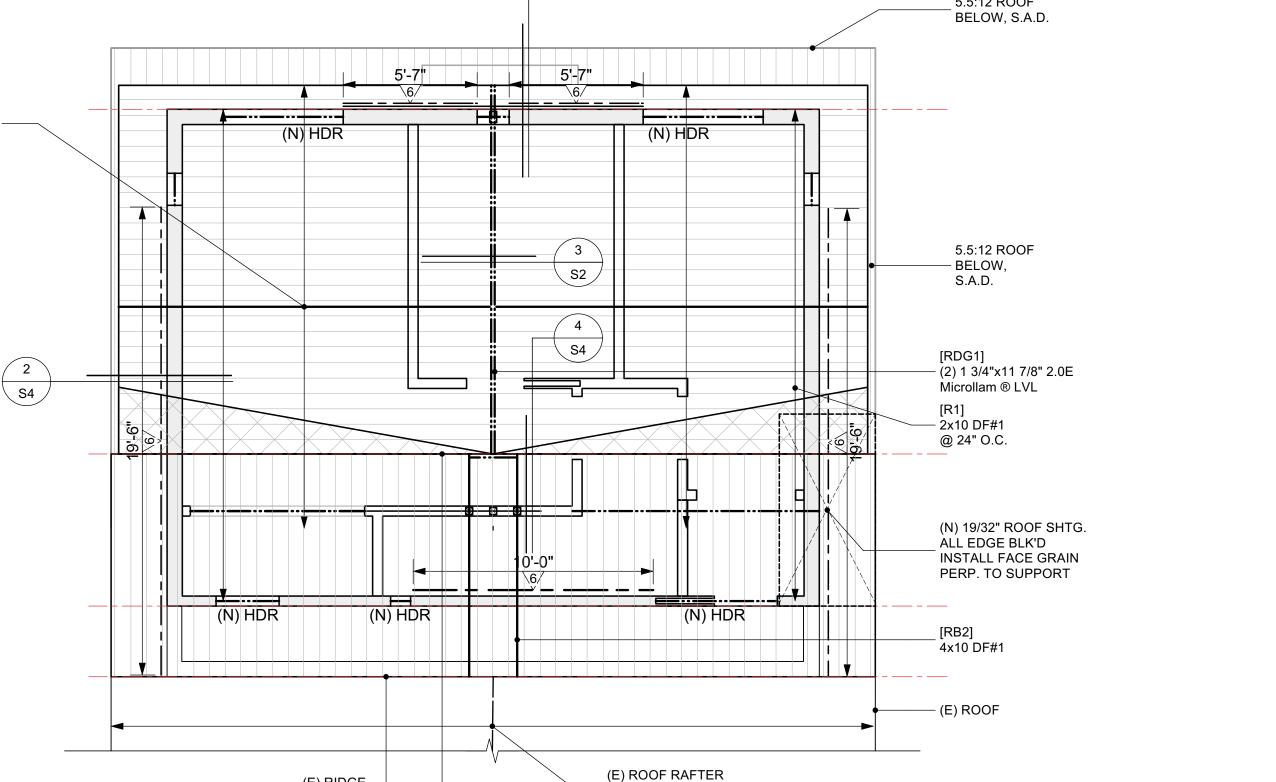
- 1. SHEATHING: 15/32" (4 PLY. MIN.) CD, CC PLYWD OR OSB. w/ ALL EDGES BLOCKED.
- NOT USED 3. TYPICAL FASTENERS: 10d COMMON w/ 12D PENETRATION MIN., NAIL FIELD @ 12" O.C.
- 4. 3x (or 2x w/ DBL. A.B.) AT PLATE AND 3x PANEL EDGES AT WALLS W/SHEAR > 300 LBS./FT.
- 5. OFFSET PANEL EDGES ON OPPOSITE SIDES OF WALL AND STAGGER PLATE SPLICE 6. ANCHOR BOLTS: HDG. (ASTM A-307) MIN. 7" EMBEDMENT, SPACING PER SCHED.
- W/ 3"x3"x.229" PLATE WASHER. 7. STAGGER 16d NAILS IN 2x, LAGS AT 3x PLATES WHEN NO SHEATHING CONTINUITY TO RIM JOIST.
- USE SDS25600 FOR 3x PLATE
- 8. PRE-DRILL 3/8" HOLES FOR LAG. PROVIDE WASHER, ADJUST LENGTH FOR 2" PENETRATION IN
- 9. CLIPS PLATE TO BLOCKS ONLY REQUIRED IF NO SHEAR SHEATHING CONTINUITY FROM WALL TO BLOCKING.





ROOF GABLE END

(N) RIDGE —







Engineer:

Seri Ngernwattana, PE 954 Castlewood Way Hayward, CA 94541 Tel:(510) 991-6890

PROJECT:

Residence Addition & Remodel

97 Forest Ave. Fairfax, CA 94930 APN: 002-192-23

Owner:

ROOF GABLE END

Zak Cordisco & Zoe Pearl

97 Forest Ave. Fairfax, CA 94930

Architect:

STUDIO J ARCHITECTURE 547 San Anselmo Avenue San Anselmo CA 94960 TEL: 1 (415) 999-5803

REVISION

No. Description Date

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Roof Framing

**Details** 

Misc. 65-10-1 PROJECT No. SWN DRAWN BY: CHECKED BY: SWN 10/20/2022

# **GENERAL**

APPLYING TO ALL STRUCTURAL FEATURES UNLESS OTHERWISE SHOWN OR NOTED

- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE 2019 CALIFORNIA BUILDING CODE AND 2019 CALIFORNIA RESIDENTIAL CODE.
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ENGINEER
- SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. UNLESS OTHERWISE SHOWN OR NOTED, ALL TYPICAL DETAILS SHALL BE USED WHERE APPLICABLE. ALL DETAILS SHALL BE CONSIDERED TYPICAL AT SIMILAR CONDITIONS.
- 4. UNLESS OTHERWISE SHOWN OR NOTED, FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS FOR ALL STRUCTURAL PRODUCTS USED ON THIS PROJECT.
- 5. THE APPROVED DRAWING SHALL BE KEPT ON THE JOB SITE AND SHALL BE AVAILABLE TO AUTHORIZED
- REPRESENTATIVES OF THE BUILDING OFFICIAL. THERE SHALL BE NO DEVIATION FROM THE STAMPED DRAWINGS WITHOUT OFFICIAL APPROVAL
- 6. SAFETY MEASURES: AT ALL TIMES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PEOPLE AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. SHORING AND BRACING OF THE SOIL, AND THE EXISTING STRUCTURES. SHALL BE INSTALLED WHERE NECESSARY TO ADEQUATELY SUPPORT THE IMPOSED VERTICAL AND LATERAL LOADS, AND SHALL BE MAINTAINED UNTIL THE NEW STRUCTURE CAN SUPPORT THE ANTICIPATED LOADS. UNDERPINNING AND/OR SHORING IS REQUIRED AT ALL ELEVATIONS ADJACENT TO, AND TO ELEVATIONS BELOW, EXISTING FOUNDATIONS, AND WHERE PARTIAL REMOVAL OF EXISTING FOUNDATIONS IS CALLED FOR ON THE DRAWINGS. THE ENGINEER'S JOB SITE VISITS ARE NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY
- OF THE CONTRACTOR'S SAFETY MEASURES. ALL SAFETY -RELATED MEASURES SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF CAL-OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION DIVISION OF DEPT. OF INDUSTRIAL SAFETY, STATE OF CALIFORNIA)

7. ANY OPENING, HOLES, CUTS OR DISCONTINUITIES NOT SHOWN ON THE STRUCTURAL DRAWINGS AND EXTENDING

- INTO OR THROUGH STRUCTURAL ELEMENTS REQUIRE THE PRIOR APPROVAL OF THE ENGINEER, AND MAY REQUIRE SPECIAL STRUCTURAL DETAILING.
- 8. CONTRACTORS SHALL SCHEDULE WORK TO MINIMIZE INTERRUPTION AND INCONVENIENCE TO THE ACTIVITIES OF THE ADJACENT BUILDING TENANTS
- 9. CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORKING AREA.
- 10. CONTRACTOR SHALL COMPLY WITH THE CITY OF FAIRFAX REQUIREMENTS FOR THE PROTECTION OF PUBLIC RIGHT-OF-WAY (SIDEWALKS).
- 11. THE LOCATION OF EXISTING UTILITY LINES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ENDEAVOR TO MAINTAIN IN SERVICE ALL UTILITIES TO THE TENANTS FOR THE DURATION OF THE PROJECT.
- IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR SPECIFIED. 13. REFERENCE TO OTHER DRAWINGS:
- 13.1 SEE DRAWINGS OTHER THAN STRUCTURAL FOR KINDS OF FLOOR FINISH AND THEIR LOCATION, FOR DEPRESSIONS IN FLOOR SLABS, FOR OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL
- FEATURES, FOR DRIVEWAY PAVING, WALKS, RAMPS, STAIRS, CURBS, ETC. 13.2 HOLES AND OPENINGS THROUGH WALLS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE CHECKED BY THE CONTRACTOR WHO SHALL VERIFY SIZES AND LOCATION OF SUCH HOLES OR OPENINGS WITH THE
- PLUMBING, HEATING, VENTILATING AND ELECTRICAL DRAWINGS AND SUB-CONTRACTORS. 14. DRAWINGS & DISCREPANCIES
- 14.1 FOR ALL PLAN AND VERTICAL DIMENSIONAL CONTROL NOT SHOWN, SEE ARCHITECTURAL DRAWINGS. 14.2 DO NOT SCALE THESE DRAWINGS.
- 14.3 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE DRAWINGS PRIOR TO COMMENCING WORK. ANY CONFLICTS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER AND BE RESOLVE BEFORE WORK PROCEEDS.
- 14.4 THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND DETAILS OF EXISTING CONSTRUCTION. ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE DESCRIBED ON THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER AND BE RESOLVED BEFORE COMMENCEMENT OF WORK.
- 14.5 THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES AND COORDINATE ALL REQUIRED PENETRATIONS AT THE FOUNDATION, FLOOR, WALL OR ROOF CONSTRUCTION.
- 14.6 THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL BRACING, SHORING AND TEMPORARY SUPPORTS AS REQUIRED TO RESIST CONSTRUCTION LOADS UNTIL COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. 15. THE ENGINEER SHALL HAVE NO CONTROL OR CHARGE OF, NOR BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHOD, TECHNIQUES, SEQUENCES, OR PROCEDURE, SAFETY PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY PERSONS PERFORMING ANY OF THE WORK OR FOR FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. BY ENTERING TO A CONTRACT TO PERFORM THE WORKS UNDER THIS DESIGN DRAWING AND SPECIFICATION, THE CONTRACTOR, BUILDER OF THIS PROJECT SHALL DEFEND, INDEMNIFY, AND HOLD THIS ENGINEER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCES OF WORKING ON

THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE ENGINEER OR THE OWNER. THE ISSUANCE OF A BUILDING PERMIT SHALL NOT BE CONSTRUED AS A GUARANTEE THAT ALL CODE REQUIREMENTS ARE REFLECTED IN THE DOCUMENT. THE GENERAL CONTRACTOR FOR THE PROJECT SHALL BE ULTIMATELY RESPONSIBILITY FOR INSURING THAT THE FINISHED WORK COMPLIED WITH ALL REGULATIONS, LAWS AND CODE REQUIREMENT. 16. IN THE CASE WHERE TWO OR MORE DETAILS APPLYING TO THE SAME PART OF THE WORK ARE IN CONFLICT, THE MOST RESTRICTIVE SHALL GOVERN UNLESS CLARIFIED OR OTHERWISE APPROVED BY THE ENGINEER.

**DESIGN DATA** 

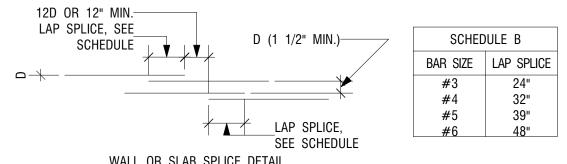
1. DESIGN VERTICAL LOADS: ROOF 15 PSF 20 PSF **EXTERIOR WALLS** 12 PSF 15 PSF 40 PSF **FLOOR** 10 PSF DECK

- 2. WIND DESIGN: ASCE 7-10 SECTION 6.4 METHOD 1 SIMPLIFIED PROCEDURE.
- PER CBC 2019 AND ASCE 7-10. WIND SPEED = 110 MPH. IMPORTANCE FACTOR 1 OCCUPANCY CATEGORY 'II'. ROUGHNESS CAT. 'D' WIND EXPOSURE CAT. 'C'; INTERNAL PRESSURE COEFFICIENT = ±0.18 FOR OPEN BUILDING. 3. SEISMIC DESIGN
- SITE COORDINATES: 37°26'39.2"N 122°10'52.4"W
- IMPORTANCE FACTOR, I=1.0; OCCUPANCY CATEGORY, 'II'; SEISMIC DESIGN CATEGORY 'E'; MAPPED SPECTRAL RESPONSE ACCELERATIONS, Ss =1.0g, S1=0.60g; SITE CLASS D - Default (See Section 11.4.3) SPECTRAL RESPONSE COEFFICIENTS, Sds= 1.545g, Fa=1.2 AND Sd1 null -See Section 11.4.8 TL = 12 BASIC SEISMIC-FORCE-RESISTING SYSTEM A. BEARING WALL SYSTEM, 13 LIGHT FRAME SHEATHED WITH WOOD STRUCTURE PANELS RATED FOR SHEAR RESISTANCE OR STEEL SHEATHING; R = 6.5
- SEISMIC COEFFICIENT Cs= 0.235 CALCULATION METHOD PER 12.8 ASCE 7-10 & 1613.5 2019 CBC
- 4. FOUNDATION THERE IS NO SOIL REPORT FOR THE PROJECT. SOIL CLASS 5 PER TABLE 1806.2 IS ASSUMED ALLOWABLE SOIL BEARING CAPACITY = 1500 PSF WITH INCREMENT BY ONE-THIRD WHERE USED WITH THE ALTERNATIVE BASIC
- LOAD COMBINATIONS OF SECTION 1605.3.2 THAT INCLUDE WIND OR EARTHQUAKE LOADS 4.1 EXCAVATION, GRADING AND DRAINAGE WORK SHALL BE DONE UNDER SUPERVISION OF PROJECT ENGINEER

# TESTS, SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS

OWNER TO PERFORM CONSTRUCTION OBSERVATIONS.

- 1.  $\,$  PROVIDE TESTS AND INSPECTIONS FOR ALL ITEMS AS REQUIRED BY THE 2019 CALIFORNIA BUILDING CODE.
- THE OWNER SHALL RETAIN A SPECIAL INSPECTOR TO PERFORM ALL INSPECTIONS.
- THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR WITH CONSTRUCTION SCHEDULES TO ENSURE PROPER COORDINATION OF WORK.
- 4. THE FOLLOWING SPECIFIC ITEMS SHALL BE INSPECTED AND/OR TESTED BY THE SPECIAL INSPECTOR: 4.1 REINFORCED CONCRETE CONSTRUCTION PER CBC 1705.3
- 4.2 SEISMIC RESISTANCE PER CBC 1705.12 5. STRUCTURAL OBSERVATION SHALL BE REQUIRED BY THE DESIGN ENGINEER FOR STRUCTURAL CONFORMANCE TO THE APPROVED PLANS FOR BUT NOT LIMITED TO THE FOLLOWING WORKS, CONCRETE REINFORCING, STEEL FRAME, SHEAR WALLS, SHEAR WALL HOLDOWNS AND DIAPHRAGMS. THE STRUCTURAL DESIGNER SHALL BE RETAINED BY THE



STEEL GRADE: 60.

- 1. THE SCHEDULES SHOWN ON THIS SHEET APPLY TO REGULAR WEIGHT CONCRETE, 145-150 POUNDS PER
- CUBIC FOOT. 2. ALL DETAILING AND PLACING OF REINFORCEMENT SHALL COMPLY WITH THE SPLICE LAP SCHEDULE AND
- DETAILS UNLESS SPECIFICALLY DETAILED ON DRAWINGS.
- 3. USE SCHEDULE B FOR ALL LAP SPLICES, UNLESS SPECIFICALLY NOTED IN DRAWINGS. 4. SMALLER BAR LAP LENGTH SHALL BE USED WHEN SPLICING DIFFERENT SIZE BARS.

# LAP SPLICE DETAILS

## **CONCRETE**

1. MATERIALS

1.1 CEMENT SHALL CONFORM TO 2019 CBC STND. NO. 19-1, AND SHALL BE TYPE II. TYPE I CEMENT MAY BE USED IN AREAS NOT IN CONTACT WITH EARTH. CEMENT SHALL BE SUBSTITUTED 25% BY FLY

**ASH BY WEIGHT** 1.2 AGGREGATE SHALL BE HARD ROCK, MINIMUM SIZE OF 3/4", CONFORMING TO ASTM C-33, AND FREE OF ALKALI- REACTIVITY, P-GRAVEL IS NOT PERMITTED.

PLACING CONCRETE. 3. U.O.N. CONCRETE SHALL ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTHS AT 28 DAYS AS

2. INSTALL ALL INSERTS, BOLTS, ANCHORS, AND REINFORCING BARS AND SECURELY TIE PRIOR TO

FOLLOWING

FOUNDATION CONCRETE 3000 PSI. CALCULATIONS ARE BASED ON 2500 PSI CONCRETE, THEREFORE CONCRETE SAMPLING AND PLACEMENT INSPECTION SHALL NOT REQUIRED.

4. CONCRETE SHALL BE PLACED IN A CONTINUOUS OPERATION BETWEEN PREDETERMINED CONSTRUCTION JOINTS. 5. CONCRETE SHALL BE CONTINUOUSLY CURED FOR 5 DAYS AFTER PLACEMENT IN ANY APPROVED

MANNER. 6. PIPES MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES, BUT SHALL NOT BE EMBEDDED THEREIN.

9. MAXIMUM SLUMP: 4 INCHES

## REINFORCING STEEL U.O.N. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GR. 60. DEFORM BARS FOR #4 - #9.

- GRADE 40 FOR #3, U.O.N. **ROUGH CARPENTRY** 1. FOR SCHEDULE OF MINIMUM NAILING SEE TABLE R602.3(1) CALIFORNIA RESIDENTIAL CODE, 2019
- EDITION. UNLESS OTHERWISE NOTED, ALL NAILS SHALL BE COMMON NAILS. 2. METAL FRAMING DEVICES:
- PROVIDE TYPICAL CONNECTORS FOR WOOD FRAMING BY SIMPSON CO. OR EQUAL. ALL CONNECTIONS SHALL BE 16 GA. GALVANIZED SHEET METAL OR THICKER, U.O.N., FULLY NAILED IN ALL PUNCHED HOLES WITH NAILS OF SIZE AND LENGTH SPECIFIED AND/OR PROVIDED BY MANUFACTURER.

- I-JOIST TO BEAM SIMPSON MIU - SAWN LUMBER JOIST-TO-BEAM: SIMPSON U - BEAM-TO-POST: SIMPSON CCQ, ECCQ - POST-TO-BEAM: SIMPSON BC, CC

- BEAM-TO-BEAM: SIMPSON HU 3. ALL FRAMING LUMBER SHALL BE GRADE STAMPED S-DRY .19% MAXIMUM MOISTURE CONTENT. AND SHALL MAINTAIN SPECIFIED MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION AND

SIMPSON CBSQ

FABRICATION. 4. SAWN LUMBER: U.O.N. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR LARCH (COAST REGION) GRADED AND MARKED IN ACCORDANCE WITH THE STANDARD GRADING RULES NUMBER 16 OF THE WEST COAST LUMBER INSPECTION BUREAU.

POSTS, BEAM, JOISTS & RAFTERS NO. 1 GRADE STUDS FOR EXTERIOR WALL & LOAD BEARING WALL NO. 2 GRADE STUDS FOR PARTITION WALL NO. 2 GRADE

ALL FRAMING LUMBER SHALL BE GRADE STAMPED S-DRY (19% MOISTURE CONTENT) 6. STRUCTURAL STUD WALLS:

6.1 USE SINGLE BOTTOM PLATE AND DOUBLE TOP PLATE UNLESS OTHERWISE NOTED OR SHOWN. STAGGER JOINTS IN UPPER AND LOWER MEMBERS OF TOP PLATES NOT LESS THAN 4'-0".

6.2 BOLT SILL PLATE TO CONCRETE AS PER ANCHOR BOLT SCHEDULE. ONE BOLT SHALL BE WITHIN 9" OF EACH END OF 7-BOLT DIAMETERS. ALL SILL BOLTS SHALL BE PROVIDED AND INSTALLED WITH 3"X3"X.229" STEEL PLATE WASHERS. BOLTS:

BOLTS SHALL BE PER ASTM A307, U.O.N.

- POST-TO-FOUNDATION:

WOOD PRESERVATIVE:

1 ALL WOOD FRAMING IN CONTACT WITH CONCRETE AND/OR EXPOSED TO WEATHER OR PROLONGED DAMPNESS SHALL BE TREATED WITH 'CELLOW" AT THE RATE OF 0.23 POUNDS PER CUBIC FOOT IN ACCORDANCE WITH AWPA SPECIFICATIONS, OR SHALL BE WOOD OF NATURAL RESISTANCE TO

- 2 ALL CROSS-CUT, NOTCHED, BORED OR DRILLED SURFACES OF PRESSURE TREATED FRAMING SHALL BE RE-SEALED BY PROTIM RESEAL OR EQUAL TO RESTORE UNTREATED HEARTH WOOD THAT
- ALL FASTENERS, HANGERS & CONNECTORS SHALL BE CORROSION-RESISTANT MATERIALS 9. MANUFACTURED LUMBER
- 1. Parallam® PSL, PARALLEL STRAND LUMBER SHALL BE 2.2E GRADE MIN.
- Microllam® LVL, LAMINATED VENEER LUMBER SHAL BE 2.0E GRADE MIN. 3. TimberStrand® LSL, LAMINATED STRAND LUMBER SHALL BE 1.3E OR 1.55E MIN. PER PLAN.

1. U.O.N., USE DOUGLAS FIR APA EXTERIOR, EXPOSURE 1, RATED SHEATHING IN CONFORMANCE WITH THE U.S. COMMERCIAL STANDARDS PS-1. INSTALL WITH FACE GRAIN PERPENDICULAR TO JOISTS OR

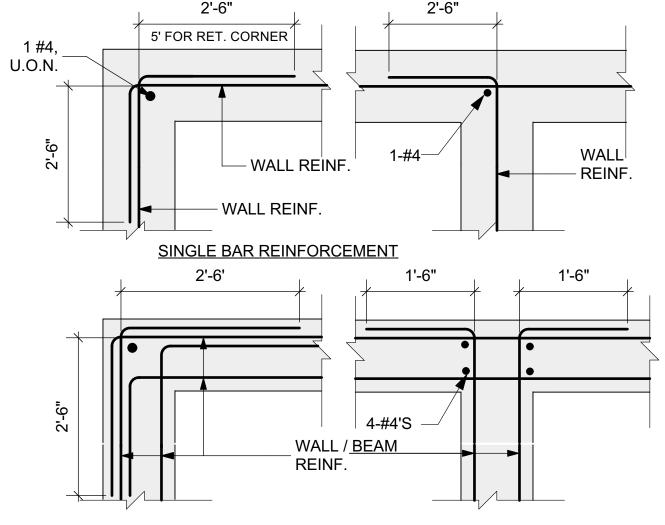
RAFTERS. 2. ROOF SHEATHING SHALL BE 15/32" WITH A SPAN RATING OF 40/20, MINIMUM, SEE PLAN. BLOCKED, W/ 10d COMMON NAILS @ 4" O.C. EDGE & BOUNDARY NAILING AND 10d COMMON NAILS @ 12" O.C. FIELD NAILING. INSTALL WITH FACE GRAIN PERPENDICULAR TO RAFTERS.

3. FLOOR SHEATHING SHALL BE 3/4 " T&&G BLOCKED, W/ 10d COMMON NAILS @ 6" O.C. EDGE & BOUNDARY NAILING AND 10d COMMON NAILS @ 12" O.C. FIELD NAILING. INSTALL WITH FACE GRAIN PERPENDICULAR TO JOISTS.

4. SHEAR WALL SHEATHING SHALL BE 5 PLYS 15/32" STRUCTURAL 1 W/ FASTENING AS NOTED IN SHEAR WALL SCHEDULE ANCHORING ADHESIVE

# **ANCHORING ADHESIVE**

HIGH STRENGTH ANCHORING ADHESIVE [EPOXY] HALL BE SIMPSON 'SET-XP' INSTALL PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS AND PER ICC-ES-ESR-2508, REISSUED JULY 2021



# **MULTI BAR REINFORCEMENT**

NOTE: 12" VERTICAL BEND FOR BEAM 18" HORIZONTAL BEND FOR WALL AS SHOWN



	ABBREVIATION					nended Ei d bend dian		S	Deta	ailing Dimension
			All Grad	es: D	= Finisne	a bena alan	ieter			
A.B.	ANCHOR BOLT				1		1	1	<b>+</b>	1
ABV.	ABOVE		Bar	D		)° Hooks	90° Hooks		Bar Size	ĭ
ADD'L	ADDITIONAL		Size	(in.)	A or G	J	A or G	]	180° 4d	or 2-1/2" Min.
APPX.	APPROXIMATE		#3 [#10]	2-1/4"	5"	3"	6"	1		
ALT.	ALTERNATE		#4 [#13]	3"	6"	4"	8"			Detailing Dimens
ARCH	ARCHITECT		#5 [#16]	3-3/4"	7"	5"	10"	-		Detailing Dimens
BLW.	BELOW		#6 [#19]	4-1/2"	8"	6"	1'-0"			
BLDG.	BUILDING		#7 [#22]	5-1/4"	10"	7"	1'-2"		<b>↓</b>	
BLK'G	BLOCKING		#8 [#25]	6"	11"	8"	1'-4"	] [	$\overline{}$	<del>-</del>
ВМ	BEAM		#9 [#29]	9-1/2"	1'-3"	11-3/4"	1'-7"		Ť	D
B.N.	BOUNDARY NAIL		#10 [#32]	10-3/4"	1'-5"	1'-1-1/4"	1'–10"	1	I Bar Size	
BET.	BETWEEN		#11 [#36]	12"	1'-7"	1'-2-3/4"	2'-0"		90°	A or G
BOT.	BOTTOM		#14 [#43]	18-1/4"		1'-9-3/4"	2'-7"	1	30	
BPL	BEARING PLATE		#18 [#57]	24"	3'-0"	2'-4-1/2"	3'-5"			
CBC	CALIFORNIA BUILDING CODE							1		
C.J.	CONSTRUCTION JOINT; CONTROL JOINT	Re	ecomm	ende	ed Indu	stry Prac	tice for	Stirrup a	and Tie	Hooks
CL	CENTER LINE					_		_		
CLR	CLEAR			#6, 7, 8		→		-¦¦ 135°	Seismi	c Stirru
CMU	CONCRETE MASONRY UNITS		6d for	#3, 4, 5		A or G	;	11	_	— <b>-</b>
CNTS	COUNTERSINK		<b>A</b>		(2)	<b>≕</b>		-\ <u>\</u>	· •	ıl k il
COL.	COLUMN				Next D				Hoo A or	11
CONC.	CONCRETE								ļ	- :: /
CONT.	CONTINUOUS		Detailing Dimension		A or G				D T	
d	PENNY (NAIL SIZE)		Dimension	_	Bar Size	l Dimensi e I	on 6d 🔨	<b>/</b>		
DAI. DIM.	DIAMETER DIMENSIONS						_	→ Bar Size	Detail	
	DOUBLE			р. Х	<b>&gt;</b>		D \( \frac{1}{2}	<i>&gt;</i>	Dimens	sion
DBL DET.	DETAIL				9)	<u> </u>		אלי		
DET. D.F.	DOUGLAS FIR		i G B	eam	90°		l ⊈ Beam	135°	. ↓	→ Bar S
D.F. D.T.P.	DOUBLE TOP PLATE				30			133		
D.T.P. DWG.	DRAWING		Table 1	.8 St	tirrup (1	Γies Simil	ar)	Table	1.9 135	° Seismi
						ensions All G	•			All Grades:
(E) EA.	EXISTING EACH			- I I I I			14403.		Stirrup/Ti	
EA. EF.	EACH FACE		Bar	D	90°	135°		Bar	135°	Seismic Hook
EF.	ENDANCION JOINT		Size	_	A or G	A or G	H*	Size		or G

E.J. EXPANSION JOINT

ENGINEER

EACH WAY

EXTERIOR

FINISH

F.O.S. FACE OF STUD

**FOUNDATION** 

F.O.C. FACE OF CONCRETE

FAR SIDE

GALVANIZED

GRADE BEAM

HORIZONTAL

HIGH STRENGTH

INSIDE DIAMETER

ANGLE SECTION

LONGITUDINAL

MACHINE BOLT

NOT APPLICABLE

MAXIMUM

MINIMUM

NUMBER

NTS NOT TO SCALE

O.C. ON CENTER

O/ OVER

OPN'G OPENING

NEAR SIDE

O.D. OUTSIDE DIAMETER

PARALLEL

PLATE

PWD PLYWOOD

RAFTER

REQUIRED

RETAINING

SCHEDULE

SHEATHING

SLAB ON GRADE

SELECT STRUCTURAL

TONGUE AND GROOVE

T.O.S. TOP OF SLAB; TOP OF STEEL

UNLESS OTHERWISE NOTE

WIDE FLANGE SECTION

SHEET

SIMILAR

SQUARE

STD STANDARD

STEEL

S.W. SHEAR WALL

SYM. SYMMETRICAL

TD TIE-DOWN

THRD THREADED

T.N. TOE-NAIL

TYP. TYPICAL

VERTICAL

W.W.F. WELDED WIRE FABRIC @ AT (SPACING)

WITH

VERIFY IN FIELD

RDWD REDWOOD

PERFORATED

PERPENDICULAR

PVC POLYVINYL CHLORIDE

REINFORCEMENT

ROUGH OPENING

SEE CIVIL DRAWINGS

SEE ARCHITECTURAL DRAWINGS

SEE LANDSCAPE DRAWINGS

SEE MECHANICAL DRAWINGS

GLUED-LAMINATED BEAM

HOLLOW STRUCTURAL SECTION

LAMINATED STRAND LUMBER

LAMINATED VENEER LUMBER

ORIENTED STRAND BOARD

PARALLEL STRAND LUMBER

SHEAR WALL SCHEDULE

PRESSURE TREATED

POWDER ACTUATED FASTENERS PENETRATION

FOOTING

GAUGE

HEADER

HEIGHT

INT INTERIOR

JST JOIST

EQUAL

E.S. EACH SIDE

**EVERY OTHER** 

ELEV. ELEVATION

E.N. EDGE NAIL

ENG

E.O.

EQ.

E.W.

EXT.

FDN.

FIN.

FTG.

GALV.

GBM

GLB

HDR

HSS

HT.

I.D.

LONG'L

LSL

LVL

MAX.

MB

MIN

(N)

N/A

NS

OSB

PARL

PERF.

PERP.

PL.

PSL

REINF.

RFT

REQ'D

RET.

S.C.D.

S.L.D.

S.M.D.

SHT.

SHTG.

SIM.

S.O.G.

S.Q.

SS

ST

T&G

U.O.N.

VERT. V.I.F.

> WF /W

SCHED.

S.W. SCHED.

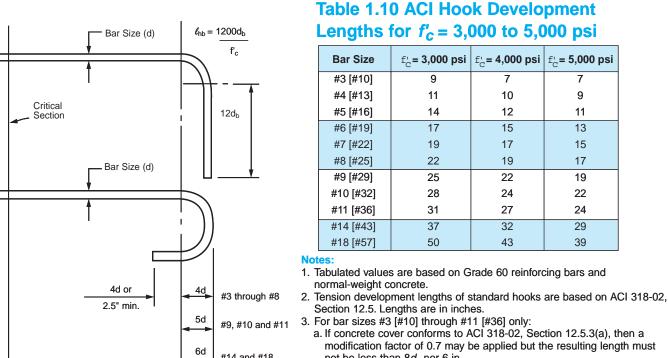
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HORZ.

# Table 1.8 Stirrup (Ties Similar)

Stirrup a	rup and Tie Hook Dimensions All Grades:							ons All Gra p/Tie Hooks	
Bar	D	90°	1;	35°		Bar		135° Seismic I	
Size	_	A or G	A or G	H*		Size	D	A or G	
8 [#10]	1-1/2"	4"	4"	2-1/2"		#0 [#40]	4.4/01		
[#13]	2"	4-1/2"	4-1/2"	3"		#3 [#10]	1-1/2"	4-1/4"	
[#16]	2-1/2"	6"	5-1/2"	3-3/4"		#4 [#13]	2"	4-1/2"	
	4-1/2"	1'-0"	0	4-1/2"		#5 [#16]	2-1/2"	5-1/2"	3
[#19]	4-1/2	1-0	8"	4-1/2		#6 [#19]	4-1/2"	8"	
[#22]	5-1/4"	1'-2"	9"	5-1/4"		- '	-	011	,
8 [#25]	6"	1'-4"	10-1/2"	6"		#7 [#22]	5-1/4"	9"	į
- []	-			1		#8 [#25]	6"	10-1/2"	
l dimens	ion is ap	proximate.				*!! =:======		nrovimoto	

# Development $\ell_{dh}$ of Standard Hooks



**Detailing Dimension** 

135° Seismic Stirrup/Tie Hooks

Table 1.9 135° Seismic Stirrup/Tie

\*H dimension is approximate

#3 [#10] | 1-1/2" | 4-1/4" | 3"

a. If concrete cover conforms to ACI 318-02, Section 12.5.3(a), then a modification factor of 0.7 may be applied but the resulting length must not be less than  $8d_h$  nor 6 in.

b. If hook is enclosed in ties or stirrups conforming to ACI 318-02, Section 12.5.3(b), then a modification factor of 0.8 may be applied but the resulting length must not be less than  $8d_b$  nor 6 in.

4. For epoxy-coated hooks, multiply the tabulated values by 1.2.

# Table 1.11 Tension Lap Splice Lengths – Grade 60 Uncoated Bars $f'_c$ = 3,000 psi or greater, Normal Weight Concrete

# **DESIGN AND DETAILING DATA – ACI** ACI Tension Lap Splice Lengths for $f_C' = 3,000, 4,000,$ and 5,000 psi

_			$f_C' = 3,0$	00 psi			$f_C' = 4,0$	000 psi			$f_C' = 5,0$	)00 psi	
Bar Size		Lap Top Bars		Other Bars		Top Bars		Other Bars		Top Bars		Other Bars	
Size	Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
#3 [#10]	A	22	32	17	25	19	28	15	22	17	25	13	19
	B	28	42	22	32	24	36	19	28	22	33	17	25
#4 [#13]	A	29	43	22	33	25	37	19	29	22	33	17	26
	B	37	56	29	43	32	48	25	37	29	43	22	33
#5 [#16]	A	36	54	28	41	31	47	24	36	28	42	22	32
	B	47	70	36	54	40	60	31	47	36	54	28	42
#6 [#19]	A	43	64	33	50	37	56	29	43	33	50	26	38
	B	56	84	43	64	48	72	37	56	43	65	33	50
#7 [#22]	A	63	94	48	72	54	81	42	63	49	73	37	56
	B	81	122	63	94	70	106	54	81	63	94	49	73
#8 [#25]	A	72	107	55	82	62	93	48	72	55	83	43	64
	B	93	139	72	107	80	121	62	93	72	108	55	83
#9 [#29]	A	81	121	62	93	70	105	54	81	63	94	48	72
	B	105	157	81	121	91	136	70	105	81	122	63	94
#10 [#32]	A	91	136	70	105	79	118	61	91	70	105	54	81
	B	118	177	91	136	102	153	79	118	91	137	70	105
#11 [#36]	A	101	151	78	116	87	131	67	101	78	117	60	90
	B	131	196	101	151	113	170	87	131	101	152	78	117
#14 [#43]	N/A	121	181	93	139	105	157	81	121	94	140	72	108
#18 [#57]	N/A	161	241	124	186	139	209	107	161	125	187	96	144

1. Tabulated values are based on Grade 60 reinforcing bars and normal-weight concrete.

2. Tension development lengths and tension lap splice lengths are based on ACI 318-02, Sections 12.2.2 and 12.15, respectively. Tabulated values for beams or columns are based on transverse reinforcement and concrete cover meeting minimum Code requirements. Lengths are in inches.

3. Cases 1 and 2, which depend on the type of structural element, concrete cover, and the center-to-center spacing of the bars, are defined as:

ams or Columns	Case 1	Cover at least $1d_b$ and cc. spacing at least $2d_b$
	Case 2	Cover less than $1d_b$ or cc. spacing less than $2d_b$
Others	Case 1	Cover at least $1d_b$ and cc. spacing at least $3d_b$
	Case 2	Cover less than $1d_b$ or cc. spacing less than $3d_b$

 Lap Class A values are the required tension development lengths, l<sub>d</sub>; lap splice lengths are multiples of tension development lengths; Class A - 1.0\( \)d and Class B = 1.3\( \)d (ACE 318-02)

5. Lap splices of #14 [#43] or #18 [#57] bars are not permitted. The tabulated values for those bar sizes are the tension development lengths.

Top bars are horizontal bars with more than 12 inches of concrete cast below the bars. 7. For lightweight aggregate concrete, multiply the tabulated values by 1.3; or when  $f_{ct}$  is

specified, the factor is  $6.7 \sqrt{f'_c/f_{ct}} \ge 1.0$ . 8. For epoxy-coated bars, multiply the tabulated values by one of the following factors:

concrete Cover and Spacing	Top Bars	Other Bars
Cover $< 3d_b$ or cc. spacing $> 7d_b$	1.7 / 1.3 - 1.31	1.50
Cover $\leq 3d_b$ or cc. spacing $\leq 7d_b$	1.20	1.20



Structural & Civil Engineering No. C 66949 Exp. 9/30/2024

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REVISION

No. Description Date

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Typical Details

Misc. 65-10-1 PROJECT No. SWN DRAWN BY: CHECKED BY 10/20/2022

