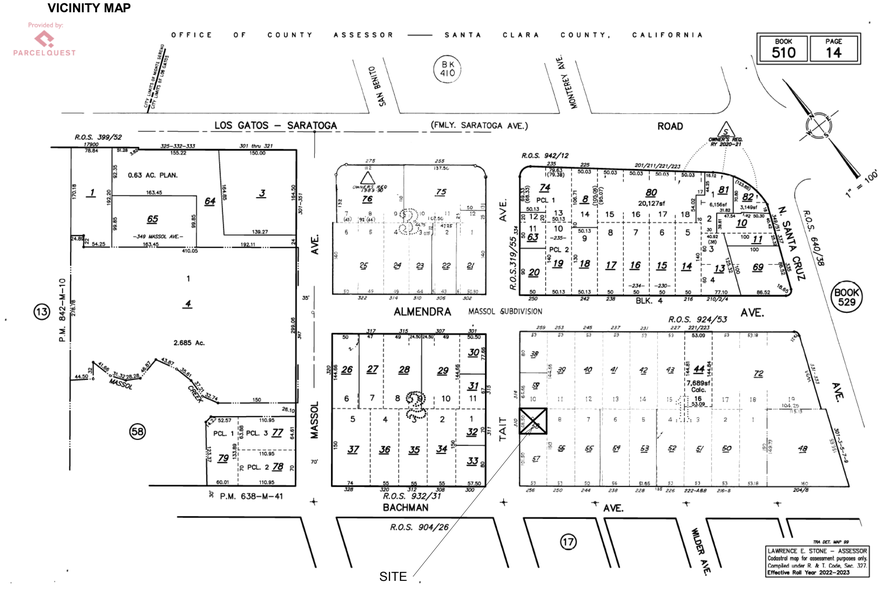
ALLENDE ADDITION

INDEX OF DRAWINGS

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE AND FIELD CONDITIONS PRIOR TO AND DURING CONSTRUCTION. WINDOW, DOOR AND CABINET DIMENSIONS MUST BE VIF BY CONTRACTOR, INSTALLER OR FABRICATOR PRIOR TO ORDERING. ANY DISCREPANCY FOUND BETWEEN PLANS AND ACTUAL FIELD CONDITION MUST BE BROUGHT TO THE ATTENTION OF D3 DESIGNS AND THE STRUCTURAL ENGINEER INVOLVED IN THE PROJECT. FAILURE TO DO SO VOIDS D3 DESIGNS AND THE ENGINEER OF RESPONSIBILITY TO WORK PERFORMED BY CONTRACTOR. D3 DESIGNS IS NOT RESPONSIBLE FOR ON SITE INSPECTION TO ASSURE COMPLIANCE WITH MATERIALS OR WORKMANSHIP SPECIFIED HEREIN, UNLESS BY SECONDARY AGREEMENT.

VICINITY MAP



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310 TAIT AVE.
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APN: 510-14-058

GEOTECH ENGINEER
Kourosh Younesi, PE
Principal Engineer
GeoFoundation Inc.
486 Chelsea Xing, San Jose, CA 95138
Cell: (408) 710 - 6701
www.geofoundationinc.com

TITLE 24
DAVID HENSEL, PE
P.O. Box 1442
SAN MARCOS, CA 92079
(619) 665-3259

STRUCTURAL ENGINEER
4x Engineering, Inc.
1885 Meridian Ave.
San Jose, CA 95125
Tel: 408-642-5464
www.4xengineering.com

CIVIL ENGINEER
Peter Carlino
Lea and Braze
www.leabraze.com
Phone: 510-887-4086 x.117
Mobile: 510-760-8727
Email: Pcarlino@leabraze.com

SCOPE OF WORK
PROVIDE PROPERLY PLACED BLOCKING AND BACKING IN ALL BATHROOMS AND CLOSETS FOR THE PROPER INSTALLATION OF TOWEL BARS, TOILET PAPER HOLDERS, SHELVING AND ANY WALL MOUNTED FIXTURE OR LIGHT.

BUILD 368 S.F. LOWER LEVEL ADU ADDITION PER PLAN
BUILD NEW 415 S.F. UPPER LEVEL ADDITION PER PLAN
INSTALL WINDOWS, DOORS AND SKYLIGHTS PER PLAN
INSTALL FLOORING PER HOMEOWNER
INSTALL CABINETS, COUNTERS, PLUMBING FIXTURES AND APPLIANCES
INSTALL TILE
INSTALL GLASS SHOWER ENCLOSURE
TAPE, TEXTURE AND PAINT INTERIOR. COLOR TBD BY HOMEOWNER
INSTALL EXTERIOR SIDING. COLOR TBD BY HOMEOWNER
INSTALL ELECTRICAL FIXTURES, OUTLETS AND SWITCHES PER ELECTRICAL PLAN
INSULATE PER TITLE 24 REQUIREMENTS
INSTALL HVAC AND WATER HEATER PER TITLE 24 REQUIREMENTS
INSTALL (N) GAS METER

GENERAL NOTES

1. CONTRACTOR SHALL, AS PART OF THIS CONTRACT, FURNISH ALL INSURANCE REQUIRED BY THE OWNER AND FURNISH ALL MATERIAL, LABOR TRANSPORTATION AND EQUIPMENT AND PROPERLY INSTALL ALL WORK SPECIFIED HEREIN, SHOWN ON THE DRAWINGS, OR REASONABLY IMPLIED TO COMPLETE THE CONSTRUCTION. INCLUDED AS PART OF THE WORK OF THESE SECTIONS, NOT NECESSARILY LIMITED BY THEM, ARE THE FOLLOWING: ALL MATERIALS, LABOR, TOOLS AND EQUIPMENT REQUIRED TO PROPERLY EXECUTE AND COMPLETE HIS WORK ACCORDING TO THE PLANS AND SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINISHING OF HIS WORK IN THE MANNER AND FORM PRESCRIBED BY THE PLANS AND SPECIFICATIONS. REPORT DISCREPANCIES OR ERRORS AND OMISSIONS IN THE PLANS AND SPECIFICATIONS FOR THE WORK PRIOR TO SUBMITTING BID.
3. CONTRACTORS ARE TO PROTECT ALL PROPERTY AND THE WORK OF ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES WHICH GOVERN THIS AREA.
4. ALL CONSTRUCTION AND INSTALLATION SHALL COMPLY ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES WHICH GOVERN THIS AREA.
5. CONTRACTORS SHALL INDIVIDUALLY WARRENT FOR ONE YEAR ALL MATERIALS AND WORKMANSHIP EXCEPT AS OTHERWISE AGREES. IN CASE OF CONCONFLICT, NOTES AND SPECIFIC DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE "GENERAL NOTES AND SPECIFICATIONS" AND OVER TYPICAL DETAILS.
6. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
7. ITEMS SPECIFIED ON PLANS AND SPECIFICATIONS REPRESENT THE TYPE AND QUALITY REQUIRED. SUBCONTRACTORS MAY SUBSTITUTE "EQUAL" ITEMS IN THEIR BID WHEN APPROVED BY THE OWNER AND ARCHITECT.
8. CONTRACTORS SHALL, UPON COMPLETION OF THIS WORK, CLEAN AND CLEAR THE AREA OF ALL DEBRIS OR ANY OTHER MATTER CAUSED BY HIS OPERATION.
9. THE ARCHITECT WILL IN NO WAY BE RESPONSIBLE FOR THE WAY IN WHICH FIELD WORK IS PERFORMED, SAFETY IN, ON OR AROUND THE JOBSITE, METHODS OF PERFORMANCE OR TIMELINESS OF PERFORMANCE OF THE WORK.
10. THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS AND SHALL AT ONCE REPORT TO THE ARCHITECT ANY DISCREPANCY OR OMISSION HE MAY DISCOVER.
11. FENCES AND FREE STANDING MASONRY WALLS UP TO 36" IN HEIGHT DO NOT REQUIRE A BUILDING PERMIT. ALL THOSE OVER 36" IN HEIGHT REQUIRED A SEPARATE BUILDING PERMIT.
12. SIGNS REQUIRE A SEPARATE PERMIT.
13. WHERE CONTINUOUS OR SPECIAL INSPECTION IS REQUIRED BY THESE PLANS, A REGISTERED DEPUTY INSPECTOR APPROVED BY AND RESPONSABLE TO THE ARCHITECT AND BUILDING DEPARTMENT SHALL BE EMPLOYED BY THE OWNER.
14. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
15. "PENETRATIONS OF FIRE-RESISTIVE WALLS, FLOOR-CEILINGS AND ROOF-CEILINGS SHALL BE PROTECTED AS REQUIRED IN CRC SECTION R302.4.
16. THESE DRAWINGS SHOW ONLY REPRESENTATIVE ABD TYPICAL DETAILS TO ASSIST THE CONTRACTOR. THE DRAWINGS DO NOT ILLUSTRATE EVERY CONDITION. ALL ATTACHMENTS, CONNECTIONS, FASTENINGS, ETC. SHALL BE PROPERLY SECURED IN CONFORMANCE WITH BEST PRACTICE, AND CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THE SAME. ALL SPECIFICATIONS AND DETAILS INCLUDED ON THESE DRAWINGS ARE INTENDED TO INDICATE A PARTICULAR LEVEL OF QUALITY FOR THE PROJECT. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL INSTALL ALL MATERIALS AND SYSTEMS IN STRICT ACCORDANCE WITH EACH SPECIFIC MANUFACTURERS INSTALLATION INSTRUCTIONS. ALL MANUFACTURERS RECOMMENDATIONS FOR MATERIAL INSTALLATION SHALL TAKE PRECEDENCE OVER ANY METHOD IMPLIED IN THESE CONSTRUCTION DOCUMENTS.
17. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS PRIOR TO COMMENCING WORK AND NOTIFY ARCHITECT OF AN DISCREPANCIES.
18. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON DRAWINGS. DO NOT SCALE ANY DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
19. THE BUILDING INSPECTOR WILL RECHECK FOR EXPANSIVE SOILS AND/OR GRADING REQUIREMENTS AT THE FIRST INSPECTION
20. THE CONTROL VALVES IN SHOWERS, TUB/SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. CPC SECTIONS 408, 409, 410.

GOVERNING CODE

ALL WORK SHALL BE IN CONFORMANCE WITH, BUT NOT LIMITED TO THE REQUIREMENTS OF THE FOLLOWING AND ANY OTHER STATE AND LOCAL CODES HAVING JURISDICTION:

ALL 2022 CALIFORNIA CODES
2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA GREEN BUILDING STANDARD CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS

ALL PERMITS EXCEEDING $1,000 IN VALUATION SHALL REQUIRE INSTALLATION OF APPROVED SMOKE AND CARBON MONOXIDE DETECTORS WITHIN THE DWELLING.

ALL PERMITS EXCEEDING $10,000 IN VALUATION SHALL REQUIRE THE INSTALLATION OF AN APPROVED AUTOMATIC GAS SHUT-OFF DEVICE ON THE CUSTOMER OWNED PIPING AT THE UTILITY METER.

BUILDING ADDRESS NUMBERS MUST BE A MINIMUM OF 4 INCHES IN HEIGHT OR 3 INCHES IN HEIGHT AND SELF-ILLUMINATED.

PER THE GREEN BUILDING STANDARDS CODE, THE CONSTRUCTION AND DEMOLITION ORDINANCE (C & D) APPLIES

TRUSS CALCULATIONS TO BE A DEFERRED SUBMITTAL

GAS LINE DIAGRAM TO BE A DEFERRED SUBMITTAL

SITE DATA

PROJECT ADDRESS: 310 TAIT AVE., LOS GATOS, CA 95030
LOT SIZE: 2649 S.F.
APN: 510-14-058

ZONING DATA

ZONING DESIGNATION:	R1-D:LHP
OVERLAY DESIGNATIONS:	Historic District
BASE FAR:	1033 s.f.
OCCUPANCY GROUP:	R-3/U
EXISTING USE:	RESIDENTIAL
PROPOSED USE:	RESIDENTIAL
SETBACKS:	
FRONT YARD SETBACK:	15'
SIDE YARD SETBACK:	5' MAIN HOUSE/4' ADU
REAR YARD SETBACK:	20' MAIN HOUSE/ 4' ADU
MAX. ALLOWABLE HEIGHT:	30'

BUILDING DATA

CONSTRUCTION TYPE:	V-B
YEAR BUILT:	1918
EXISTING # OF STORIES:	1
PROPOSED # OF STORIES:	2
PROPOSED BUILDING HEIGHT:	24' - 3"
FIRE SPRINKLERS:	NO
FIRE ALARM:	NO

AREA CALCULATION

(N) BUILDING AREA	
(N) LOWER LEVEL	618 S.F.
(N) UPPER LEVEL	415 S.F.
MAIN HOUSE TOTAL	**1033 S.F.**
(N) ADU	368 S.F.
TOTAL	1401 S.F.

TITLE 24 SUMMARY

1. New walls: R-21 (2x6)
2. New Roof: R-30
3. New floor: R-19
4. New glazing: U-factor = 0.30 & SHGC = 0.23
5. Water heater: new tankless water heater w/0.95 energy factor (minimum); 1x for the entire house
6. HVAC: 2x new furnace + AC for the (95% AFUE, 14.3 SEER2); 1 for the main house and 1 for the ADU

SEE FULL TITLE 24 REPORT FOR ALL REQUIREMENTS

COMPLIANCE NOTES

1. COMPLIANCE WITH THE DOCUMENTATION REQUIREMENTS OF THE 2022 ENERGY EFFICIENCY STANDARDS IS NECESSARY FOR THIS PROJECT. REGISTERED, SIGNED, AND DATED COPIES OF THE APPROPIATE CF1R, CF2R, AND CF3R FORMS SHALL BE MADE AVAILABLE AT NECESSARY INTERVALS FOR BUILDING INSPECTOR REVIEW. FINAL COMPLETED FORMS WILL BE AVAILABLE FOR THE BUILDING OWNER.
2. ALL PROPOSED BUILDING, STRUCTURES, ADDITIONS, MODIFICATIONS TO BUILDINGS/STRUCTURES MUST COMPLY WITH THE APPROVED LOCATION, AS SHOWN ON THE COUNTY APPROVED PLOT PLAN. AT THE DISCRETION OF THE COUNTY, THE PROPERTY OWNER MAY BE REQUIRED TO PROVIDE PROOF OF CURRENT PLACEMENT OF EACH ON THE PARCEL. THIS WAY INCLUDE A STAMPED AND SIGNED SETBACK CERITIFATE PREPARED BY A CALIFORNIA LICENSED SURVEYOR OR CIVIL ENGENNER. (COUNTY BUILDING CODE 91.1.107.2).

REVISIONS	BY

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APN: 510-14-058

COVER SHEET

310 TAIT AVE. LOS GATOS, CA 95030

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DATE 11/1/2025 11:52:55 AM	A0.0
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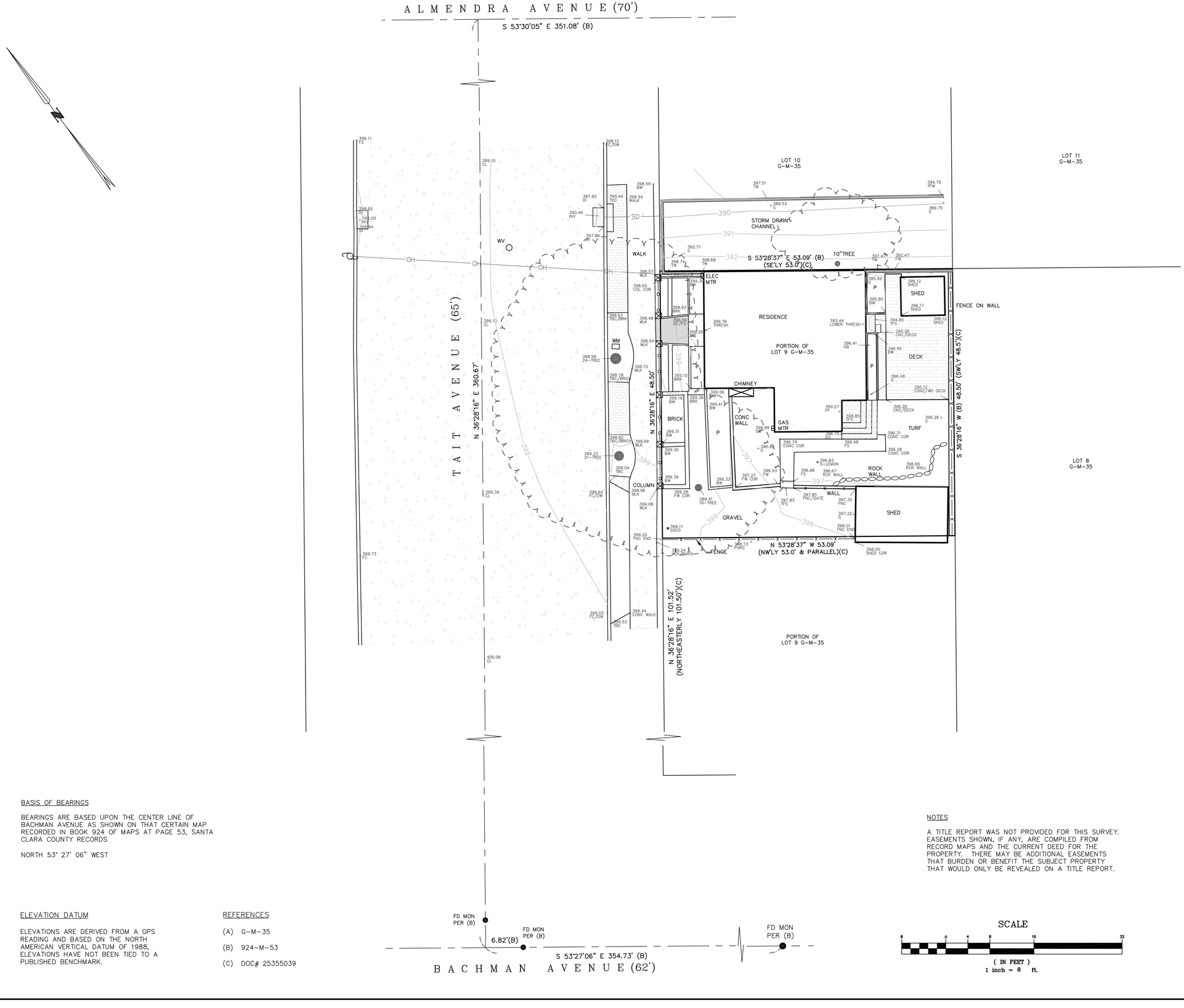


ABBREVIATIONS

PUE – PUBLIC UTILITY EASEMENT
WCE – WIRE CLEARANCE EASEMENT
SDE – STORM DRAIN EASAEMENT
ICV – IRRIGATION CONTROL VALVE
CNC– CONCRETE
FNC – FENCE
TBC – TOP BACK OF CURB
AE – ANCHOR EASEMENT
OH – OVERHEAD UTILITY LINES
HB – HOSE BIB
FC – FACE OF CURB
FS – FACE OF STAIR
DL – DRIP LINE
SL – SHRUB LINE
G – GROUND
P – PLANTER

PARCEL DATA:

APN: 510–14–058

AREA: 2,575 SF +/–

AVG SLOPE: 4.9%

BASIS OF BEARINGS

BEARINGS ARE BASED UPON THE CENTER LINE OF BACHMAN AVENUE AS SHOWN ON THAT CERTAIN MAP RECORDED IN BOOK 924 OF MAPS AT PAGE 53, SANTA CLARA COUNTY RECORDS

NORTH 53° 27' 06" WEST

ELEVATION DATUM

ELEVATIONS ARE DERIVED FROM A GPS READING AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, ELEVATIONS HAVE NOT BEEN TIED TO A PUBLISHED BENCHMARK.

REFERENCES

(A) G–M–35

(B) 924–M–53

(C) DOC# 25355039

NOTES

A TITLE REPORT WAS NOT PROVIDED FOR THIS SURVEY. EASEMENTS SHOWN, IF ANY, ARE COMPILED FROM RECORD MAPS AND THE CURRENT DEED FOR THE PROPERTY. THERE MAY BE ADDITIONAL EASEMENTS THAT BURDEN OR BENEFIT THE SUBJECT PROPERTY THAT WOULD ONLY BE REVEALED ON A TITLE REPORT.

SCALE

8 0 4 8 16 32

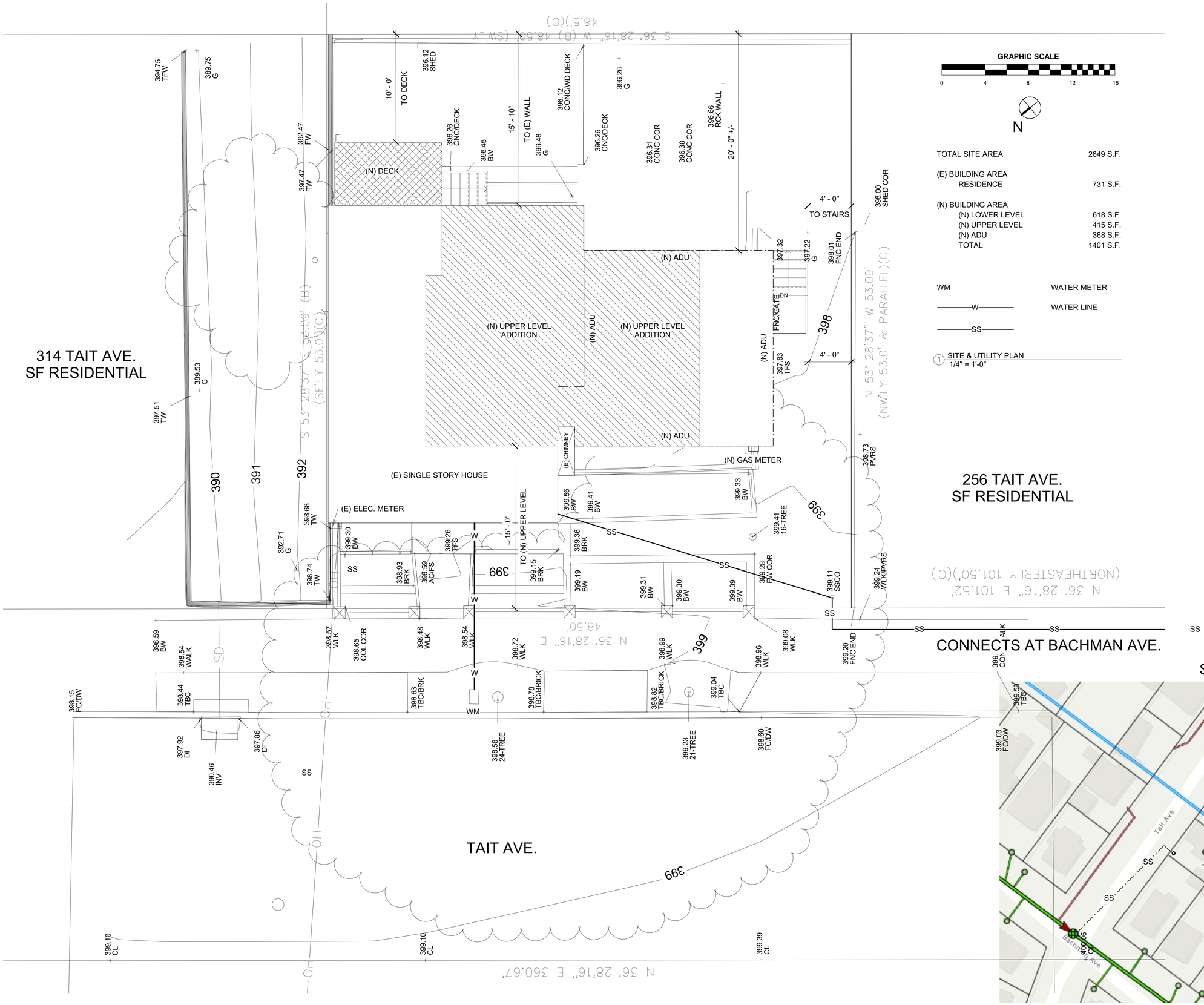
(IN FEET)
1 inch = 8 ft.

LICENSED LAND SURVEYOR
JEAN-PAUL HAPPEE
8807
STATE OF CALIFORNIA

JEAN–PAUL HAPPEE, PLS 8807

ALPHA LAND SURVEYS, INC.

4444 SCOTTS VALLEY DR. #7 SCOTTS VALLEY, CA 95066 (831) 438–4453	P.O. BOX 1146 MORGAN HILL, CA 95038 (831) 438–4453	TOPOGRAPHIC MAP OF 310 TAIT AVENUE TOWN OF LOS GATOS SANTA CLARA COUNTY	SHEET 1 OF ONE
1" = 8'	DATE: 1/31/23	JOB#: 2022–242	



GRAPHIC SCALE

0 4 8 12 16

N

TOTAL SITE AREA	2649 S.F.
(E) BUILDING AREA	
RESIDENCE	731 S.F.
(N) BUILDING AREA	
(N) LOWER LEVEL	618 S.F.
(N) UPPER LEVEL	415 S.F.
(N) ADU	368 S.F.
TOTAL	1401 S.F.

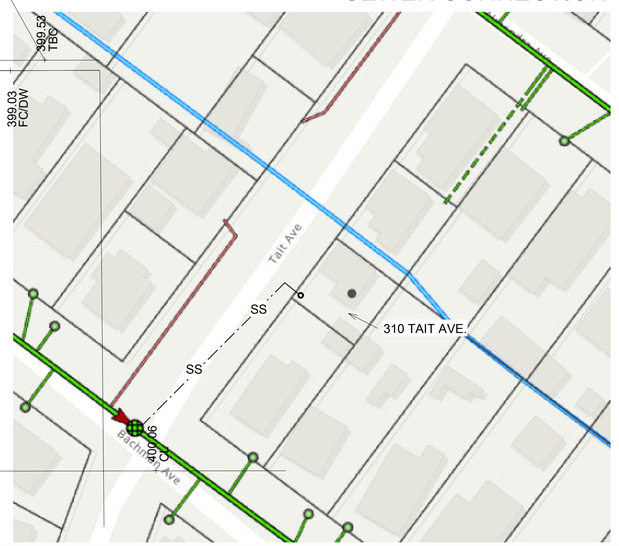
WM WATER METER

——W—— WATER LINE

——SS——

1 SITE & UTILITY PLAN
1/4" = 1'-0"

SEWER CONNECTION



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LOS GATOS, CA 95030
APN: 510-14-058

SITE & UTILITY PLAN

310 TAIT AVE. LOS GATOS, CA 95030

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DATE	10/24/2025 6:13:16 AM
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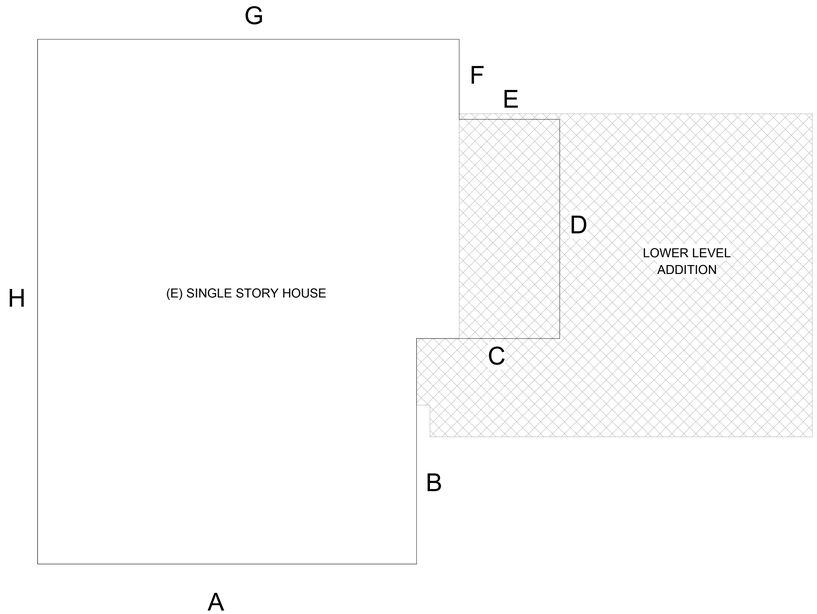
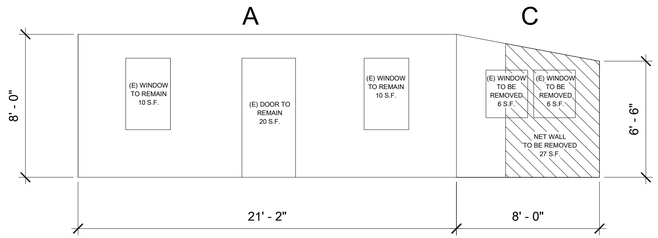
SHEET	A1.0

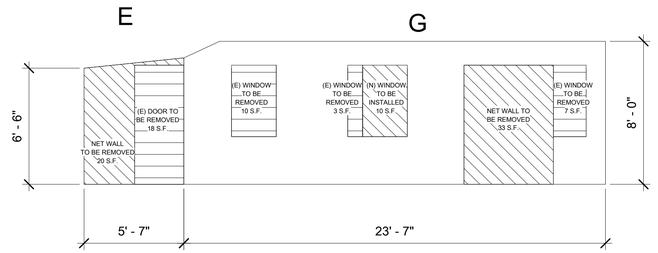


WALL TO BE REMOVED

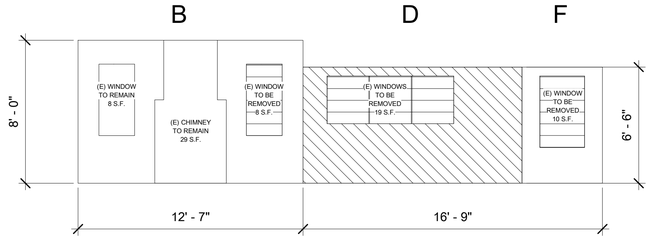
OPENING TO BE BLOCKED



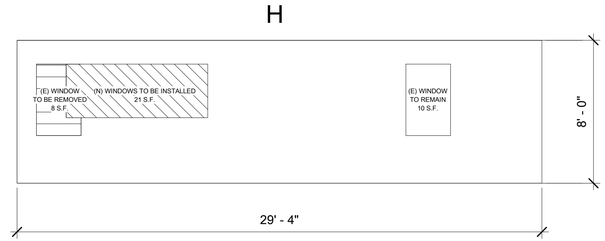
FRONT ELEVATION



BACK ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

A. EXISTING WALL SURFACE AREA

WALL SECTION	L X H	TOTAL WALL SURFACE (GROSS)	EXISTING NET OPENING (WINDOWS AND DOORS)	NET WINDOWS AND DOORS TO BE REMOVED	NET WINDOWS AND DOORS TO REMAIN	WALLS TO BE REMOVED	WALLS TO REMAIN	CONTIGUOUS WALL TO REMAIN
A	21' 2" X 8'	169 S.F.	40 S.F.	0	40 S.F.	0	169-40-0	129 S.F.
B	12' 7" X 8'	101 S.F.	45 S.F.	8 S.F.	37 S.F.	0	101-45-0	56 S.F.
C	8' X 6' 6"	58 S.F.	12 S.F.	12 S.F.	0	27 S.F.	58-12-27	19 S.F.
D	12' 3" X 6' 6"	78 S.F.	19 S.F.	19 S.F.	0	59 S.F.	78-19-59	0
E	5' 7" X 6' 6"	38 S.F.	18 S.F.	18 S.F.	0	20 S.F.	38-18-20	0
F	4' 6" X 6' 6"	31 S.F.	10 S.F.	10 S.F.	0	0	31-10-0	21 S.F.
G	23' 7" X 8'	188 S.F.	30 S.F.	20 S.F.	0	43 S.F.	188-30-43	115 S.F.
H	29' 4" X 8'	235 S.F.	20 S.F.	8 S.F.	10 S.F.	21 S.F.	235-20-21	194 S.F.
TOTAL		**898 S.F.**	**194 S.F.**					**531 S.F.**

B. CALCULATE 50% OF EXISTING WALL SURFACE (GROSS) = 898/2 = 449 S.F.

C. CALCULATE 50% OF EXISTING WALL SURFACE (NET) = 898-194/2 = 352 S.F.

D. TOTAL CONTIGUOUS NET WALL AREA TO REMAIN = 531 S.F. = 59%

1 DEMO CALC
1/4" = 1'-0"

REVISIONS	BY

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DEMO CALCULATIONS

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	1/4" = 1'-0"
DATE	11/5/2025 7:56:04 AM
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SHEET
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GRADING AND DRAINAGE PLANS

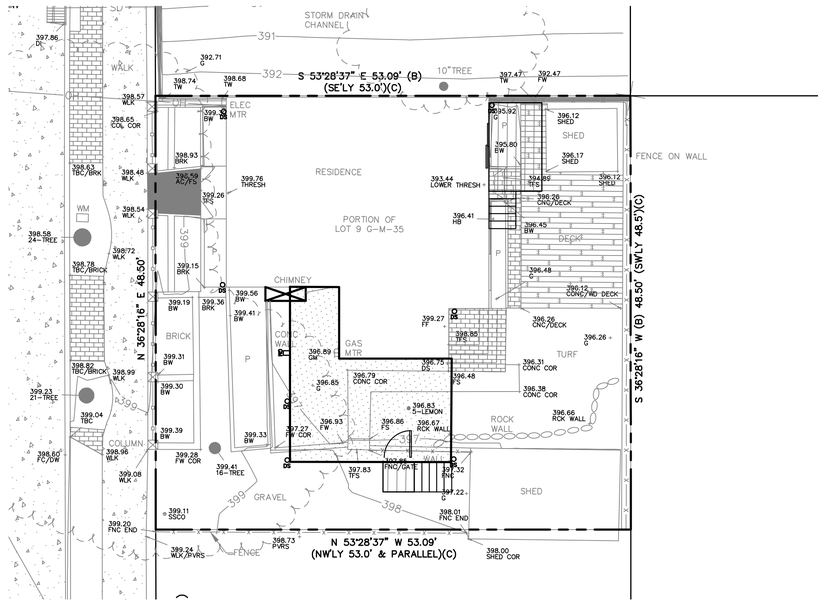
310 TAIT AVENUE, LOS GATOS, CA 95030
ASSESSORS PARCEL NO. 510-14-058

LEGEND

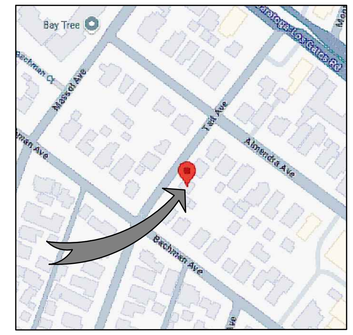
EXISTING	PROPOSED	DESCRIPTION
		BOUNDARY
		PROPERTY LINE
		RETAINING WALL
		LANDSCAPE RETAINING WALL
RW	RW	RAINWATER TIGHTLINE
	SUB	SUBDRAIN LINE
	TL	TIGHTLINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
	SDP	STORM DRAIN PRESSURE LINE
P	SSP	SANITARY SEWER PRESSURE LINE
JT	JT	JOINT TRENCH
		SET BACK LINE
		CONCRETE VALLEY GUTTER
		EARTHEN SWALE
CB	CB	CATCH BASIN
JB	JB	JUNCTION BOX
AD	AD	AREA DRAIN
		CURB INLET
SDMH	SDMH	STORM DRAIN MANHOLE
		FIRE HYDRANT
SSMH	SSMH	SANITARY SEWER MANHOLE
		STREET SIGN
222.57 INV	222.57 INV	SPOT ELEVATION
		FLOW DIRECTION
	D	DEMOLISH/REMOVE
		BENCHMARK
200	200	CONTOURS
	PP/PL SEE NOTE XX" TREE	TREE TO BE REMOVED
	TP	TREE PROTECTION FENCING

ABBREVIATIONS

AB	AGGREGATE BASE	MAX	MAXIMUM
AC	ASPHALT CONCRETE	MH	MANHOLE
ACC	ACCESSIBLE	MIN	MINIMUM
AD	AREA DRAIN	MON.	MONUMENT
BC	BEGINNING OF CURVE	MRO	METERED RELEASE OUTLET
B & D	BEARING & DISTANCE	(N)	NEW
BM	BENCHMARK	NO.	NUMBER
BOW	BACK OF SIDEWALK	NTS	NOT TO SCALE
BUB	BUBBLER BOX	O.C.	ON CENTER
BW/FG	BOTTOM OF WALL/FINISH GRADE	O/	OVER
		(PA)	PLANTING AREA
CB	CATCH BASIN	PED	PEDESTRIAN
C & G	CURB AND GUTTER	PIV	POST INDICATOR VALVE
℄	CENTER LINE	PSS	PUBLIC SERVICES EASEMENT
CPP	CORRUGATED PLASTIC PIPE (SMOOTH INTERIOR)	℗	PROPERTY LINE
		PP	POWER POLE
CO	CLEANOUT	PUE	PUBLIC UTILITY EASEMENT
COTG	CLEANOUT TO GRADE	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	R	RADIUS
CONST	CONSTRUCT or –TION	RCP	REINFORCED CONCRETE PIPE
CONC COR	CONCRETE CORNER	RIM	RIM ELEVATION
CY	CUBIC YARD	RW	RAINWATER
D	DIAMETER	R/W	RIGHT OF WAY
DI	DROP INLET	S	SLOPE
DIP	DUCTILE IRON PIPE	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EA	EACH	SAN	SANITARY
EC	END OF CURVE	SD	STORM DRAIN
EG	EXISTING GRADE	SDMH	STORM DRAIN MANHOLE
EL	ELEVATIONS	SHT	SHEET
EP	EDGE OF PAVEMENT	S.L.D.	SEE LANDSCAPE DRAWINGS
EQ	EQUIPMENT	SPEC	SPECIFICATION
EW	EACH WAY	SS	SANITARY SEWER
(E)	EXISTING	SSCO	SANITARY SEWER CLEANOUT
FC	FACE OF CURB	SSMH	SANITARY SEWER MANHOLE
FF	FINISHED FLOOR	ST.	STREET
FG	FINISHED GRADE	STA	STATION
FH	FIRE HYDRANT	STD	STANDARD
FL	FLOW LINE	STRUCT	STRUCTURAL
FS	FINISHED SURFACE	T	TELEPHONE
G	GAS	TC	TOP OF CURB
GA	GAGE OR GAUGE	TOW	TOP OF WALL
GB	GRADE BREAK	TEMP	TEMPORARY
HDPE	HIGH DENSITY CORRUGATED POLYETHYLENE PIPE	TP	TOP OF PAVEMENT
		TW/FG	TOP OF WALL/FINISH GRADE
HORIZ	HORIZONTAL	TYP	TYPICAL
HI PT	HIGH POINT	VC	VERTICAL CURVE
H&T	HUB & TACK	VCP	VITRIFIED CLAY PIPE
ID	INSIDE DIAMETER	VERT	VERTICAL
INV	INVERT ELEVATION	W/	WITH
JB	JUNCTION BOX	W, WL	WATER LINE
JT	JOINT TRENCH	WM	WATER METER
JP	JOINT UTILITY POLE	WWF	WELDED WIRE FABRIC
L	LENGTH		
LNDG	LANDING		
LF	LINEAR FEET		



KEY MAP
1" = 40'



VICINITY MAP
NTS

ESTIMATED ONSITE EARTHWORKS QUANTITIES

CUT		
CUT (SITE GRADING)	0	CU.YD.
CUT (WITHIN BUILDING FOOTPRINT)	25	CU.YD.
CUT TOTAL OVERALL VOLUME	25	CU.YD.
FILL		
FILL (SITE GRADING)	20	CU.YD.
FILL (WITHIN BUILDING FOOTPRINT)	0	CU.YD.
FILL TOTAL OVERALL VOLUME	20	CU.YD.
TOTAL EXPORT:	5	CU.YD.

OWNER'S INFORMATION

OWNER:
SANTIAGO ALLENDE
310 TAIT AVENUE
LOS GATOS, CA

APN: 510-14-058

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:
1. TOPOGRAPHIC SURVEY BY ALPHA LAND SURVEYS, INC, ENTITLED:
"TOPOGRAPHIC MAP"
310 TAIT AVENUE
LOS GATOS, CA
DATED: 01-31-2023
JOB# 2022-242

2. SITE PLAN BY D3 DESIGNS, LLC., ENTITLED:
"SITE PLAN"
310 TAIT AVENUE
LOS GATOS, USA

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

FEMA NOTE:

PROPERTY LIES WITHIN ZONE "X", BEING AREAS DETERMINED TO BE OUTSIDE OF THE .2% ANNUAL CHANCE FLOODPLAIN AS PER FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 06085C0376H, DATED MAY 18, 2009.

CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY CONNECTIONS PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD.

*** BUILDING PAD NOTE:** ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

1-800-642-2444 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116.
aabaya@leabraze.com

SHEET INDEX

SANTA CLARA COUNTY FIRE DEPARTMENT

FIRE PROTECTION IMPROVEMENTSAS SHOWN ON THESE PLANS ARE HEREBY APPROVED THIS _____ DAY OF _____ 202_.

DEPUTY FIRE MARSHALL — DATE

TOWN OF LOS GATOS
IMPROVEMENT PLANS REVIEWED BY:

GARY HEAP, P.E.
TOWN ENGINEER — DATE

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
RESCUE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

REGISTERED PROFESSIONAL ENGINEER No. C79555 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	22513401

GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE
TITLE SHEET, ABREVIATIONS, LEGEND
PARKS AND PUBLIC WORKS DEPARTMENT
TOWN OF LOS GATOS

REVISIONS	BY	DATE
◇		

SHEET 01 OF 08

REV.: SEPT. 2016

TOWN OF LOS GATOS STANDARD GRADING NOTES

1. ALL WORK SHALL CONFORM TO CHAPTER 12 OF THE CODE OF THE TOWN OF LOS GATOS, THE ADOPTED CALIFORNIA BUILDING CODE AND THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EXCEPT AS SPECIFIED OTHERWISE ON THESE PLANS AND DETAILS.

2. NO WORK MAY BE STARTED ON-SITE WITHOUT AN APPROVED GRADING PLAN AND A GRADING PERMIT ISSUED BY THE TOWN OF LOS GATOS, PARKS AND PUBLIC WORKS DEPARTMENT LOCATED AT 41 MILES AVENUE, LOS GATOS, CA 95030.

3. A PRE-JOB MEETING SHALL BE HELD WITH THE TOWN ENGINEERING INSPECTOR FROM THE PARKS AND PUBLIC WORKS DEPARTMENT PRIOR TO ANY WORK BEING DONE. THE CONTRACTOR SHALL CALL THE INSPECTIONS LINE AT (408) 399-5771 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY GRADING OR ONSITE WORK. THIS MEETING SHOULD INCLUDE:
   a. A DISCUSSION OF THE PROJECT CONDITIONS OF APPROVAL, WORKING HOURS, SITE MAINTENANCE AND OTHER CONSTRUCTION MATTERS;
   b. ACKNOWLEDGEMENT IN WRITING THAT CONTRACTOR AND APPLICANT HAVE READ AND UNDERSTAND THE PROJECT CONDITIONS OF APPROVAL, AND WILL MAKE CERTAIN THAT ALL PROJECT SUB-CONTRACTORS HAVE READ AND UNDERSTAND THEM PRIOR TO COMMENCING WORK AND THAT A COPY OF THE PROJECT CONDITIONS OF APPROVAL WILL BE POSTED ON SITE AT ALL TIMES DURING CONSTRUCTION.

4. APPROVAL OF PLANS DOES NOT RELEASE THE DEVELOPER OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN. IF, DURING THE COURSE OF CONSTRUCTION OF THE IMPROVEMENTS, PUBLIC INTEREST AND SAFETY REQUIRES A MODIFICATION OR DEPARTURE FROM THE TOWN SPECIFICATIONS OR THESE IMPROVEMENT PLANS, THE TOWN ENGINEER SHALL HAVE FULL AUTHORITY TO REQUIRE SUCH MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

5. APPROVAL OF THIS PLAN APPLIES ONLY TO THE GRADING, EXCAVATION, PLACEMENT, AND COMPACTION OF NATURAL EARTH MATERIALS. THIS APPROVAL DOES NOT CONFER ANY RIGHTS OF ENTRY TO EITHER PUBLIC PROPERTY OR THE PRIVATE PROPERTY OF OTHERS AND DOES NOT CONSTITUTE APPROVAL OF ANY OTHER IMPROVEMENTS.

6. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO BE DISPOSED OF AT APPROVED LOCATION(S).

7. IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE OR CONTRACTOR TO IDENTIFY, LOCATE AND PROTECT ALL UNDERGROUND FACILITIES. PERMITTEE OR CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-227-2600 A MINIMUM OF FORTY-EIGHT (48) HOURS BUT NOT MORE THAN FOURTEEN (14) DAYS PRIOR TO COMMENCING ALL WORK.

8. ALL GRADING SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT FOR AIRBORNE PARTICULATES.

9. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, CODES, RULES AND REGULATIONS GOVERNING THE WORK IDENTIFIED ON THESE PLANS. THESE SHALL INCLUDE, WITHOUT LIMITATION, SAFETY AND HEALTH RULES AND REGULATIONS ESTABLISHED BY OR PURSUANT TO THE OCCUPATIONAL SAFETY AND HEALTH ACT OR ANY OTHER APPLICABLE PUBLIC AUTHORITY.

10. THE GENERAL CONTRACTOR SHALL PROVIDE QUALIFIED SUPERVISION ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.

11. HORIZONTAL AND VERTICAL CONTROLS SHALL BE SET AND CERTIFIED BY A LICENSED SURVEYOR OR REGISTERED CIVIL ENGINEER QUALIFIED TO PRACTICE LAND SURVEYING, FOR THE FOLLOWING ITEMS:
   a. RETAINING WALL: TOP OF WALL ELEVATIONS AND LOCATIONS (ALL WALLS TO BE PERMITTED SEPARATELY AND APPLIED FOR AT THE TOWN OF LOS GATOS BUILDING DIVISION).
   b. TOE AND TOP OF CUT AND FILL SLOPES.

12. PRIOR TO ISSUANCE OF ANY PERMIT, THE APPLICANT'S SOILS ENGINEER SHALL REVIEW THE FINAL GRADING AND DRAINAGE PLANS TO ENSURE THAT DESIGNS FOR FOUNDATIONS, RETAINING WALLS, SITE GRADING, AND SITE DRAINAGE ARE IN ACCORDANCE WITH THEIR RECOMMENDATIONS AND THE PEER REVIEW COMMENTS. THE APPLICANT'S SOILS ENGINEER'S APPROVAL SHALL THEN BE CONVEYED TO THE TOWN EITHER BY LETTER OR BY SIGNING THE PLANS.
    SOILS ENGINEER: _____
    REFERENCE _____ REPORT NO. _____, DATED _____, SHALL BE THOROUGHLY COMPLIED WITH. BOTH THE MENTIONED REPORT AND ALL UPDATES/ADDENDUMS/LETTERS ARE HEREBY APPENDED AND MADE A PART OF THIS GRADING PLAN.

13. DURING CONSTRUCTION, ALL EXCAVATIONS AND GRADING SHALL BE INSPECTED BY THE APPLICANT'S SOILS ENGINEER. THE ENGINEER SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS BEFORE BEGINNING ANY GRADING. THE ENGINEER SHALL BE ON-SITE TO VERIFY THAT THE ACTUAL CONDITIONS ARE AS ANTICIPATED IN THE DESIGN-LEVEL GEOTECHNICAL REPORT AND/OR PROVIDE APPROPRIATE CHANGES TO THE REPORT RECOMMENDATIONS, AS NECESSARY. ALL UNOBSERVED AND/OR UNAPPROVED GRADING SHALL BE REMOVED AND REPLACED UNDER SOILS ENGINEER OBSERVANCE (THE TOWN INSPECTOR SHALL BE MADE AWARE OF ANY REQUIRED CHANGES PRIOR TO WORK BEING PERFORMED).

14. THE RESULTS OF THE CONSTRUCTION OBSERVATION AND TESTING SHOULD BE DOCUMENTED IN AN "AS-BUILT" LETTER/REPORT PREPARED BY THE APPLICANTS' SOILS ENGINEER AND SUBMITTED FOR THE TOWN'S REVIEW AND ACCEPTANCE BEFORE FINAL RELEASE OF ANY OCCUPANCY PERMIT IS GRANTED.

15. ALL PRIVATE AND PUBLIC STREETS ACCESSING PROJECT SITE SHALL BE KEPT OPEN AND IN A SAFE, DRIVABLE CONDITION THROUGHOUT CONSTRUCTION. IF TEMPORARY CLOSURE IS NEEDED, THEN FORMAL WRITTEN NOTICE TO THE ADJACENT NEIGHBORS AND THE TOWN OF LOS GATOS PARKS AND PUBLIC WORKS DEPARTMENT SHALL BE PROVIDED AT LEAST ONE (1) WEEK IN ADVANCE OF CLOSURE AND NO CLOSURE SHALL BE GRANTED WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE TOWN. NO MATERIAL OR EQUIPMENT SHALL BE STORED IN THE PUBLIC OR PRIVATE RIGHT-OF-WAY.

16. THE CONTRACTOR SHALL INSTALL AND MAINTAIN FENCES, BARRIERS, LIGHTS AND SIGNS THAT ARE NECESSARY TO GIVE ADEQUATE WARNING AND/PROTECTION TO THE PUBLIC AT ALL TIMES.

17. OWNER/APPLICANT: _____
    PHONE: _____

18. GENERAL CONTRACTOR: _____
    PHONE: _____

19. GRADING CONTRACTOR: _____
    PHONE: _____

20. WATER SHALL BE AVAILABLE ON THE SITE AT ALL TIMES DURING GRADING OPERATIONS TO PROPERLY MAINTAIN DUST CONTROL.

21. THIS PLAN DOES NOT APPROVE THE REMOVAL OF TREES. APPROPRIATE TREE REMOVAL PERMITS AND METHODS OF TREE PRESERVATION SHALL BE REQUIRED. TREE REMOVAL PERMITS ARE REQUIRED PRIOR TO THE APPROVAL OF ALL PLANS.

22. A TOWN ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY. A STATE ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN STATE RIGHT-OF-WAY (IF APPLICABLE). THE PERMITTEE AND/OR CONTRACTOR SHALL BE RESPONSIBLE COORDINATING INSPECTION PERFORMED BY OTHER GOVERNMENTAL AGENCIES.

23. NO CROSS-LOT DRAINAGE WILL BE PERMITTED WITHOUT SATISFACTORY STORMWATER ACCEPTANCE DEED/FACILITIES. ALL DRAINAGE SHALL BE DIRECTED TO THE STREET OR OTHER ACCEPTABLE DRAINAGE FACILITY VIA A NON-EROSIVE METHOD AS APPROVED BY THE TOWN ENGINEER.

24. IT IS THE RESPONSIBILITY OF CONTRACTOR AND/OR OWNER TO MAKE SURE THAT ALL DIRT TRACKED INTO THE PUBLIC RIGHT-OF-WAY IS CLEANED UP ON A DAILY BASIS. MUD, SILT, CONCRETE AND OTHER CONSTRUCTION DEBRIS SHALL NOT BE WASHED INTO THE TOWN'S STORM DRAINS.

25. GOOD HOUSEKEEPING PRACTICES SHALL BE OBSERVED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. SUPERINTENDENCE OF CONSTRUCTION SHALL BE DILIGENTLY PERFORMED BY A PERSON OR PERSONS AUTHORIZED TO DO SO AT ALL TIMES DURING WORKING HOURS. THE STORING OF GOODS AND/OR MATERIALS ON THE SIDEWALK AND/OR THE STREET WILL NOT BE ALLOWED UNLESS A SPECIAL PERMIT IS ISSUED BY THE ENGINEERING DIVISION. THE ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE KEPT CLEAR OF ALL JOB RELATED DIRT AND DEBRIS AT THE END OF THE DAY. FAILURE TO MAINTAIN THE PUBLIC RIGHT-OF-WAY ACCORDING TO THIS CONDITION MAY RESULT IN PENALTIES AND/OR THE TOWN PERFORMING THE REQUIRED MAINTENANCE AT THE DEVELOPER'S EXPENSE.

26. GRADING SHALL BE UNDERTAKEN IN ACCORDANCE WITH CONDITIONS AND REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION CONTROL PLAN AND/OR STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE TOWN OF LOS GATOS STORM WATER QUALITY MANAGEMENT PROGRAM, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AND ANY OTHER PERMITS/REQUIREMENTS ISSUED BY THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD. PLANS (INCLUDING ALL UPDATES) SHALL BE ON-SITE AT ALL TIMES. NO DIRECT STORMWATER DISCHARGES FROM THE DEVELOPMENT WILL BE ALLOWED ONTO TOWN STREETS OR INTO THE PUBLIC STORM DRAIN SYSTEM WITHOUT TREATMENT BY AN APPROVED STORM WATER POLLUTION PREVENTION DEVICE OR OTHER APPROVED METHODS. MAINTENANCE OF PRIVATE STORMWATER POLLUTION PREVENTION DEVICES SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER. DISCHARGES OR CONNECTION WITHOUT TREATMENT BY AN APPROVED AND ADEQUATELY OPERATING STORMWATER POLLUTION PREVENTION DEVICE OR OTHER APPROVED METHOD SHALL BE CONSIDERED A VIOLATION OF THE ABOVE REFERENCED PERMIT AND THE TOWN OF LOS GATOS STORMWATER ORDINANCE.

TOWN OF LOS GATOS NPDES NOTES

1. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.

2. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.

3. APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS) FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILL OR RESIDES SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.

4. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES AND MUST NOT BE DISCHARGED TO RECEIVING WATERS OR TO THE LOCAL STORM DRAIN SYSTEM.

5. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES (BMPS) AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

6. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY, ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.

7. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTE OR POLLUTANTS OFF OF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE PROHIBITED EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT OR THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPERCHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

8. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.

GENERAL NOTES

1. TOTAL DISTURBED AREA = 2,544 SF (0.058 ACRES)

PROJECT DATA

1. EXISTING PROPERTY ADDRESS: 310 TAIT AVE
2. PROPOSED PROPERTY ADDRESS: 310 TAIT AVE
3. PROPERTY OWNER: SANTIAGO ALLENDE, 310 TAIT AVENUE, LOS GATOS, CA 95030

ASSESSORS PARCEL NUMBER: 510-14-058

4. EXISTING USE: SINGLE FAMILY RESIDENCE
5. EXISTING ZONING:
6. PROPOSED USE: SINGLE FAMILY RESIDENTIAL
7. PROPOSED ZONING:
8. SITE AREA: 2,544 S.F. (0.058 ACRES)

APPLICANT/DEVELOPER: SANTIAGO ALLENDE, 310 TAIT AVE, LOS GATOS, CA 95030, Phone:, Email:

CONSULTANTS: DONNA CHIVERS, D3 DESIGNES, LLC ARCHITECT, 510-714-8309

PETER CARLINO, PE, LEA & BRAZE ENGINEERING, 2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CA 94545, 510-887-4086

9. STORM DRAIN PROVIDER:
10. WATER SUPPLY: SAN JOSE WATER COMPANY
11. SANITARY SEWER DISPOSAL: WEST VALLEY SANITATION
12. GAS AND ELECTRIC: PG&E
13. TELEPHONE: FRONTIER COMMUNICATIONS
14. CABLE: COMCAST
15. STORM DRAIN: TOWN OF LOS GATOS
16. FIRE PROTECTION: SANTA CLARA COUNTY FIRE DEPARTMENT
17. DATUM: NGVD 88
18. BASIS OF BEARINGS: BEARINGS ARE BASED UPON THE CENTER LINE OF BACHMAN AVENUE AS SHOWN ON THAT CERTAIN MAP RECORDED IN BOOK 924 OF MAPS AT PAGE 53, SANTA CLARA COUNTY RECORDS. NORTH 53°,27' 06" WEST.

BENCHMARK INFORMATION: ELEVATIONS ARE DERIVED FROM A GPS READING AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, ELEVATIONS HAVE NOT BEEN TIED TO A PUBLISHED BENCHMARK.

NOTE: ALL DRY UTILITIES TO BE INSTALLED UNDERGROUND. TO BE DESIGNED BY OTHERS.

REV.: SEPT. 2016

REGISTERED PROFESSIONAL ENGINEER — No. C79555 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	22513410

GRADING AND DRAINAGE PLANS

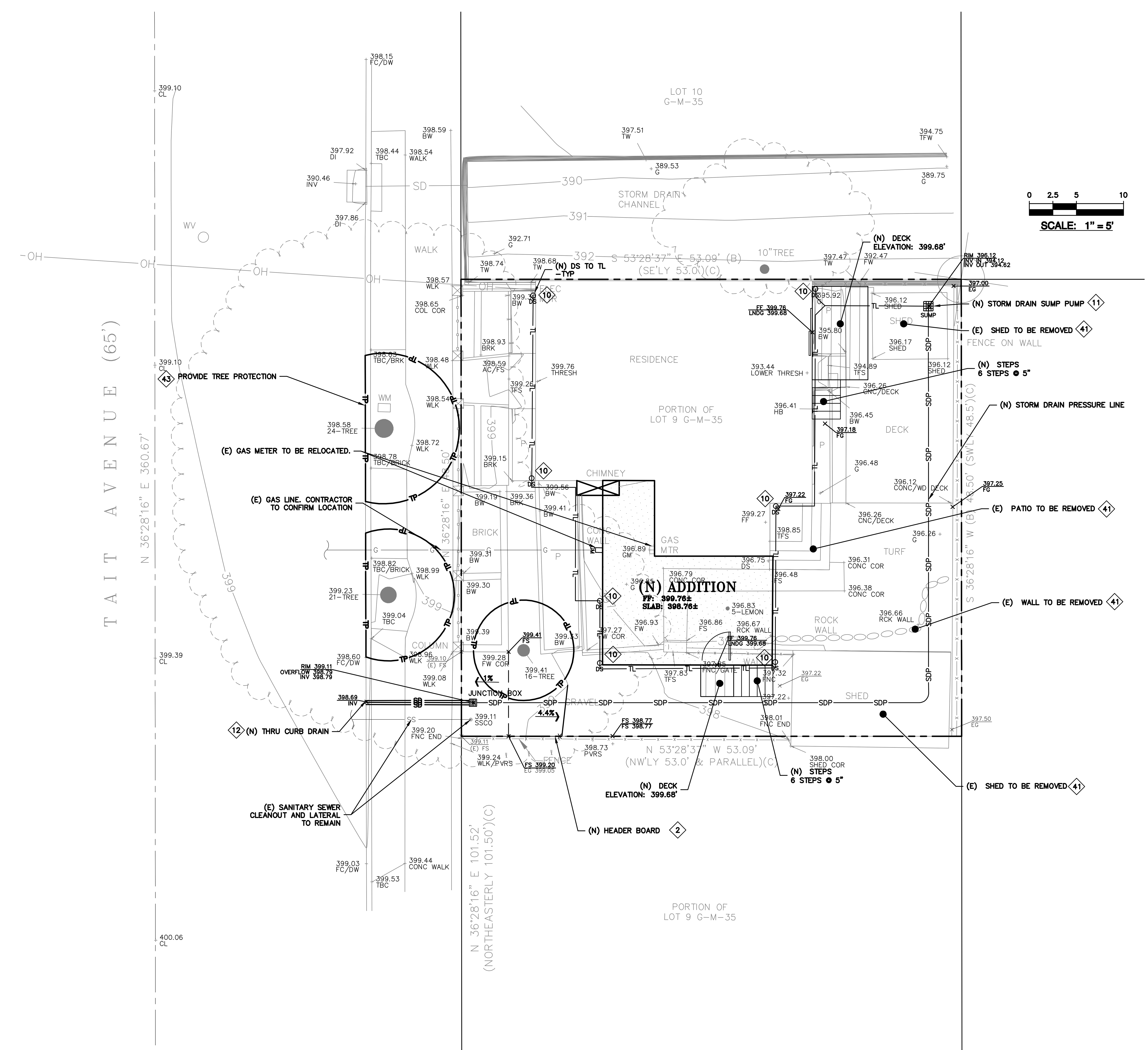
ALLENDE RESIDENCE
310 TAIT AVE
TOWN NOTES & PROJECT DATA

PARKS AND PUBLIC WORKS DEPARTMENT

TOWN OF LOS GATOS

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
RESIDENCE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

◇	REVISIONS	BY	DATE



FLATWORK KEYNOTES 1 TO 2

1. FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.4 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.12.1.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS.
2. (N) HEADERBOARD. SEE DETAIL 4 ON SHEET 4.0.

STORM DRAIN KEYNOTES 10 TO 12

10. CONNECT RAIN WATER DOWNSPOUTS TO 4" PVC (SDR-35) TIGHTLINE, SLOPED AT 1% MINIMUM. DIRECT TO NEAREST STORM DRAIN LINE AS SHOWN ON PLANS. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS. TIGHTLINE MAY BE PLACED IN COMMON TRENCH WITH SUBDRAIN LINES, HOWEVER, DO NOT CONNECT TO SUBDRAIN LINES. SEE DETAIL 2 ON SHEET 04.
11. INSTALL (N) SUMP PUMP FOR STORMDRAIN. SEE DETAIL 1 ON SHEET 04.
12. INSTALL (N) CURB THROUGH DRAIN. SEE DETAIL 3 ON SHEET 03.

DEMOLITION KEYNOTES 41 TO 43

41. DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N) CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED DEMOLITION PERMITS.
42. REMOVE (E) TREE. CONTRACTOR SHALL OBTAIN THE PROPER TREE REMOVAL PERMITS AS REQUIRED.
43. PROVIDE TREE PROTECTION AROUND TREES TO REMAIN. SEE DETAIL 6 ON SHEET ER-2.

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

* BUILDING PAD NOTE:
ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

1-800-642-2444 CALL BEFORE YOU DIG 811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER PETER CARLINO No. C79555 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:2251341CI	

GRADING AND DRAINAGE PLANS

ALLENDE RESIDENCE
310 TAIT AVE
GRADING AND DRAINAGE PLAN

TOWN OF LOS GATOS — PARKS AND PUBLIC WORKS DEPARTMENT

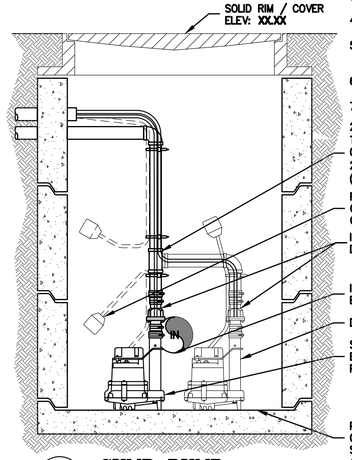
TOWN OF LOS GATOS

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS
MAIN OFFICE: 2495 INDUSTRIAL PKWY WEST HAYWARD, CALIFORNIA 94545 (510) 887-4086
REGIONAL OFFICES: ROSEVILLE DUBLIN SAN JOSE
WWW.LEABRAZE.COM

REVISIONS	BY	DATE

REV.: SEPT. 2016

PUMP PURPOSE: SUBDRAIN, STORM DRAIN LIFT					
SPECIFICATION		QUANTITY		CONTAINMENT	
X	ZOELLER 151		SIMPLEX (SINGLE)		CHRISTY V-24
	ZOELLER 153	X	DUPLEX (DOUBLE)	X	30" HDPE
					CONCRETE MANHOLE



1 / 04 **SUMP PUMP**
NTS

PUMP NOTES:
1. SUBSURFACE DRAINAGE SYSTEMS (IF APPLICABLE) AND SURFACE STORM DRAIN SYSTEMS (IF APPLICABLE) SHALL REMAIN DEDICATED SEPARATE SYSTEMS AND SHALL NOT CONNECT TO EACH OTHER.
2. SIMPLEX PUMPS MAY BE CONTROLLED BY PIGGYBACK FLOAT SWITCH OR VIA HARD WIRE TO CONTROL PANEL.
3. DUPLEX PUMPS SHALL BE HARD WIRED TO ALTERNATING CONTROL PANEL AND OPERATE VIA FLOAT SWITCHES.
4. RAIL SYSTEM SHALL BE UTILIZED FOR PUMPS DEEPER THAN 5' BELOW GROUND SURFACE.
5. ALL PUMPS SHALL HAVE AUDIBLE HIGH WATER LEVEL ALARM IN LOCATION TO ALERT OWNER OR CONNECTED TO BUILDING SECURITY SYSTEM.
6. ALL WIRING SHALL BE PER APPLICABLE CODE AND SHALL BE LOCATED PER CONTRACTOR / ELECTRICIAN.
7. HDPE SHALL HAVE SOLID LID BOLTED DOWN.

2" HDPE (SDR-11) OR PVC (SCH 40) DISCHARGE LINE TO OUTLET PER PLANS. PROVIDE MINIMUM 24" COVER OVER DISCHARGE LINE. FOR BURIAL DEPTH LESS THAN 24", USE GALVANIZED STEEL PIPE OR PROVIDE 4" PVC (SDR-35) PROTECTIVE SLEEVE.

FLOAT SWITCH:
ON ELEV: XX.XX
OFF ELEV: XX.XX

INSTALL CHECK VALVE AT DISCHARGE LINE - TYP.

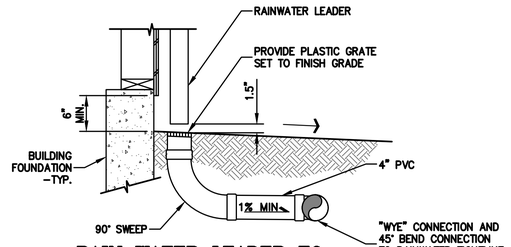
INVERT IN
ELEV: XX.XX

DUPLEX PUMP (IF APPLICABLE PER CHART ABOVE)

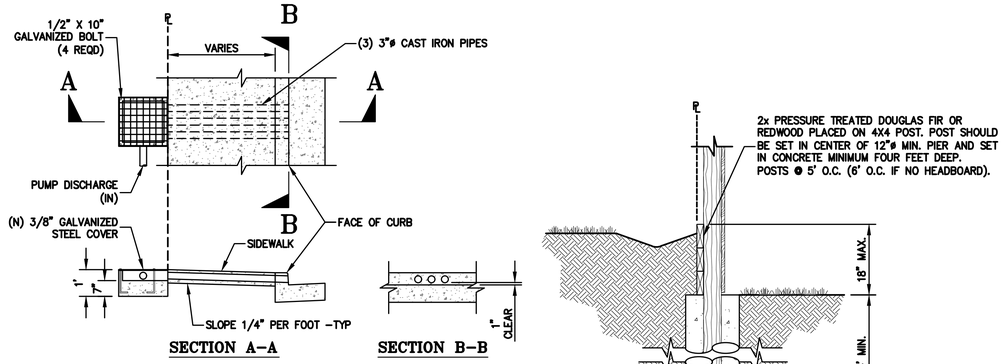
SUBMERSABLE SUMP PUMP PER SPECIFICATION ABOVE. BACKFLOW PREVENTION CHECK VALVE SHALL BE PROVIDED ON DISCHARGE LINE

PUMP SYSTEM CONTAINMENT PER CHART ABOVE WITH SOLID BOTTOM
SUMP ELEV: XX.XX

NOTE: BACK-UP POWER IS RECOMMENDED. NOTIFY ENGINEER IF OMITTED FROM PROPOSED PROJECT.



2 / 04 **RAIN WATER LEADER TO TIGHTLINE CONNECTION**
NTS



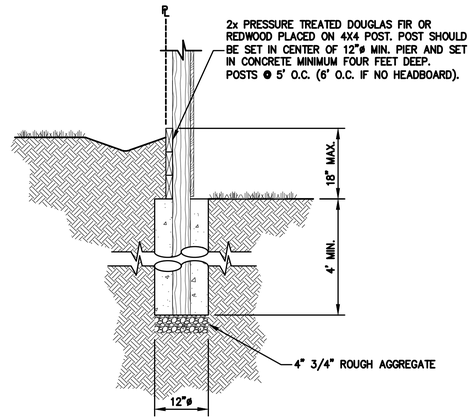
NOTES:

DISCHARGE PIPE SHALL ENTER BOX PARALLEL TO SIDE WALK.

3"ø MAX PIPE SIZE. MULTIPLE PIPE MAY BE USED TO MEET CAPACITY REQUIREMENTS.

RIGID PLASTIC, PVC, CAST IRON, OR STEEL PIPES ALLOWED BETWEEN BOX AND CURB FACE.

3 / 04 **THRU CURB WITH SOLID BOTTOM**
NTS



4 / 04 **REDWOOD HEADER ON FENCE**
NTS

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

REV.: SEPT. 2016

REGISTERED PROFESSIONAL ENGINEER
No. C79555
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	22513410

GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE
DETAILS

PARKS AND PUBLIC WORKS DEPARTMENT
TOWN OF LOS GATOS

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

◇	REVISIONS	BY	DATE

GENERAL NOTES

ALL GENERAL NOTES, SHEET NOTES, AND LEGEND NOTES FOUND IN THESE DOCUMENTS SHALL APPLY TYPICALLY THROUGHOUT. IF INCONSISTENCIES ARE FOUND IN THE VARIOUS NOTATIONS, NOTIFY THE ENGINEER IMMEDIATELY IN WRITING REQUESTING CLARIFICATION.

THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION, GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

STORMWATER POLLUTION PREVENTION NOTES

1) STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.

2) CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.

3) USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.

4) AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.

5) DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.

6) PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.

7) PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT PRACTICAL.

8) LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.

9) LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.

10) AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

A. THE PHRASE "NO DUMPING – DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.

B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.

C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.

D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.

E. STORING, HANDLING, AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.

F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

GRADING & DRAINAGE NOTES:

1. SCOPE OF WORK

THESE SPECIFICATIONS AND APPLICABLE PLANS PERTAIN TO AND INCLUDE ALL SITE GRADING AND EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL, STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION, RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.

2. GENERAL

A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS, THE SOILS REPORT BY XXXXXXXXXXXXXXXXX; AND THE TOWN OF LOS GATOS.

B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TESTS AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.

3. CLEARING AND GRUBBING

A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.

B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.

D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:

(1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.

(2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.

(3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

4. SITE PREPARATION AND STRIPPING

A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.

B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION, THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS, STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE OF RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT UNIFORM SOIL COMPACTION. THE GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION, THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.

5. EXCAVATION

A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER, UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL. RESULTING GROUND LINE SHALL BE SCARIFIED, MOISTURE-CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.

B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

6. PLACING, SPREADING AND COMPACTING FILL MATERIAL

A. FILL MATERIALS

THE MATERIALS PROPOSED FOR USE AS COMPACTED FILL SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL; HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. ANY IMPORTED MATERIAL SHALL BE APPROVED FOR USE BY THE SOILS ENGINEER, IN WRITING, BEFORE BEING IMPORTED TO THE SITE AND SHALL POSSESS SUFFICIENT FINES TO PROVIDE A COMPETENT SOIL MATRIX AND SHALL BE FREE OF VEGETATIVE AND ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.

B. FILL CONSTRUCTION

THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT OF THE FILL.

THE APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS NO THICKER THAN 8" IN LOOSE THICKNESS. LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. WHEN THE MOISTURE CONTENT OF THE FILL IS BELOW THAT SPECIFIED, WATER SHALL BE ADDED UNTIL THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS ABOVE THAT SPECIFIED, THE FILL MATERIAL SHALL BE AERATED BY BLADING OR OTHER SATISFACTORY METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.

AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED, IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.

THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS. NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.

COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.

7. CUT OR FILL SLOPES

ALL CONSTRUCTED SLOPES, BOTH CUT AND FILL, SHALL BE NO STEEPER THAN 2 TO 1 (HORIZONTAL TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS FILL EXISTING ON THE SLOPES SHALL BE BLADED OFF TO CREATE THE FINISHED SLOPE EMBANKMENT. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND THEN BE PLANTED WITH EROSION CONTROL SLOPE PLANTING. THE SOILS ENGINEER SHALL REVIEW ALL CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE TIME OF THEIR DETECTION.

8. SEASONAL LIMITS AND DRAINAGE CONTROL

FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS INTERRUPTED FOR ANY REASON THE FILL OPERATIONS SHALL NOT BE RESUMED UNTIL FIELD TEST PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.

9. DUST CONTROL

THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

10. INDEMNITY

THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE ENGINEER, THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

11. SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

12. GUARANTEE

NEITHER THE FINAL PAYMENT, NOR THE PROVISIONS IN THE CONTRACT, NOR PARTIAL, NOR ENTIRE USE OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.

THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THERE FROM WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

13. TRENCH BACKFILL

EITHER THE ON-SITE INORGANIC SOIL OR APPROVED IMPORTED SOIL MAY BE USED AS TRENCH BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS AND BE COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 90% RELATIVE COMPACTION. IMPORTED SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% RELATIVE COMPACTION. WATER JETTING ASSOCIATED WITH COMPACTION USING VIBRATORY EQUIPMENT WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THE PIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND BACKFILL.

14. EROSION CONTROL

A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE TOWN GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.

B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.

C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER 15 TO APRIL 15. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER 15 AND APRIL 15 UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.

D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE SOILS ENGINEER.

E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.

F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.

G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT, SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.

H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.

I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING PROPORTIONS:

FIBER, 2000 LBS/ACRE
SEED, 200 LBS/ACRE (SEE NOTE J, BELOW)
FERTILIZER (11-8-4), 500 LBS/ACRE
WATER, AS REQUIRED FOR APPLICATION

J. SEED MIX SHALL BE PER CALTRANS STANDARDS.

K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND WEED SEED.

L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.

M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL, PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.

N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE TOWN ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.

O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4-HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.

P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE TOWN ENGINEER MAY REQUIRE SPRAY APPLICATION OF WATER OR OTHER MAINTENANCE ACTIVITIES TO ASSURE THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.

15. CLEANUP

THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

NOTE:
THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.

REV.: SEPT. 2016

REGISTERED PROFESSI

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL NOTES:

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15.
9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15 THROUGH APRIL 15, WHICHEVER IS LONGER.
10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM OCTOBER 15 THROUGH APRIL 15.
15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15 THROUGH APRIL 15, WHICHEVER IS GREATER.
16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT ("MRP") NPDES PERMIT CAS 612008.
17. THE CONTRACTOR SHALL ADHERE TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE CITY/TOWN OR COUNTY STORM DRAIN SYSTEMS.
18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT-OF-WAY.
20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTHEN BERMS IN CONJUNCTION OF ALL LANDSCAPING.
22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND

EROSION CONTROL NOTES CONTINUED:

25. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM.
26. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
27. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO OCTOBER 15 AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS,TO PUBLIC OWNED FACILITIES.

EROSION CONTROL MEASURES:

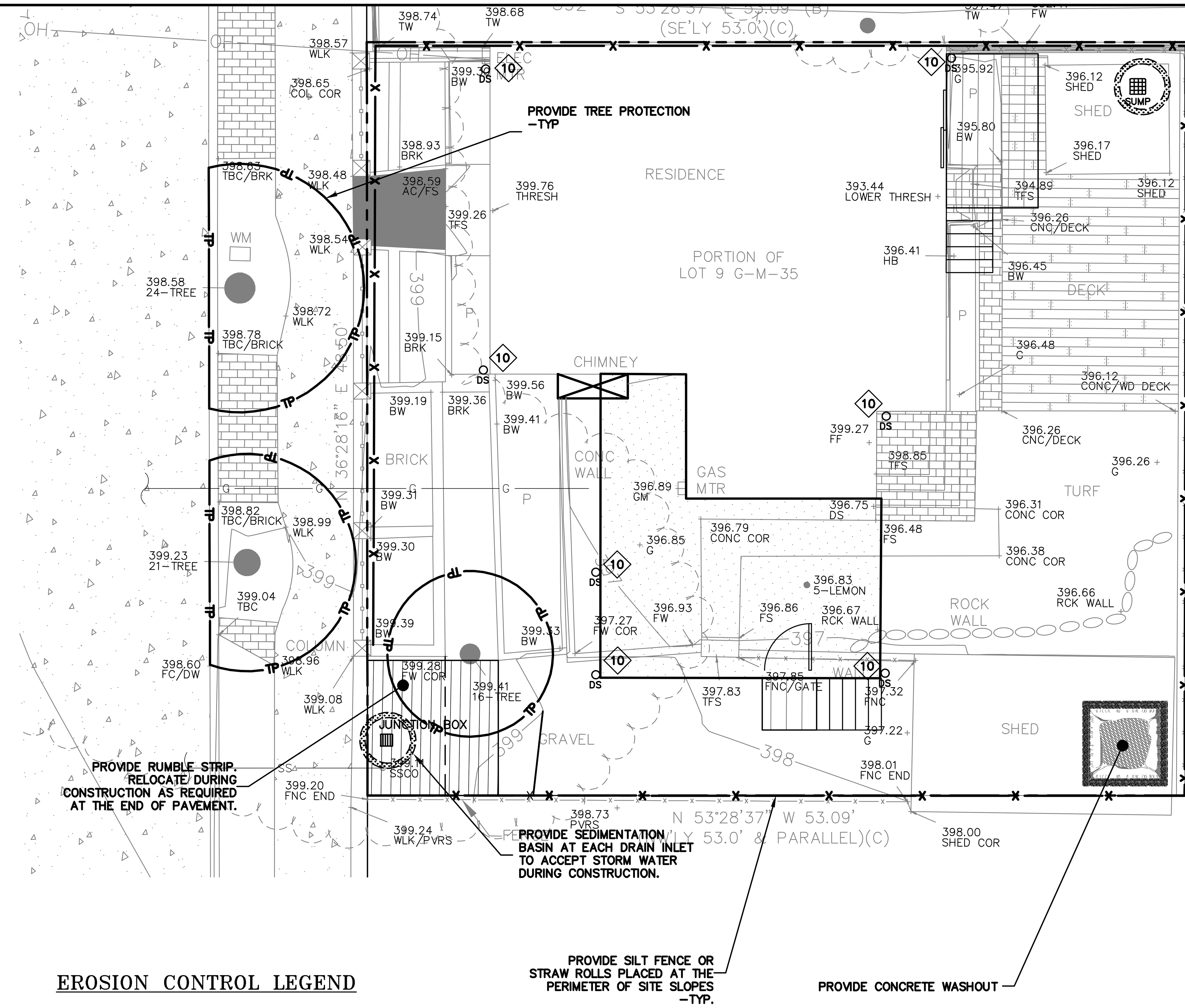
1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15 TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15 OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

REFERENCES:

1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
   E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   F. RILLS AND GULLIES MUST BE REPAIRED.
2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION



EROSION CONTROL LEGEND

(symbol)	GRAVEL BAG
(symbol)	SEDIMENTATION BASIN
(symbol)	INLET PROTECTION
—SR—	STRAW ROLL
—X—	SILT FENCE
(symbol)	CONCRETE WASHOUT
(symbol)	CONSTRUCTION ENTRANCE
(symbol)	TREE PROTECTION

NOTE:
SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. -TYP

GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE
EROSION CONTROL PLAN

TOWN OF LOS GATOS — PARKS AND PUBLIC WORKS DEPARTMENT

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	2251341CI

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE: 2495 INDUSTRIAL PKWY WEST, HAYWARD, CALIFORNIA 94545, (510) 887-4086
REGIONAL OFFICES: ROSEVILLE, DUBLIN, SAN JOSE
WWW.LEABRAZE.COM

REVISIONS	BY	DATE

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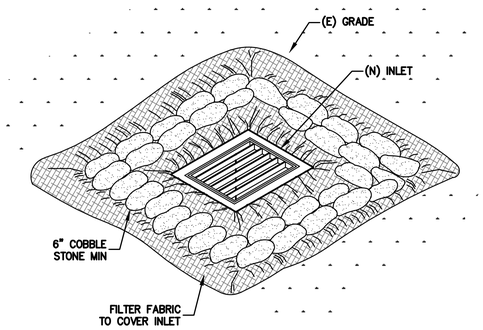
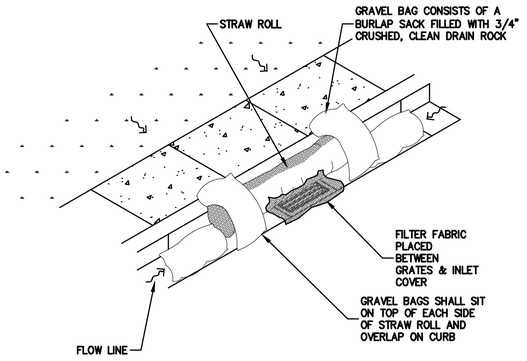
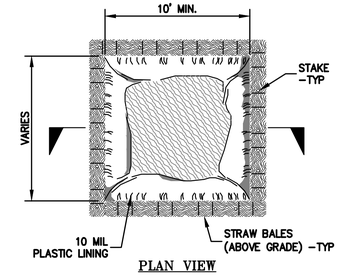


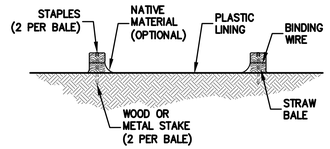
1 ER-2 **INLET PROTECTION**
NTS



2 ER-2 **STREET INLET PROTECTION**
NTS

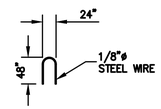


PLAN VIEW

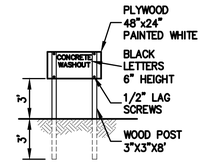


SECTION

3 ER-2 **CONCRETE WASHOUT**
NTS



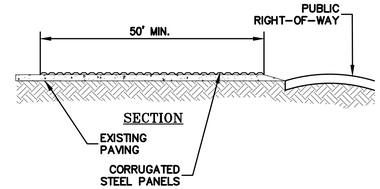
STAPLE DETAIL



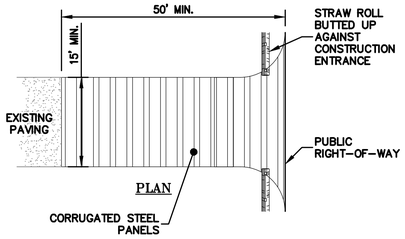
CONCRETE WASHOUT SIGN DETAIL

NOTES:
ACTUAL LAYOUT DETERMINED IN FIELD.

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



SECTION



PLAN

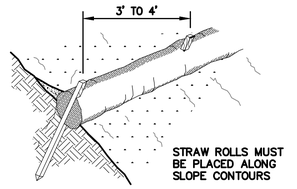
4 ER-2 **STEEL PLATED CONSTRUCTION ENTRANCE**
NTS

NOTES:

CORRUGATED STEEL PANELS SHALL BE A MINIMUM OF 50'.

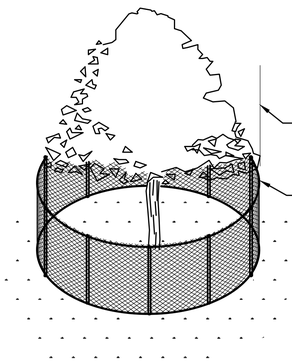
WIDTH SHALL BE A MIN. OF 15' OR GREATER IF NECESSARY TO COVER ALL VEHICULAR INGRESS AND EGRESS. PROVIDE AMPLE TURNING RADII.

ACCESSES SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL, WITH MAINTENANCE PROVIDED AS NECESSARY.



NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

5 ER-2 **STRAW ROLLS FLAT LOT**
NTS



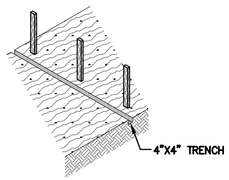
5' HIGH STEEL FENCE POSTS BURIED 2' INTO THE GROUND ON 5' CENTERS WITH 5' HIGH BRIGHT ORANGE FENCE FABRIC. POST TO BE AT DRIP LINE OF TREE WHERE EVER POSSIBLE.

NOTE:
REFER TO LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL TREE PROTECTION INFORMATION.

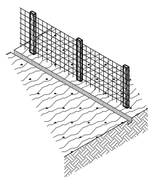
NOTE:
LOCAL JURISDICTION MIGHT HAVE MORE STRINGENT REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING W/ INSPECTOR TO ENSURE PROPER PROCEDURES ARE BEING FOLLOWED.

6 ER-2 **EXISTING TREE PROTECTION DETAIL**
NTS

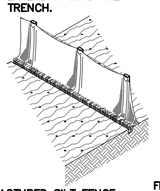
1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UP SLOPE ALONG THE LINE OF POSTS.



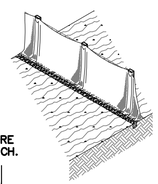
2. STAPLE WIRE FENCE TO THE POSTS.



3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.

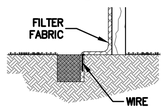


4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.

NOTE:
PREMANUFACTURED SILT FENCE PRODUCTS MAY BE USED IN LIEU OF WIRE FENCE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND MAINTAIN KEYING OF FABRIC PER THIS DETAIL.



NOTE:
IT IS ESSENTIAL THAT THE WIRE/FABRIC BE FULLY EMBEDDED INTO THE GROUND SO RUN-OFF CANNOT FLOW FREELY UNDER FENCE.

7 ER-2 **SILT FENCE**
NTS

REGISTERED PROFESSIONAL ENGINEER
PETER CARMAND
No. C79555
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	225134101

GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE
EROSION CONTROL DETAILS
PARKS AND PUBLIC WORKS DEPARTMENT
TOWN OF LOS GATOS

TOWN OF LOS GATOS 1887

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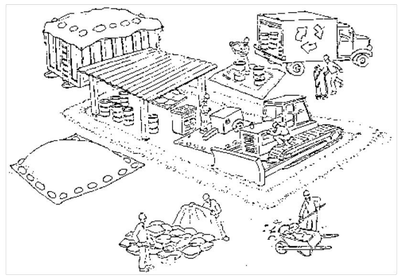
REVISIONS	BY	DATE

SHEET 07 OF 08

REV.: SEPT. 2016

Pollution Prevention — It's Part of the Plan



Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution in San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will ensure your compliance with local ordinance requirements.

Materials storage & spill cleanup

Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet from catch basins, and covered with a tarp during wet weather or when rain is forecast.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✓ Recycle all asphalt, concrete, and aggregate base material from demolition activities.
- ✓ Check dumpsters regularly for leaks and to make sure they don't overflow. Repair or replace leaking dumpsters promptly.

Hazardous materials management

- ✓ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, state, and federal regulations.
- ✓ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✓ Report any hazardous materials spills immediately! Dial 911 or your local emergency response number.

Vehicle and equipment maintenance & cleaning

- ✓ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✓ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✓ If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinsewater to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

Earthwork & contaminated soils

- ✓ Keep excavated soil on the site where it is least likely to collect in the street. Transfer to dump trucks should take place on the site, not in the street.
- ✓ Use hay bales, silt fences, or other control measures to minimize the flow of silt off the site.
- ✓ Avoid scheduling earth moving activities during the rainy season if possible. If grading activities during wet weather are allowed in your permit, be sure to implement all control measures necessary to prevent erosion.
- ✓ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✓ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place hay bales down-slope until soil is secure.
- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call your local fire department for help in determining what testing should be done.
- ✓ Manage disposal of contaminated soil according to Fire Department instructions.

Dewatering operations

- ✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ✓ Be sure to call your city's storm drain inspector before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the city inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Saw cutting

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, hay bales, sand bags, or fine gravel dams to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

Paving/asphalt work

- ✓ Do not pave during wet weather or when rain is forecast.
- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Place drip pans or absorbent material under paving equipment when not in use.
- ✓ Protect gutters, ditches, and drainage courses with hay bales, sand bags, or earthen berms.
- ✓ Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- ✓ Do not use water to wash down fresh asphalt concrete pavement.

Concrete, grout, and mortar storage & waste disposal

- ✓ Be sure to store concrete, grout, and mortar under cover and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or designate an on-site area for washing where water will flow onto dirt or into a temporary pit in a dirt area. Let the water seep into the soil and dispose of hardened concrete with trash.

- ✓ Divert water from washing exposed aggregate concrete to a dirt area where it will not run into a gutter, street, or storm drain.
- ✓ If a suitable dirt area is not available, collect the wash water and remove it for appropriate disposal off site.

Painting

- ✓ Never rinse paint brushes or materials in a gutter or street!
- ✓ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink. If you can't use a sink, direct wash water to a dirt area and spade it in.
- ✓ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✓ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

BASMAA Bay Area Stormwater Management Agencies Association

Bay Area Stormwater Management Agencies Association (BASMAA)
1-888-BAYWISE

Storm drain polluters may be liable for fines of up to $10,000 per day!

REV.: SEPT. 2016

REGISTERED PROFESSIONAL ENGINEER — No. C79555 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC

PROJECT NO.:2251341OI

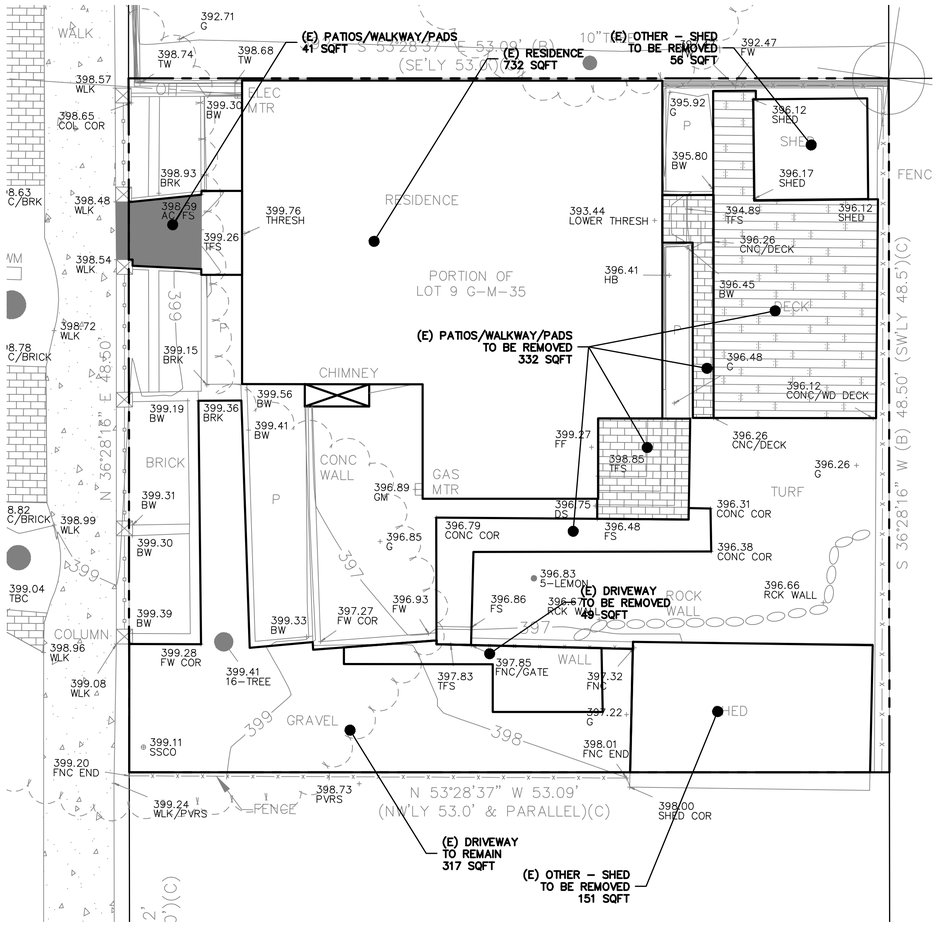
GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE
BEST MANAGEMENT PRACTICES
PARKS AND PUBLIC WORKS DEPARTMENT
TOWN OF LOS GATOS

TOWN OF LOS GATOS

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
RESEDA
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

	DATE	BY	REVISIONS
◇			

SHEET 08 OF 08



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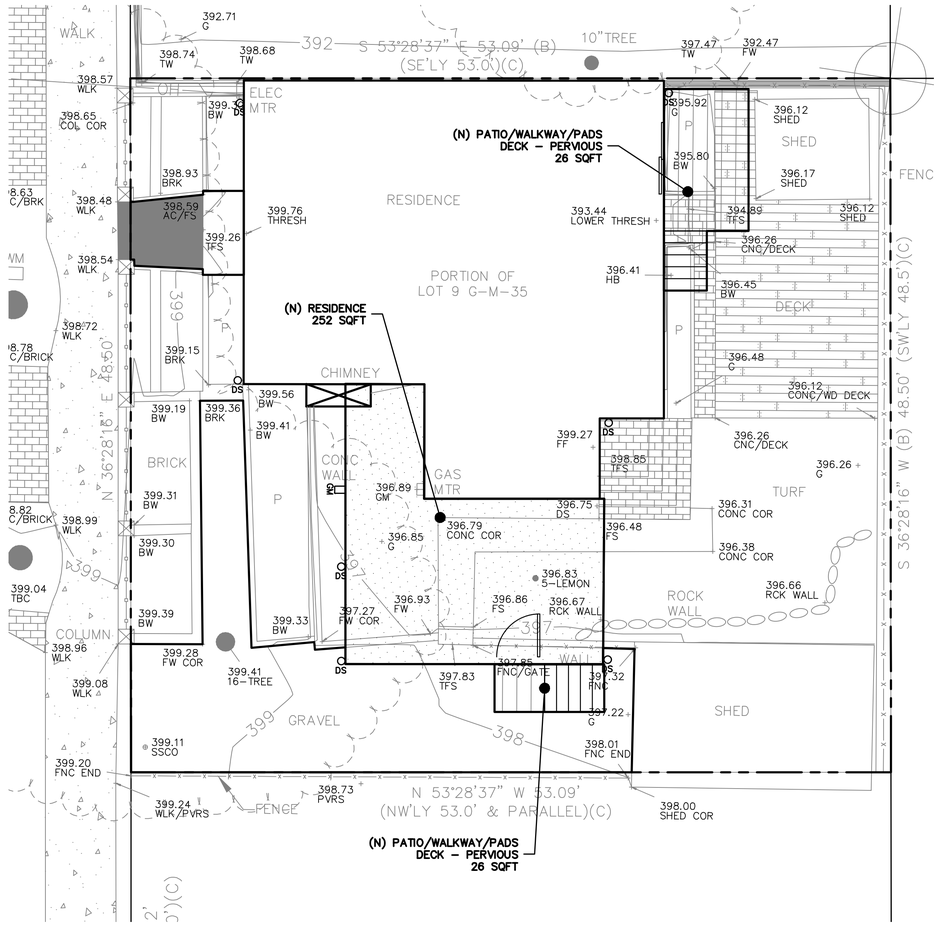

PROPOSED

0 2.5 5 10

SCALE: 1" = 5'

IMPERVIOUS SURFACE INFORMATION				
TOTAL SITE AREA =	2,575 SQUARE FEET = 0.059 ACRES			
DISTURBED AREA =	2,575 SQUARE FEET = 0.059 ACRES			
IMPERVIOUS AREAS	**EXISTING (sq-ft.)**	**REMOVED (sq-ft.)**	**NEW (sq-ft.)**	**PROPOSED (sq-ft.)**
RESIDENCE ROOFLINE	732	0	252	984
GARAGE	0	0	0	0
OTHER - SHED	207	207		0
DRIVEWAY AND PARKING	366	49		317
PATIOS, WALKWAYS AND PADS	373	332	0	41
WATER FEATURES	0			0
TOTAL IMPERVIOUS AREA	**1,678**	588	252	**1,342**
SEMI-PERVIOUS AREAS				
PERMEABLE PAVER AUTOTURN AND COURT	0	0	0	0
GRAVEL AUTOCOURT	0	0	0	0
DG PATIOS AND WALKWAYS	0	0	0	0
GRAVEL PATIOS AND WALKWAYS	0	0	0	0
TOTAL SEMI-PERVIOUS AREA	0	0	0	0
TOTAL DEVELOPED AREA	1,678	588	252	1,342
NET CHANGE IN DEVELOPED AREA	**-336 SQFT. NET DECREASE**			

REV.: SEPT. 2016

REGISTERED PROFESSIONAL ENGINEER
PETER CALLENDO
No. C79555
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

DATE:	JULY 22, 2025
SCALE:	AS NOTED
DESIGN:	MR
DRAWN:	MR
CHECK:	DH
ENGR:	PC
PROJECT NO.:	22513410

GRADING AND DRAINAGE PLANS
ALLENDE RESIDENCE
310 TAIT AVE

PARKS AND PUBLIC WORKS DEPARTMENT

TOWN OF LOS GATOS

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CIVIL ENGINEERS I LAND SURVEYORS
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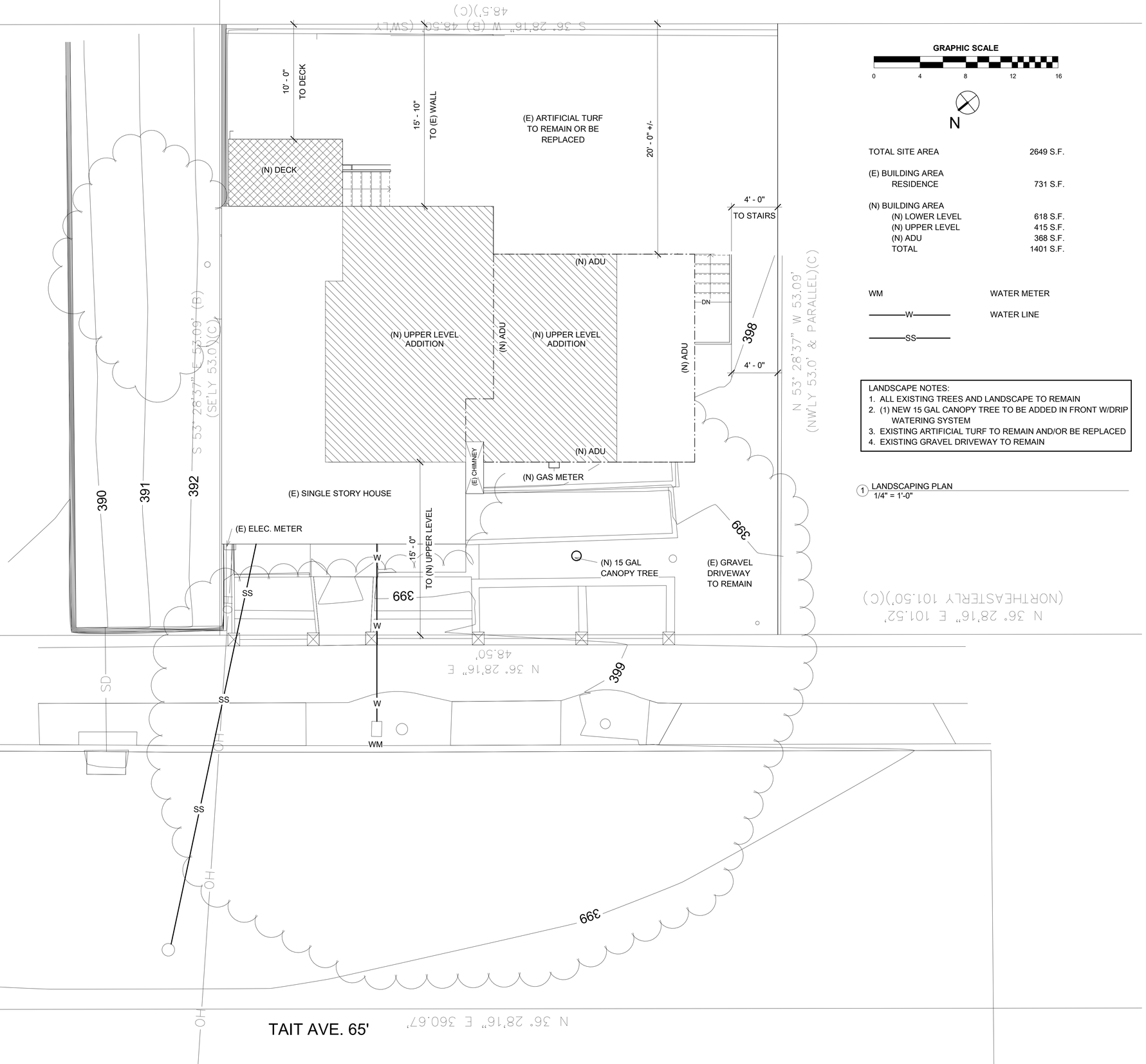
	DATE	BY	REVISIONS
◇			



GRAPHIC SCALE

0 4 8 12 16

N

TOTAL SITE AREA	2649 S.F.
(E) BUILDING AREA	
RESIDENCE	731 S.F.
(N) BUILDING AREA	
(N) LOWER LEVEL	618 S.F.
(N) UPPER LEVEL	415 S.F.
(N) ADU	368 S.F.
TOTAL	1401 S.F.

WM — WATER METER

—W— WATER LINE

—SS—

LANDSCAPE NOTES:
1. ALL EXISTING TREES AND LANDSCAPE TO REMAIN
2. (1) NEW 15 GAL CANOPY TREE TO BE ADDED IN FRONT W/DRIP WATERING SYSTEM
3. EXISTING ARTIFICIAL TURF TO REMAIN AND/OR BE REPLACED
4. EXISTING GRAVEL DRIVEWAY TO REMAIN

1 LANDSCAPING PLAN
1/4" = 1'-0"

REVISIONS	BY

DESIGN CONSULTANT

DONNA CHIVERS
D3 DESIGNS, LLC

4716 BRYCE CIR.
CARLSBAD, CA 92008
510-714-8309

donnachivers@gmail.com
www.d-3-design.com

CLIENT

SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

LANDSCAPE PLAN

310 TAIT AVE. LOS GATOS, CA 95030

SCALE 1/4" = 1'-0"	SHEET L1.0
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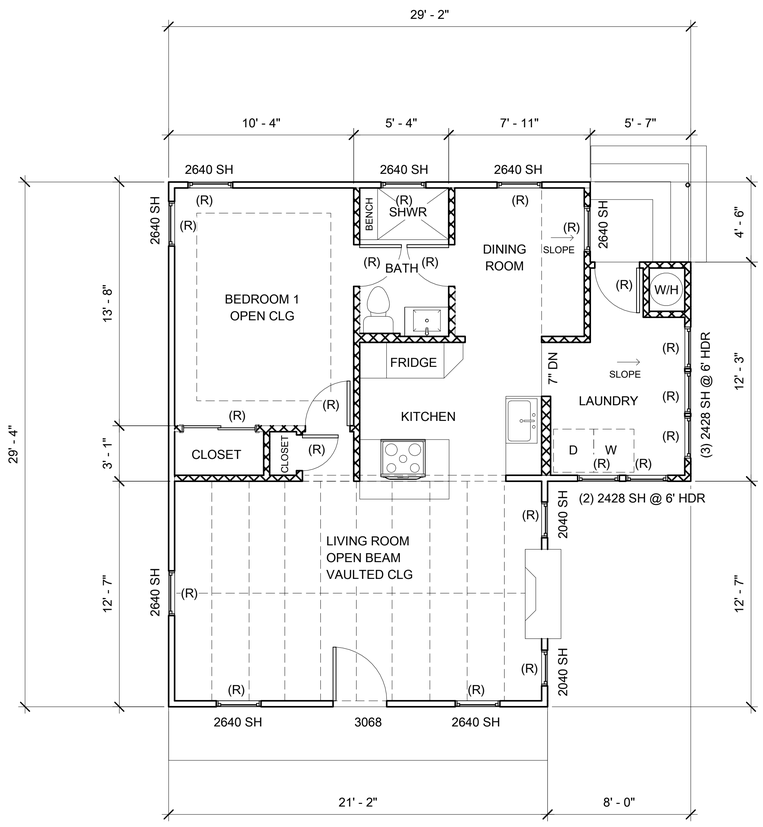

1 MAIN FLOOR
1/4" = 1'-0"

GRAPHIC SCALE

0 4 8 12 16

N

TOTAL SITE AREA 2649/2575 S.F.

(E) BUILDING FOOTPRINT
RESIDENCE 731 S.F.

INDICATES WALLS TO BE REMOVED

(R) INDICATES DOORS/WINDOWS TO BE REMOVED

DEMO NOTES:
1. REMOVE DOORS AND WINDOWS AS INDICATED
2. REMOVE WALLS AS INDICATED
3. REMOVE ROOF
4. REMOVE CABINETS, COUNTERS, PLUMBING FIXTURES AND APPLIANCES THROUGHOUT
5. REMOVE FIREPLACE AND CHIMNEY
6. REMOVE ALL HVAC AND WH UNITS
7. REMOVE BRICK STAIRS IN BACK
8. REMOVE EXTERIOR MATERIALS THROUGHOUT
9. REMOVE FIREPLACE AND CHIMNEY

REVISIONS	BY

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SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

EXISTING FLOOR PLAN AND DEMO PLAN

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	1/4" = 1'-0"
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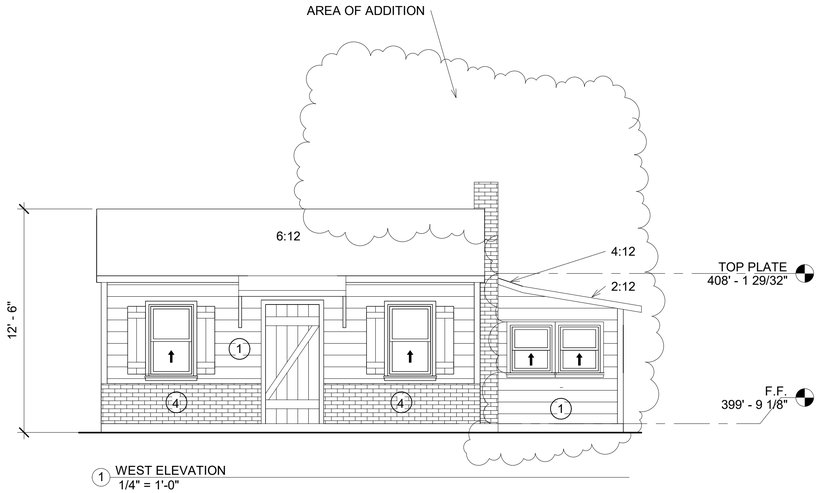
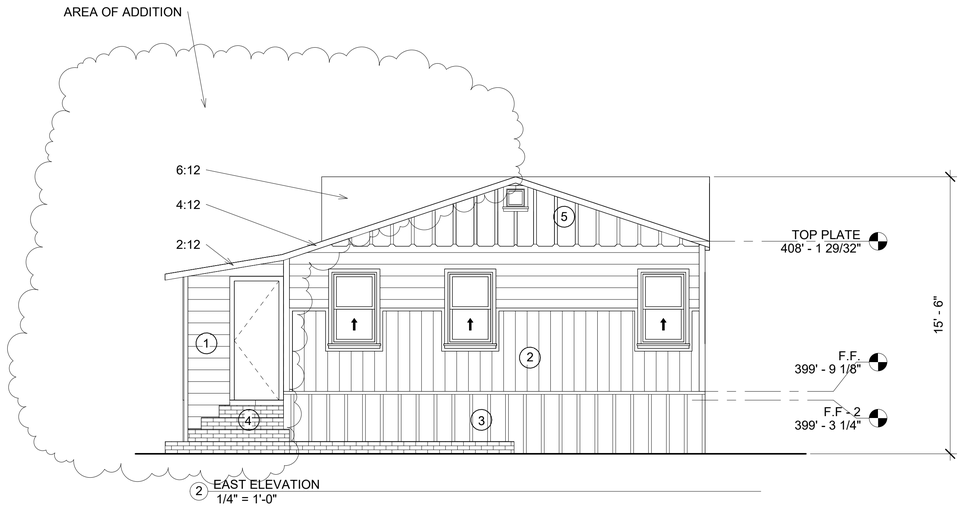


1 WEST ELEVATION
1/4" = 1'-0"



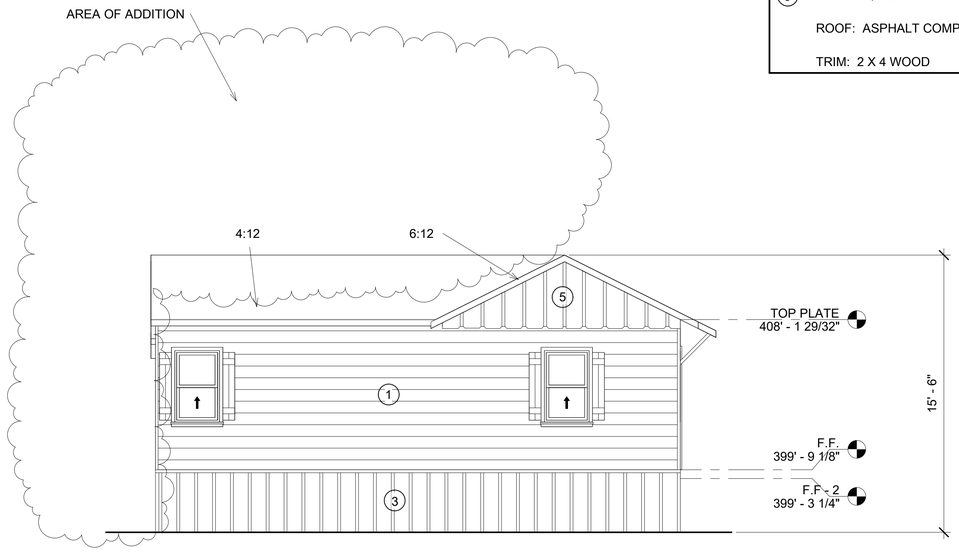
2 EAST ELEVATION
1/4" = 1'-0"

EXTERIOR MATERIALS:

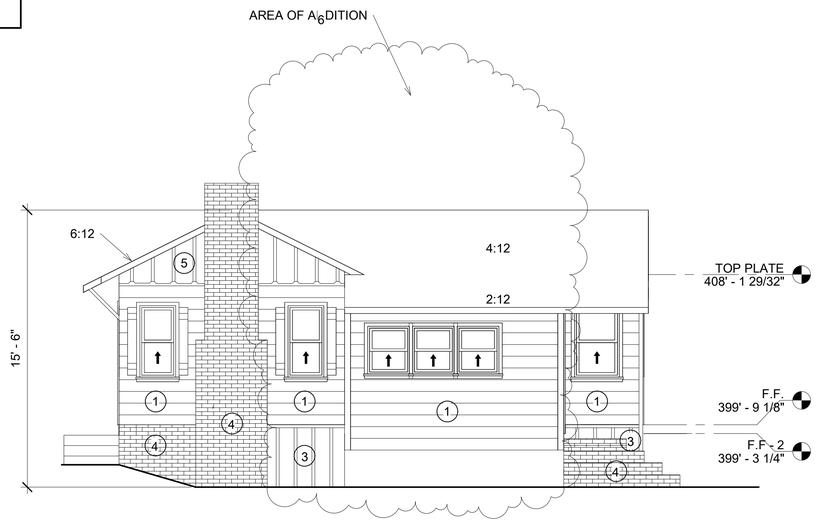
1. 8" WOOD, HORIZONTAL LAPPED SIDING
2. 8" WOOD, T & G VERTICAL SIDING
3. WOOD BOARD AND BATTEN
4. RED BRICK
5. 8" WOOD, SCALLOPED VERTICAL SIDING WITH 2" TRIM

ROOF: ASPHALT COMPOSITION SHINGLE, BROWN

TRIM: 2 X 4 WOOD



3 NORTH ELEVATION
1/4" = 1'-0"



4 SOUTH ELEVATION
1/4" = 1'-0"

REVISIONS	BY

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CLIENT

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310 TAIT AVE.
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APN: 510-14-058

EXISTING ELEVATIONS

310 TAIT AVE. LOS GATOS, CA 95030

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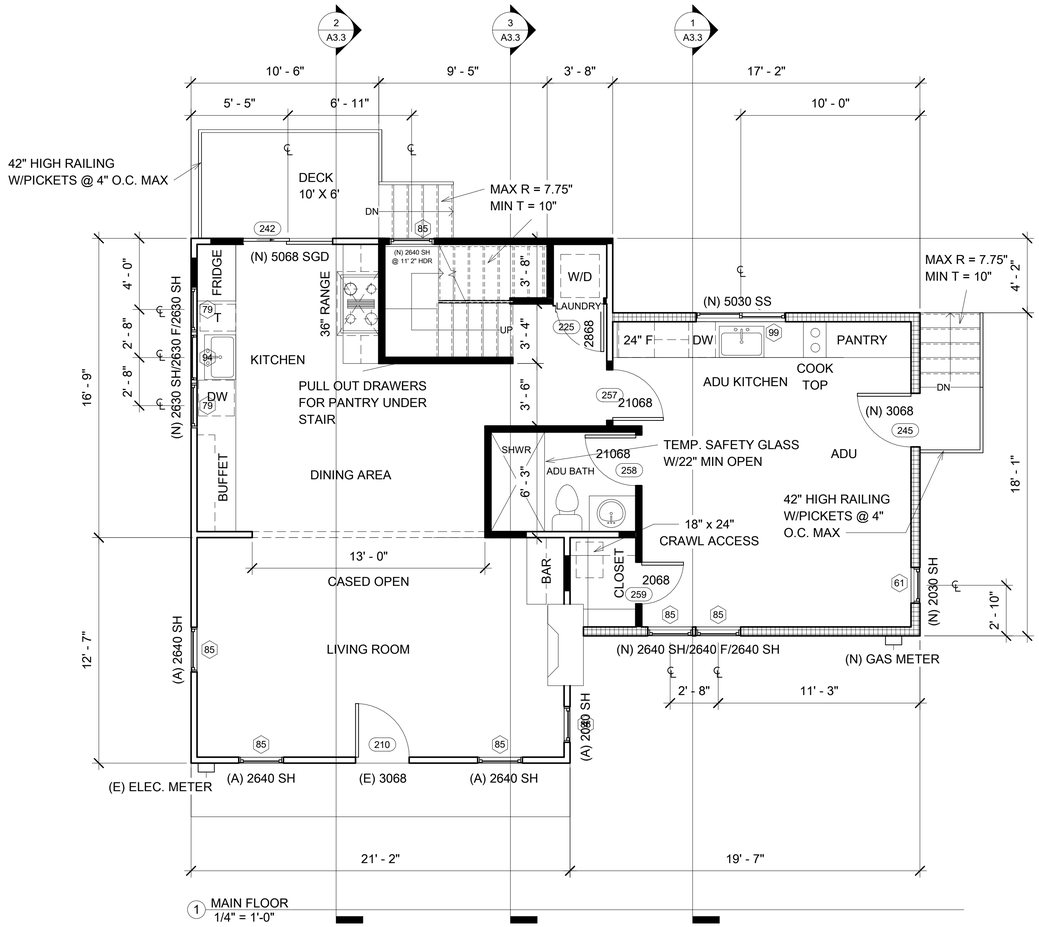


GRAPHIC SCALE

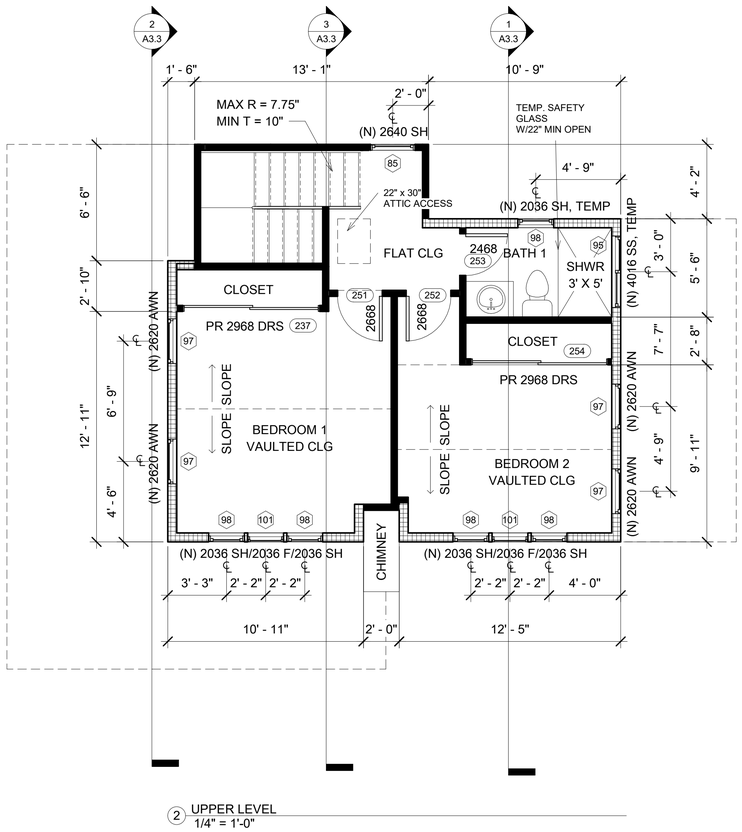
0 4 8 12 16

N

TOTAL SITE AREA	2649 S.F.
(E) BUILDING AREA	
RESIDENCE	731 S.F.
(N) BUILDING AREA	
(N) LOWER LEVEL	618 S.F.
(N) UPPER LEVEL	415 S.F.
(N) ADU	368 S.F.
TOTAL	1401 S.F.

(N) 2 X 6 WALLS

(N) 2 X 4 WALLS



DOOR SCHEDULE				
Mark	Width	Height	Family	Comments
210	3' - 0"	6' - 8"	Single-Flush	FRONT ENTRY
225	2' - 8"	6' - 8"	Single-Flush	LAUNDRY
237	7' - 6"	6' - 8"	Door-Interior-Double-Sliding-2_Panel-Wood	PR 2968 DRS - BEDROOM 1 CLOSET
242	5' - 0"	6' - 8"	Door-Double-Sliding	KITCHEN
245	3' - 0"	6' - 8"	Single-Flush	ADU ENTRY
251	2' - 6"	6' - 8"	Single-Flush	BEDROOM 1
252	2' - 6"	6' - 8"	Single-Flush	BEDROOM 2
253	2' - 4"	6' - 8"	Single-Flush	BATH 1
254	7' - 6"	6' - 8"	Door-Interior-Double-Sliding-2_Panel-Wood	PR 2968 DRS - BEDROOM 2 CLOSET
257	2' - 10"	6' - 8"	Single-Flush	ADU INTERIOR ENTRY
258	2' - 10"	6' - 8"	Single-Flush	ADU BATH
259	2' - 4"	6' - 8"	Single-Flush	ADU CLOSET

WINDOW SCHEDULE				
Type Mark	Width	Height	Family	Comments
85	2' - 6"	4' - 0"	Window-Single-Hung	LIVING ROOM
86	2' - 0"	4' - 0"	Window-Single-Hung	LIVING ROOM
85	2' - 6"	4' - 0"	Window-Single-Hung	LIVING ROOM
85	2' - 6"	4' - 0"	Window-Single-Hung	LIVING ROOM
85	2' - 6"	4' - 0"	Window-Single-Hung	STAIR LANDING
85	2' - 6"	4' - 0"	Window-Single-Hung	STAIR LANDING
94	2' - 6"	3' - 0"	Window-Fixed	KITCHEN
79	2' - 6"	3' - 0"	Window-Single-Hung	KITCHEN
79	2' - 6"	3' - 0"	Window-Single-Hung	KITCHEN
97	2' - 6"	2' - 0"	Window-Awning-Single	BEDROOM 1
97	2' - 6"	2' - 0"	Window-Awning-Single	BEDROOM 1
99	5' - 0"	3' - 0"	Window-Sliding-Double	ADU KITCHEN
85	2' - 6"	4' - 0"	Window-Single-Hung	ADU
85	2' - 6"	4' - 0"	Window-Single-Hung	ADU
97	2' - 6"	2' - 0"	Window-Awning-Single	BEDROOM 2
97	2' - 6"	2' - 0"	Window-Awning-Single	BEDROOM 2
101	2' - 0"	3' - 6"	Window-Fixed	BEDROOM 1
101	2' - 0"	3' - 6"	Window-Fixed	BEDROOM 2
98	2' - 0"	3' - 6"	Window-Single-Hung	BEDROOM 1
98	2' - 0"	3' - 6"	Window-Single-Hung	BEDROOM 1
98	2' - 0"	3' - 6"	Window-Single-Hung	BEDROOM 2
98	2' - 0"	3' - 6"	Window-Single-Hung	BEDROOM 2
98	2' - 0"	3' - 6"	Window-Single-Hung	BATH 1
95	4' - 0"	1' - 6"	Window-Sliding-Double	BATH 1
61	2' - 0"	3' - 0"	Window-Single-Hung	ADU

FOUNDATION VENTILATION NOTES:

1. Provide ventilation to equal 1 s.f. per 150 s.f. of underfloor space
   a. Under floor area measures 986 s.f. / 150 s.f. = 6.57 s.f. required
   b. Provide 14 foundation vents. At least 1 vent opening to be located within 3" off foundation corner.
2. Openings to be located as to provide cross ventilation. Openings shall be covered with corrosion resistant wire mesh.
3. Standard foundation vent measured 6" x 14" net free opening = .5 s.f.
4. For additions to existing structures provide cross ventilation between new and existing foundation with vented blocking at every 3rd joist bay.
5. Access between new and existing foundation to be via an opening of 16" x 24" min.
6. Crawl access to be a minimum 18" x 24" and within 20' of plumbing.

REVISIONS	BY

DESIGN CONSULTANT

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CLIENT

SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

NEW FLOOR PLANS

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	1/4" = 1'-0"
DATE	11/5/2025 7:57:31 AM
DRAWN BY	Author

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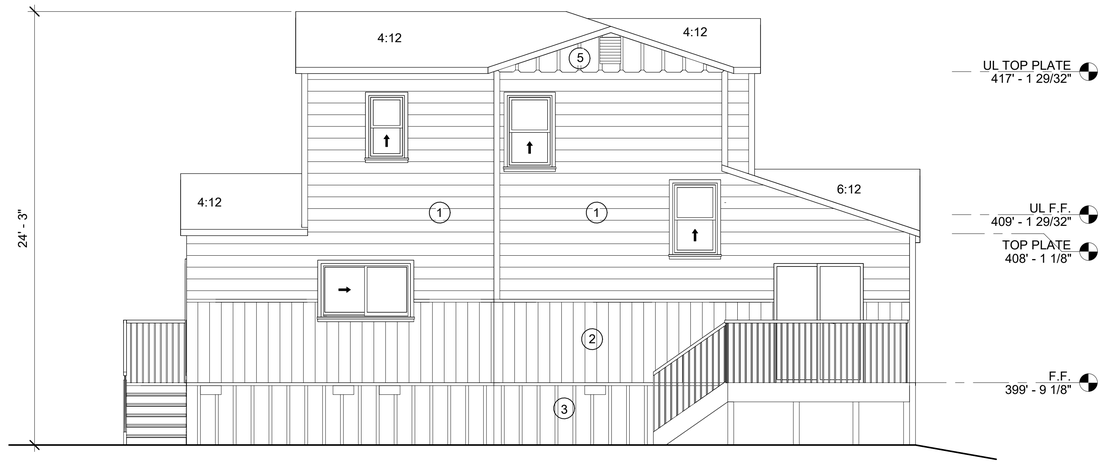
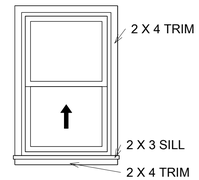
1 WEST ELEVATION
1/4" = 1'-0"



2 EAST ELEVATION
1/4" = 1'-0"



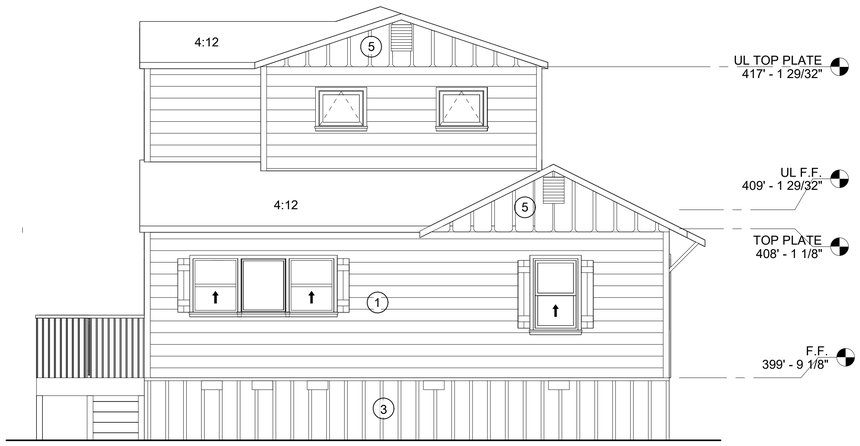
5 WINDOW TRIM DETAIL
1/2" = 1'-0"

EXTERIOR MATERIALS:

1. 8" WOOD, HORIZONTAL LAPPED SIDING
2. 8" WOOD, T & G VERTICAL SIDING
3. WOOD BOARD AND BATTEN
4. RED BRICK
5. 8" WOOD, SCALLOPED VERTICAL SIDING WITH 2" TRIM

ROOF: ASPHALT COMPOSITION SHINGLE, BROWN

TRIM: 2 X 4 WOOD



3 NORTH ELEVATION
1/4" = 1'-0"

4 SOUTH ELEVATION
1/4" = 1'-0"

REVISIONS	BY

DESIGN CONSULTANT

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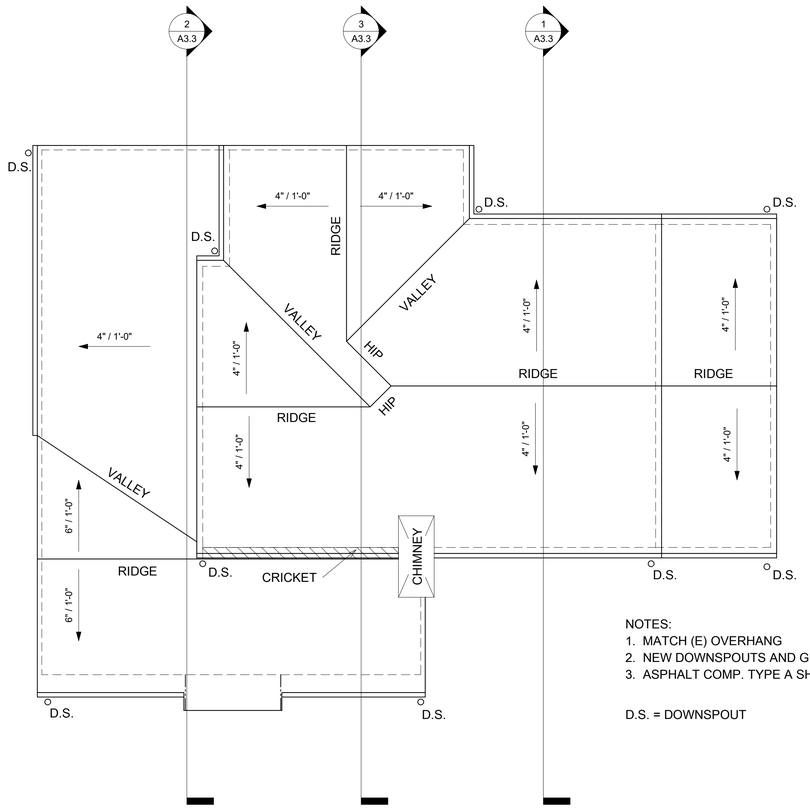
CLIENT

SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

NEW ELEVATIONS

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	As indicated	SHEET	A3.1
DATE	10/11/2025 1:11:30 PM		
DRAWN BY	Author		



1 ROOF PLAN
1/4" = 1'-0"

NOTES:
1. MATCH (E) OVERHANG
2. NEW DOWNSPOUTS AND GUTTERS THROUGHOUT
3. ASPHALT COMP. TYPE A SHINGLE, TYP.

D.S. = DOWNSPOUT

FURNACE NOTES:

1. Attic access must be within 20' of new attic HVAC unit. The access opening must be at least as large as the largest component of the appliance and not less than 22" x 30". Provide solid flooring a minimum of 24" wide from access to unit. Provide a minimum 30" x 30" clear work space on the service side of the unit.

2. Where the height of the space is less than 6' the passageway shall not be more than 20' in length when measured along the center line of the passageway from the access opening to the equipment.

TRUSS NOTES:

Roof truss design to be a deferred submittal. The deferred submitttal shall first be submitted to the project engineer for review and coordination; following the completion of project engineer review and coordination, a submittal to the building department shall be made (for review and approval), which shall include a letter (or by stamping with a shop drawing review stamp) stating this review and coordination has been performed and completed and plans and calculations for the deferred items are found to be acceptable (e.g. with regard to geometry, load conditions, etc.) with no exceptions.

ATTIC VENTILATION NOTES:

1. If attic has a vertical height of more than 30", provide a readily accessible access opening no less than 22" x30" for emergency entry to attic (exception to 22" dimension normally allowed when no mechanical equipment is installed in attic). Minimum 30" unobstructed headroom in the attic space shall be provided at or above the access opening. Verify compliance in field.

2. ATTIC VENTILATION: Provide ventilation to equal 1 s.f per 150 s.f. of attic area.

   Exceptions:
   a. area may be 1/300 provided 50% of the required area is provided by ventilators located in the upper portion of the space at least 3 ft above eave line.
   b. Openings shall be covered with corrosion resistant wire mesh.

3. VENTILATION CALCULATION

a. Ventilated Attic Area 986 s.f. ÷ 150 = 6.57 s.f. required ventilation
b. 6.57 s.f. required ventilation x 144 = 946.56 sq in. required

Provide attic ventilation as follows:
5 Gable end vents measuring 14" x 12" net free opening = 168 sq in.
1 Eave vents measuring 5.5" x 22" net free opening = 121 sq. in.

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CLIENT

SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

ROOF PLAN

310 TAIT AVE. LOS GATOS, CA 95030

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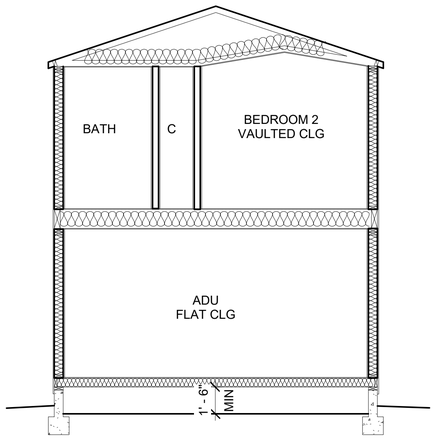
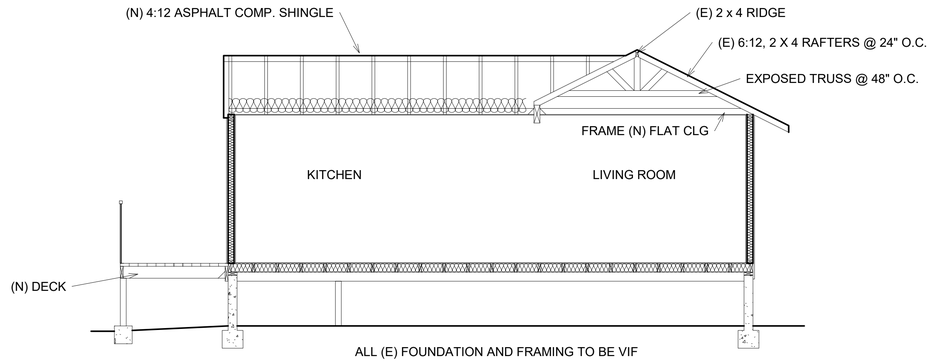


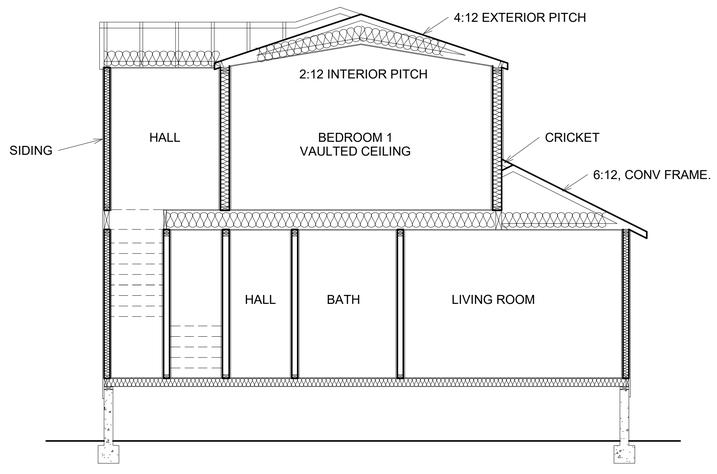
1 SECTION THRU BEDROOM 2 AND ADU
1/4" = 1'-0"

INSULATION REQUIREMENTS:

1. New walls: R-21 (2x6)
2. New Roof: R-30
3. New floor: R-19



2 SECTION THRU KITCHEN AND LIVING ROOM
1/4" = 1'-0"



3 SECTION THRU STAIRS AND BEDROOM 1
1/4" = 1'-0"

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SECTIONS

310 TAIT AVE. LOS GATOS, CA 95030

SCALE 1/4" = 1'-0"	SHEET A3.3
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GENERAL NOTES:

1. Habitable enclosed rooms are provided with the natural ventilation with a minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated. C.R.C Section r303.1

2. Each pane of glazing installed in hazardous locations as defined by C.R.C Section R308.4 shall be provided with a manufacturer's designation specifying who applied the designation, designating the ype of glass and the safety standard with which it complies, which is visible in the final installation. The designation shall be acid etched, sandblasted, etc. or be of a type which once applied cannot be removed without being destroyed. C.R.C Section R308.1

3. Glazing in the following areas shall comply with C.R.C Section R308.4:
   a. In all fixed and operable panels of swinging, sliding, and bifold doors
   b. In an individual fixed or operable panel adjacent to a door where the neares vertical edge is within a 24 inch arc of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface.

4. Glazing in a individual fixed or operable panel that meets all of the following conditions:
   a. The exposed area of an individual pane is larger that 9 s.f. and
   b. The bottom edge fo the glazing is less than 18 " above the floor and
   c. The top edge of the glazing is more than 36 inches above the floor
   d. One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing.

5. NFRC labels must remain attached to the glazing until inspected by the field inspector.

6. All exterior hose bibs to be provided with a non-removable backflow prevention device per CPC section 603.5.7

7. Minimum occupancy separation between garage and residence shall be the installation of materials approved for one-hour fire-resistive construction on the garage side. Where the separation is horizontal, structural members supporting the separation shall be protected by equivalent fire-resistive construction. Section 302.6 of the CRC.

8. No opening between garage and rooms used for sleeping. Section 302.5 of the CRC.

9. Minimum opening protection for door between garage and residence shall be the installation of a self-closing tight-fitting solid wood door a min.1 3/8" in thickness or a self-closing tight-fitting door having a fire protection rating of not less than 20 minutes. Verify compliance in field.

10. Clothes dryer vent shall be of metal and shall have smooth interior surfaces. Approved flexible duct connectors not more than 6' in length and not concealed within construction are allowed. Clothes dryer to vent to exterior of building and shall be equipped with a back-draft damper. Unless otherwise permitted or required by the dryer manufacturer's specifications, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14', including two 90-degree elbows.

16. All doors including the required egress door shall be provided with landings not more than 7.75" below the top of the threshold per CRC R311.3.3. Landings at egress door should not be more than 1.5" lower than top of threshold per CRC section R311.3.1.

17. Provide a minimum 36" landing measured in the direction of travel on each side of exterior door CRC R311.3.

18. At emergency escape windows in bedrooms the bottom of the clear opening of the window to be not more than 44" above the floor and shall be maintained free of any obstructions. CRC 311.3

19. Any equipment installed in the garage and subject to vehicle damage, shall be protected by adequate barriers (e.g. 4" dia. Steel pipe filled with concrete installed in a footing measuring 12"dia. and 3' deep.

20. Air ducts installed in an under-floor crawl space shall not prevent access to the crawl space and shall maintain a min. 4" vertical clearance from the dirt below

21. Prior to any work being performed in the public right-of-way obtain an encroachment permit along with insurance requirements for all public improvements including a traffic control plan per the latest California Manual on Uniform Traffic Control Devices standards to be reviewed and approved by the Dept. of Public Works.

22. All penetrations into unconditioned space (i.e attic, crawl) shall be caulked and gasketed,weaterstripped or sealed to omit infiltration or exfiltration

23. All underfloor cleanouts shall be extended to the exterior of the building if located more than 20' from under-floor access

24. All joints and seams of Ducting systems shall be sealed with material meeting UL1BI Standards

KITCHEN NOTES:

1. Sinks in islands to be vented per CPC section 909.1

2. Kitchen doors leading from the garage shall be 1-3/8” thich solid wood or honey comb core steel doors or 20 minute fire-rated doors equipped with self-closing and self-latching devices. (CRC R302.5.1)

3. All lighting shall be high efficacy. (Title 24-Building Energy Efficiency Standards 150.0(k)

4. Minimum 30 inches clearance required above kitchen range, except where 24” is allowed per code or manuf. Spec. (CMC 921.3.2)

5. Domestic dishwashing machine shall not be directly connected to a drainage system or food waste disposer without the use of an approved air gap fitting on the discharge side of the machine. (CPC 807.4

6. Household cooking appliances shall have a vertical clearance above the cooking top of not less than 30” to combustible material or metal cabinets.

7. Exhaust ducts shall teminate outside the building and shall be equipped with a back-draft damper per CMC Sec.504.1

8. All receptacles shall be GFCI protected and tamper-resistant (TR). Recepatcles shall be located so that no point is more than 24 “ from a receptacle outlet measured horiz. along the wall.

9. Receptacles shall be located no more than 20” above countertop

10. On the discharge side of the dishwasher provide a listed air gap fitting. Listed air gaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drain board whichever is higher per CPC Sec. 807.4

GENERAL PLUMBING NOTES:

1. The water heaters pressure/temperature (P/T) relief valve shall be galvanized steel, hard-drawn copper, or CPVC. The valve shall be drained to the exterior of the building, terminate toward the ground maintaining between 6" and 24".of clearance from the ground, and point downward. The diameter of the valve opening (generally 3/4") must be maintained to the termination of the drain.

2. All plumbing vents shall terminate not less than 6" above roof nor less than 1' from any vertical surface.

3. If the water pressure exceeds 80 psi, an expansion tank and an approved pressure regulator shall be installed

4. A non-removable backflow preventer or bib-type vacuum breaker will be installed on all exterior hose bibs

5. The hot water pipe from the water heater to the kitchen shall be insulated

6. Air conditioner refrigerant lines must be protected from UV deterioration

7. Install pressure absorbing device (or approved mechanical device), located as close as possible to quick acting valves, that will absorb high pressures resulting from the quick closing of quick-acting valves (i.e., dishwasher, washing machine, etc.). CPC 609.10

BATHROOM NOTES:

1. Exhaust fans are required in bathrooms per CalGreen section 4.506.1.

2. Water closet stool shall be located in a clear space not less than 30" in width and have a clear space in front of the water closet stool not less than 24". Section 2904 of the CBC. Water closets must be ultra low flush fixtures, which use no more than 1.28 gallons per flush.

3. Shower walls shall be ceramic tile (or other approved material) applied over cement backing board. Waterproofing membrane to extend to height of not less than 72 inches (u.o.n) per CRC R307.2.

4. All shower compartments, regardless of shape, shall have a min. finished interior of one thousand twenty-four (1024) square inches and shall also be capable of encompassing a 30" circle. This measurement shall be maintained to a point 70" above the shower drain.

5. Showers and tub-shower combinations shall be provided with individual control valves of the pressure balance or the thermostatic mixing valve type. Handle position stops or temperature limiting device shall be provided on such valves and shall be adjusted per manufacturer's instruction to deliver a maximum mixedwater setting of 120 degrees (49C). The water heater thermostat shall not be considered a suitable control for meeting this provision. (CPC 408.3)

6. Maximum flow rates per CPC Chapter 4 (CPC 403.0)
   Water closets: 1.28 GPM
   Shower heads: 1.8 GPM
   Sink faucets: 1.2 GPM

7. All receptacles shall be GFCI protected and connected to a dedicated 15 and 20 amps circuit (CEC 210.8)

8. All new bathroom lighting shall be high-efficacy and at least one new luminaire is to be controlled by a vacancy sensor. [CA Energy Section 150.0(k)2J]

9. Exhaust fans and lighting shall have separate control switches (even if a combination unit is installed). The exhaust fan may need to be supplied by a GFCI protected circuit based on the manuf. Requir. (CEEC 150.0(o)

10. Exhaust fans are required in all bathrooms, even if an operable window is installed (CA Energy Efficiency Stand. Sec. 150)

11. Exhaust fans shall terminate a min. of 3' from property line and 3' from openings into a building (CMC 504.5) Exhaust fans at shower shall be listed for wet location and shall be GFCI proteded. (CEC 210)

12. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control

13. Shower enclosure doors shall open outward and maintain 22” clearance (CPC 408.5)

14. The bathtub waste opening in the floor over the crawl space shall be protected by a metal screen not exceeding 1/2" or a solid cover

FURNACE ACCESS NOTES:

1. Attic access must be within 20' of new attic HVAC unit. The access opening must be at least as large as the largest component of the appliance and not less than 22" x 30". Provide solid flooring a minimum of 24" wide from access to unit. Provide a minimum 30" x 30" clear work space on the service side of the unit.

2. Where the height of the space is less than 6' the passageway shall not be more than 20' in length when measured along the center line of the passageway from the access opening to the equipment. Permanent 120 volt receptacle outlet and lighting fixutre to be installed near the appliance.

GREEN CODE NOTES:

1. Annular spaces around pipes, electrical cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to enforcing agency.

2. Duct openings and other related air distributtion component openings shall be covered during construction.

3. Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.

4. Paints, stains and other coating shall be compliant with VOC limits.

5. Documentation shall be provided to verify that compliant VOC limit finish materials have been used.

6. 80% of floor area receiving resillient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database or be certified under the Resilient Floor Covering Institute (RFCI) FloorScore program: or meet Calif. Dept. of PUblic Health, "Standard Method for the testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chamber", Version 1.1 Feb. 2010 (also known as spec. 01350)

7. Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.

8. Vapor retarder and caplillary break is installed at slab-on-grade-foundations.

9. Moisture content of building materials used in wall and floor framing is checked before enclosure.

10. Duct systems are sized and designed and equipment is selected using the following methods:
    a. establish heat loss and heat gain values according to the ANSI/ACCA 2 manual J-2004 or equivalent.
    b. Size duct systems according ANSI/ACCA 1 manual D-2009 or equivalent
    c. Select heating and cooling equipment according to ANSI/ACCA 3 manual S-2004 or equivalent

11. HVAC system installers are trained/certified in the proper installation of HVAC systems Special Inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.

12. Verification of compliance with this code may include construction documents, plans, specifications builider or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.

13. Newly constructed one and two familiy dwellings and townhouses with attached private garages shall comply with EV infrastructure requirements in accordance with the CA Green Building Standards Code.

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GENERAL NOTES

310 TAIT AVE. LOS GATOS, CA 95030

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2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2024 Supplement)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.
Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Section 4.106.4.1 or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the *California Electrical Code*.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Section 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1 Reserved.

4.106.4.2.2 Multifamily dwellings, hotels and motels

1. EV ready parking spaces with receptacles.

a. Hotels and motels. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.

b. Multifamily parking facilities. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. EV charging receptacles required by this section shall be located in at least one assigned parking space per dwelling unit where assigned parking is provided but need not exceed forty (40) percent of the total number of assigned parking spaces provided on the site.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the *California Building Code*; or parking facilities otherwise incapable of supporting electric vehicle charging.

c. Receptacle power source. EV charging receptacles in multifamily parking facilities shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the *California Building Code*; or parking facilities otherwise incapable of supporting electric vehicle charging.

d. Receptacle configurations. 208/240V EV charging receptacles shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R
2. For 30-ampere receptacles, NEMA 14-30R
3. For 50-ampere receptacles, NEMA 14-50R

2. EV ready parking spaces with EV chargers.

a. Hotels and motels. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors.

b. Multifamily parking facilities. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors. Where common use parking or unassigned parking is provided, EV chargers shall be located in common use or unassigned parking areas and shall be available for use by all residents or guests.

Where low power Level 2 EV charging receptacles or Level 2 EV chargers are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See *California Building Code*, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.

EVCS spaces shall be designed to comply with the following:

1. The minimum length of each EVCS space shall be 18 feet (5486 mm).
2. The minimum width of each EVCS space shall be 9 feet (2743 mm).
3. One in every 25 EVCS spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EVCS space is 12 feet (3658 mm). Surface slope for this EVCS space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:

   a. The EVCS space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space.
   b. The EVCS space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.
   Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1.

4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces. In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the accessibility provisions for EV chargers in the *California Building Code*, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with *California Building Code*, Chapter 11A, Section 1109A.

4.106.4.2.3 Reserved.

4.106.4.2.4 Reserved.

4.106.4.2.5 Electric vehicle ready space signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings.
Where new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EV capable spaces to support future Level 2 electric vehicle supply equipment. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE."

Notes:

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 8.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

4.304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations*, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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CA GREEN BUILDING CODE SHEET 1

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
DATE 10/11/2025 1:13:36 PM	G1
DRAWN BY Author	

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 2 (July 2024 Supplement)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O³/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)	
ARCHITECTURAL APPLICATIONS	**VOC LIMIT**
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	**VOC LIMIT**
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[4]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS
2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	**CURRENT LIMIT**
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

hhtps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code*.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter.Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

REVISIONS	BY

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CA GREEN BUILDING CODE SHEET 2

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
DATE 10/11/2025 1:13:51 PM	G2
DRAWN BY Author	

GreenPoint Rated Existing Home Checklist

A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green. GreenPoint Rated is provided as a public service by Build It Green, a professional non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.

This checklist is used to track projects seeking a Whole House or Elements Label using the GreenPoint Rated Existing Home Rating System. The minimum requirements for each table are listed in the project summary at the end of this checklist. Selected measures can be awarded points allocated by the percentage of presence of the measure in the home. The measure or practice must be found in at least 10% of the home to earn points.

Instructions: Column A is a dropdown menue with the options of "Yes", "No", or "TBD" or a range of percentages to allocate points. Select the appropriate dropdown and the apropriate points will appear in the yellow "points acheived" column.

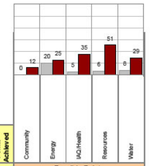
The criteria for the green building practices listed below are described in the GreenPoint Rated Existing Home Rating Manual, available at **www.builditgreen.org/greenpointrated**

GreenPoint Rated Existing Home Checklist Version 2.1.3

Build It Green

Enter Label: **Whole House**

Points Achieved: **152**



310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
AA. COMMUNITY				Possible Points		
Yes	**1. Home is Located within 1/2 Mile of a Major Transit Stop**	2	2			
	2. Compact Development & House Size					
2	a. Density of 10 Units per Acre or Greater **(Enter units/acre)**		2		2	
Yes	b. Home Size Efficiency **(5 points is average, points awarded based on home size)**	5			1–9	
	3. Pedestrian and Bicycle Access/ Alternative Transportation					
	a. Site has Pedestrian Access Within ¼ Mile of neighborhood services;					
	TIER 1: 1) Day Care 2) Community Center 3) Public Park					
	4) Drug Store 5) Restaurant 6) School					
	7) Library 8) Farmer's Market 9) After School Programs					
	10) Convenience Store Where Meat & Produce are Sold					
	TIER 2: 1) Bank 2) Place of Worship 3) Laundry/Cleaners					
	4) Hardware 5) Theater/Entertainment 6) Fitness/Gym					
	7) Post Office 8) Senior Care Facility 9) Medical/Dental					
	10) Hair Care 11) Commercial Office of Major Employer 12) Full Supermarket					
Yes	5 Services Listed Above (Tier 2 Services count as 1/2 Service Value)	1	1			
Yes	10 Services Listed Above (Tier 2 Services count as 1/2 Service Value)	1	1			
No	b. Access to A Dedicated Pedestrian Pathway to Places of Recreational Interest within 1/2 Mile		1			
No	c. At Least Two of the Following Traffic-Calming Strategies Installed within 1/4 mile:		1			
	Designated Bicycle Lanes are Present on Roadways;					
	Ten-Foot Vehicle Travel Lanes;					
	Street Crossings Closest to Site are Located Less Than 300 Feet Apart;					
	Streets Have Rumble Strips, Bulbouts, Raised Crosswalks or Refuge Islands					
	4. Safety & Social Gathering					
Yes	a. Front Entrance Has Views from the Inside to Outside Callers	1	1			
Yes	b. Front Entrance Can be Seen from the Street and/or from Other Front Doors	1	1			
No	c. Porch (min. 100sf) Oriented to Streets and Public Spaces		1			
	5. Diverse Households					
No	a. Home Has at Least One Zero-Step Entrance (prerequisite for 5b. And 5c.)		1			
Yes	b. All Main Floor Interior Doors & Passageways Have a Min. 32-Inch Clear Passage Space		1			
Yes	c. Home includes at Least a Half-Bath on the Ground Floor with Blocking for Grab Bars		1			
Yes	d. Lot Includes Full-Function Independent Rental Unit	1	1			
	Total Points Available in Community = 26	12				
A. SITE				Possible Points		
Yes	**1. Protect Existing Topsoil from Erosion and Reuse after Construction**	2	1			1
	2. Divert Construction and Demolition Waste					
Yes	a. Divert All Cardboard, Concrete, Asphalt and Metals **(Required for both Whole House and Elements, if Applicable)**	Y				R
Yes	b. Divert 25% C&D Waste Excluding All Cardboard, Concrete, Asphalt and Metals	2				2
No	**3. Construction IAQ Management Plan**			2		

310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
Total Points Available in Site = 6	4					
B. FOUNDATION				Possible Points		
	1. Replace Portland Cement in Concrete with Recycled Flyash or Slag					
No	a. Minimum 20% Flyash and/or Slag Content				1	
No	b. Minimum 30% Flyash and/or Slag Content				1	
Yes	**2. Moisture Source Verification and Correction (Required for Whole House)**	Y		R	R	
	3. Retrofit Crawl Space to Control Moisture					
Yes	a. Control Ground Moisture with Vapor Barrier	2		2		
Yes	b. Foundation Drainage System	2			2	
Yes	**4. Pest Inspection and Correction**	1			1	
	5. Design and Build Structural Pest Controls					
Yes	a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections by Metal or Plastic Fasteners/Dividers	1			1	
Yes	b. All New Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation	1			1	
No	**6. Radon Testing and Correction or Radon Resistant Construction**			1		1
	Total Points Available in Foundation = 10	7				
C. LANDSCAPE				Possible Points		
No	**Is the landscape area <15% of the total site area? (only 3 points available in this section for projects with <15% landscape area)**					
	1. Resource-Efficient Landscapes					
Yes	a. No Invasive Species Listed by Cal-IPC Are Planted	1				1
Yes	b. No Plant Species Require Shearing	1			1	
Yes	c. 50% of Plants Are California Natives or Mediterranean Cimate Species	3				3
Yes	**2. Fire-Safe Landscaping Techniques**	1	1			
	3. Minimal Turf Areas					
No	a. Turf Not Installed on Slopes Exceeding 10% or in Areas Less than 8 Feet Wide					2
Yes	b. Turf is <25% of Landscaped Area	2				2
No	c. Turf is <10% of Landscaped Area or eliminated					2
Yes	**4. Shade Trees Planted**	3	1	1		1
Yes	**5. Plants Grouped by Water Needs (Hydrozoning)**	2				2
	6. High-Efficiency Irrigation Systems Installed					
Yes	a. System Uses Only Low-Flow Drip, Bubblers, or Low-flow Sprinklers	2				2
Yes	b. System Has Smart Controllers	3				3
No	**7. Compost and Recycle Garden Trimmings on Site**					1
≥90%	**8. Mulch in All Planting Beds to the Greater of 2 Inches or Local Water Ordinance Requirement**	2				2
TBD	**9. Use Environmentally Preferable Materials for Non-Plant Landscape Elements and Fencing**				1	
Yes	**10. Light Pollution Reduced by Shielding Fixtures and Directing Light Downward**	1	1			
	11. Rain Water Harvesting System (1 point for ≤ 350 gallons, 2 points for > 350 gallons)					
No	a. Cistern(s) is Less Than 750 Gallons					1
No	b. Cistern(s) is 750 to 2,500 Gallons					1
No	c. Cistern(s) is Greater Than 2,500 Gallons					1
No	**12. Soil Amended with Compost**				1	1
	Total Points Available in Landscape = 32	21				
D. STRUCTURAL FRAME & BUILDING ENVELOPE				Possible Points		
	1. Optimal Value Engineering					
≥90%	a. Place Rafters & Studs at 24-Inch On Center Framing	1			1	
≥90%	b. Size Door & Window Headers for Load	1			1	
≥90%	c. Use Only Jack & Cripple Studs Required for Load	1			1	
	2. Use Engineered Lumber					
≥90%	a. Engineered Beams & Headers	1			1	
TBD	b. Insulated Headers		1			
≥90%	c. Engineered Lumber for Floors	1			1	
No	d. Engineered Lumber for Roof Rafters				1	
No	e. Engineered or Finger-Jointed Studs for Vertical Applications				1	
≥90%	f. Oriented Strand Board for Subfloor	1			1	
≥90%	g. Oriented Strand Board Wall and Roof Sheathing	1			1	
	3. FSC Certified Wood					
≥90%	a. Dimensional Lumber, Studs, and Timber	4			4	
≥90%	b. Panel Products	2			2	
	4. Solid Wall Systems (includes SIPs, ICFs, & Any Non-Stick Frame Assembly)					
No	a. Floors			2	2	
No	b. Walls			2	2	
No	c. Roofs			2	2	

310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
	5. Reduce Pollution Entering the Home from the Garage					
No	a Tightly Seal the Air Barrier between Garage and Living Area			1		
No	b. Install Garage Exhaust Fan OR Have a Detached Garage			1		
No	**6. Energy Heels on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)**		1			
	7. Overhangs and Gutters					
No	a. Minimum 16-Inch Overhangs and Gutters				1	
No	b. Minimum 24-Inch Overhangs and Gutters		1			
	8. Retrofit/ Upgrade Structure for Lateral Load Reinforcement for Wind or Seismic					
Yes	a. Partial Lateral Load Reinforcement Upgrades/ Retrofits	1			1	
Yes	b. Lateral Load Reinforcement Upgrades/ Retrofits for Entire home	2			2	
Yes	**9. Sound Exterior Assemblies (Required for Whole House)**	Y			R	
	Total Points Available in Structural Frame & Building Envelope = 38	16				
E. EXTERIOR FINISH				Possible Points		
≥90%	**1. Recycled-Content (No Virgin Plastic) or FSC-Certified Wood Decking**	2			2	
No	**2. Rain Screen Wall System Installed**				2	
≥90%	**3. Durable & Noncombustible Cladding Materials**	1			1	
≥90%	**4. Durable & Fire-Resistant Roofing Materials or Assembly**	2			2	
	Total Points Available in Exterior Finish = 7	5				
F. INSULATION				Possible Points		
	1. Install Insulation with 30% Post-Consumer Recycled Content					
≥90%	a. Walls and Floors	1			1	
≥90%	b. Ceilings	1			1	
	2. Install Insulation that is Low-Emitting (Certified CA Residential Section 01350)					
≥90%	a. Walls and Floors	1		1		
≥90%	b. Ceilings	1		1		
≥90%	**3. Inspect Quality of Insulation Installation before Applying Drywall**	1	1			
	Total Points Available in Insulation = 5	5				
G. PLUMBING				Possible Points		
	1. Distribute Domestic Hot Water Efficiently					
≥50%	a. Insulate All Accessible Hot Water Pipes (prerequisite for 1b. and 1c.)	2		1		1
Yes	b. Locate Water Heater Within 12' Of All Water Fixtures, as measured in plan	2		1		1
Yes	c. Install On-Demand Circulation Control Pump	2	1	1		1
≥90%	**2. High-Efficiency Toilets (Dual-Flush or ≤ 1.28 gpf)**	2				2
	3. Water Efficient Fixtures					
Yes	a. All Fixtures Meet Federal Energy Policy Act (Toilets: 1.6 gpf, Sinks: 2.2 gpm, Showers: 2.5 gpm) **(Required For Whole House)**	Y				R
≥90%	b. High-Efficiency Showerheads Use ≤ 1.8 gpm at 80 psi	3				3
≥90%	c. Bathroom Faucets Use ≤ 1.2 gpm	2		1		1
Yes	**4. Plumbing Survey (No Plumbing Leaks) (Required for Whole House and Elements)**	Y				R
	Total Points Available in Plumbing = 13	13				
H. HEATING, VENTILATION & AIR CONDITIONING				Possible Points		
	1. General HVAC Equipment Verification and Correction					
Yes	a. Visual Survey of Installation of HVAC Equipment **(Required for Whole House and Elements)**	Y		R		
Yes	b. Conduct Diagnostic Testing to Evaluate System	2		2		
Yes	c. Conduct Flow Hood Test and Assess Delivery of Air	1		1		
Yes	d. Air Conditioning Compressor Operates Properly and Refrigerant Charge is Optimal	1		1		
Yes	**2. Design and Install HVAC System to ACCA Manuals J, D and S**	4		4		
	3. Sealed Combustion Units					
Yes	a. Furnaces	2			2	
Yes	b.Water heaters	2			2	
No	**4. Zoned, Hydronic Radiant Heating**			1		
Yes	**5. High Efficiency Air Conditioning Air conditioning with Environmentally Responsible Refrigerants**	1	1			
	6. Effective Ductwork Installation					
Yes	a. New Ductwork and HVAC unit Installed Within Conditioned Space	1		1		
Yes	b. Duct Mastic Used on All Ducts, Joints and Seams	1		1		
Yes	c. Ductwork System is Pressure Relieved	1		1		
Yes	**7. High Efficiency HVAC Filter (MERV 13+)**	1			1	
Yes	**8. No Fireplace OR Sealed Gas Fireplaces with Efficiency Rating ≥60% using CSA Standards**	1			1	
	9. Effective Exhaust Systems Installed in Bathrooms and Kitchens					
≥90%	a. ENERGY STAR Bathroom Fans Vented to the Outside	1		1		
≥90%	b. All Bathroom Fans are on Timer or Humidistat	1		1		
Yes	c. Kitchen Range Hood Vented to the Outside	1		1		

310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
	10. Mechanical Ventilation System for Cooling Installed					
Yes	a. ENERGY STAR Ceiling Fans & Light Kits in Living Areas & Bedrooms	1		1		
No	b. Whole House Fan			1		
	11. Mechanical Ventilation for Fresh Air Installed					
Yes	a. Compliance with ASHRAE 62.2 Mechanical Ventilation Standards (as adopted in Title 24 Part 6)	1			1	
TBD	b. Advanced Ventilation Practices (Continuous Operation, Sone Limit, Minimum Efficiency, Minimum Ventilation Rate, Homeowner Instructions)				1	
TBD	c. Outdoor Air Ducted to Bedroom and Living Areas of Home		1		1	
	12. Carbon Monoxide					
Yes	a. Carbon Monoxide Testing and Correction **(Required for Whole House)**	Y			R	
Yes	b. Carbon Monoxide Alarm(s) Installed	1			1	
Yes	**13. Combustion Safety Backdraft Test (Required for Whole House and Elements)**	Y			R	
	Total Points Available in Heating, Ventilation and Air Conditioning = 30	24				
I. RENEWABLE ENERGY				Possible Points		
	1. Offset Energy Consumption with Onsite Renewable Generation (Solar PV, Solar Thermal, Wind) Enter % total energy consumption offset, 1 point per 4% offset		25			
	Total Points Available in Renewable Energy = 25					
J. BUILDING PERFORMANCE				Possible Points		
Yes	**1. Energy Survey and Education (Required for Elements or Meet J3)**	Y		R		
	2. Energy Upgrades (Available for Elements Rating Only, Mutually Exclusive with J3. 2 point minimum and 6 point maximum credit required)					
	TIER 1: Practices in Tier 1 Are Worth Full Value (1 point)					
TBD	a) Attic Insulation up to or Exceeding Current Code		1			
TBD	b) Crawl Space Insulation up to or Exceeding Current Code		1			
TBD	c) Wall Insulation up to or Exceeding Current Code		1			
TBD	d) High Efficiency Furnace (90% AFUE Minimum)		1			
TBD	e) Seal Ducts and Duct Leakage is <15%		1			
TBD	f) 15 SEER, 12 EER Air Conditioning Unit (in climate zones 2,4,8-15)		1			
TBD	g) House Passes Blower Door Test With ≤0.5 ACH or a 50% Improvement		1			
	TIER 2: Practices in Tier 2 Are Worth Half Value (0.5 points)					
TBD	h) High Efficiency Water Heater ≥.67EF		0.5			
TBD	i) Radiant Barrier in Attic		0.5			
TBD	j) Windows Upgraded to Current Code Requirements, Which are Typically Dual Pane		0.5			
TBD	k) Duct insulation to Code		0.5			
TBD	l) ENERGY STAR Thermostat		0.5			
TBD	m) 15 SEER, 12 EER Air Conditioning unit (in climate zones 1,3,5,6,7,16)		0.5			
	3. Meet Energy Budget for Home Based on Year (Based GreenPoint Rated Index, Includes Blower Door Test) (Required for Whole House, Available for Elements)		10+			
No	**4. Design and Build Zero Energy Homes**		5			
No	**5. Comprehensive Utility Bill Analysis**		1			
	Total Points Available in Building Performance = 16+					
K. FINISHES				Possible Points		
Yes	**1. Entryways Designed to Reduce Tracked in Contaminants**	1		1		
	2. Low/No-VOC Paint					
≥90%	a. Low-VOC Interior Wall/Ceiling Paints (<50 gpl VOCs regardless of sheen)	1		1		
≥90%	b. Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs (flat))	2		2		
≥90%	**3. Coatings Meet SCAQMD Rule 1113 for Low VOCs**	2		2		
≥90%	**4. Low-VOC Caulks & Construction Adhesives (Meet SCAQMD Rule 1168)**	2		2		
No	**5. Recycled-Content Paint**				1	
	6. Environmentally Preferable Materials for Interior Finish: A) FSC Certified Wood B) Reclaimed Materials C) Rapidly Renewable D) Recycled-Content E) Finger-Jointed or F) Local					
≥90%	a. Cabinets	1			1	
≥90%	b. Interior Trim	1			1	
≥90%	c. Shelving	1			1	
≥90%	d. Doors	1			1	
≥90%	e. Countertops	1			1	
Yes	**7. For Newly Installed Products, Reduce Formaldehyde in Interior Finish – Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates (Required for Whole Building & Elements)** (EPA IAP)	Y			R	

310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
	8. Reduce Formaldehyde in Interior Finish - Exceed Current CARB ATCM for Composite Wood Formaldehyde Limits Prior to Mandatory Compliance Dates					
≥90%	a. Doors	1		1		
≥90%	b. Cabinets and Countertops	2		2		
≥90%	c. Interior Trim and Shelving	1		1		
Yes	**9. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb**	3		3		
	Total Points Available in Finishes = 21	20				
L. FLOORING				Possible Points		
≥90%	**1. Environmentally Preferable Flooring: A) FSC-Certified Wood B) Reclaimed or Refinished C) Rapidly Renewable D) Recycled-Content, E) Exposed Concrete F) Local** *Flooring Adhesives Must Have <70 gpl VOCs and sealer must meet SCAQMD Rule 1113.*	4			4	
No	**2. Thermal Mass Floors**			1		
≥90%	**3. Flooring Meets CA Section 01350 or CRI Green Label Plus Requirements**	2			2	
	Total Points Available in Flooring = 7	6				
M. APPLIANCES AND LIGHTING				Possible Points		
Yes	**1. ENERGY STAR Dishwasher (Must Meet Current Specifications) (Mutually Exclusive with J3)**	2		1		1
	2. ENERGY STAR Clothes Washing Machine with Water Factor of 3.2 or Less					
Yes	a. Meets CEE Tier 2 Requirements (Modified Energy Factor 2.92, Water Factor 3.2)	3		1		2
No	b. Meets CEE Advanced Tier Requirements (Modified Energy Factor 3.10, Water Factor 3.0)					2
	3. ENERGY STAR Refrigerator Installed					
Yes	a. ENERGY STAR Qualified & < 25 cu.ft.Capacity **(Mutually Exclusive with J3)**	1		1		
No	b. ENERGY STAR Qualified & < 20 cu.ft.Capacity **(Mutually Exclusive with J3)**			1		
	4. Built-In Recycling & Composting Center					
Yes	a. Built-In Recycling Center	2			2	
No	b. Built-In Composting Center				1	
Yes	**5. Electrical Survey (Required for Whole House)**	Y			R	
No	**6. Verification of Entire Electrical System**				2	
≥90%	**7. Energy Efficient Lighting**	1	1			
Yes	**8.Low- Mercury Lamps (Linear and Compact Flourescent)**	1			1	
≥90%	**9. Lighting Controls Installed**	1	1			
	Total Points Available in Appliances and Lighting = 13+	11				
N. OTHER				Possible Points		
Yes	**1. Incorporate GreenPoint Checklist in Blueprints Or Distribute Checklist (Required for Whole House and Elements)**	Y		R		
No	**2. Develop Homeowner Manual of Green Features/Benefits**			1		1
	3. Hazardous Waste Testing					
No	a. Lead Testing Interior, Exterior and Soil				1	
No	b. Asbestos Testing and Remediation				1	
Yes	**4. Gas Shut Off Valve (motion/ non-motion)**	2			1	1
	Total Points Available in Other = 6	2				
P. INNOVATIONS				Possible Points		
	AA. Community: No Innovation Measures At This Time					
	A. Site					
No	1. Cool Site		1			
	B. Foundation: No Innovation Measures At This Time					
	C. Landscaping					
No	1. Irrigation System Uses Recycled Wastewater					1
	D. Structural Frame and Building Envelope					
	1. Design, Build and Maintain Structural Pest and Rot Controls					
Yes	a. Locate All Wood (Siding, Trim, Structure) At Least 12 Inches Above Soil	1			1	
≥90%	b. All Wood Framing 3 Feet from the Foundation is Treated with Borates (or Use Factory-Impregnated Materials) OR Walls are Not Made of Wood	1		1		
Yes	2. Use Moisture Resistant Materials and Practices in Wet Areas of Kitchen, Bathrooms, Utility Rooms, and Basements	1		1		
	3. Use FSC-Certified Engineered Lumber					
≥90%	a. Engineered Beams and Headers	1			1	
No	b. Insulated Engineered Headers				1	
50%	c. Wood I-Joists or Web Trusses for Floors	0.5			1	
No	d. Wood I-Joists for Roof Rafters				1	
No	e. Engineered or Finger-Jointed Studs for Vertical Applications				1	
≥90%	f. Roof Trusses	1			1	

310 Tait Ave	Points Achieved	Community	Energy	IAQ/Health	Resources	Water
	E. Exterior Finish					
No	1. Green Roofs (25% or Roof Area Minimum)		2	2		
	F. Insulation: No Innovation Measures At This Time					
	G. Plumbing					
No	1. Graywater Pre-Plumbing (Includes Clothes Washer at Minimum)					1
No	2. Graywater System Operational (Includes Clothes Washer at Minimum)					2
No	3. Innovative Wastewater Technology (Constructed Wetland, Sand Filter, Aerobic System)					1
No	4. Composting or Waterless Toilet					1
No	5. Install Drain Water Heat-Recovery System		1			
	H. Heating, Ventilation and Air Conditioning (HVAC)					
No	1. Humidity Control Systems (Only in California Humid/Marine Climate Zones 1,3,5,6,7)			1		
	I. Renewable Energy: No Innovation Measures At This Time					
	J. Building Performance					
No	1. Test Total Supply Air Flow Rates		1			
No	2. Energy Budget Analysis (J3) Completed By CEPE		1			
	K. Finishes: No Innovation Measures At This Time.					
	L. Flooring: No Innovation Measures At This Time.					
	M. Appliances: No Innovation Measures At This Time.					
	N. Other					
No	1. Homebuilder's Management Staff Are Certified Green Building Professionals		1			
No	2. Comprehensive Owner's Manual and Homeowner Education Walkthroughs		1			
	3. Additional Innovations: List innovative measures that meet green building objectives. Points will be assessed by Build It Green and the GreenPoint Rater.					
TBD	a. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	b. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	c. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	d. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	e. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	f. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	g. Describe Innovation Here and Enter Possible Points in Columns L-P					
TBD	h. Describe Innovation Here and Enter Possible Points in Columns L-P					
	Total Points Available in Innovation = 26+	5.5				

Summary

Total Available Points	224+	25	83	46	76	47
Minimum Points Required (Whole House)	50		20	5	6	8
Minimum Points Required (Elements)	25		8	2	2	4
Total Points Achieved	152	12.0	25.0	35.0	50.5	29.0

REVISIONS	BY

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Donna Chivers

D3 designs

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CLIENT

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310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

GREEN POINT CHECKLIST

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
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BUILDING ENERGY ANALYSIS REPORT

PROJECT:

310 Tait Ave. SFD + ADU
310 Tait Ave.
Los Gatos, CA 95030

Project Designer:

D3 Designs, LLC
4716 Bryce Circle
Carlsbad, CA 92008
(510) 714-8309

Report Prepared by:

David Hensel, PE
Hensel Consulting Engineers, Inc.
16776 Bernardo Center Dr., Suite 203
San Diego, CA 92128
(619) 665-3259

Job Number:

25403

Date:

10/17/2025

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

TABLE OF CONTENTS

GENERAL INFORMATION					
01	Project Name	310 Tait Ave. SFD + ADU			
02	Run Title	Title 24 Analysis			
03	Project Location	310 Tait Ave.			
04	City	Los Gatos	05	Standards Version	2022
06	Zip code	95030	07	Software Version	EnergyPro 9.4
08	Climate Zone	4	09	Front Orientation (deg/ Cardinal)	305
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	3
14	Addition Cond. Floor Area (ft^2)	670	15	Number of Stories	2
16	Existing Cond. Floor Area (ft^2)	731	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	1401	19	Glazing Percentage (%)	19.26%
20	ADU Bedroom Count	1	21	ADU Conditioned Floor Area	255
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

COMPLIANCE RESULTS	
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	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Margin (EDR1)	Margin (EDR2)
Space Heating	0	49.03	0	43.33	0	5.7
Space Cooling	0	46.2	0	49.66	0	-3.46
IAQ Ventilation	0	1.67	0	0.51	0	1.16
Water Heating	0	47.54	0	42.42	0	5.12
Self Utilization/Flexibility Credit				0		0
Efficiency Compliance Total	0	144.44	0	135.92	0	8.52
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	7.56	0	7.56		
Appl. & Cooking	0	34.69	0	34.68		
Plug Loads	0	40.46	0	40.46		
Outdoor Lighting	0	1.74	0	1.74		
TOTAL COMPLIANCE	0	228.89	0	220.36		

ENERGY USE INTENSITY				
	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	40.55	37.61	2.94	7.25
Net EUI[2]	40.55	37.61	2.94	7.25

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- IAQ Ventilation System: as low as 0.1 W/CFM

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 analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

- Indoor air quality ventilation
- Kitchen range hood
- Duct Sealing required if a duct system component, plenum, or air handling unit is altered

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft^2)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
310 Tait Ave. SFD + ADU	1401	1	3	4	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
1st Floor-Main-Existing	Conditioned	New Furnace + AC1	618	8.3	DHW Sys 1	Existing Unchanged

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
2nd Floor-Main-Addition	Conditioned	New Furnace + AC1	415	8.2	DHW Sys 1	New
1st Floor-ADU-Existing	Conditioned	New Furnace + AC2	113	9	DHW Sys 1	Existing Unchanged
1st Floor-ADU-Addition	Conditioned	New Furnace + AC2	255	8.3	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Existing Front Wall	1st Floor-Main-Existing	Default Wall Prior to 197	305	Front	170	40	90	none	Existing	No
Existing Rear Wall	1st Floor-Main-Existing	Default Wall Prior to 197	125	Back	189	43.4	90	none	Existing	No
Existing Left Wall	1st Floor-Main-Existing	Default Wall Prior to 197	35	Left	235	32.5	90	none	Existing	No
Existing Right Wall	1st Floor-Main-Existing	Default Wall Prior to 197	215	Right	57	8	90	none	Existing	No
New Front Wall	2nd Floor-Main-Addition	New R-21 Wall	305	Front	202	42	90	none	New	n/a
New Rear Wall	2nd Floor-Main-Addition	New R-21 Wall	125	Back	97	7	90	none	New	n/a
New Left Wall	2nd Floor-Main-Addition	New R-21 Wall	35	Left	52	10	90	none	New	n/a

REVISIONS	BY

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APN: 510-14-058

TITLE 24

310 TAIT AVE. LOS GATOS, CA 95030

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OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
New Right Wall	2nd Floor-Main-Addition	New R-21 Wall	215	Right	144	16	90	none	New	n/a
New Rear Wall 2	2nd Floor-Main-Addition	New R-15 Wall1	125	Back	105	10	90	Extension	New	n/a
New Left Wall 2	2nd Floor-Main-Addition	New R-15 Wall1	35	Left	126	0	90	Extension	New	n/a
New Right Wall 2	2nd Floor-Main-Addition	New R-15 Wall1	215	Right	34	0	90	Extension	New	n/a
New Rear Wall 3	1st Floor-ADU-Existing	New R-21 Wall II	125	Back	46	0	90	none	New	n/a
New Front Wall 2	1st Floor-ADU-Addition	New R-21 Wall	305	Front	150	20	90	none	New	n/a
New Rear Wall 4	1st Floor-ADU-Addition	New R-21 Wall	125	Back	98	15	90	none	New	n/a
New Right Wall 3	1st Floor-ADU-Addition	New R-21 Wall	215	Right	145	26	90	none	New	n/a
New Interior Surface	1st Floor-Main-Existing>>1st Floor-ADU-Addition	New R-15 Wall	n/a	n/a	32	0	n/a		New	n/a

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
New Interior Surface 2	1st Floor-Main-Existing>>1st Floor-ADU-Existing	New R-15 Wall	n/a	n/a	47	0	n/a		New	n/a
New Interior Surface 3	1st Floor-Main-Existing>>1st Floor-ADU-Existing	New R-15 Wall	n/a	n/a	54	0	n/a		New	n/a
New Interior Surface 4	1st Floor-Main-Existing>>1st Floor-ADU-Existing	New R-15 Wall	n/a	n/a	50	0	n/a		New	n/a
New Interior Surface 5	1st Floor-Main-Existing>>1st Floor-ADU-Existing	New R-15 Wall	n/a	n/a	36	0	n/a		New	n/a
Existing Roof 2	1st Floor-Main-Existing	Default Roof Prior to 197	n/a	n/a	168	n/a	n/a		Existing	No
New Roof	2nd Floor-Main-Addition	New R-30 Roof Attic	n/a	n/a	415	n/a	n/a		New	n/a
New Roof 2	1st Floor-ADU-Addition	New R-30 Roof Attic	n/a	n/a	137	n/a	n/a		New	n/a
Existing Raised Floor	1st Floor-Main-Existing	Default Floor Crawlspace	n/a	n/a	618	n/a	n/a		Existing	No

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Existing Raised Floor 2	1st Floor-ADU-Existing	Default Floor Crawlspace	n/a	n/a	113	n/a	n/a		Existing	No
New Raised Floor	1st Floor-ADU-Addition	New R-19 Floor Crawlspace	n/a	n/a	255	n/a	n/a		New	n/a
New Interior Surface 6	2nd Floor-Main-Addition	New R-0 Floor No Crawlspa	n/a	n/a	184	n/a	n/a		New	n/a
New Interior Surface 7	2nd Floor-Main-Addition	R-19 Floor No Crawlspace	n/a	n/a	113	n/a	n/a		New	n/a
New Interior Surface 8	2nd Floor-Main-Addition	R-19 Floor No Crawlspace	n/a	n/a	56	n/a	n/a		New	n/a
New Interior Surface 9	2nd Floor-Main-Addition	R-19 Floor No Crawlspace	n/a	n/a	56	n/a	n/a		New	n/a

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Zone	Construction	Azimuth	Orientation	Area (ft^2)	Skylight Area (ft^2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition	Existing Construction
Existing Roof	1st Floor-Main-Existing	Default Roof Prior to 1971	0	n/a	266	0	6	0.1	0.85	No	Existing	No	

ATTIC

01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic 1st Floor-Main-Existing	Attic Roof1st Floor-Main-Existing	Ventilated	4	0.1	0.85	No	No	Existing	No
Attic 2nd Floor-Main-Addition	Attic Roof2nd Floor-Main-Addition	Ventilated	4	0.1	0.85	No	No	New	n/a
Attic 1st Floor-ADU-Addition	Attic Roof1st Floor-ADU-Addition	Ventilated	4	0.1	0.85	No	No	New	n/a

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
New Window-85	Window	Existing Front Wall	Front	305			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Swinging Door-210	Window	Existing Front Wall	Front	305			1	20	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 2	Window	Existing Front Wall	Front	305			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 3	Window	Existing Rear Wall	Back	125			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Sliding Door-242	Window	Existing Rear Wall	Back	125			1	33.4	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-79	Window	Existing Left Wall	Left	35			1	7.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
New Window-94	Window	Existing Left Wall	Left	35			1	7.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-79 2	Window	Existing Left Wall	Left	35			1	7.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 4	Window	Existing Left Wall	Left	35			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-86	Window	Existing Right Wall	Right	215			1	8	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-98	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-101	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-98 2	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-98 3	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-101 2	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-98 4	Window	New Front Wall	Front	305			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
New Window-99	Window	New Rear Wall 4	Back	125			1	15	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-61	Window	New Right Wall 3	Right	215			1	6	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Swinging Door-245	Window	New Right Wall 3	Right	215			1	20	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

OPAQUE SURFACE CONSTRUCTIONS

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
Default Wall Prior to 197	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.357	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: All Other Siding
New R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.068	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: All Other Siding
New R-15 Wall1	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.095	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: All Other Siding
New R-21 Wall II	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.068	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: All Other Siding

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
New Window-98 5	Window	New Rear Wall	Back	125			1	7	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-97	Window	New Left Wall	Left	35			1	5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-97 2	Window	New Left Wall	Left	35			1	5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-97 3	Window	New Right Wall	Right	215			1	5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-97 4	Window	New Right Wall	Right	215			1	5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-95	Window	New Right Wall	Right	215			1	6	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 5	Window	New Rear Wall 2	Back	125			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 6	Window	New Front Wall 2	Front	305			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
New Window-85 7	Window	New Front Wall 2	Front	305			1	10	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

REVISIONS	BY

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APN: 510-14-058

TITLE 24

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
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OPAQUE SURFACE CONSTRUCTIONS

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
Default Roof Prior to 1971	Cathedral Ceilings	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-11	None / None	0.078	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-11 / 2x4 Inside Finish: Gypsum Board
New R-15 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.086	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board
Attic Roof1st Floor-Main-Existing	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.4	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Attic Roof2nd Floor-Main-Addition	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Attic Roof1st Floor-ADU-Addition	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Default Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x8 @ 16 in. O. C.	R-0	None / None	0.218	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x8

OPAQUE SURFACE CONSTRUCTIONS

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
New R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x8 @ 16 in. O. C.	R-19	None / None	0.047	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x8
Default Roof Prior to 197	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-11	None / None	0.081	Over Ceiling Joists: R-1.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
New R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x6 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-15.7 insul. Cavity / Frame: R-14.3 / 2x6 Inside Finish: Gypsum Board
New R-0 Floor No Crawlspa	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
R-19 Floor No Crawlspace	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-19	None / None	0.044	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x12 Ceiling Below Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)	Status	Verified Existing Condition	Existing Water Heating System
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	New	NA	

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int./Ext.)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
DHW Heater 1	Gas	Consumer Instantaneous	1	0	UEF	0.95	Btu/Hr	200000	0	n/a	n/a		New	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Status	Verified Existing Condition	Existing HVAC System
New Furnace + AC1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	New	No	

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Status	Verified Existing Condition	Existing HVAC System
New Furnace + AC2	Heating and cooling system other	Heating Component 2	1	Cooling Component 2	1	HVAC Fan 2	Air Distribution System 2	New	No	

HVAC - HEATING UNIT TYPES

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 1	Central gas furnace	1	AFUE - 95	n/a
Heating Component 2	Central gas furnace	1	AFUE - 95	n/a

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/EER2/CEER	Efficiency SEER/SEER2	Zonally Controlled	Multi-speed Compressor	HERS Verification
Cooling Component 1	Central split AC	1	EER2/SEER2	11.7	14.3	Not Zonal	Single Speed	Cooling Component 1-hers-cool
Cooling Component 2	Central split AC	1	EER2/SEER2	11.7	14.3	Not Zonal	Single Speed	Cooling Component 2-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEERSEER2	Verified Refrigerant Charge
Cooling Component 1-hers-cool	Not Required	0	Not Required	Not Required	Not Required
Cooling Component 2-hers-cool	Not Required	0	Not Required	Not Required	Not Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft
			Supply	Return	Supply	Return	Supply	Return							
Air Distribution System 1	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distribution System 1-hers-dist	Existing	No		n/a
Air Distribution System 2	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distribution System 2-hers-dist	Existing	No		n/a

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan
HVAC Fan 2	HVAC Fan	0.45	HVAC Fan 2-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Not Required	0
HVAC Fan 2-hers-fan	Not Required	0

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam ADU IAQVentRpt 1-1	30	0.1	Exhaust	No	n/a / n/a	No	Yes	New

HERS RATER VERIFICATION OF EXISTING CONDITIONS

OVERHANGS AND FINS - VERIFIED AND ALTERED

This section does not apply to this project.

INDOOR AIR QUALITY (IAQ) FANS - VERIFIED AND ALTERED

01	02	03	04	05	06	07
Name	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/IAQ Recovery Effectiveness - SRE	IAQ Recovery Effectiveness - ASRE/IAQ Recovery Effectiveness - ASRE

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: David Hensel	Documentation Author Signature: David Hensel
Company: Hensel Consulting Engineers, Inc.	Signature Date: 10/17/2025
Address: 16776 Bernardo Center Dr.	CEA/ HERS Certification Identification (if applicable): R19-21-30091
City/State/Zip: San Diego, CA 92079	Phone: (619) 665-3259

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: David Hensel	Responsible Designer Signature: David Hensel
Company: Hensel Consulting Engineers, Inc.	Date Signed: 10/17/2025
Address: 16776 Bernardo Center Dr.	License: R19-21-30091
City/State/Zip: San Diego, CA 92079	Phone: (619) 665-3259

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

REVISIONS	BY

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CLIENT

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TITLE 24

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
DATE 10/25/2025 7:46:30 AM	T24-3
DRAWN BY Author	

2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage**. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling**. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. *
§ 110.7:	**Air Leakage**. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers**. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors**. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance**. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier**. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation**. Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7. Insulation but limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation**. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation**. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation**. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation**. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration, and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder**. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder**. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(i):	**Fenestration Products**. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light**. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors**. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake**. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper**. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification**. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. *
§ 110.2(a):	**HVAC Efficiency**. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters**. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. *
§ 110.2(c):	**Thermostats**. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation**. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves**. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights**. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(n)1:	**Building Cooling and Heating Loads**. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	**Clearances**. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier**. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation**. All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	**Insulation Protection**. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems**. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2' higher than the base of the water heater.
§ 150.0(n)3:	**Solar Water-heating Systems**. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	**Ducts**. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance**. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", if mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems**. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems**. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper**. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers**. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation**. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct**. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test**. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration**. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy**. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality**. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems**. Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed andcontrolled per §150.0(o)1Biiiiiiv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses**. Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1CI-III.
§ 150.0(o)1G:	**Local Mechanical Exhaust**. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1GIii;enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1GIii-iv. Airflow must be measured by the installer per §150.0(o)1GIv, and rated for sound per §150.0(o)1GIvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems**. The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing**. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers**. Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping**. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers**. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools**. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light**. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation**. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *

Lighting:

§ 110.9:	**Lighting Controls and Components**. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy**. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires**. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings**. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires**. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes**. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans**. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k). *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires**. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires**. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets**. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls**. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls**. Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls**. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls**. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements**. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems**. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls**. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers**. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls**. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting**. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs**. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles**. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences**. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area**. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth**. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading**. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment. *
§ 110.10(b)3B:	**Shading**. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents**. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways**. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation**. A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel**. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel**. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s)	**Energy Storage System (ESS) Ready**. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, *or* a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0.(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready**. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	**Electric Cooktop Ready**. Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready**. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

5/6/22

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www.d-3-design.com

CLIENT

SANTIAGO ALLENDE
310 TAIT AVE.
LOS GATOS, CA 95030
APN: 510-14-058

MANDATORY MEASURES

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
DATE 10/25/2025 7:47:06 AM	T24-4
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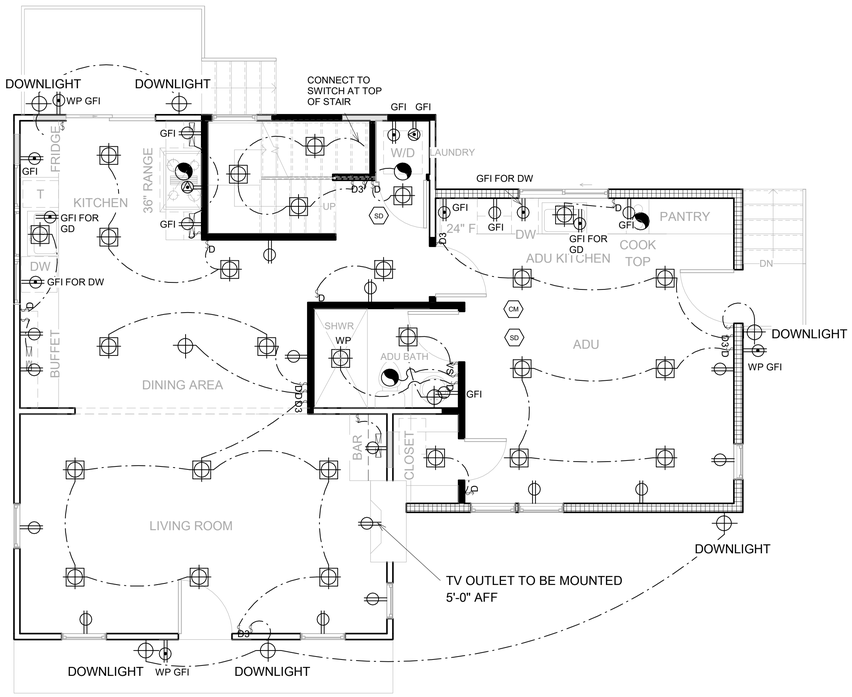
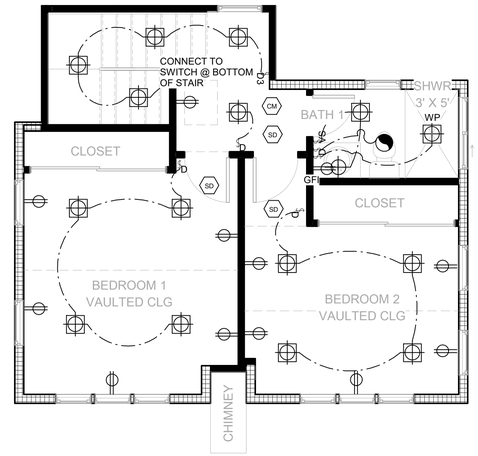


1 MAIN FLOOR ELECTRICAL PLAN
1/4" = 1'-0"

ELECTRICAL SYMBOLS/ABBREVIATIONS	
	UNDER CABINET LED LIGHTING
	CEILING MOUNTED FIXTURE
	CEILING MOUNTED FAN W/LIGHT
	WALL MOUNTED FIXTURE
	RECESSED CAN LIGHT
	RECESSED ROTATING FIXTURE
D	SWITCH WITH DIMMER
VS	VACANCY SENSOR
D3	3-WAY SWITCH
	DUPLEX OUTLET
	WATER PROOF OUTLET
	SPECIALTY OUTLET
CM	CARBON MONOXIDE
SD	SMOKE DETECTOR
G	GAS LINE
T	TELEPHONE LINE
D	DATA LINE
HB	HOSE BIBB
WP	WATER PROOF
GFI	GROUND FAULT INTERRUPTOR
	EXHAUST FAN
GD	GARBAGE DISPOSAL



2 UPPER LEVEL ELECTRICAL PLAN
1/4" = 1'-0"

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LOS GATOS, CA 95030
APN: 510-14-058

ELECTRICAL PLAN

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	1/4" = 1'-0"
DATE	10/11/2025 1:12:59 PM
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SHEET
E1.0

NOTES:

1. Receptacles installed in wet locations shall have an enclosure that is weatherproof per CEC section 406.8(B)(2).

2. Sufficient access and working space shall be provided and maintained at main electrical panel and sub-panel locations to permit ready and safe operation and maintenance of such equipment. Such working space shall be a clear area with minimum 30" width and shall extend from the floor or platform to a height of not less than 6'-6".

3. Install electric fluorescent lighting in compliance with CEC requirements for a "45 lumens per watt" efficiency lamp in kitchen. Fluorescent lighting in bathrooms.

4. In kitchens and dining areas of dwelling units a receptacle outlet shall be installed at each counter space wider than 12". Receptacles shall be installed so that no point along the wall line is more than 24" measured horiz. from an outlet in that space. Island and peninsula counter tops 12" or deeper with a long dimension of 24" or more shall be provided with min. 1 receptacle (peninsula counter is measured from the connecting edge). Receptacle outlets shall be located not more than 18" above the counter top.

5. Carbon monoxide alarms to be installed in the ceiling or wall in each area/hallway adjacent to sleeping rooms and on every level of a dwelling unit.

6. Smoke alarms to be installed in each sleeping area, outside each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story.

7. AII lighting shall be high efficacy or other type permitted if they are controlled by dimmer switch or occupancy sensor.

8. AII bathroom exhaust fans to have a minimum 50 cfm intermittent or 20 cfm continuous per CMC Table 403.7.

9. All recessed lights shall be certified air tight construction in addition to being IC rated.

10. Exterior lights attached to the building shall be high efficacy fixtures controlled by a motion sensor in combination with a photo-control, astronomical time clock oR energy management system.

11. Ground fault circuit interrupter protection required for receptacles installed bathrooms, garages at grade level outdoors, all kitchen counter receptacle outlets and on construction power poles.

12. Electrical lighting fixtures in clothes closets shall be installed as follows.
    1. Surface mounted incandescent fixtures with a completely enclosed lamp may be installed on the wall above the door or on the ceiling provided there is a minimum clearance of 12" between the fixture and the storage area.
    2. Surface mounted fluorescent fixtures installed on the wall above the door or on the ceiling. Recessed-incandescent fixtures with a completely enclosed lamp, recessed fluorescont fixtures installed in the wall or the ceiling may be installed provided there is a minimum clearance of 6" from the storage area.

13. At least one wall receptacle outlet shall be installed adjacent to each basin location (i.e. 2 sinks, 2 outlets; if installed at each end of the counterspace or a single outlet may be installed between the 2 sinks)

14. Receptacle outlets required outside at grade (w/i 6'-6"), at least one receptacle outlet accessible at grade level, shall be instailed at the front and back of the dwelling, at laundry area, in attached garage and basement. Provide at least one weather-resistant type receptacle in a weatherproof enclosure at the front and back of the dwelling. (CEC 210.52(E)(1) & 406.8(B)(1)

15. In every habitable room or area of dwelling units, receptacle outlets shall be installed so that no point along the floor line in any wall space is more than 6' measured horizontally from an outlet in that space, including any wall space 2' or more in width and the wall space occupied by fixed panels in exterior walls, but excluding sliding panels in exterior walls.

16. Provide switch controlled lighting outlet in every habitable room, bathroom, hallway, stairway, garage and at outdoor entrances or exits. At least one lighting outlet controlled by a light switch located at the point of entry to the attic, underfloor space utility room and basement shall be installed where these spaces are used for storage or contain equipment requiring servicing.

17. AII branch circuits that supply 125 volt, single phase, 15 and 20-ampere receptacle outlets installed in dwelling unit bedrooms shall be protected by an arc fault circuit interrupter. All 120 volt, single-phlse, 15- and 20- ampere brach circuits supplying new receptacle, lighting and alarm outlets installed in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas s all be protected by a listed arc-fault circuit interrupter (AFCI, combination-type, installed to provide protection of the branch circuit. CEC article 210.12(A)

18. Electrical light fixtures in clothes closets shall be installed over an area which is unobstructed to the floor. Maintain an 18 inch clearance horizontally between the fixture and a storage area where combustible material may be stored within the closet.

19. Warm air furnaces within compartments or alcoves shall have a minimum working space clearance of 3" along the sides, back and top with a total width of the enclosing space at least 12" wider than the furnace.

20. Install excess flow valves at all fuel burning appliances.

21. All receptacle outlets to be tamper resistant per CEC 406.11

22. All 125 volt, single phase 15 and 20 ampere recetacles installed in the following locations shall have GFCI protection for personel (CEC 210.8)
    a. Bathrooms, garages, outdoors, crawl spaces, unfinished basements
    b. Kitchen countertop surfaces
    c. Laundry, utility, and wet bar sinks (within 6' of the edge of sink)
    d. Boathouses

23. Smoke alarms shall not be installed within a 36" horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.

24. Lighting installed in attached and detached garages, laundry rooms and utility rooms shall be high efficacy luminaires and be controlled by occupancy sensor.

25. Separate circuits will be provided for bathrooms, laundry rooms, garbage disposal/dishwasher, two at kitchen counter tops and HVAC (as required by the manufacturer).

26. Lighting fixtures located within 3' horizontally and 8' vertically of the bathtub rim or shower stall threshold shall be listed for damp location, or listed for wet locations where subject to shower spray.

27. Air conditioner refrigerant lines must be protected from UV deterioration.

28. Newly constructed one and two familiy dwellings and townhouses with attached private garages shall comply with EV infrastructure requirements in accordance with the CA Green Building Standards Code.

29. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarm shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit.

30. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling or sleeping unit, the carbon monoxide alarm shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit.

31. All garage receptacle outlets shall be at least 18” AFF.

32. All receptacle outlets are to be Tamper Resistant as per CEC 406.12, and AFCI protected per CEC 210.12.

33. Exterior ‘WP’ receptacle outlets are to be in a bubble-type enclosure.

34. All exhaust fans are to be Energy Star rated with a humidistat.

35. Kitchen receptacles shall meet all of the following requirements: CEC 210.8, 210.12, 210.23, 210.52, 406.12

    A. Countertop receptacles shall be located no more than 20 inches above the countertop.
    B. Electric stoves and ovens shall be supplied with a 40- or 50- amp branch circuit.
    C. Countertop receptacles shall be supplied by a minimum of two 20-amp branch circuits.
    D. Dining area, breakfast room, pantry, or similar area shall be supplied by a 20-amp circuit, the countertop circuits may be used to supply these areas.

36. Requirements for bathrooms:

    A. Lighting fixtures located within 3 feet horizontally and 8 feet vertically of the bathtub rim or shower stall threshold shall be listed for a damp location, or listed for wet locations where subject to shower spray. CEC 410.10
    B. Each bathroom shall have one light fixture controlled by a vacancy sensor switch that requires a manual on activation (does not automatically turn on) and automatically turns off within 30 minutes after the room is vacated. All other light fixtures shall be controlled by a vacancy sensor or dimmer.
    C. Hydro-massage tubs (i.e. Jacuzzi tubs) shall have access to the motor, be supplied by a GFCI protected dedicated circuit, and be listed by a recognized testing agency (i.e. UL). All metal cables, fittings, piping, or other metal surfaces, within 5 feet of the inside wall of the Hydro-massage tub shall be properly bonded. Hydro-massage tubs shall be bonded with a minimum #8 AWG bare copper wire and the bonding shall be accessible. CEC 680.70

37. Lighting efficiency requirements: California Energy Efficiency Standards 150.0(k)

    All lighting shall be high efficacy such as fluorescent. LED lighting system and GU-24 lamp holder shall be listed by Energy Commission and shall meet the requirement of Table 150-C.

Watts	Lumens/Watts
5 or less	30
>5 to 15	45
>15 to 40	60
Over 40	90

    A. All lighting fixtures shall be controlled by either a dimmer switch or by a vacancy sensor switch that requires a manual on activation (does not automatically turn on) and automatically turns off within 30 minutes after the room is vacated.
    B. All light fixtures shall contain bulbs that are labeled as JA8-2016 (JA8-2016-E for sealed lens or recessed fixture). Screw base bulbs are permitted, except in recessed lighting fixtures.
    C. Recessed lighting shall be listed as IC (zero clearance to insulation) and AT (air tight), be sealed/caulked between the fixture housing and ceiling, shall not contain a screw base socket, and contain bulbs marked with JA8-2016-E efficiency label.
    D. Note that all outdoor lighting shall be controlled by a manual ON and OFF switch and controlled by photocell and motion sensor.

38. Smoke alarms and carbon monoxide alarms are required to be listed by the California State Fire Marshal.

39. Smoke detectors and carbon monoxide detectors must be interconnected 110V each with a battery backup.

REVISIONS	BY

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APN: 510-14-058

ELECTRICAL NOTES

310 TAIT AVE. LOS GATOS, CA 95030

SCALE	SHEET
DATE 10/24/2025 6:37:23 AM	E1.1
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FLOOR JOISTS SCHEDULE

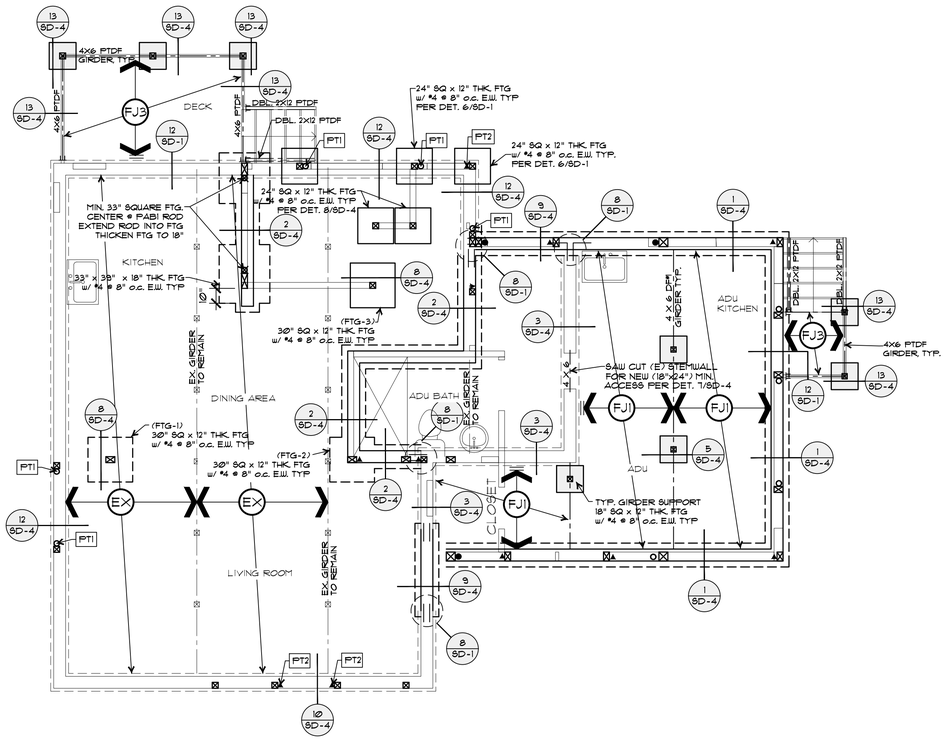
FJ1	2 X 6 DF#2 @ 16" O.C.
FJ2	SEE SHEET S-2.
FJ3	2 X 6 PTDF @ 16" O.C.

REQUIRED STRUCTURAL OBSERVATIONS:

1. SEISMIC FORCE RESISTING SYSTEM PER 2022 CBC 1705.11.2
2. FOUNDATION EXCAVATIONS AND REINFORCING STEEL PLACEMENT
3. THE COMPLETE STRUCTURAL SYSTEM, JUST PRIOR TO WALL FINISHES.

HANGER SCHEDULE (U.N.O.)

SUPPORTED MEMBER SIZE	HANGER	MIN. POST SIZE REQ.
2X RAFTERS, DBL. RAFTERS	LSSU, LSU	--
2X CEILING JOISTS, DBL. JOISTS	LUS, LUS	--
TJI FLOOR I-JOISTS	ITS	--
4X BEAM SAWN LUMBER	HU	4X4 DF#2
6X BEAMS SAWN LUMBER	HU	4X6 DF#2
3½" WIDE ENGINEERED BEAM	HHUS	4X4 DF#2
5¼" WIDE ENGINEERED BEAM	HHUS	4X6 DF#2
7" WIDE ENGINEERED BEAM	HGUS	6X6 DF#1 /4X8 DF#1
1¾" MICROLAM	LSU	2-2X4 DF#2
SKEWED BEAMS	SKEWED HU	4X4 DF#2
SINGLE FLANGE APPLICATIONS	MGU	--
TRUSS HANGERS	USE MANUF. SUPPLIED HANGERS	



LEGEND :

POSTS: (SEE DETAIL 9/SD-2)

- DBL. 2X4 POST
- 4 X 4 POST
- 4 X 6 POST
- 6 X 6 POST
- INDICATES 4X OR 6X KING POST

HOLDOWNS: (SEE DETAIL 1/SD-1)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- HDU2 W/ SIMPSON SSTB20 STAB BOLT
- HDU5 W/ SIMPSON SB⅝x24 STAB BOLT
- HDQ8 W/ SB 1X30" STAB BOLT
- HHDQ11 W/ PABB THREADED BOLT
- HD19 W/ PAB 10 THREADED BOLT

SHEAR-WALLS: (SEE SHEET SD-2)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR WALL LOCATION
- INDICATES SHEAR MATERIAL
- INDICATES NOT PART OF LATERAL SYSTEM
- INDICATES SHEAR-WALL TYPE
- INDICATES SHEAR-WALL LENGTH
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES STRAP / UPPER FLOOR HOLD-DOWN
- NEW WALL
- NON-SHEAR BEARING WALL
- INDICATES THE SHEAR LINE NAME AND LOCATION
- STRAP BY LENGTH DEPICTED, SEE DETAIL 14/SD-3 FOR ROOF AND 4,5/SD-5 FOR FLOOR

FLOOR/CEILING/ROOF FRAMING:

- HANGER PER SCHEDULE
- JOIST WITH A HANGER
- JOIST WITH A SUPPORT BELOW

FOUNDATION:

- HANGER PER SCHEDULE
- WALL ABOVE
- CONCRETE SLAB PER PLANS
- TYPICAL SPREAD FOOTING
- SPREAD FOOTING W/ RAISED STEM WALL

FOUNDATION NOTES:

1- ALL HARDWARE IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER SHALL BE GALVANIZED OR ZINC COATED OR STAINLESS STEEL.

2- TYP. HOLD-DOWN INSTALLATION: SEE DETAIL 1/SD-1

3- ALL HARDWARE SHOULD BE PRE-SET (ANCHOR BOLTS, HOLDDOWNS, ETC.) PRIOR TO CONCRETE POUR.

4- ALL HARDWARE SHOULD MANUFACTURED BY "SIMPSON" U.N.O. ON PLANS. (REPLACEMENT HARDWARE IS ALLOWED, PLEASE CONTACT E.O.R.)

5- CONTRACTOR SHOULD PROVIDE CONSTRUCTION JOINTS ON ANY STRUCTURAL AND THEY SHOULD NOT BE SPACED MORE THAN 10'-0" IN ANY DIRECTION.

7- PRIOR TO THE CONTRACTOR REQUESTING A FOUNDATION INSPECTION, THE SOIL ENGINEER SHALL ADVISE THE BUILDING IN WRITING THAT:

a) THE BUILDING EXCAVATION AND BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOIL REPORT AND SPECIFICATIONS.
b) THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED
c) THE FOUNDATION AND PIER (IF ANY) EXCAVATION, DEPTH AND MATERIAL COMPLY WITH THE SOILS REPORT AND APPROVED PLANS.

8- PRIOR TO A FINAL INSPECTION, THE SOILS ENGINEER OF RECORD SHALL ISSUE A FINAL REPORT STATING THE COMPLETED PAD, FOUNDATION, FINISH GRADING, DRAINAGE, AND ASSOCIATED SITE WORK SUBSTANTIALLY CONFORMS TO THE APPROVED PLANS, SPECIFICATIONS, AND SOILS INVESTIGATION.

9- EXCAVATION CUTS EXCEEDING 5 FEET TYPICALLY REQUIRE A "DOSH" PERMIT. ALL EXCAVATIONS MUST CONFIRM TO APPLICABLE "OSHA" AND "CAL-OSHA" REQUIREMENTS. CONTACT CALIFORNIA DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH "DOSH" FOR INFORMATION ABOUT REQUIRED PERMITS.

PULL TEST VALUE TABLE

HOLDDOWN NUMBER	VALUES (LBS.)
PT1	4500
PT2	9000

* REQUIRED THREADED BOLTS SHOULD BE INSTALLED PER 9/SD-1 CONDITION "A" BEFORE CALLING FOR PULL TEST.

FLOOR FRAMING NOTES:

1- FLOOR JOISTS: SEE FLOOR JOISTS SCHEDULE

2- FLOOR SHTN'G: 3/4" T&G PLYWOOD W/ 10d @ 6" O.C. EN. & 10" O.C. FN.

3- HEADERS: SEE SCHEDULE ON DETAIL 10/SD-2

4- PROVIDE DOUBLE FLOOR JOISTS MIN. BELOW BEARING WALLS AND 2X MIN. BLOCKING UNDER THE PERPENDICULAR WALLS.

5- SHEAR WALLS: SEE SCHEDULE ON SHEET SD-2

6- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

7- PROVIDE PLYWOOD EDGE NAILING FOR ALL COLLECTOR BEAMS/JOISTS.

NO.	REVISIONS	BY

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

FOUNDATION PLAN

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 Meridian Ave.
San Jose, CA 95125
Phone:(408)-842-5464

PROJECT NAME:

ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

REGISTERED PROFESSIONAL ENGINEER — No. C73572 Exp. 12/31/2026 — STATE OF CALIFORNIA — CIVIL

DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

SHEET NO.

S-1

RAFTER/FLOOR JOISTS SCHEDULE

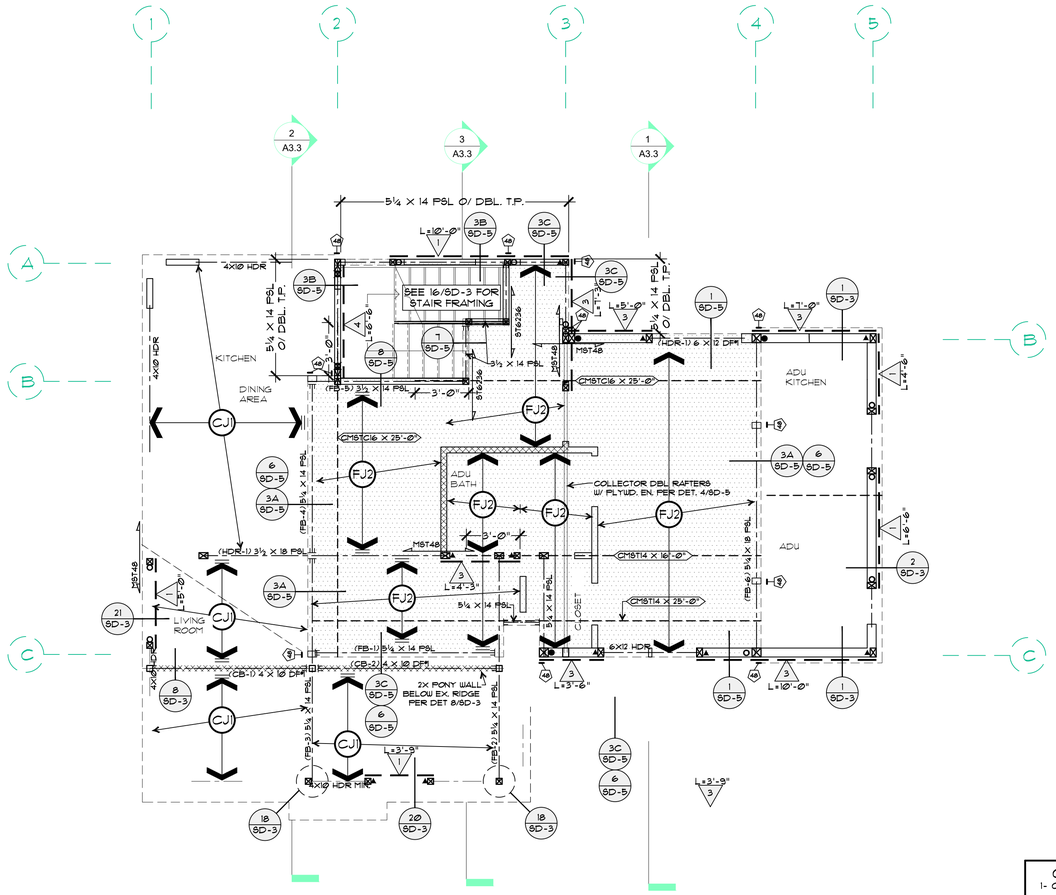
FJ1 — SEE SHEET S-1

FJ2 — 14" TJI 360 FLR JSTS. @ 16" O.C.

FJ3 — SEE SHEET S-1

CEILING JOISTS SCHEDULE

CJ — 2 X 6 DF#2 @ 24" O.C.



HANGER SCHEDULE (U.N.O.)

SUPPORTED MEMBER SIZE	HANGER	MIN. POST SIZE REQ.
2X RAFTERS, DBL. RAFTERS	LSSU, LSU	--
2X CEILING JOISTS, DBL. JOISTS	LUS, LUS	--
TJI FLOOR I-JOISTS	ITS	--
4X BEAM SAWN LUMBER	HU	4X4 DF#2
6X BEAMS SAWN LUMBER	HU	4X6 DF#2
3½" WIDE ENGINEERED BEAM	HHUS	4X4 DF#2
5¼" WIDE ENGINEERED BEAM	HHUS	4X6 DF#2
7" WIDE ENGINEERED BEAM	HGUS	6X6 DF#1 /4X8 DF#1
1¾" MICROLAM	LSU	2-2X4 DF#2
SKEWED BEAMS	SKEWED HU	4X4 DF#2
SINGLE FLANGE APPLICATIONS	MGU	--
TRUSS HANGERS	USE MANUF. SUPPLIED HANGERS	

LEGEND :

POSTS: (SEE DETAIL 9/SD-2)

- DBL. 2X4 POST
- 4 X 4 POST
- 4 X 6 POST
- 6 X 6 POST
- INDICATES 4X OR 6X KING POST

UPPER FLOOR HOLDOWNS: (SEE DETAIL 10,11,12/SD-5)

- INDICATES WELDED HOLD-DOWN THREADED ROD NOT APPLICABLE
- INDICATES HOLD-DOWN STRAP/BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES BEAM SUPPORTING POST
- INDICATES HOLD-DOWN STRAP/BRACKET BEAM TO POST CONNECTION
- INDICATES LOCATION OF THROUGH BOLT ON SUPPORTING BEAM BELOW

HDU2 · HDU5 · HDQ8 · HHDQ11 · HDI9 · CS16 · MST21 · MST37 · MST48 · MST60 · MST72 · MST96 · CMST12 · CMST14

HOLDOWNS: (SEE DETAIL 1/SD-1)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- HDU2 W/ SIMPSON SSTB20 STAB BOLT
- HDU5 W/ SIMPSON SB⅝x24 STAB BOLT
- HDQ8 W/ SB 1X30" STAB BOLT
- HHDQ11 W/ PAB8 THREADED BOLT
- HDI9 W/ PAB 10 THREADED BOLT

SHEAR-WALLS: (SEE SHEET SD-2)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR WALL LOCATION
- INDICATES SHEAR MATERIAL
- INDICATES NOT PART OF LATERAL SYSTEM
- INDICATES SHEAR-WALL TYPE
- INDICATES SHEAR-WALL LENGTH
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES STRAP / UPPER FLOOR HOLD-DOWN
- NEW WALL
- NON-SHEAR BEARING WALL
- INDICATES THE SHEAR LINE NAME AND LOCATION
- X'-X" — STRAP BY LENGTH DEPICTED, SEE DETAIL 14/SD-3 FOR ROOF AND 4,5/SD-5 FOR FLOOR

FLOOR/CEILING/ROOF FRAMING:

- HANGER PER SCHEDULE
- JOIST WITH A HANGER
- JOIST WITH A SUPPORT BELOW
- JOIST WITH A CANTILEVERED END
- 2nd FLOOR FRAMING
- 2nd FLOOR FRAMING (DECK/BALCONY)
- HFX- — PRE-FABRICATED PANEL SEE HARDY FRAME SCHEDULE

CEILING FRAMING NOTES :

1- CEILING JOISTS: SEE CEILING JOISTS SCHEDULE

2- HEADERS: SEE SCHEDULE ON DETAIL 10/SD-2

3- WALLS STUDS: 2 X 4 DF#2 @ 16" O.C. UP TO 10'-1" HEIGHT, USE 2 X 6 DF#2 @ 16" O.C. FOR WALLS 10'-2" AND TALLER

4- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

5- ALL OPENINGS ON THE CEILINGS LARGER THAN 24" WIDE SHOULD BE FRAMED AROUND WITH DOUBLE CEILING JOISTS U.N.O.

FLOOR FRAMING NOTES:

1- FLOOR JOISTS: SEE PLANS

2- FLOOR SHTNG: 3/4" T&G PLYWOOD W/ 10d @ 6" O.C. EN. & 10" O.C. FN.

3- HEADERS: SEE SCHEDULE ON DETAIL 10/SD-2

4- PROVIDE DOUBLE FLOOR JOISTS MIN. BELOW BEARING WALLS AND 2X MIN. BLOCKING UNDER THE PERPENDICULAR WALLS.

5- SHEAR WALLS: SEE SCHEDULE ON SHEET SD-2

6- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

7- PROVIDE PLYWOOD EDGE NAILING FOR ALL COLLECTOR BEAMS/JOISTS.

8- CONTRACTOR SHOULD FOLLOW INSTALLATION SPECS PROVIDED ON SHEET FJ-1 FOR ENGINEERED FLOOR JOISTS

2nd FLOOR FRAMING & 1st FLOOR SHEAR WALL & CEILING PLAN SCALE: 1/4" = 1'-0"

NO.	REVISIONS	BY

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Consulting Structural Engineering Services
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Phone:(408)-842-5464

PROJECT NAME:

ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

REGISTERED PROFESSIONAL ENGINEER — No. C73272 Exp. 12/31/2026 — CIVIL — STATE OF CALIFORNIA

DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

SHEET NO.

S-2

TRUSS NOTES :

1-ROOF TRUSSES: THE SCHEMATIC, SPECS & CALCULATION OF THE PREFABRICATED ROOF TRUSSES SHALL BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. THE SAID DOCUMENTS SHALL ALSO BE REVIEWED & APPROVED BY THE CITY BUILDING DEPT.

2-PROVIDE AIR GAP BETWEEN THE BOTTOM OF TRUSS CHORDS AND INTERIOR NON BEARING WALLS.CHECK THE TRUSS MANUFACTURER FOR THE REQUIRED AIR GAP. PROVIDE SIMPSON "DTC" @ NON BEARING WALL TYP. PERPENDICULAR TO TRUSSES U.N.O. ON PLANS.

3-TRUSS LOADS: TOP CHORD DL=9.Ø PSF, LL=2Ø.Ø PSF
BOTT. CHORD DL=9.Ø PSF, LL=1Ø.Ø PSF

4- TRUSS LAYOUT AND SCHEMATICS SHALL BE CONSIDERED AS PART OF CONSTRUCTION DOCUMENTS CONTRACTOR SHOULD FOLLOW THE TRUSS LAYOUT BASED ON MANUFACTURER'S DOCUMENTS.

5- ALL COLLECTOR FORCES SHOWN ON PLANS ARE ASD LOADS.

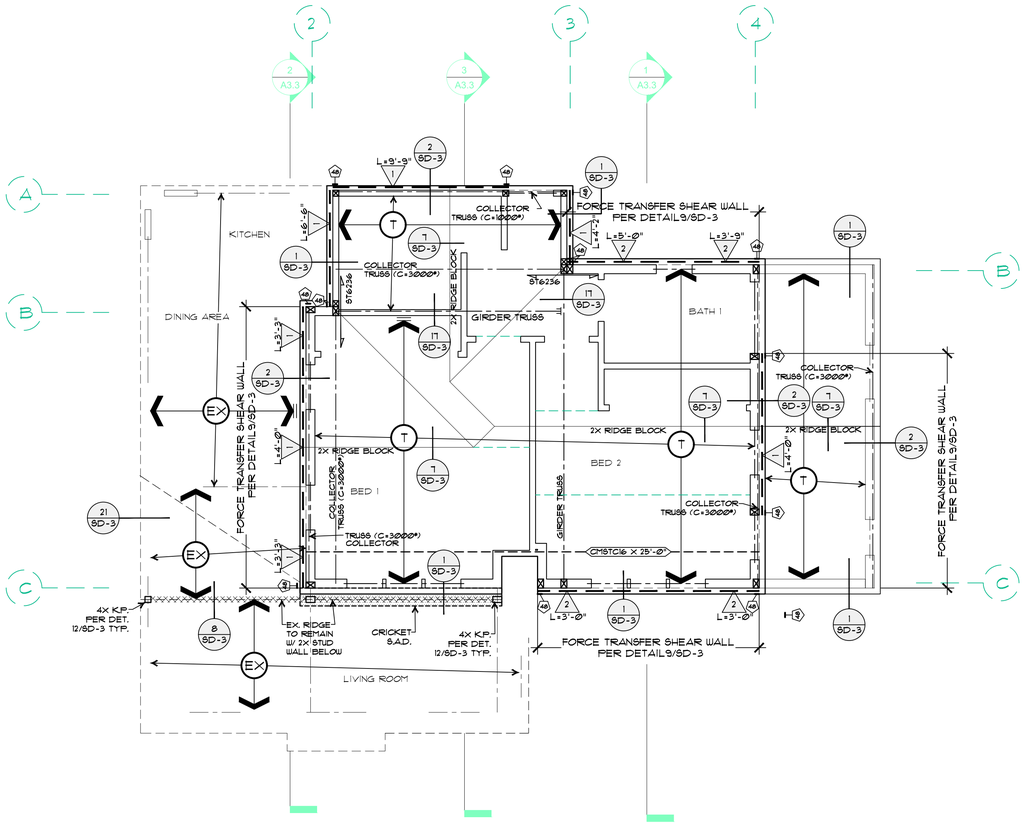
6- PRIOR TO START OF CONSTRUCTION, THE FINALIZED TRUSS PACKAGE SHALL BE SUBMITTED TO EOR FOR FINAL REVIEW. ADDITIONAL FRAMING/ FOUNDATION CHANGES MAY MAY BE REQUIRED.

⟨—(J)—⟩ JACK TRUSSES

⟨—(T)—⟩ ROOF TRUSSES

RAFTER SCHEDULE

⟨—(EX)—⟩ EXISTING RAFTERS TO REMAIN
(2 X 6 DF#2 @ 24" O.C ASSUMED)



HANGER SCHEDULE (U.N.O.)

SUPPORTED MEMBER SIZE	HANGER	MIN. POST SIZE REQ.
2X RAFTERS, DBL. RAFTERS	LSSU, LSU	--
2X CEILING JOISTS, DBL. JOISTS	LUS, LUS	--
TJI FLOOR I-JOISTS	ITS	--
4X BEAM SAWN LUMBER	HU	4X4 DF#2
6X BEAMS SAWN LUMBER	HU	4X6 DF#2
3½" WIDE ENGINEERED BEAM	HHUS	4X4 DF#2
5¼" WIDE ENGINEERED BEAM	HHUS	4X6 DF#2
7" WIDE ENGINEERED BEAM	HGUS	6X6 DF#1 /4X8 DF#1
1¾" MICROLAM	LSU	2-2X4 DF#2
SKEWED BEAMS	SKEWED HU	4X4 DF#2
SINGLE FLANGE APPLICATIONS	MGU	--
TRUSS HANGERS	USE MANUF. SUPPLIED HANGERS	

ROOF FRAMING NOTES :

1- ROOFING MATERIAL : COMP. SHINGLES (MAX WEIGHT = 4 PSF)

2- ROOF SHTNG: 1/2" CDX PLYWD W/ 8d @ 6" O.C. EN. & 12" O.C. FN. W/ PLYWD. CLIPS @ MID SPAN. STAGGER ALL SEAMS AND INSTALL LONG DIRECTION PERPENDICULAR TO THE FRAMING. (TYP. @ ALL ROOFS)

3- ROOF RAFTERS: SEE RAFTER SCHEDULE

4- HEADERS: SEE SCHEDULE ON DETAIL 1Ø/SD-2

5- WALLS STUDS: 2 X 4 DF#2 @ 16" O.C. UP TO 1Ø'-1" HEIGHT. USE 2 X 6 DF#2 @ 16" O.C. FOR WALLS 1Ø'-2" AND TALLER

6- COVER THE ENTIRE EXTERIOR WALLS OF THE BUILDING WITH W/ 1/2" CDX PLYWD. W/ TYPE-1 SHR. WALL NAILING U.N.O. BY SHEAR WALL SCHEDULE

7- SHEAR WALLS: SEE SCHEDULE ON SHEET SD-2

8- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

9- ALL OPENINGS ON ROOF PLYWOOD SHOULD BE STRAPPED W/ C516 COIL STRAP FOR MIN. 12" BEYOND THE OPENING ON ALL SIDES.

1Ø- FOR CEILING BUILT UP SEE DETAILS 13/1 & 2Ø ON SHEET SD-3 TYP.

LEGEND :

POSTS: (SEE DETAIL 9/SD-2)

- DBL. 2X4 POST
- 4 X 4 POST
- 4 X 6 POST
- 6 X 6 POST
- INDICATES 4X OR 6X KING POST

UPPER FLOOR HOLDOWNS: (SEE DETAIL 1Ø,11,12/SD-5)

- INDICATES WELDED HOLD-DOWN THREADED ROD NOT APPLICABLE
- INDICATES HOLD-DOWN STRAP/BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES BEAM SUPPORTING POST
- INDICATES HOLD-DOWN STRAP/BRACKET BEAM TO POST CONNECTION
- INDICATES LOCATION OF THROUGH BOLT ON SUPPORTING BEAM BELOW

HDU2, HDU5, HDQ8, HHDQ11, HD19, C516, MSTC21, MSTC31, MSTC48, MSTC60, MSTC72, MSTC78, MSTC14, CMSTC12

SHEAR-WALLS: (SEE SHEET SD-2)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR WALL LOCATION
- INDICATES SHEAR MATERIAL
- INDICATES SHEAR-WALL TYPE
- INDICATES SHEAR-WALL LENGTH
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES STRAP / UPPER FLOOR HOLD-DOWN
- NEW WALL
- NON-SHEAR BEARING WALL
- INDICATES THE SHEAR LINE NAME AND LOCATION
- STRAP BY LENGTH DEPICTED, SEE DET. 14/SD-3 FOR ROOF AND 4.5/SD-5 FOR FLOOR

ROOF/CEILING:

- HANGER PER SCHEDULE
- CEILING JOISTS DIRECTION SIZE AND SPACING PER TABLE ON SD-Ø
- NEW SKYLIGHT SEE ARCH. DET. FOR SIZE INFORMATION PER DET. 12/SD-3
- NEW UPPER ROOF PER PLAN
- NEW LOWER ROOF PER PLAN
- NEW CALIFORNIA FRAMED AREA
- JOIST WITH A SUPPORT BELOW

ROOF FRAMING PLAN AND 2nd FLOOR SHEAR WALL PLAN SCALE: 1/4" = 1'-Ø"

NO.	REVISIONS	BY

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Phone:(408)-842-5464

PROJECT NAME:
ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

REGISTERED PROFESSIONAL ENGINEER — STRUCTURAL — No. C73272 Exp. 12/31/2Ø18 — CIVIL — STATE OF CALIFORNIA

DATE: 9-2Ø-25

JOB NO:	DRAWN:
25-Ø46	J.V.
DATE:	SCALE:
1Ø/2Ø/25	AS NOTED

SHEET NO.
S-3

I. GENERAL NOTES:

A. FEATURES OF CONSTRUCTION SHOWN ARE TYPICAL & THEY SHALL APPLY GENERALLY FOR ALL SIMILAR CONDITIONS. CONTRACTOR SHALL CHECK THESE PLANS FOR EXISTING DIMENSIONS & SHALL VERIFY JOB-SITE CONDITIONS. ANY DISCREPANCY SHALL BE REPORTED AND PROPER ADJUSTMENTS MADE BEFORE PROCEEDING WITH ANY WORK. CONTRACTOR SHALL SUPPLY ALL SHORING & BRACING NECESSARY FOR STABILITY OF STRUCTURE AND SUPPORT OF CONSTRUCTION LOADS.

B. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE 2022 EDITION OF CALIFORNIA BUILDING CODE AND THE REQUIREMENTS OF THE CITY/COUNTY WHICH THE WORK IS BEING HELD AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OF RECORD. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS & VERIFY ALL DETAILS, DIMENSIONS, ELEVATIONS, ETC. BY COMPARISON WITH ARCHITECTURAL DRAWINGS, SURVEY & EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

C. ALL WORK SHALL CONFORM TO STATE AND FEDERAL LAW (CalOSHA & OSHA) REGARDING WORK SAFETY AND MATERIAL HANDLING.

D. FRAMING CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE FRAMED IN ACCORDANCE WITH THE CONVENTIONAL CONSTRUCTION REQUIREMENTS OF 2022 CBC CODE.

E. DIMENSIONS SHOWN ON PLANS WOULD TAKE PRECEDENCE OVER SCALE INDICATED ON PLANS, NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

F. ALL OPENINGS AND CUTS FOR PLUMBING, DUCTS, VENTILATION, SHALL BE VERIFIED AND CHECKED BY THE GENERAL CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.

G. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED FINISH MATERIAL AND/OR STRUCTURAL MEMBERS AS REQUIRED AND AS CONFIRMED BY THE BUILDING INSPECTOR AND STRUCTURAL ENGINEER.

H. TYPICAL DETAILS SHALL APPLY WHERE NO SPECIFIC DETAILS OR SECTIONS ARE GIVEN.

I. TRADE NAMES AND MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY, EQUIVALENT SUBSTITUTIONS WILL BE PERMITTED.

II. DESIGN DATA:

1. BUILDING CODE=	2022 CALIFORNIA BUILDING CODE (CBC)
2. RISK CATEGORY=	CATEGORY II
3. BUILDING IMPORTANCE FACTOR=	1.0
4. DESIGN METHOD=	ALLOWABLE STRESS DESIGN
5. STRUCTURAL SYSTEM=	LIGHT-FRAME WOOD WALL SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE

6. LIVE LOADS:

a. FLOOR LIVE LOAD, UNIFORM=	40 PSF
b. FLOOR LIVE LOAD, EXTERIOR BALCONIES, UNIFORM=	60 PSF
c. CEILING LIVE LOAD, UN-INHABITABLE ATTICS w/o STORAGE=	10 PSF
d. CEILING LIVE LOAD, UN-INHABITABLE ATTICS w/ STORAGE=	20 PSF
e. ROOF LIVE LOAD, ORDINARY FLAT, PITCHED, CURVED, UNIFORM=	20 PSF
f. HANDRAILS & GUARDRAILS, CONCENTRATED=	200 LBS
g. HANDRAILS & GUARDRAILS, UNIFORM=	50 PLF
h. VEHICLE BARRIER SYSTEMS, PASSENGER CARS=	6000 LBS
m. GRAB BARS=	250 LBS
n. FIXED LADDERS=	300 LBS PER 10'-0"

7. DEAD LOADS:

a. ROOF TOP CHORD=	14 PSF
b. ROOF BOTTOM CHORD (CEILING)=	8 PSF
c. FLOOR	12 PSF

8. WIND LOADS:

a. DESIGN METHOD=	METHOD-2 , ALL HEIGHTS
b. BASIC WIND SPEED=	92 MPH
c. UPWIND EXPOSURE CATEGORY=	B

9. SEISMIC LOADS:

a. SEISMIC ANALYSIS PROCEDURE=	EQUIVALENT LATERAL FORCE
b. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss=	1.50
c. MAPPED SPECTRAL RESPONSE ACCELERATION, S1=	0.6
d. SITE CLASS=	D
e. SPECTRAL RESPONSE COEFFICIENT, Sds=	1.00
f. SPECTRAL RESPONSE COEFFICIENT, Sd1 =	0.60
g. RESPONSE MODIFICATION FACTOR, R=	6.5
h. SEISMIC RESPONSE COEFFICIENT, Cs=	0.16
i. DESIGN HORIZONTAL EQ. FORCE, Eh=	12468 LBS
j. SEISMIC DESIGN CATEGORY=	D

10. ALLOWABLE SOIL LOADS

a. ALLOWABLE BEARING CAPACITY, D+L =	1500 PSF
b. ALLOWABLE SEISMIC STRESS INCREASE=	1/3

III. EXCAVATION:

A. CODES & STANDARDS:
1. DESIGN BASED ON MOST RECENT ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE PLUS LOCAL AMENDMENTS.
2. IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT AN UNDERGROUND LOCATOR SERVICE TO IDENTIFY AND LOCATE ANY BURIED UNDERGROUND UTILITIES A MINIMUM OF 48-HOURS PRIOR TO BEGINNING ANY EXCAVATION WORK.

B. CONSTRUCTION:
1. EXCAVATIONS SHALL BE CARRIED OUT "IN THE DRY" CONDITIONS AND PROVISIONS SHALL BE MADE TO PREVENT THE BOTTOM OF EXCAVATIONS FROM FLOODING.
2. EXCAVATIONS FOR FOUNDATION SHALL BE CARRIED TO UNDISTURBED FIRM MATERIAL, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER OF RECORD (IF ANY).
3. FINISHED GRADE SHALL SLOPE AWAY FROM ALL STRUCTURES AT:

COMPACTED EARTH:	5% MIN.
ROCK=	5% MIN.
COMPACTED CRUSHED ROCK/AGGREGATE BASE=	5% MIN.
ASPHALT=	2% MIN.
CONCRETE=	2% MIN.

4. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ALL EXCESS SOIL AND DEMOLITION MATERIALS AT A LEGAL DISPOSAL SITE.
5. ALL EXCAVATIONS AND GRADING SHALL BE REVIEWED AS DIRECTED BY THE PERMITS.

IV. FOUNDATION:

A. PROTECT EXCAVATION AND APPROVED EARTHWORK FROM WEATHER AND WATER ACCUMULATION.
B. FOOTINGS TO BEAR ON FIRM, UNDISTURBED SOIL A MINIMUM OF 18" BELOW GRADE, OR AS SHOWN ON THE DRAWINGS.
C. CLEAN EXCAVATION OF LOOSE MATERIALS PRIOR TO CONCRETE POUR.
D. PROVIDE A MINIMUM CRAWL SPACE CLEARANCE OF 18" FROM JOISTS AND 12" FROM GIRDERS TO EARTH.

V. CONCRETE & MASONRY:

A. CODES & STANDARDS:

1. CONCRETE DESIGN, MATERIALS, CONSTRUCTION, AND TESTING SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-19.
2. CONCRETE MASONRY DESIGN, MATERIALS, CONSTRUCTION AND TESTING SHALL CONFORM TO "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES", TMS 402-16
3. GUNITE/SHOTCRETE DESIGN, MATERIALS, CONSTRUCTION, AND TESTING SHALL CONFORM TO "RECOMMENDED PRACTICE FOR SHOTCRETING", ACI 506.

B. MATERIALS:

UNLESS NOTED OTHERWISE ON THESE DRAWINGS, MATERIALS SHALL CONFORM TO THE FOLLOWING:

1. CONCRETE
1.1. ALL SLAB-ON-GRADE:

1.1.1. CEMENT:	ASTM C150, TYPE II
1.1.2. MAXIMUM WATER/CEMENT RATIO:	0.45
1.1.3. SLUMP:	4 INCHES (MAX.)
1.1.4. MINIMUM 28 DAY STRENGTH:	2500 PSI (DESIGNER'S SPEC) 3000 PSI (BUILDER'S SPEC)
1.1.5. NO AIR ENTRAINMENT PERMITTED.	
1.1.6. MIN-MAX FLY ASH RATIO:	11.0%-25.0%

1.2. FOOTINGS, PIERS, AND ALL OTHER CONCRETE:

1.2.1. CEMENT:	ASTM C150, TYPE II
1.2.2. SLUMP:	4 INCHES (MAX.)
1.2.3. MINIMUM 28 DAY STRENGTH:	3000 PSI

1.3. AGGREGATE:

1.3.1. FINE AGGREGATE:	ASTM C33
1.3.2. COARSE AGGREGATE:	ASTM C33
1.3.3. MAX. SIZE AGG. FOR SLABS ON GRADE AND ELEMENTS OF LESS THAN 12" THICK:	3/4"
1.3.4. MAX. SIZE AGG. FOR ALL OTHER CONCRETE:	1"
1.3.5. NO PEA GRAVEL IS ALLOWED IN CONCRETE MIX.	

1.4. WATER:	POTABLE
1.5. GROUT:	NON-SHRINK (4000 PSI) MIN.

1.6. REINFORCING STEEL:

1.6.1. #5 AND LARGER:	GRADE 60, ASTM A615
1.6.2. #4 AND SMALLER	GRADE 40, ASTM A615
1.6.3. WELDED WIRE FABRIC	GRADE 60, ASTM A185 & ASTM A497

2. CONCRETE MASONRY UNITS:
2.1. LIGHTWEIGHT, CONFORMING TO THE FOLLOWING SPECS.
2.2. HOLLOW, LOAD BEARING & STRUCTURAL ASTM C-90, GRADE N-1.

3. MORTAR: ASTM C-270 , TYPE "S"

4. CONCRETE EXPANSION JOINTS: 1/2" PRE MOLDED, ASPHALT IMPREGNATED FIBERBOARD, U.N.O. ON PLANS

5. WATERSTOP: VIRGIN POLYVINYL CHLORIDE (P.V.C.) 6" WIDE X 3/8" THICK, RIBBED, WITH CENTER BULB AS MANUFACTURED BY "VINYLEX CORPORATION" OR APPROVED EQUAL.

C. CONSTRUCTION:

1. FORM WORK:
1.1. ALL FORM WORK AND PLACEMENT OF REINFORCING AND INSERTS SHALL BE RECEIVED AND SIGNED -OFF BY THE ENGINEER OF RECORD, PRIOR TO PLACEMENT OF CONCRETE.
1.2. THE SIDES OF THE FOUNDATIONS ABOVE THE GRADE SHALL BE FORMED.
1.3. THE SIDES OF THE FOUNDATIONS BELOW THE GRADE MAY BE CAST AGAINST NEAT EXCAVATIONS AS LONG AS THE SIDES OF THE EXCAVATIONS ARE STABLE, AND APPROVED BY E.O.R.
1.4. FORMS SHALL BE CONSTRUCTED OF WOOD, STEEL, OR ALUMINUM, BUILT TRUE TO LINE AND GRADE AND MORTAR TIGHT. THE DESIGN, ARRANGEMENT, AND CONSTRUCTION OF THE FORMS ARE CONTRACTORS RESPONSIBILITY.
1.5. FORM CONSTRUCTION SHALL ENSURE THAT THE CONCRETE SURFACES CONFORM TO THE TOLERANCES OF THE "RECOMMENDED PRACTICES FOR CONCRETE FORM WORK", ACI 347.
1.6. PRIOR TO CASTING OF ANY STRUCTURE, THE FORMS SHALL BE CLEANED OF ALL FOREIGN MATERIALS. LOOSE OR DISTURBED SOIL SHALL BE REMOVED FROM THE EXCAVATIONS.
1.7. ALL EMBEDDED ITEMS, INCLUDING BOLTS AND DOWELS, SHALL BE SECURELY HELD IN THE FINAL LOCATION DURING PLACEMENT OF CONCRETE OR GUNITE.
1.8. SLEEVES AND CONDUITS SHALL BE RIGIDLY SECURED TO PREVENT FLOATATION.
1.9. WATERSTOPS ARE TO BE FIXED IN PLACE TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE
1.10. WATERSTOPS SHALL BE JOINTED AT INTERSECTIONS TO PROVIDE CONTINUOUS WATERTIGHT JOINTS. ALL JOINTS ARE TO BE BENCH SPLICED WITH A SPLICING TOOL. USE OF OPEN FLAME FOR SPLICING IS PROHIBITED.
1.11. WHERE DOWELS, ANCHOR BOLTS, EMBEDDED PLATES, WATERSTOPS, ELECTRICAL CONDUITS, ETC. INTERFERE WITH PLACING OF REINFORCING STEEL, THE REINFORCING BARS MAY BE BENT OR SHIFTED SLIGHT TO CLEAR REINFORCING STEEL AREAS SHALL BE MAINTAINED.
1.12. BEFORE POURING ANY STRUCTURE, THE CONTRACTOR SHALL REVIEW ALL THE PLANS FOR PENETRATIONS, EMBEDDED PLATES, SLEEVES, CONDUITS, BLOCK OUTS, ETC. THESE ITEMS MUST BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE OR GUNITE.
1.13. REFER TO ARCHITECTURAL DRAWINGS FOR REVEALS, AREAS OF TEXTURED CONCRETE OR SPECIAL FINISHES, ITEMS REQUIRED TO BE CAST INTO CONCRETE, CURBS AND SLAB DEPRESSIONS.

2. REINFORCING STEEL:
2.1. REINFORCING SHALL BE CLEANED AND FREE OF OIL, LOOSE MILL SCALE, LOOSE RUST OR OTHER COATINGS THAT WOULD DESTROY OR REDUCE THE BOND.
2.2. REINFORCEMENT SHALL BE BENT COLD
2.3. WELDING OF REINFORCING STEEL, WHEN ALLOWABLE, SHALL BE DONE WITH LOW-HYDROGEN ELECTRODES (E70XX) AND IN ACCORDANCE WITH AWS D1.1
2.4. REINFORCEMENT SHALL BE ACCURATELY PLACED IN ACCORDANCE WITH THE DRAWINGS AND SHALL BE SECURELY TIED IN POSITION.
2.5. THE CLEAR DISTANCE BETWEEN THE BARS SHALL NOT BE LESS THAN 1½" TIMES THE BAR DIAMETER, BUT IN NO CASE LESS THAN 1⅓ TIMES THE MAXIMUM SIZE OF COARSE AGGREGATE OR 1½" INCHES.
2.6. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AT LEAST EQUAL TO THE BAR DIAMETER BUT NOT LESS THAN THE FOLLOWING:
2.6.1. FOUNDATIONS, BEAMS, SLABS CAST AGAINST EARTH: 3 INCHES CLEAR.
2.6.2. FOUNDATIONS, BEAMS, SLABS CAST AGAINST FORM: 2 INCHES CLEAR.
2.6.3. SURFACES IN CONTACT WITH WATER: 2 INCHES CLEAR.
2.7. CONTINUOUS REINFORCEMENT SHALL BE LAPPED AND ANCHORED TO DEVELOP FULL STRENGTH AT SPLICES AND CORNERS IN ACCORDANCE WITH ACI 318-19, CHAPTER 25. SPLICES SHALL BE STAGGERED SO THAT NO MORE THAN ½ OR THE AREA OF STEEL IS SPLICED AT THE SAME LOCATION. SEE DET. 2A/SD-1 FOR MINIMUM LAP SPLICE LENGTH.

3. CONSTRUCTION JOINTS:
3.1. LOCATION OF JOINTS SHALL BE AS SHOWN ON THE DRAWINGS. ADDITIONAL JOINT LOCATIONS SHALL BE AS REQUIRED AND APPROVED BY THE ENGINEER OF RECORD.

4. PLACEMENT:
4.1. CONCRETE
4.1.1. CONCRETE SHALL BE PLACED AS NEARLY AS POSSIBLE IN ITS FINAL POSITION AND THE USE OF VIBRATORS FOR EXTENSIVE SHIFTING OF FRESH CONCRETE SHALL NOT BE PERMITTED. CONCRETE SHALL NOT BE PERMITTED TO FALL MORE THAN SIX FEET (6') WITHOUT THE USE OF ADJUSTABLE LENGTH PIPE OR "ELEPHANT TRUNKS". ONCE PLACEMENT HAS COMMENCED, IT SHALL BE CARRIED ON AS A CONTINUOUS OPERATION AT SUCH A RATE THAT THE CONCRETE SURFACE AT ALL TIMES REMAINS PLASTIC AND FLOWS READILY UNTIL THE SECTION IS COMPLETED BETWEEN PREDETERMINED CONSTRUCTION JOINTS.
4.1.2. CONCRETE SHALL NOT BE PLACED WHEN THE MAXIMUM AIR TEMPERATURE IS EXPECTED TO EXCEED 100 DEGREES FAHRENHEIT ON THE DAY OF PLACEMENT.
4.1.3. CONCRETE SHALL NOT BE PLACED ON FROZEN GROUND NOR SHALL IT BE PLACED WHILE THE ATMOSPHERIC TEMPERATURE IS BELOW 35 DEGREES FAHRENHEIT. THE CONCRETE SHALL THEN BE PROTECTED FROM FREEZING OR FROST FOR A PERIOD OF 7 DAYS AFTER PLACING.

4.2. GUNITE/SHOTCRETE
4.2.1. GUNITE SHALL BE PLACED ON FIRM, NATURAL, UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL THAT CONFORMING TO CBC, SECTION 2621. NOZZLE MAN'S HELPER SHALL CLEAR THE REBOUND AHEAD OF THE WORK. REBOUND SHALL NOT BE INCORPORATED IN THE WORK IN ANY MANNER.

4.3. MASONRY
4.3.1. CONCRETE MASONRY SHALL BE LAID WITH LAPPED UNITS (RUNNING BOND) U.N.O., AND REINFORCED AS SHOWN ON THE DRAWINGS.

4.4. CURING
4.4.1. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT FOR AT LEAST THE FIRST (7) DAYS AFTER PLACEMENT.
4.4.2. GUNITE/SHOTCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT FOR AT LEAST THE FIRST (14) DAYS AFTER PLACEMENT.
4.4.3. CURING PROCEDURES SHALL BE BASED UPON THE APPLICABLE PORTIONS OF, "STANDARD PRACTICE FOR CURING CONCRETE", ACI 308-81

VI. WOOD FRAMING:

A. CODES & STANDARDS:

1. CALIFORNIA BUILDING CODE
2. ALL WORK SHALL CONFORM TO THE APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND SPECIFICATIONS.
3. ALL MANUFACTURER SPECIFICATIONS AND RECOMMENDATIONS SHALL BE FOLLOWED.
4. SAWN LUMBER, SHEATHING, AND GLU-LAMINATED LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF A LUMBER GRADING OR INSPECTION AGENCY SUCH AS THE REDWOOD INSPECTION SERVICE, WEST COAST LUMBER INSPECTION BUREAU, WESTERN WOOD PRODUCTS ASSOCIATION, AMERICAN PLYWOOD ASSOCIATION, OR THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

B. MATERIALS:

1. SAWN LUMBER
1.1. ALL LUMBER SHALL BE AIR-DRIED WITH MOISTURE CONTENT NOT EXCEEDING 19% PRIOR TO INSTALLATION.
1.2. PROVIDE DRESSED LUMBER, SURFACED FOUR SIDES (S4S), U.N.O.
1.3. SPACE STUDS AT 16" o.c. MAXIMUM U.N.O. BOTTOM PLATE/TOP PLATE/NAILING/BOLTING/FASTENING/SPLICING SHALL BE AS SHOWN ON THE NAILING SCHEDULE AND DRAWINGS.
1.4. WOOD IN CONTACT WITH CONCRETE, MASONRY, OR SOIL SHALL BE PRESSURE TREATED DOUGLAS FIR. DOUGLAS FIR SHALL BE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARDS.
1.4.1. PRESSURE TREATED WOOD SHALL CONFORM TO THE USE CONDITIONS OF THE AWPA AND AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

1.4.1.1.	SILL PLATES:	UC4B, GROUND CONTACT-HEAVY DUTY
1.4.1.2.	EXPOSED EXTERIOR FRAMING:	UC3B, ABOVE GROUND-EXPOSED

1.5. HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR AS RECOMMENDED BY THE AMERICAN WOOD PROTECTION ASSOCIATION.
1.6. ALL LUMBER SHALL BE AIR-DRIED WITH MOISTURE CONTENT NOT EXCEEDING 19% PRIOR TO INSTALLATION.
1.7. UNLESS NOTED OTHERWISE ON THE PLANS, SAWN LUMBER GRADES AND SPECIES SHALL BE PER FOLLOWING:

SIZE/USE	DF/L	REDWOOD
2X LUMBER	#2 & BETTER	#2 & BETTER
4X LUMBER	#2	#2 & BETTER
6X & LARGER	#1	#2 & BETTER
STUDS	STUD	STUD
BLOCKING, BACKING	CONSTRUCTION/ STANDARD/	UTILITY GRADE
MUDSILLS	P.T.D.F.	#2 & BETTER
DECKING	COMMERCIAL	DECK HEART
RETAINING WALL POSTS & LAGGINGS	P.T.D.F.	#2 & BETTER

2. PLYWOOD
2.1. AT A MINIMUM ALL PLYWOOD SHEATHING SHALL BE C-D-X GRADE WITH EXTERIOR GLUE EACH SHEET SHEET SHALL BE IDENTIFIED WITH AN APA GRADE STAMP.
2.2. PLYWOOD SHEATHING SHALL BE PER PLANS WITH MINIMUM PANEL SPAN RATING PER TABLE BELOW, APPLIED DIRECTLY TO FRAMING.

2.2.1. LOCATION	SHEATHING	GRADE	NAILING
ROOF	½" CDX PLYWOOD OR ½" OSB	APA 32/16	8d @ 6" O.C. EN. & 12" O.C. FN.
FLOOR	¾" T&G	APA 48/24	10d @ 6" O.C. EN. & 10" O.C. FN.
WALLS	PER SHEAR WALL SCHEDULE	APA 32/16	PER SHR. WALL. SCHEDULE

2.3. INDIVIDUAL PIECES OF PLYWOOD SHALL NOT BE LESS THAN 24" IN THE LEAST DIMENSION NOR LESS THAN 4'-0" SQ. TOTAL AREA.
2.4. INSTALL PLYWOOD SHEATHING WITH THE "C" SIDE TO THE EXTERIOR, UNLESS NOTED OTHERWISE
2.5. PRE-DRILL HOLES WHERE PLYWOOD OR FRAMING TENDS TO SPLIT.
2.6. PROVIDE EDGE NAILING ALONG ALL JOISTS, TRUSSES, BEAMS, COLLECTORS AND BLOCKING OVER OR IN LINE WITH SHEAR WALLS. (2 - ROWS REQUIRED)
2.7. DO NOT OVER DRIVE NAILS INTO PLYWOOD SHEATHING, ANYMORE THAN TO PROVIDE THE NAIL HEAD FLUSH WITH THE PLYWOOD SURFACE.
2.8. ALL NAILS SHALL BE COMMON NAILS OR HOT DIPPED GALVANIZED BOX NAILS.

3. GLU-LAM BEAMS
3.1. CONTRACTOR SHALL SUBMIT (W.C.L.I.B.) CERTIFICATE OF COMPLIANCE FOR ALL GLU-LAM BEAMS USED IN THE PROJECT. THE CERTIFICATE SHALL BE SUBMITTED TO THE LOCAL BUILDING JURISDICTION AND THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
3.2. ALL FABRICATION AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED DOUGLAS FIR (COAST REGION) LUMBER BY THE WEST COAST LUMBER MAN'S ASSOCIATION AND THE CURRENT EDITION OF TIMBER CONSTRUCTION.
3.3. ALL GLUED LAMINATED MEMBERS SHALL BE DOUGLAS FIR, COMBINATION 24F-V4 (U.N.O.) OR 24F-V8 WITH WATERPROOF RESORCINOL OR PHENOL RESORCINOL GLUE CONFORMING TO THE FEDERAL SPECIFICATIONS MIL-A-397I-B. (USE 24F-V8 AT CANTILEVER CONDITION.)
3.4. FINISH OF GLU-LAM SHALL BE PROTECTED AGAINST ANY WEATHERING. THE MEMBERS SHALL BE INDUSTRIAL APPEARANCE GRADE IN CONFORMANCE WITH THE STANDARD APPEARANCE GRADES OF THE W.C.L.I.B.

4. STRUCTURAL COMPOSITE LUMBER AND PRE-MANUFACTURED TRUSSES
4.1. MANUFACTURED LUMBER, UNLESS APPROVED BY THE ENGINEER OF THE RECORD OR NOTED OTHERWISE ON THE PLANS, SHALL BE PRODUCTS MANUFACTURED BY ILEVEL BY WEYERHOUSE OR BOISE CASCADE FOR RESIDENTIAL AND LIGHT COMMERCIAL PROJECTS, OR BY REDBUILT FOR COMMERCIAL PROJECTS.

4.2. FLOOR I-JOISTS
4.2.1. TJI JOISTS BY ILEVEL (ESR-1387) ALL ENGINEERED FLOOR JOISTS SHALL BE DESIGNED FOR MIN. L/480 (DL+LL) DEFLECTION LIMITS. SEE PLANS FOR TJI SIZE, TYPE AND LAYOUT.
4.2.2. BCI JOISTS BY BOISE CASCADE (ESR-1336.) ALL ENGINEERED FLOOR JOISTS SHALL BE DESIGNED FOR MIN. L/480 (DL+LL) DEFLECTION LIMITS. SEE PLANS FOR BCI SIZE, TYPE AND LAYOUT.

4.3. STRUCTURAL BEAMS
4.3.1. PARALLAM (PSL) BY ILEVEL (ESR-1387) PARALLAM 2.0E (PSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 2,000,000 PSI
Fb= 2,300 PSI
Fv= 290 PSI

4.3.2. VERSA-LAM BY BOISE CASCADE (ESR-1040.) VERSA-LAM 2.0E (PSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 2,000,000 PSI
Fb= 3,100 PSI
Fv= 285 PSI

4.3.3. MICROLAM BEAMS (LVL) BY ILEVEL (ESR-1387.) MICROLAM 1.9E (LVL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 1,900,000 PSI
Fb= 2,600 PSI
Fv= 285 PSI

4.3.4. TIMBERSTRAND (LSL) BY ILEVEL (ESR-1387.) TIMBERSTRAND (LSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 1,550,000 PSI
Fb= 2,325 PSI
Fv= 310 PSI

C. CONSTRUCTION:
1. ALL FRAMING CONNECTIONS AND ALL OTHER COMPONENTS AND SYSTEMS SHALL BE FASTENED CONNECTED, AND CONSTRUCTED TO ADEQUATELY RESIST ALL FORCES, INCLUDING BUT NOT LIMITED TO GRAVITY, SEISMIC, AND WIND LOADS.
2. PRE DRILL WOOD AS REQUIRED TO PREVENT SPLITTING WHEN USING MACHINE BOLTS, LAG BOLTS/SCREWS, ¼" DIAMETER OR LARGER, AND NAILS/SPIKES 20d OR LARGER. REPLACE ALL SPLIT WOOD.
3. HOLES FOR BOLTS SHALL BE BORED WITH A BIT 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
4. FLOOR JOISTS, CEILING JOISTS, ROOF JOISTS, RAFTERS AND ROOF CEILING JOISTS, NOMINAL 2" IN WIDTH, SHALL HAVE ONE EDGE HELD IN LINE FOR THEIR ENTIRE LENGTH IF OVER 4" IN NOMINAL DEPTH. IF MORE THAN 8" IN NOMINAL DEPTH SHALL ALSO HAVE FULL DEPTH SOLID BLOCKING AT 8'-0" o.c. MAXIMUM. USE 2X OR SOLID BLOCKING OR AN APPROVED TYPE METAL BRIDGING.
5. ALL BOLTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHER UNDER HEAD & NUT, U.N.O.
6. ALL BOLTS SHALL BE RE-TIGHTENED PRIOR TO APPLICATION OF PLYWOOD, GYPSUM BOARD, ETC.
7. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, HVAC DUCTS, WIRING, ETC. UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF THE RECORD. BEAMS WITH ONLY UNIFORM LOADING ON THEM MAY BE DRILLED PER MANUFACTURER'S SPECIFICATIONS.
8. 2X SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS UNLESS THE MEMBERS ARE FULLY SUPPORTED BY HANGERS USED.

VII. STEEL FRAMING:

A. GENERAL:
1. DETAIL OF WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AMERICAN INSTITUTE OF STEEL CONSTRUCTION (A.I.S.C.) SPECIFICATIONS FOR STRUCTURAL STEEL BUILDING & CODE OF STANDARD PRACTICE.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST PROVISIONS OF STRUCTURAL WELDING CODE AMERICAN WELDING SOCIETY (AWS.) D1.1 USING E70XX ELECTRODES.
3. ALL WORK SHALL CONFORM TO THE APPLICABLE LOCAL, STATE AND FEDERAL CODES AND SPECS., INCLUDING CalOSHA, OSHA, AND THE CONDITIONS OF THE PERMIT(S).
4. ALL STRUCTURAL STEEL SURFACES ARE TO BE PAINTED OR GALVANIZED, U.N.O. STEEL IN CONCRETE SHOULD NOT BE PAINTED AND LEFT UNCOATED.
5. ALL STRUCTURAL STEEL, MISCELLANEOUS METAL AND CONNECTORS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

B. CODES & STANDARDS:
1. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS (R.C.R.B.S.J.)
2. SPECIFICATION FOR THE DESIGN OF COLD-FORM STEEL STRUCTURAL MEMBERS (A.I.S.I.), PARTS 1 AND 2.

C. MATERIALS:

1.1.	STRUCTURAL STEEL SHAPES, PLATES AND BARS	ASTM A36 OR A50
1.2.	STRUCTURAL STEEL TUBES (HSS)	ASTM A46
1.3.	HIGH STRENGTH BOLTS:	ASTM A325, A490
1.4.	UNFINISHED BOLTS AND SHOULDER BOLT	ASTM A36
1.5.	ANCHOR BOLTS AND NUTS	ASTM A307
1.6.	THREADS	ANSI B1.1 UNC CLASS 2 FIT
1.7.	WELDING ELECTRODES	AWS A5.1 SERIES E70XX

D. CONNECTIONS & FABRICATIONS:
1. THE CONTRACTOR SHALL INSURE THAT BOLTS, WELDS, CUP ANGLES, ETC. USED FOR CONNECTIONS CAN SAFELY TRANSMIT THE LOADS. NO INCREASE IN ALLOWABLE STRESS SHALL BE ALLOWED FOR CONNECTIONS.
2. TOLERANCES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE A.I.S.C. AND THE AWS. CODES.

VIII. EPOXY AND POST INSTALLED ANCHORS AND BOLTS:

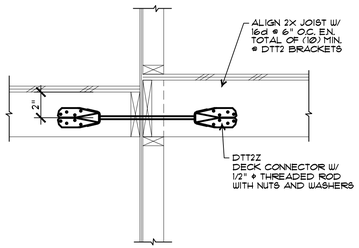
1. DEFORMED BAR EPOXY AT EXISTING FOUNDATIONS: CONTRACTOR SHALL USE SIMPSON 'EPOXY SET-XP' AND APPLICATION SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S APPROVED RECOMMENDATIONS.
2. EPOXIED BOLTS (HOLDOWNS, ANCHOR BOLTS, ETC. USE SIMPSON 'EPOXY SET 3G.) ANCHOR BOLTS AND HOLDOWNS SHALL BE TREADED STAINLESS OR GALVANIZED OR ZINC COATED RODS. EPOXY APPLICATION SHALL BE IN STRICT COMPLIANCE WITH THE SIMPSON COMPANY APPROVED SPECS. CONTRACTOR SHALL CONTACT THE LOCAL GOVERNMENT AGENCY FOR ANY ADDITIONAL REQUIREMENTS.

IX. MUDSILL ANCHORAGE TO THE FOUNDATIONS:

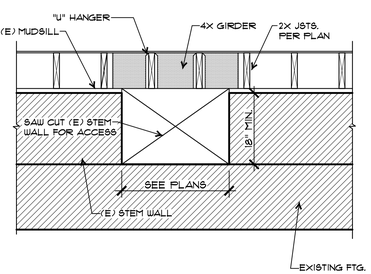
1. SEE SHEAR WALL SCHEDULE FOR ANCHOR BOLT SIZE AND SPACING AT SHEAR WALLS. MUDSILLS AT ALL OTHER WALLS SHALL BE ATTACHED TO THE FOUNDATION WITH 5/8" DIAMETER x 12" DEEP ANCHORS W/ MIN. 7" EMBEDMENT IN TO CONCRETE AT 4'-0" O.C. EACH PIECE OF SILL PLATE IS TO HAVE A MIN. OF 2 ANCHORS PER PIECE 12" MAXIMUM, SMALLER OF 5" OR 1 BOLT DIAMETER MINIMUM FROM EACH END.
2. USE 3" SQ. x 0.229" THK PLATE WASHERS FOR ANCHOR BOLTS.
3. HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR AS RECOMMENDED BY THE AMERICAN WOOD PROTECTION ASSOCIATION.

X. SHOP DRAWINGS:

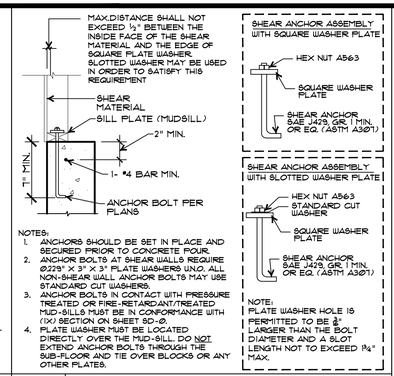
1. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. ANY REVIEW OF SHOP DRAWINGS BY THIS OFFICE IS ONLY FOR GENERAL CONFORMANCE TO THE STRUCTURAL REQUIREMENTS AND IN NO WAY GUARANTEES THE ACCURACY OR COMPLETENESS OF INFORMATION THEREON. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE ALL CONSTRUCTION IS IN FULL COMPLIANCE WITH THE LATEST SET OF STRUCTURAL DRAWINGS.
2. SHOP DRAWINGS FOR



10 DTT2Z DETAIL



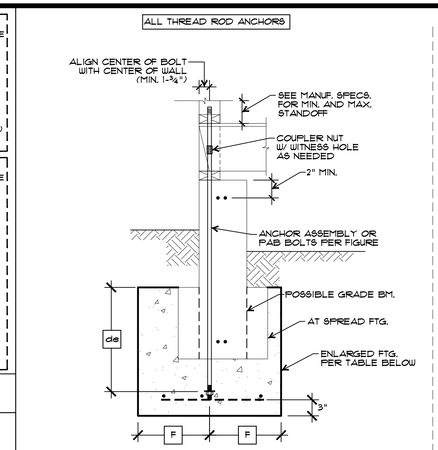
7 TYPICAL CRAWL SPACE ACCESS AT EXISTING FOOTING

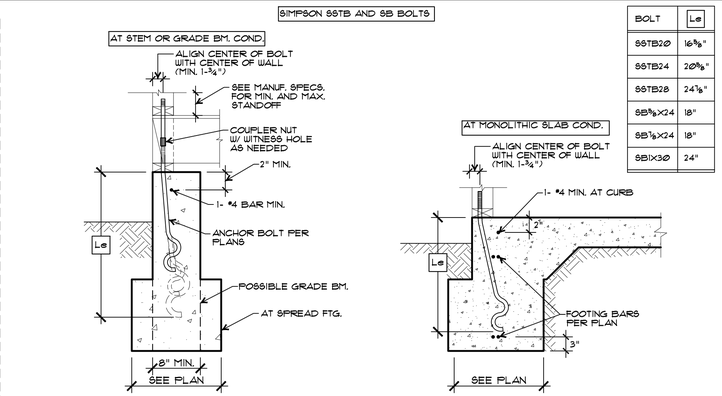


NOTES:
1. ANCHORS SHOULD BE SET IN PLACE AND SECURED PRIOR TO CONCRETE POUR.
2. ANCHOR BOLTS AT SHEAR WALLS REQUIRE Ø229" X 3" X 3" PLATE WASHERS U.N.O. ALL NON-SHEAR WALL ANCHOR BOLTS MAY USE STANDARD CUT WASHERS.
3. ANCHOR BOLTS IN CONTACT WITH PRESSURE TREATED OR FIRE-RETARDANT/TREATED MUD-SILLS MUST BE IN CONFORMANCE WITH (1X) SECTION ON SHEET SD-0.
4. PLATE WASHER MUST BE LOCATED DIRECTLY OVER THE MUD-SILL. DO NOT EXTEND ANCHOR BOLTS THROUGH THE SUB-FLOOR AND TIE OVER BLOCKS OR ANY OTHER PLATES.

4 TYP. ANCHOR BOLT INSTALLATION

SD1.4 (2019) › 5/2019





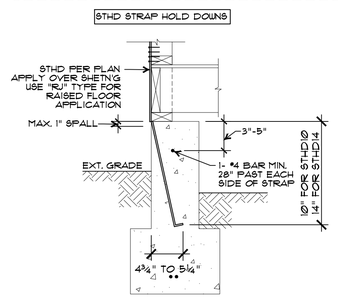
BOLT	Le
SSTB20	16⅝"
SSTB24	20⅝"
SSTB28	24⅛"
SB⅝X24	18"
SB⅞X24	18"
SB1X30	24"

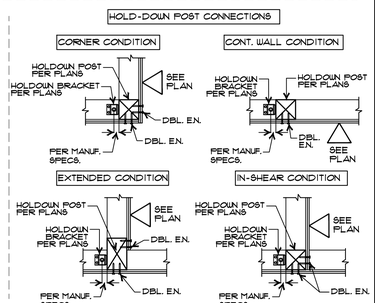
HOLDOWN TYPE	ROD DIAMETER	PLATE WASHERS F436	da	F	PAB BOLT ALTERNATIVE
○ HDU2	⅝"	2½" × 2½" × ¼"	7"	10"	PAB5
△ HDU5	⅝"	2½" × 2½" × ¼"	7"	10"	PAB5
	¾"	2½" × 2½" × ⅜"	8"	11½"	PAB6
● HDQ8	⅞"	2½" × 2½" × ⅜"	11"	13½"	PAB7
⊠ HHDQ11	1"	2½" × 2½" × ⅜"	13"	16½"	PAB8
⊠ HHDQ14	1"	2½" × 2½" × ⅜"	13"	16½"	PAB8
T HD19	1¼"	3" × 3" × ½"	16"	22"	PAB10

ALL THREAD ROD ANCHOR BOLT ASTM F1554 GR. 36 F_y= 36 ksi F_u= 58ksi

ANCHOR ROD ASSEMBLY
- ANCHOR ROD F1554, Gr. 36
- HEX NUT A563
- PLATE WASHER F436
- HEX NUT A563

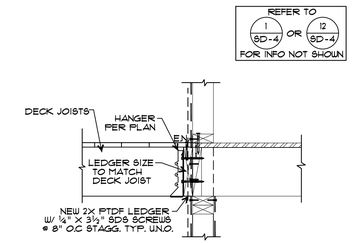
NOTES:
1. BOLTS SHOULD BE SET IN PLACE AND SECURED PRIOR TO CONCRETE POUR.
2. HOLD-DOWNS MAY BE RAISED MAX. 18" ABOVE THE MUD-SILL. BOLT SHOULD NOT BE SLOPED MORE THAN 5%. SEE MANUFACTURERS SPECS.
3. CONTRACTOR TO CALCULATE TOTAL LENGTH OF THE ALL-THREAD ROD BASED ON THE CONSTRUCTION CONDITIONS.
4. INSTALLATION SHOULD BE PER MANUFACTURERS ESR REPORT. (ESR-2611)
5. BOLTS IN CONTACT WITH PRESSURE-TREATED OR FIRE-RETARDANT/TREATED MUD-SILLS MUST BE IN CONFORMANCE WITH (1X) SECTION ON SHEET SD-0.





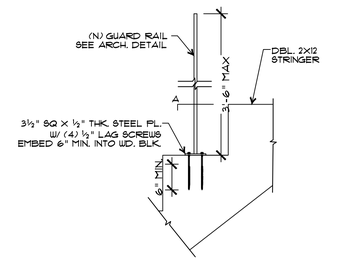
1 TYPICAL HOLD-DOWN ANCHORS AND HOLD-DOWN INSTALLATION DETAILS

SD1.1 (2019) › 4/2019



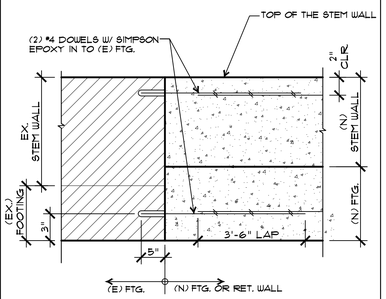
12 DECK LEDGER DETAIL

FND009 (2018) › 4/2018



11 STAIR GUARDRAIL CONNECTION

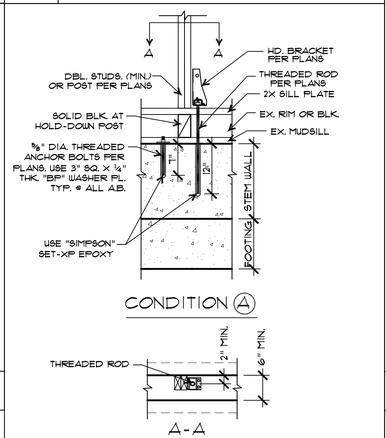
G0004 (2019) › 1/2019



FOOTING ELEVATION

NOTE:
ROUGHEN EXISTING CONCRETE TO 1/4" AMPLITUDE AND CLEAN CONCRETE OF ANY LATTIANCE AND DEBRIS PRIOR TO POUR

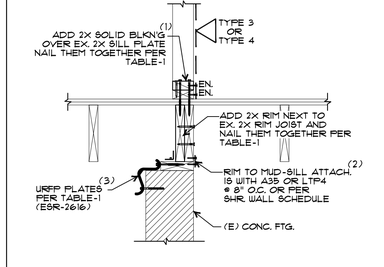
8 FOOTING CONSTRUCTION JOINT

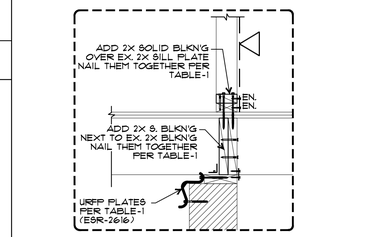


1. NOTES:
1. SEE SHEAR WALL SCHEDULE AND PLANS FOR REQUIRED ANCHOR BOLT SPACING.

2. INSTALLATION INSTRUCTIONS: (ESR-2508)
1. HOLE PREPARATION:
1.1. DRILL
1.2. BLOW- REMOVE DUST FROM HOLE WITH OIL-FREE COMPRESSED AIR FOR MIN. 4 SECONDS. COMPRESSED AIR NOZZLE MUST REACH THE BOTTOM OF THE HOLE
1.3. BRUSH- CLEAN WITH NYLON BRUSH FOR A MIN. OF 4 CYCLES. BRUSH MUST REACH THE BOTTOM OF THE HOLE.
1.4. BLOW- REMOVE DUST FROM HOLE WITH OIL-FREE COMPRESSED AIR FOR MIN. 4 SECONDS. COMPRESSED AIR NOZZLE MUST REACH THE BOTTOM OF THE HOLE
2. CARTRIDGE PREPARATION:
2.1. CHECK- DO NOT USE EXPIRED PRODUCT.
2.2. OPEN- OPEN CARTRIDGE PER PACKAGE INSTRUCTIONS.
2.3. ATTACH- ATTACH PROPER SIMPSON STRONG-TIE NOZZLE TO CARTRIDGE. DON NOT MODIFY NOZZLE.
2.4. INSERT- INSERT CARTRIDGE IN TO DISPENSING TOOL.
2.5. DISPENSE- DISPENSE ADHESIVE TO THE SIDE UNTIL PROPERLY MIXED. (UNIFORM COLOR).
3. FILLING THE HOLE: (VERTICAL ANCHORAGE)
3.1. FILL- FILL HOLE ½" - ¾" FULL, STARTING FROM THE BOTTOM TO PREVENT AIR POCKETS. WITHDRAW NOZZLE AS HOLE FILLS UP. NOZZLE EXTENSIONS MAY BE NEEDED FOR DEEP HOLES.
3.2. INSERT- INSERT CLEAN OIL FREE ANCHOR (MARKED WITH THE REQUIRED DEPTH), TURNING SLOWLY UNTIL THE ANCHOR CONTACTS THE BOTTOM OF THE HOLE.
3.3. DO NOT DISTURB- DO NOT DISTURB, LOAD OR TORQUE ANCHOR UNTIL FULLY CURED.
4. FILLING THE HOLE: (HORIZONTAL AND OVERHEAD ANCHORAGE)
4.1. INSTALL- INSTALL SIMPSON STRONG TIE ARC ADHESIVE CAP. (ARC REQUIRED REFER TO ESR-2508 TABLES A AND B)
4.2. FILL- FILL HOLE ½ - ¾, STARTING FROM THE BOTTOM TO PREVENT AIR POCKETS. WITHDRAW NOZZLE AS HOLE FILLS UP. NOZZLE EXTENSIONS MAY BE NEEDED FOR DEEP HOLES.
4.3. INSERT- CLEAN OIL FREE ANCHOR (MARKED WITH THE REQUIRED DEPTH), TURNING SLOWLY UNTIL THE ANCHOR CONTACTS THE BOTTOM OF THE HOLE. THERE SHOULD BE NO GAPS BETWEEN THE ANCHOR AND THE SIDES OF THE HOLE.
4.4. DO NOT DISTURB- DO NOT DISTURB, LOAD OR TORQUE ANCHOR UNTIL FULLY CURED. FOR OVERHEAD INSTALLATIONS, THE ANCHOR MUST BE SECURED FROM MOVEMENT DURING THE CURE TIME (E.G. WEDGES OR OTHER RESTRAINT METHODS).

9 TYPICAL CRAWL SPACE ACCESS AT EXISTING FOOTING



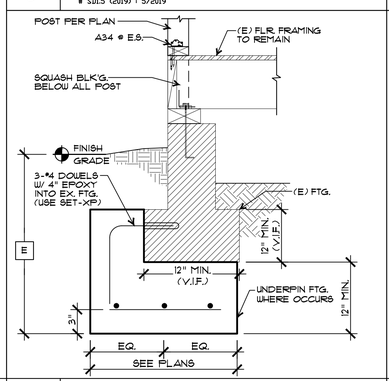


PERPENDICULAR JOIST CONDITION

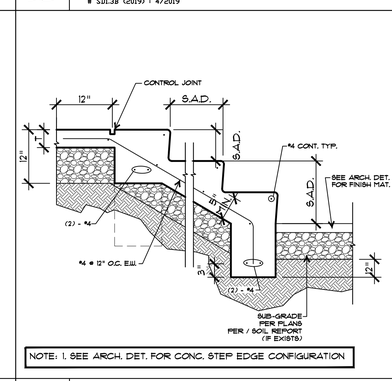
TABLE 1			
SHEAR WALL TYPE	(1) SILL PLATE NAILING	(2) RIM/BLKNG NAILING	(3) URFP PLATE SPACING
3	SDS25600 SCREWS (¼" X 6") 2- ROWS @ 12" O.C.	SDS25300 SCREWS (¼" X 3") 2- ROWS @ 12" O.C.	URFP PLATE W/ THDB24024H 3'-0" ON CENTER
4	SDS25600 SCREWS (¼" X 6") 2- ROWS @ 8" O.C.	SDS25300 SCREWS (¼" X 3") 2- ROWS @ 8" O.C.	URFP PLATE W/ THDB24024H 1'-9" ON CENTER

5 HEAVY SHEAR ON 2X MUDSILL

SD1.5 (2019) › 5/2019



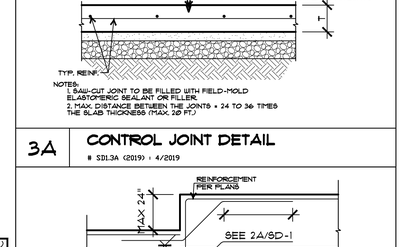
6 (N) UNDER PIN AT (E) FOOTING



NOTE: 1. SEE ARCH. DET. FOR CONC. STEP EDGE CONFIGURATION

3C TYP. CONC. STEPS ON GRADE

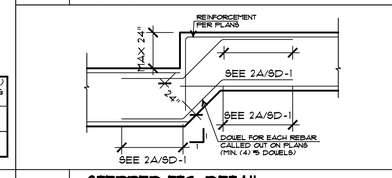
SD1.3C (2019) › 4/2019



NOTES:
1. SAW-CUT JOINT TO BE FILLED WITH FIELD-MOLD ELASTOMERIC SEALANT OR FILLER.
2. MAX. DISTANCE BETWEEN THE JOINTS = 24 TO 36 TIMES THE SLAB THICKNESS (MAX. 20 FT.)

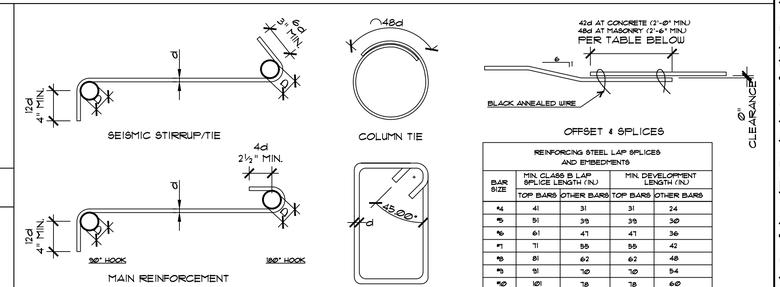
3A CONTROL JOINT DETAIL

SD1.3A (2019) › 4/2019



3B STEPPED FTG. DETAIL

SD1.3B (2019) › 4/2019



BAR SIZES	D=FINISHED INSIDE BEND DIAMETER	
	STANDARD HOOKS	STIRRUP/TIE HOOKS
#3, #4, #5	6d	4d
#6, #7, #8	6d	6d
#9, #10, #11	8d	8d
#14, #18	10d	10d

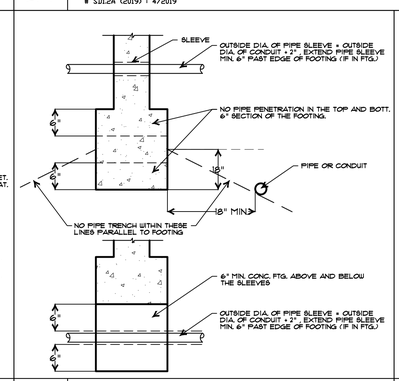
d = NOMINAL BAR DIAMETER

REINFORCING STEEL LAP SPLICES AND EMBEDMENTS				
BAR SIZE	MIN. CLASS B LAP SPLICE LENGTH (IN.)		MIN. DEVELOPMENT LENGTH (IN.)	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#4	41	31	31	24
#5	51	39	39	30
#6	61	47	47	36
#7	71	55	55	42
#8	81	62	62	48
#9	91	70	70	54
#10	101	78	78	60
#11	112	86	86	66

NOTES:
1. TABLE BASED ON A.C.I. 318-19 WITH f'_c=2500 PSI AND f_y= 60 KSI
2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT.
3. MINIMUM CONCRETE COVER IS 2"

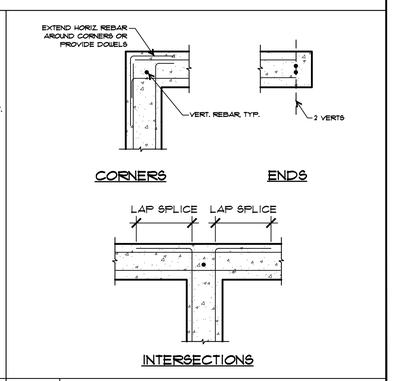
2A TYP. STANDARD REBAR HOOKS AND REBAR OFFSET / SPLICE LENGTHS

SD1.2A (2019) › 4/2019



2C PIPES THROUGH OR BELOW FTG. DET.

SD1.2C (2019) › 4/2019



2B TYP. STEEL REINF. SPLICE DETAILS

SD1.2B (2019) › 4/2019

NO.	REVISIONS	BY

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TYPICAL FOUNDATION DETAILS

ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

PROJECT NAME:

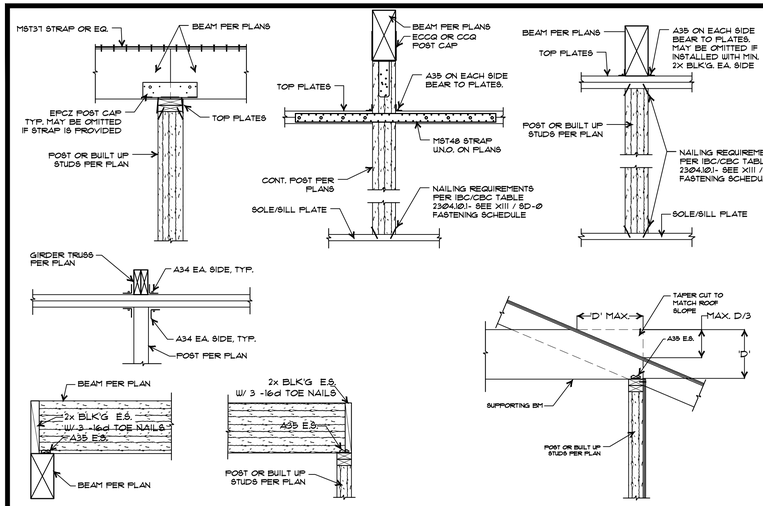
REGISTERED PROFESSIONAL ENGINEER — No. C13272 Exp. 12/31/2026 — STATE OF CALIFORNIA — CIVIL

DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

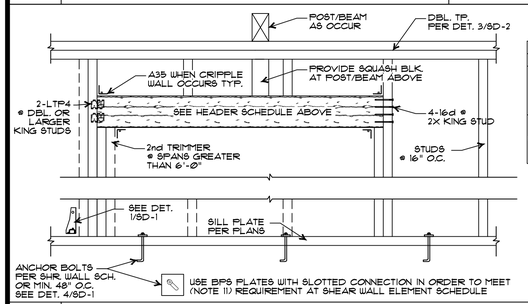
SHEET NO.

SD-1



9 TYPICAL POST CONNECTION DETAILS

SD2.9 (2019) • 1/2020

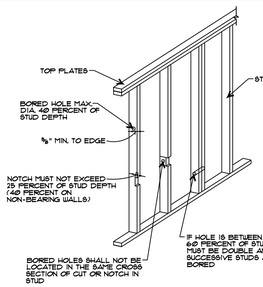


HEADER SCHEDULE (U.N.O.)

OPENING		SIZE @ 2X4 WALL	SIZE @ 2X6 WALL
ROOF	4'-0" AND LESS	4 X 6 DFPS	6 X 6 DFPS
	4'-1" TO 6'-0"	4 X 8 DFPS	6 X 8 DFPS
	6'-1" TO 8'-0"	4 X 10 DFPS	6 X 10 DFPS
FLOOR	4'-0" AND LESS	4 X 8 DFPS	6 X 8 DFPS
	4'-1" TO 6'-0"	4 X 10 DFPS	6 X 10 DFPS
	6'-1" TO 8'-0"	4 X 12 DFPS	6 X 12 DFPS

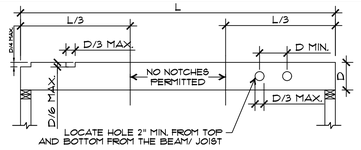
10 HEADER SCHEDULE AND CONSTRUCTION DETAIL

SD2.10 (2019) • 1/2020



11A NOTCH ON WALL STUDS/POSTS

SD2.11A (2019) • 1/2020

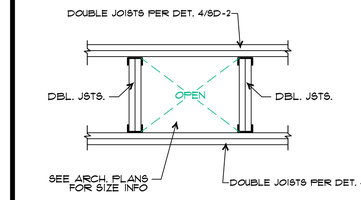


NOTES:

1. HOLES AND NOTCHES ARE NOT PERMITTED IN 2X4 JOISTS
2. HOLES OR NOTCHES IN FIRE-ENGINEERED BEAMS SHALL MEET THE MANUF. SPECS

11B NOTCH/HOLE ON BEAMS/JOISTS

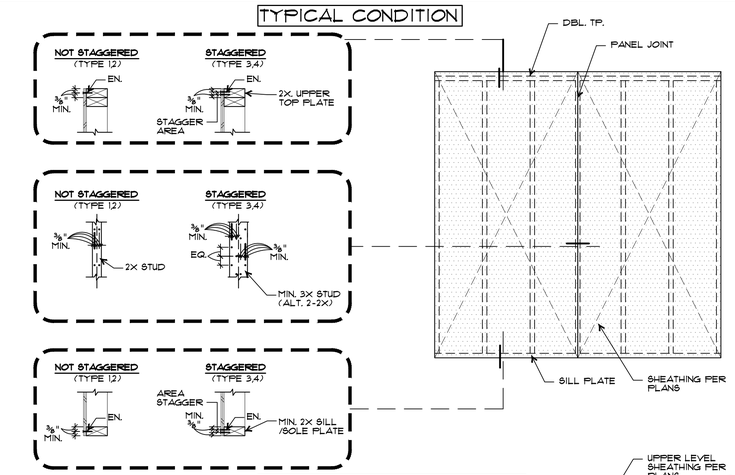
SD8.8 (2019) • 1/2020



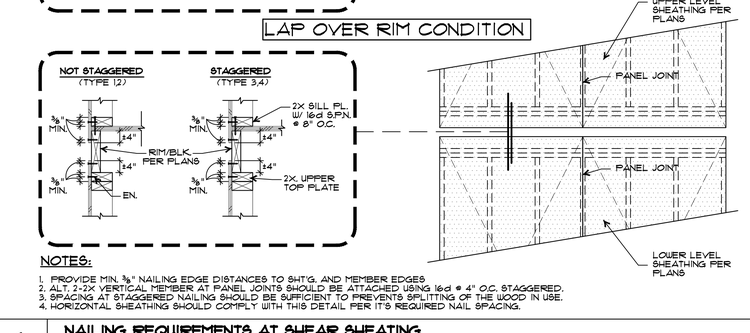
13 ACCESS HOLE OPENING IN FRAMING

SD13 (2019) • 11/2023

TYPICAL CONDITION



LAP OVER RIM CONDITION

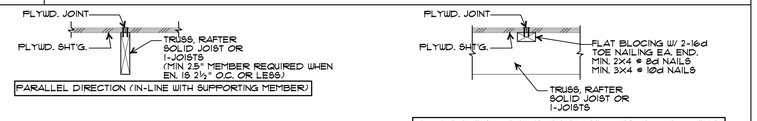


NOTES:

1. PROVIDE MIN. ⅜" NAILING EDGE DISTANCES TO SHT'G. AND MEMBER EDGES
2. ALT. 2-2X VERTICAL MEMBER AT PANEL JOINTS SHOULD BE ATTACHED USING 16d @ 4" O.C. STAGGERED.
3. SPACING AT STAGGERED NAILING SHOULD BE SUFFICIENT TO PREVENTS SPLITTING OF THE WOOD IN USE.
4. HORIZONTAL SHEATHING SHOULD COMPLY WITH THIS DETAIL PER IT'S REQUIRED NAIL SPACING.

6 NAILING REQUIREMENTS AT SHEAR SHEATHING

#SD2.6 (2019) • 1/2020

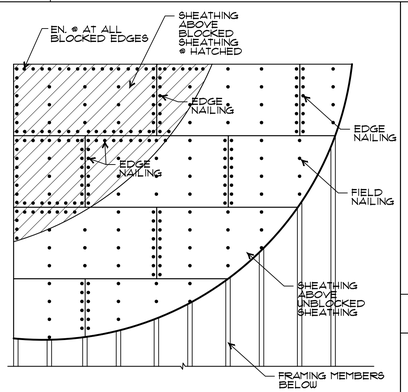


NOTES:

1. SEE DETAIL 6 FOR EDGE NAIL DISTANCE REQUIREMENTS.
2. THIS DETAIL CAN BE USED FOR BOTH HORIZANTAL AND VERTICAL DIAPHRAGMS.
3. BLOCKED DIAPHRAGM TYP. EDGE NAILING IS (10d @ 6" O.C.) FOR FLOOR & (8d @ 6" O.C.) FOR ROOF DIAPHRAGM U.N.O. ON PLANS

7 BLOCKING AT DIAPHRAGM EDGES

SD2.7 (2022) • 1/2022

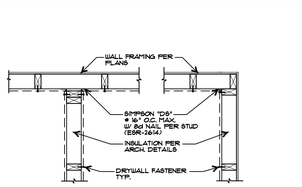


NOTES:

1. SEE DETAIL 6 FOR EDGE NAIL DISTANCE REQUIREMENTS.
2. PANELS SHOULD NOT BE LESS THAN 4'-0" X 8'-0" EXCEPT AT DIAPHRAGM BOUNDARIES AND WHERE MIN. PANEL DIM. IS 24" IN ANY DIRECTION PROVIDED BLOCKING.
2. BLOCKED DIAPHRAGM SHOULD HAVE ALL PANEL EDGES WITH EDGE NAILING PER DETAIL 7/SD-2

8A TYPICAL DIAPHRAGM LAYOUT

SD2.8A (2019) • 1/2020

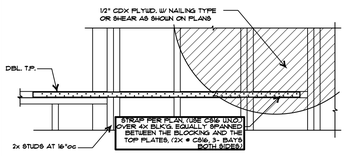


NOTES:

1. 2-STUD CORNER FRAMING ALLOWED PER CBC 2308.9.3 "EXCEPTION".
2. FLOATING DRYWALL CORNER ALLOWED PER CBC 2508.3.1
3. SIMPSON DS SHALL NOT BE USED UNLESS FIRE-RESISTANT RATINGS OR SHEAR WALL EXIST ON THE SAME WALL

8B TYPICAL DRYWALL CORNER DET.

SD2.11B (2019) • 1/2020



8C STRAP AT ELEVATION CHANGE

SD8.C (2019) • 1/2020

SHEAR ELEMENT SCHEDULE AND NOTES

WOOD STRUCTURAL PANEL SHEAR WALLS

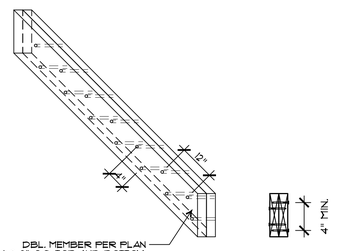
SHEAR WALL TYPE	STRUCTURAL PANEL TYPE	COMMON OR GALVANIZED BOX NAILS [4,5,9]	NAIL EDGE AND JOINT SPACING [5,6]	NAIL FIELD SPACING	SHEAR TRANSFER CLIPS	VERTICAL AND HORIZANTAL JOINT MEMBER WIDTH	MUDSILL SIZE AND ANCHOR BOLT SPACING [11] 2X MUDSILL	MUDSILL SIZE AND ANCHOR BOLT SPACING [11] 3X MUDSILL	SOLE PLATE NAILING: MIN. 2X WITH 16d P-NAIL (GUN), U.N.O.	DESIGN CAPACITY (PLF) [10]
1	½" CDX, STRUCTURAL I PLYWOOD OR OSB ONE SIDE	10d	6" O.C.	12" O.C.	A35 @ 24" O.C. LTP4 @ 24" O.C. RBC @ 16" O.C.	2X	⅝" DIA. A.B. @ 4'-0" O.C.	⅝" DIA. A.B. @ 4'-0" O.C.	(1) - ROW 16d @ 4" OC.	285 (EQ.)
2	½" CDX, STRUCTURAL I PLYWOOD OR OSB ONE SIDE	10d	4" O.C.	12" O.C.	A35 @ 16" O.C. LTP4 @ 16" O.C. RBC @ 12" O.C.	2X	⅝" DIA. A.B. @ 3'-3" O.C.	⅝" DIA. A.B. @ 4'-0" O.C.	(1) - ROW 16d @ 4" OC.	350 (EQ.)
3	½" CDX, STRUCTURAL I PLYWOOD OR OSB ONE SIDE	10d	3" O.C. STAGGERED	12" O.C.	A35 @ 12" O.C. LTP4 @ 12" O.C. RBC @ 8" O.C.	3X (ALT. 2-2X) [6]	N/A	⅝" DIA. A.B. @ 2'-6" O.C.	(1) - ROW ¼"X 6" SDS SCREUS @ 8" O.C. O/4X BLK'G. OR RIM	530 (EQ.)
4	½" CDX, STRUCTURAL I PLYWOOD OR OSB ONE SIDE [2]	10d	2" O.C. STAGGERED	12" O.C.	A35 @ 6" O.C. LTP4 @ 6" O.C. RBC NOT USED	3X	N/A	⅝" DIA. A.B. @ 1'-6" O.C.	(1) - ROW ¼"X 6" SDS SCREUS @ 6" O.C. O/4X BLK'G. OR RIM	800 (EQ.)
4X4	½" CDX, STRUCTURAL I PLYWOOD OR OSB TWO SIDES [2]	10d	2" O.C. STAGGERED	12" O.C.	LTP4 @ 6" O.C. EACH SIDE	3X	N/A	⅝" DIA. A.B. @ 9" O.C.	(2) - ROW ¼"X 6" SDS SCREUS @ 6" O.C. O/4X BLK'G. OR RIM	1600 (EQ.)

SHEAR WALL NOTES:

1. ALL EDGES ARE BLOCKED.
2. BLOCK ALL ADJOINING PANEL EDGES WITH MIN. 3X LUMBER USE 3X MUDSILL
3. PANELS SHALL NOT BE LESS THAN 4 FT. X 8 FT. EXCEPT AT BOUNDARIES AND ALL EDGES OF THE UNDERSIZED PANELS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING
4. NAILS SHALL NOT BE DRIVEN THROUGH OUTER PLY.
5. ALL NAILS SHALL BE BOX OR COMMON NAILS.
6. STRUCTURAL SHEATHING SHOULD BE APPLIED DIRECTLY OVER THE STUDS.
7. STUDS SHOULD BE SPACED AT 16" O.C. MAX. U.N.O.
8. PROVIDE ⅝" DIA. THREADED ROD AT EXISTING FOUNDATION CONDITIONS AND EMBED 7" IN TO EXISTING CONCRETE PER RETROFIT ANCHORS AND HOLDOWNS DETAIL ON THE PLANS. USE SIMPSON "SET-XP" EPOXY.
9. APPLY 2- ROWS OF EDGE NAILING ON HOLDOWN POSTS. HOLDOWN POST SHOULD BE CONTINIOUS FROM THE TOP OF THE SILL PLATE UNTIL THE BOTTOM OF THE DOUBLE TOP PLATE.
10. ALL CONNECTORS SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
11. ANCHOR BOLT AT SHEAR WALLS REQUIRE Ø.229" X 3" X 3" PLATE WASHERS, U.N.O ON THE FRAMING PLANS. ALL NON-SHEAR WALL ANCHOR BOLTS MAY USE STANDARD CUT (ROUND) WASHERS. PLATE WASHERS MAY BE SLOTTED. THE EDGE OF THE PLATE WASHER SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE. ANCHOR BOLT NUTS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE FRAMING. PLATE WASHER SIZE IS REFERENCED FROM ND'S SDPWS-2021 SECTION 4.3.6.4.3.
12. ALL FRAMING MEMBERS ARE TO BE DOUGLAS FIR LARCH. OTHER SPECIES WITH SPECIFIC GRAVITY Ø.50 OR GREATER ARE ALLOWED WITH WRITTEN CONSENT FROM THE ENGINEER OF RECORD PRIOR TO INSTALLATION. ALL OTHER SPECIES OR GRADES ARE NOT ALLOWED.
13. WHERE WOOD STRUCTURAL PANELS ARE APPLIED ON BOTH FACES OF A WALL, AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.
14. EDGE DISTANCES, END DISTANCES, AND SPACINGS SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD.
15. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED.
16. ATTACH MULTIPLE STUDS AT VERTICAL OR HORIZANTAL JOINTS WITH 16d @ 4" O.C. STAGGERED.
17. USE 6" O.C. FIELD NAILING WHERE MAX. ULTIMATE DESIGN WIND SPEED (3-SECOND GUST) IS 120 MPH OR GREATER AT EXPOSURE "C".
18. SHEAR VALUES ARE REDUCED BY Ø.92 PER SDPWS-2021 FOR 10d NAILING APPLICATIONS.

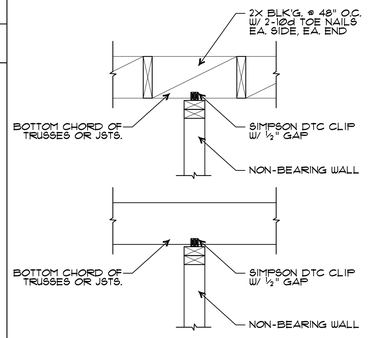
Ø SHEAR ELEMENT TABLE

#SD2-0 (2019) • 1/2020



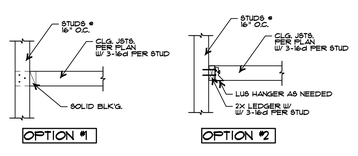
4 DOUBLE MEMBER CONNECTION DET.

SD2.4 (2019) • 1/2020



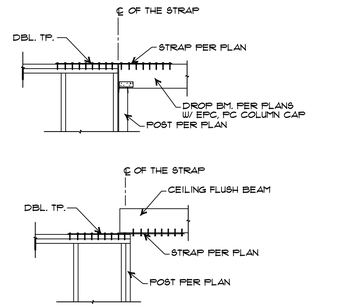
5A NON-BEARING WALLS

SD2.5A (2019) • 1/2020



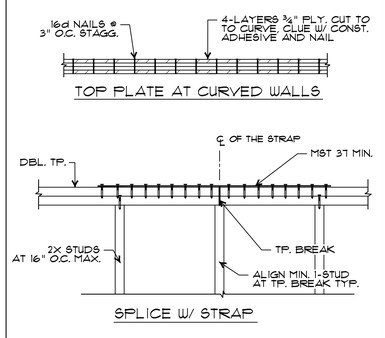
5B CEILING JSTS. CONN. @ BALLOON WALL

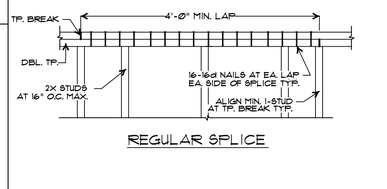
SD2.5B (2019) • 1/2020



2 DRAG STRUT DETAIL

SD2.2 (2019) • 1/2020





3 DOUBLE TOP PLATE SPLICE DETAILS

SD2.3 (2019) • 1/2020

NO.	REVISIONS	BY

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TYPICAL FRAMING DETAILS

ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

PROJECT NAME:

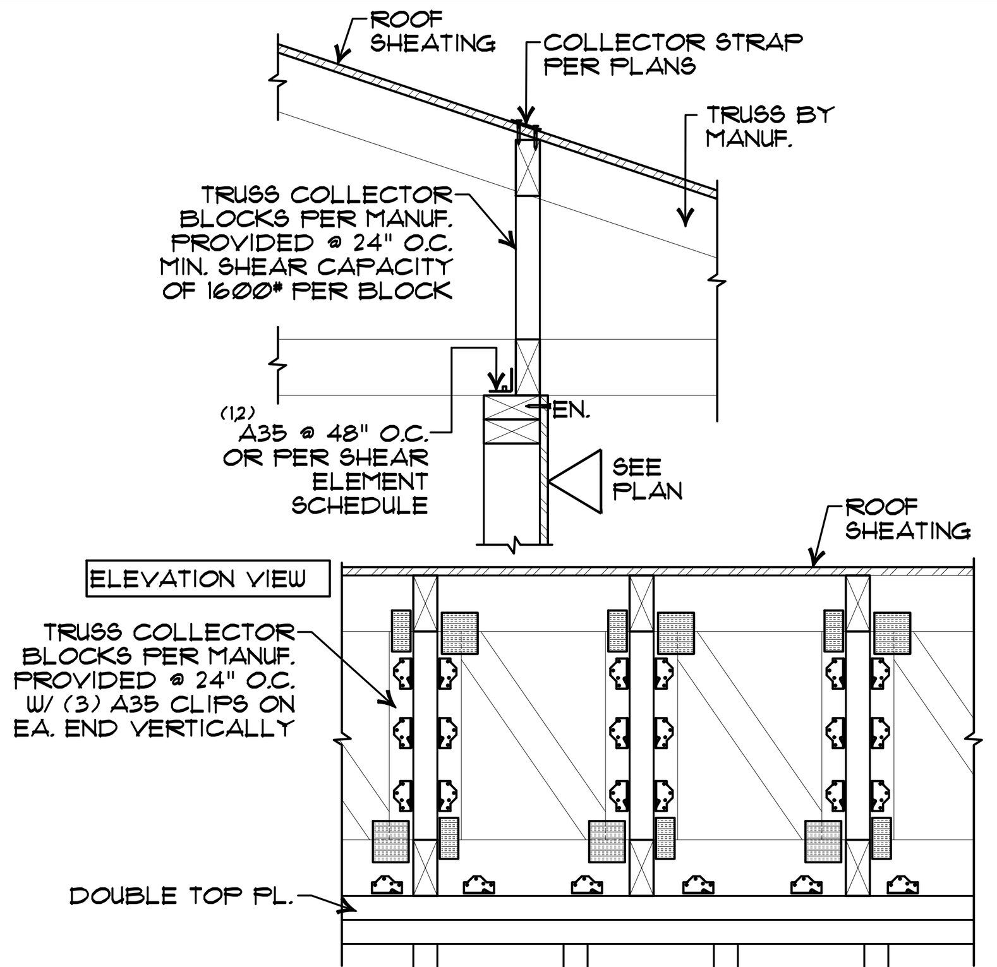
REGISTERED PROFESSIONAL ENGINEER No. C73272 Exp. 12/31/2026 CIVIL STATE OF CALIFORNIA

DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

SHEET NO.

SD-2



19 TRUSS TO WALL CONNECTIONS
R0136 (2019) : 6/2019

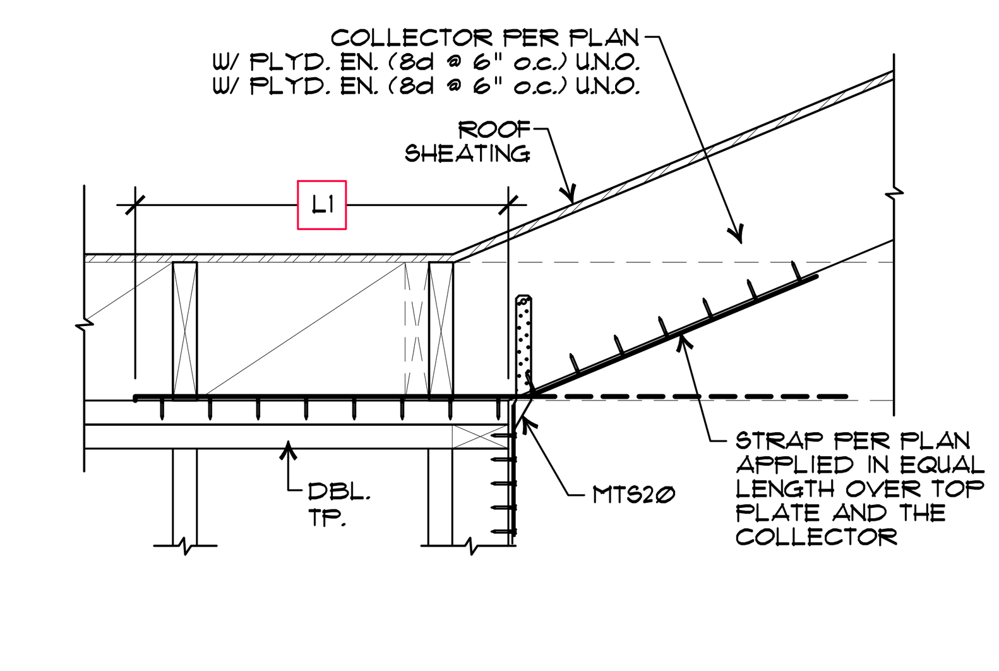
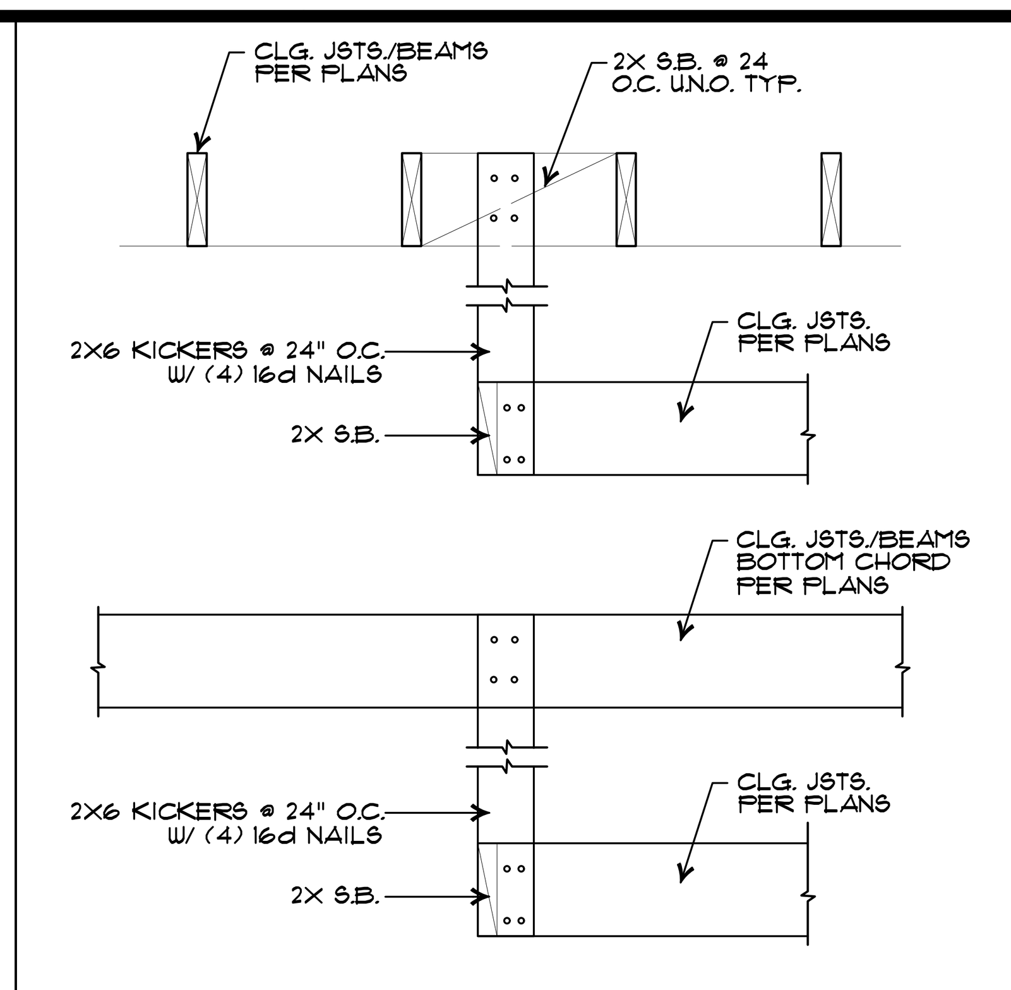
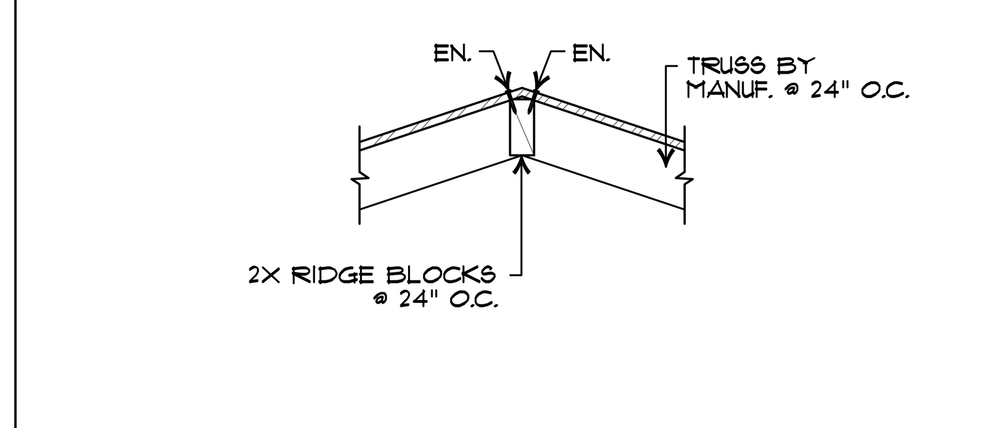


TABLE #1		
STRAP	COLLECTOR THICKNESS	L1
CS16	2X RAFTER	20"
MST48 / 60	DBL. RAFTER	24" / 30"
CMST14	DBL. RAFTER	32"

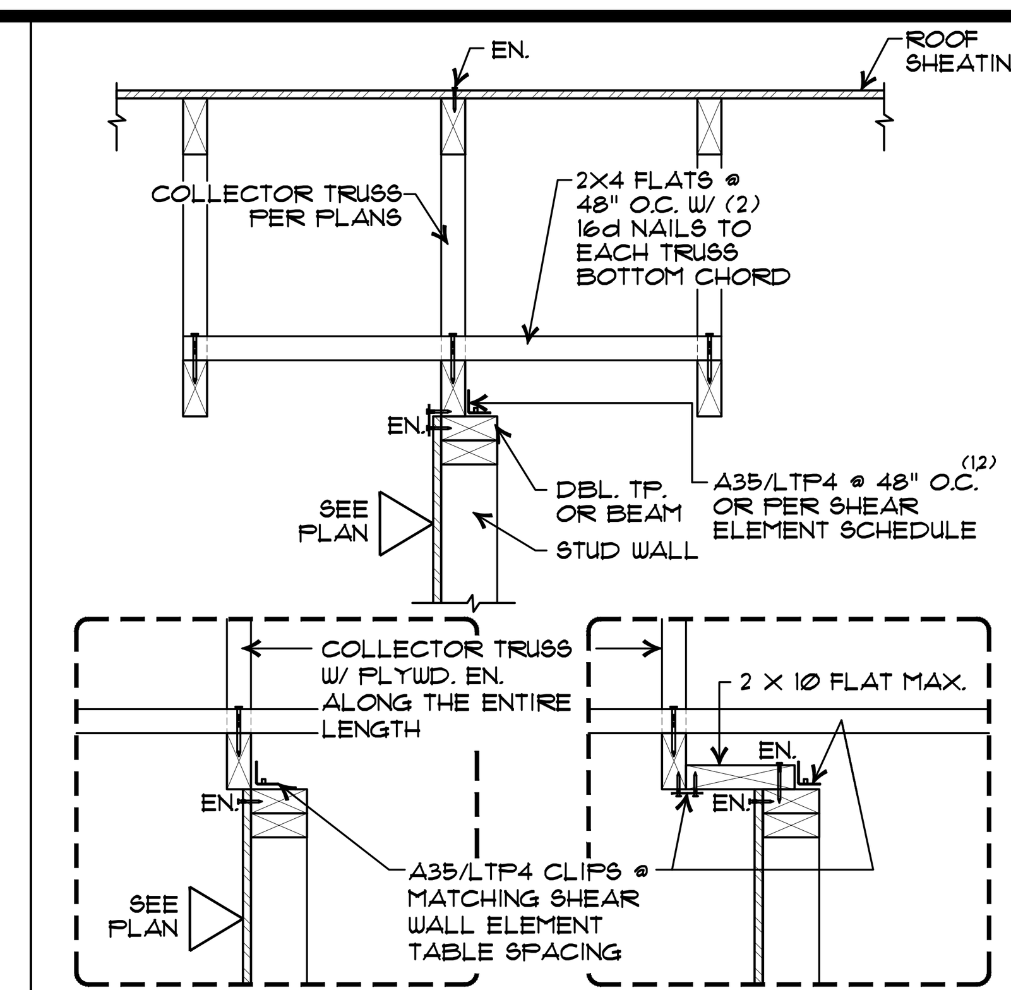
15 ROOF DRAG DETAIL
R0015 (2018) : 5/2018



11 TYPICAL DROP CEILING DETAILS
CLG0003 (2018) : 5/2018



7 RIDGE BLOCK DETAIL
R0137 (2019) : 9/2019

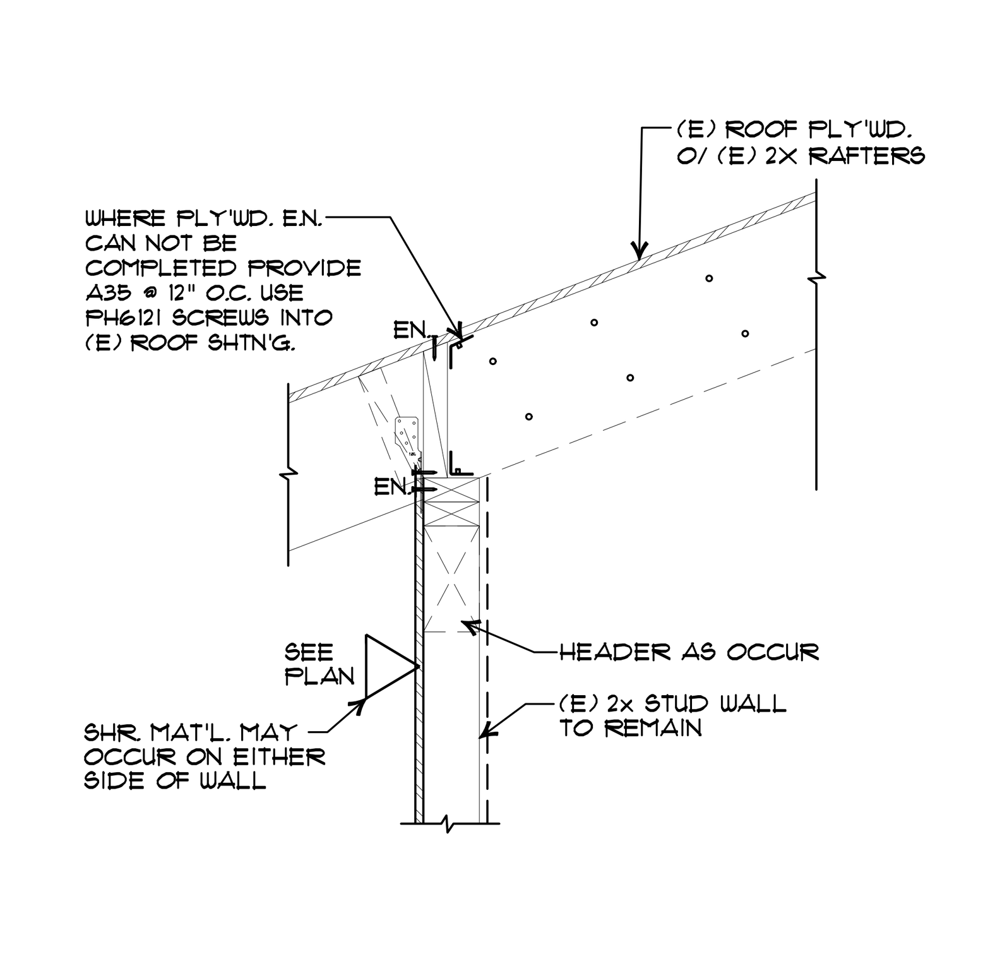


3 INTERIOR SHEAR TRANSFER DET.
R0133 (2019) : 9/2019

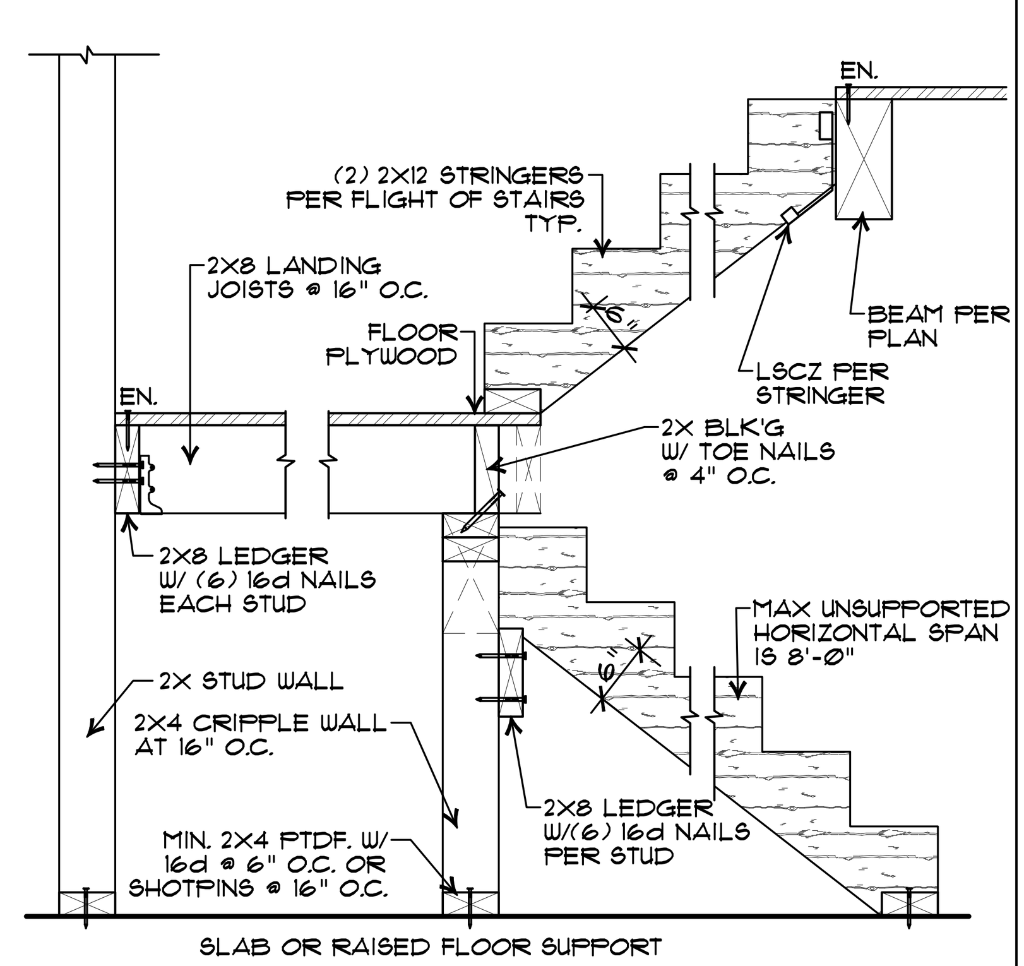
DETAIL NOTES:

1. CONTRACTOR TO PICK APPROPRIATE CONDITION PER WALL.
2. REFER TO SHEAR ELEMENT SCHEDULE FOR MECHANICAL CONNECTOR SPACING AT SHEAR WALL LOCATIONS. LS50 IS A DIRECT REPLACEMENT OF A35 WHEN PREFERRED.
3. IF E.N. OF PENETRATES THROUGH THE VENTILATION HOLES PROVIDE ADDITIONAL NAIL FOR EACH NAIL LOSS.
4. MAX. (3) 2" DIAMETER VENTILATION HOLES WITH 5¼" END DISTANCE, MIDDLE DEPTH OF EAVE BLOCKING ARE ACCEPTABLE.
5. IF PLYWOOD IS RUN UNINTERRUPTED OVER THE RIM/BLK'G W/ EDGE NAILING PER PLANS (MIN. 8d @ 6" O.C.) MECHANICAL CONNECTORS AT THE TOP OF THE WALLS CAN BE ELIMINATED @ NON-SHEAR WALL CONDITIONS.
6. PLYWOOD SHEAR NAILING SHOULD BE EQUAL TO THE SHEAR TYPE OF THE SHEAR WALL(s) CALLED ON THE PLANS ON THE SAME SHEAR LINE. TYPE "2" SHEAR NAILING SHOULD BE APPLIED IN CASE OF NO SHEAR WALL DESIGNATION IS AVAILABLE.
7. MST48 STRAP SHOULD BE PLACED IN A WAY THAT EQUAL AMOUNT OF NAILS GO IN TO THE END POSTS ABOVE AND BELOW THE CEILING BREAK. NAILING IS NOT REQUIRED OVER THE BLOCKING, SILL AND DOUBLE TOP PLATE. FULLY NAIL THE REST OF THE STRAP.

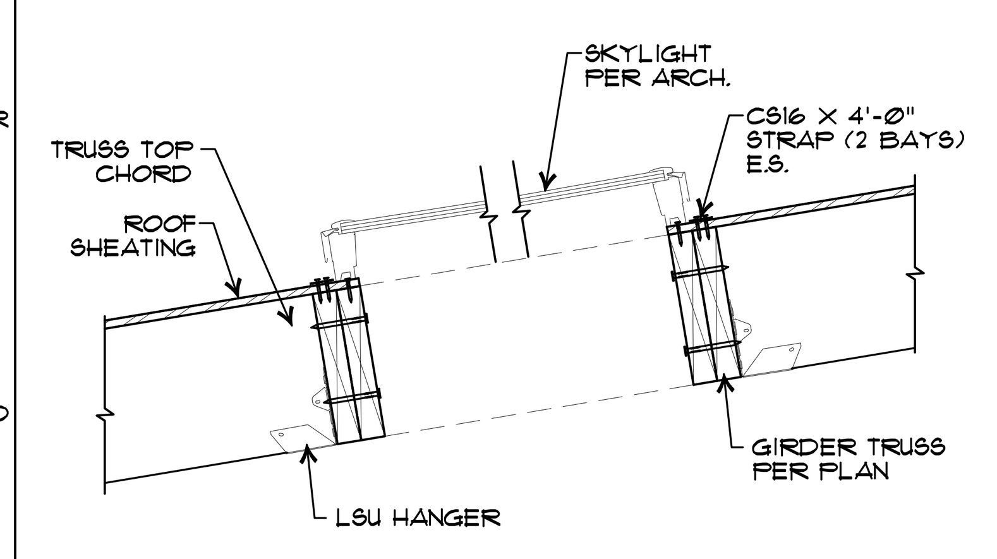
0 ROOF FRAMING NOTES
R0050 (2018) : 5/2018



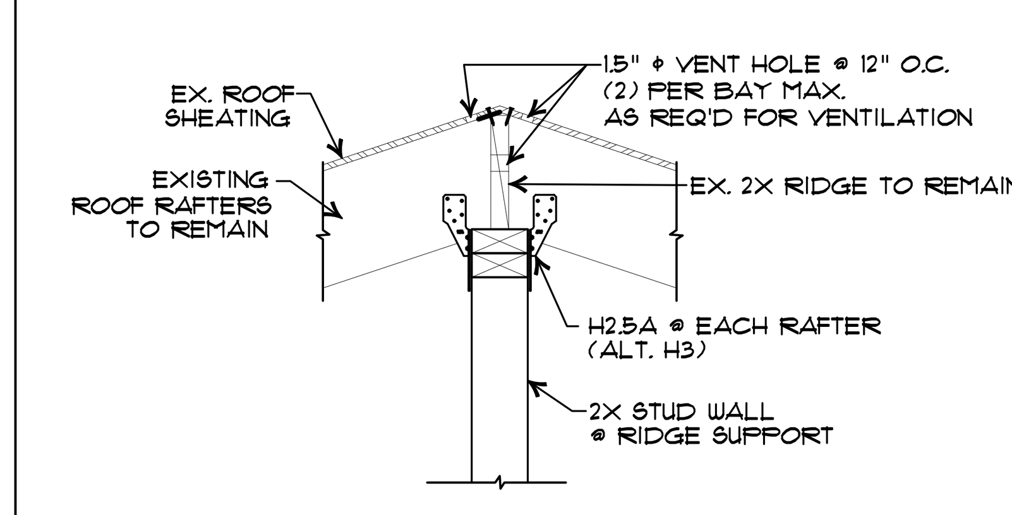
20 (N) SHEARWALL AT (E) WALL



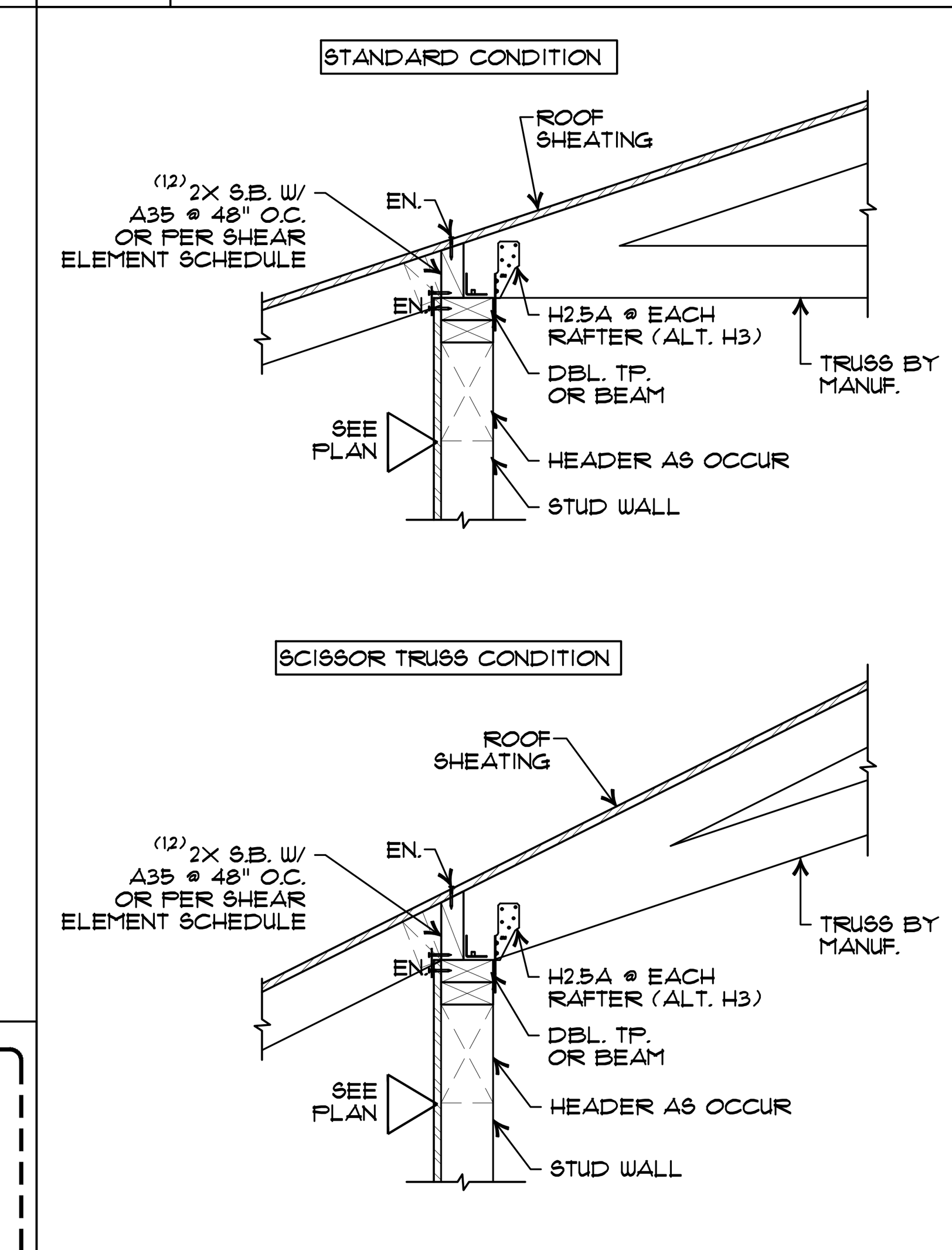
16 TYPICAL STAIRS FRAMING
G0001 (2018) : 5/2018



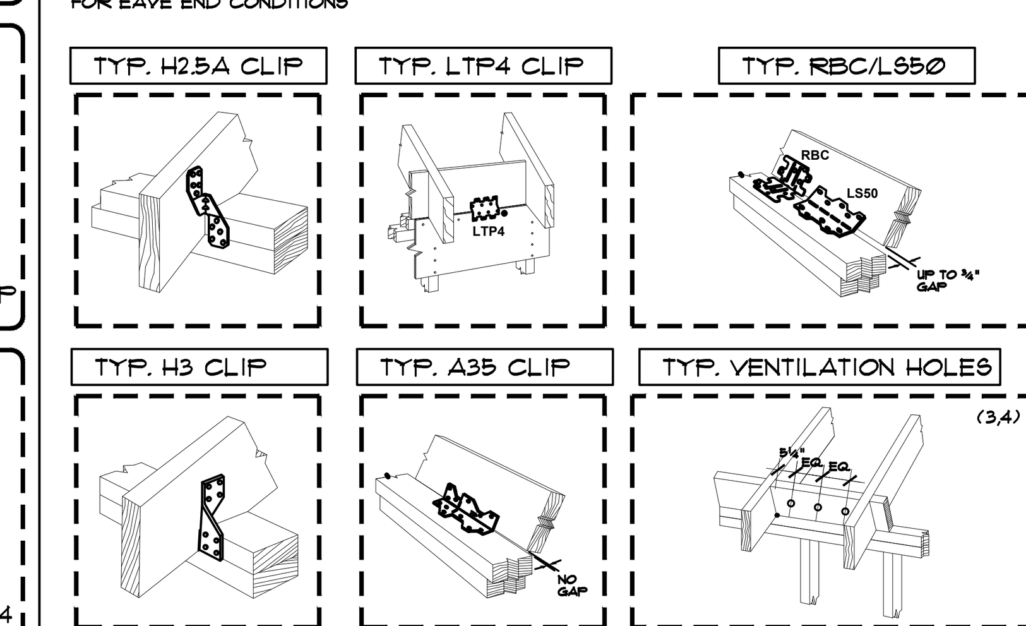
12 TYPICAL SYKLIGHT DETAIL
R0009 (2018) : 5/2018

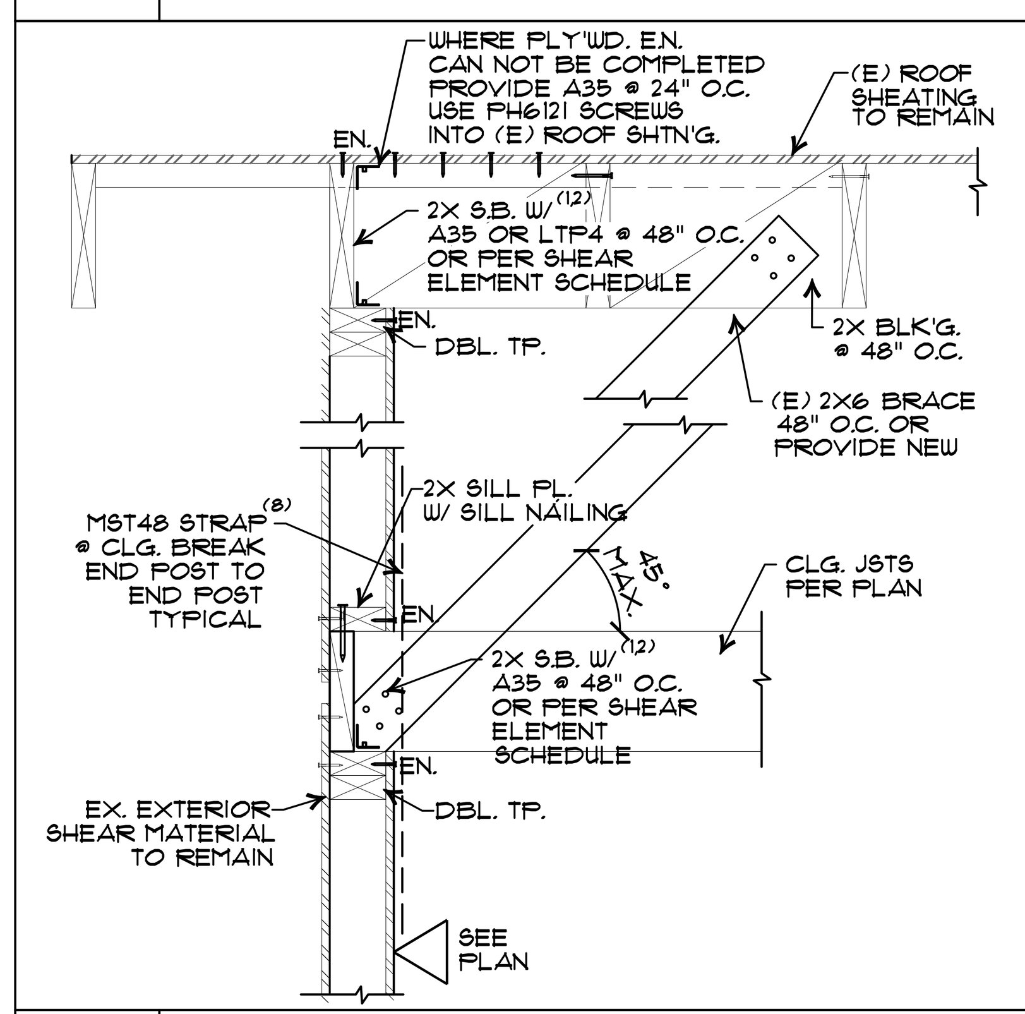


8 SUPPORTED RIDGE BOARD DET.
R0027 (2019) : 5/2019

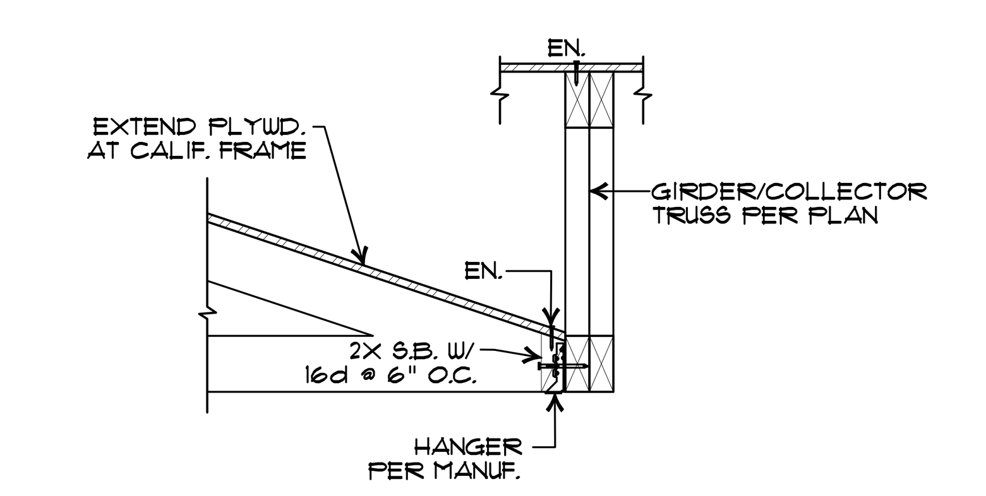


DETAIL NOTES
SEE ARCHITECTURAL PLANS FOR EAVE END CONDITIONS

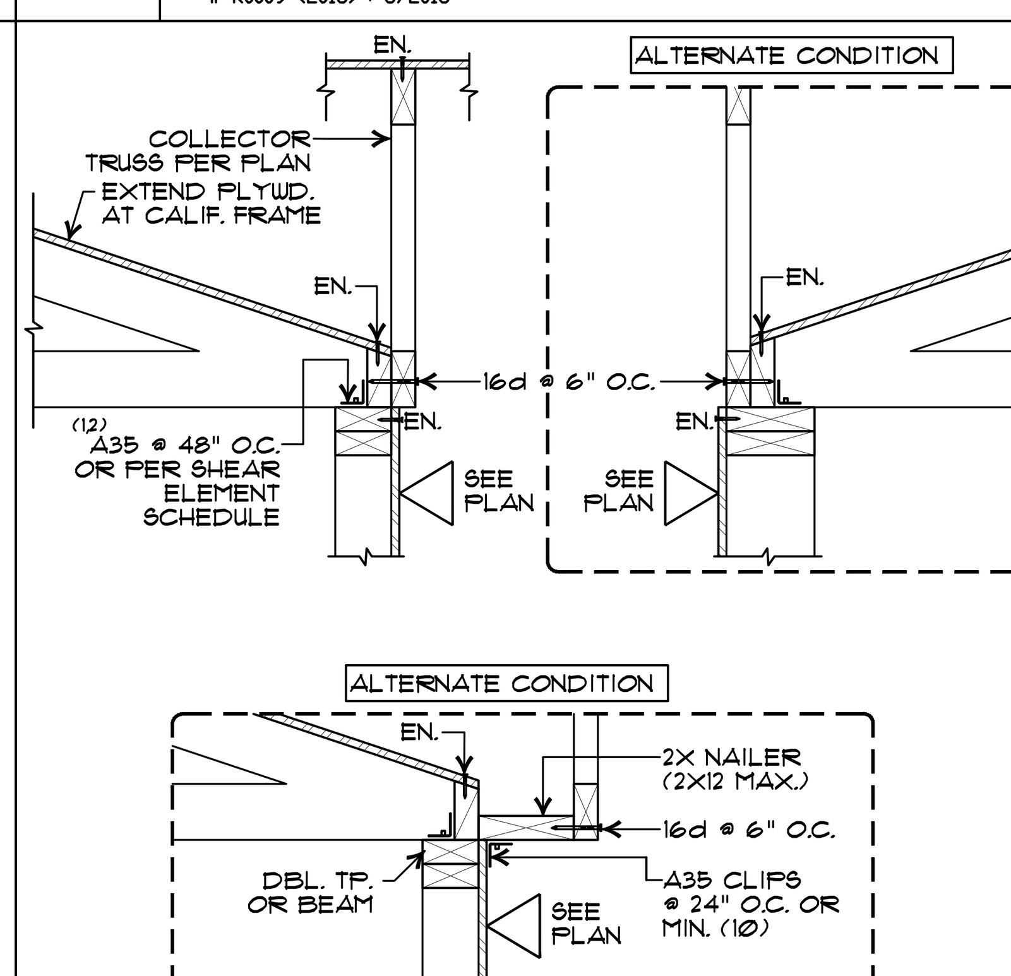




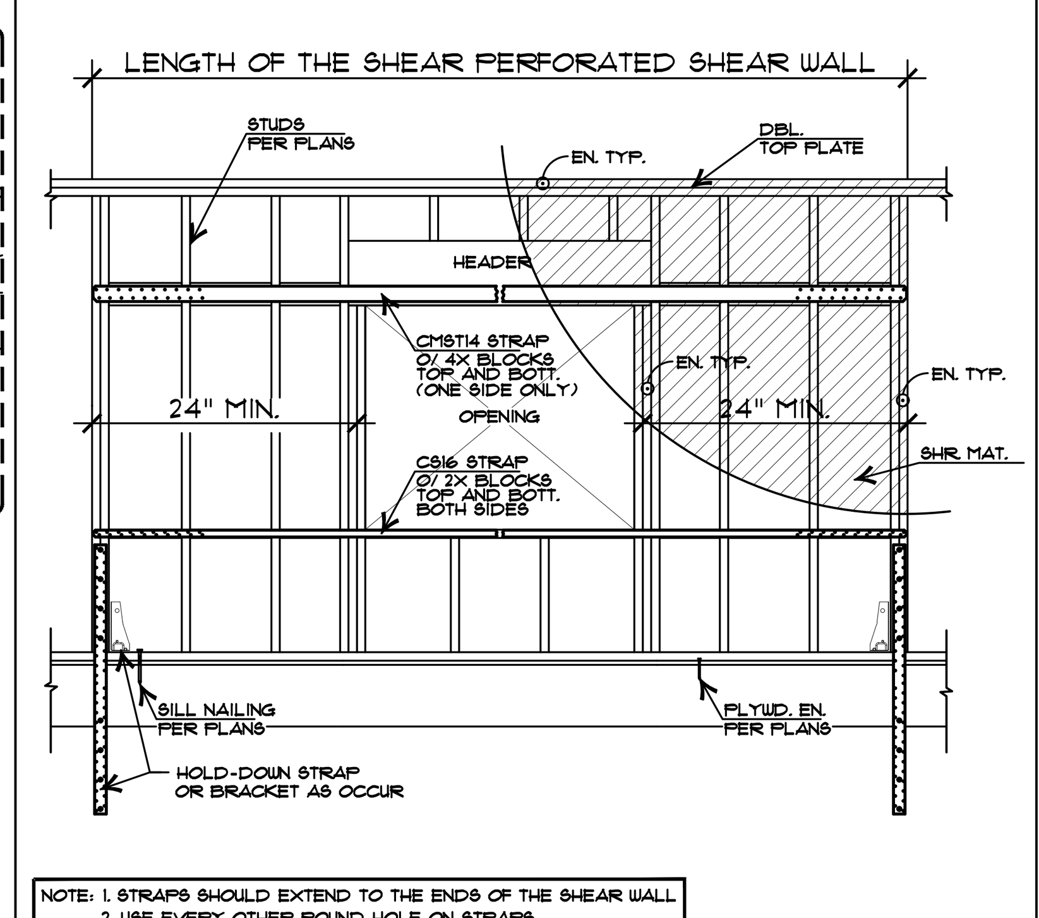
21 GABLE END DET WITH BRACES



17 GIRDER TRUSS DETAIL
R0140 (2018) : 11/2018



13 TRUSS TO WALL CONNECTIONS
R0139 (2018) : 11/2018



9 PERFORATED SHEAR WALL DETAIL
G0003 (2018) : 6/2018

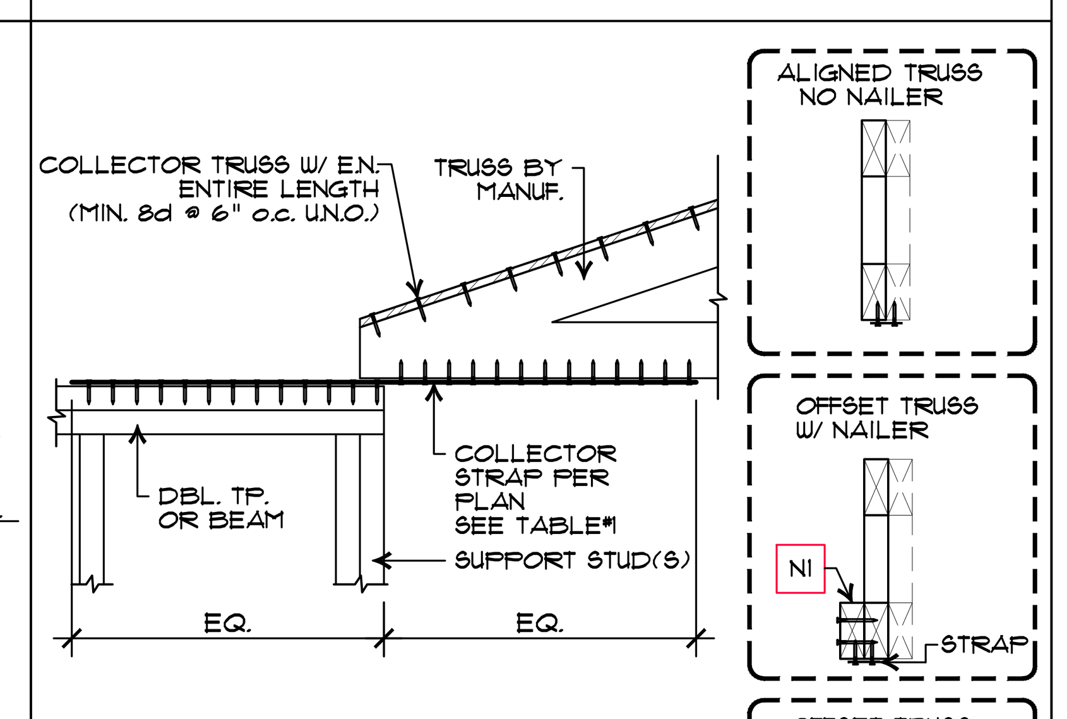
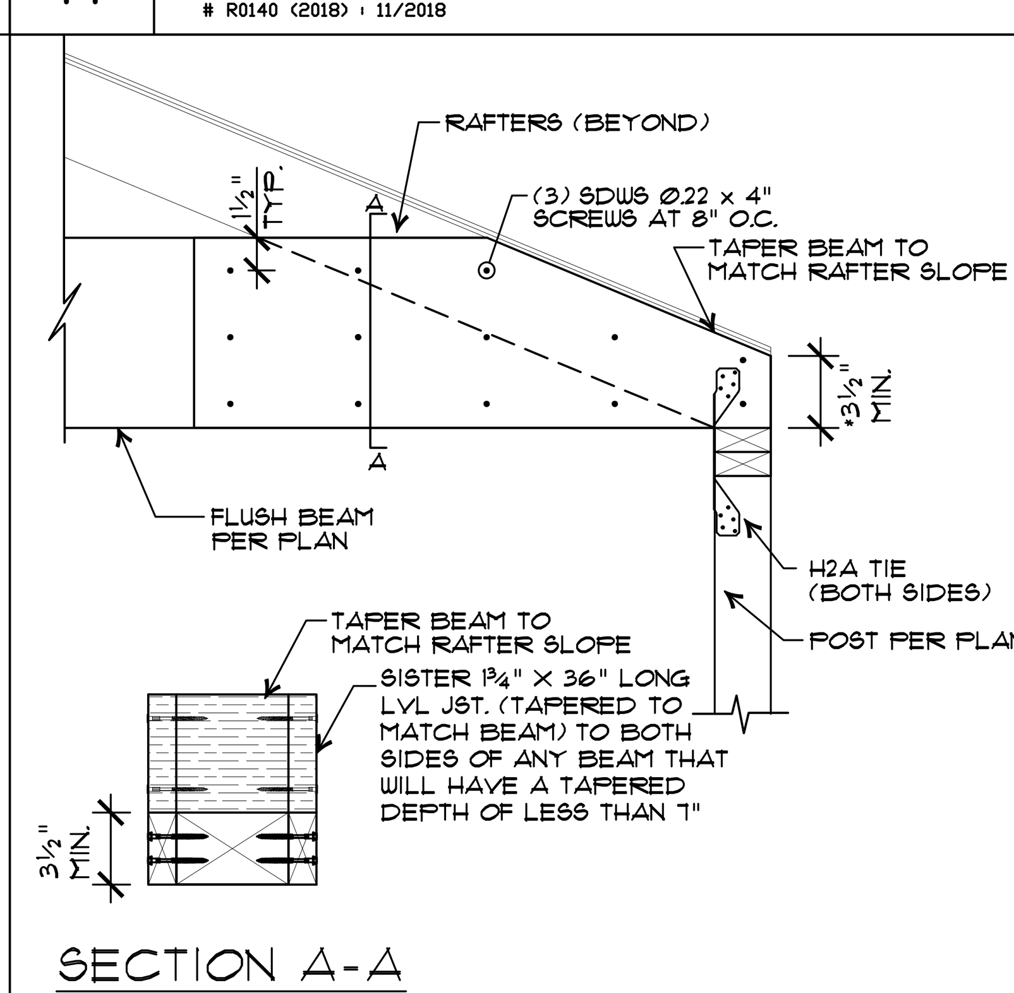


TABLE #1		
STRAP	N1	N2 (2X12 MAX)
ST6236	2X NAILER X 36" W/ (13) 16d (2)-ROWS STAGG	2X FLAT NAILER X 42" W/ (6) LTP4 CLIPS
MST48	2X NAILER X 36" W/ (18) 16d (2)-ROWS STAGG	2X FLAT NAILER X 54" W/ (8) LTP4 CLIPS
MST60	2X NAILER X 36" W/ (23) 16d (2)-ROWS STAGG	2X FLAT NAILER X 66" W/ (10) LTP4 CLIPS

5 COLLECTOR TRUSS DETAIL
R0135 (2018) : 11/2018

1 STANDARD TRUSS EAVE DETAIL
R0130 (2018) : 9/2018



18 BEAM END AT EXCESSIVE NOTCH

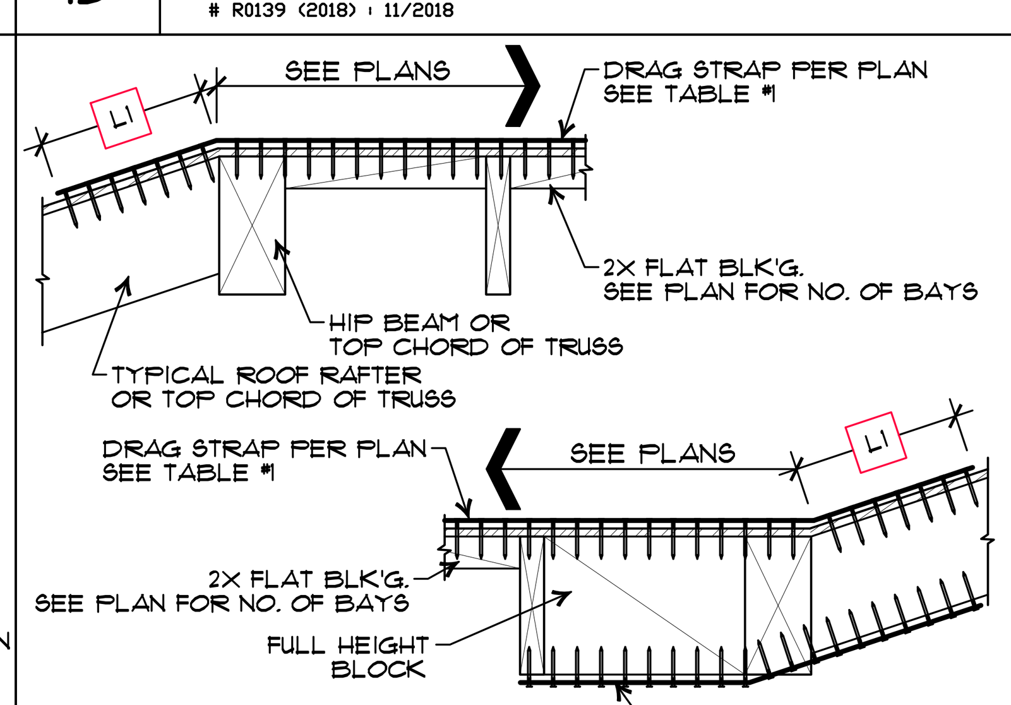
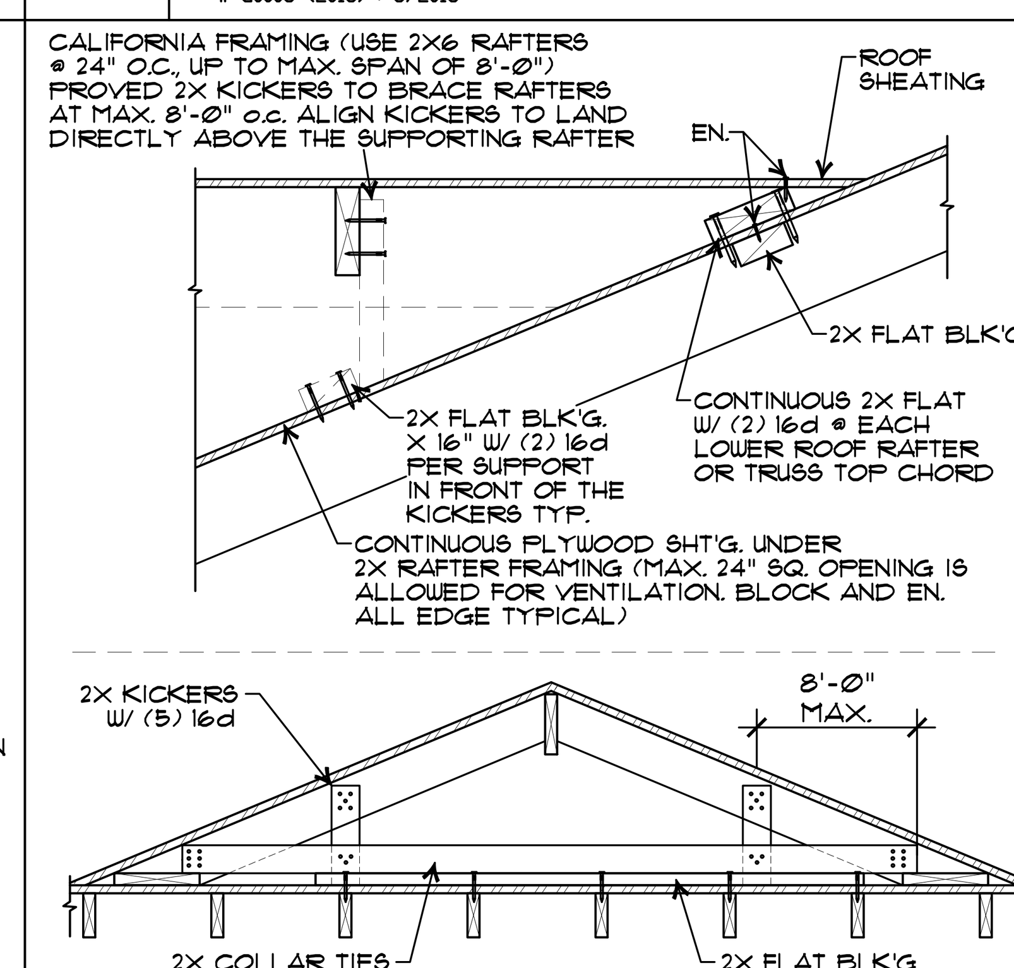


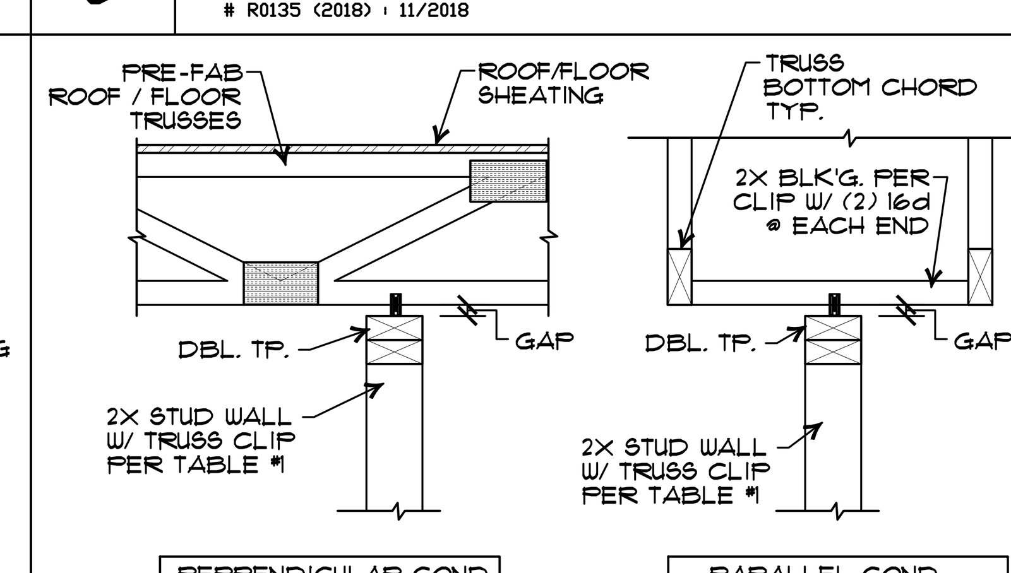
TABLE-1			
STRAP	FLAT BLOCKS	END LAP NAIL	L1
CS16	2X4 S.B.	22-10d MIN. OR 26-8d MIN.	3'-6"
CMSTC16	4X4 S.B.	58-16d MIN. SINKER	3'-6"
CMST14	4X4 S.B.	66-16d MIN. OR 76-10d MIN.	3'-6"

14 ROOF DRAG DETAIL
R0014 (2018) : 5/2018

CALIFORNIA FRAMING (USE 2X6 RAFTERS @ 24" O.C., UP TO MAX. SPAN OF 8'-0") PROVED 2X KICKERS TO BRACE RAFTERS AT MAX. 8'-0" o.c. ALIGN KICKERS TO LAND DIRECTLY ABOVE THE SUPPORTING RAFTER



10 TYPICAL CALIFORNIA FRAMING DET.
R0010 (2018) : 5/2018



DETAIL NOTES:
-GAP SHOULD BE MAX. ½" FOR STC AND DTC, 1¼" FOR HTC AFTER ROOF IS LOADED.
-USE (2) TRUSS CLIPS MIN. PER WALL SECTION
-NAILS SHOULD NOT BE DRIVEN IN A WAY LIMITS THE VERTICAL TRUSS MOVEMENT.

TABLE #1				
CLIP SPACING	WALL HEIGT MAX 8'-1"	WALL HEIGT MAX 9'-1"	WALL HEIGT MAX 14'-1"	WALL HEIGT MAX 20'-0"
24" O.C.	(1) STC	(1) DTC	(1) DTC	(1) HTC
48" O.C.	(1) HTC	(1) HTC	(1) HTC	(1) HTC
96" O.C.	(1) HTC	NOT APPROVED	NOT APPROVED	NOT APPROVED

6 NON-SHEAR INTERIOR BEARING WALL
R0122 (2018) : 7/2018

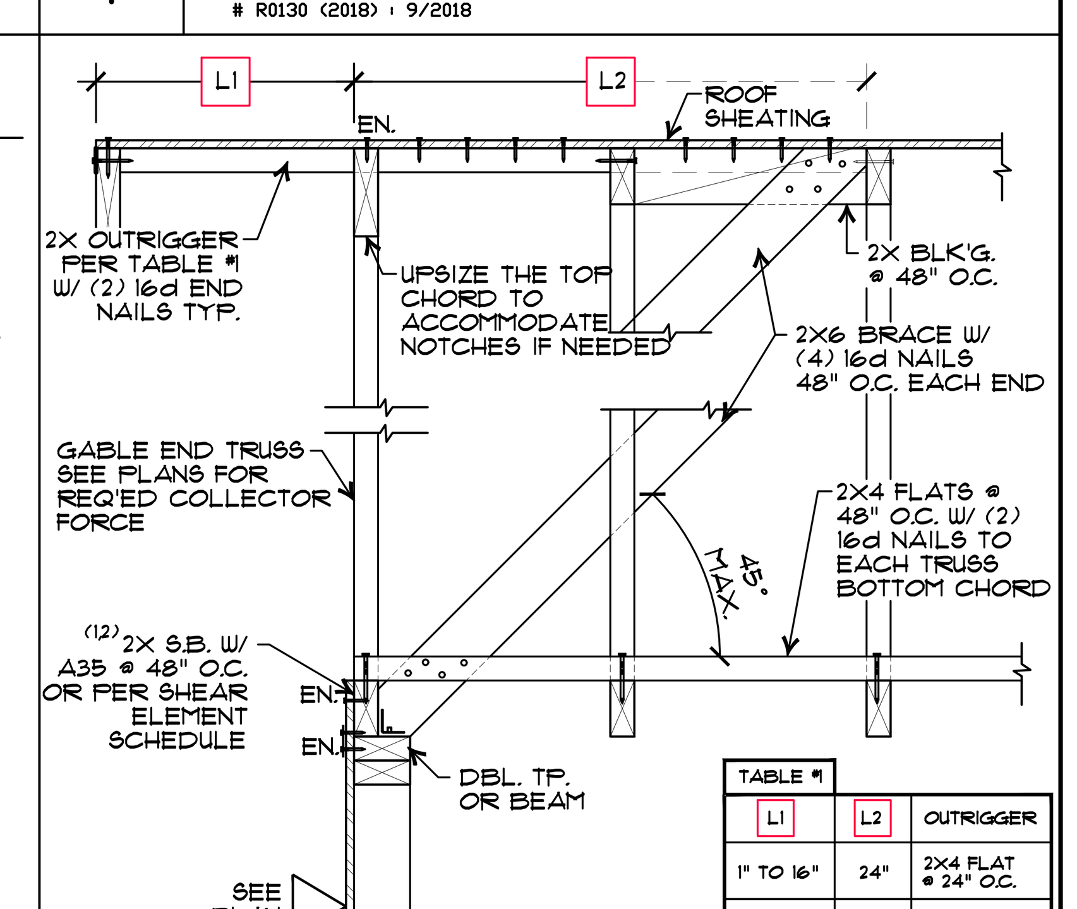


TABLE #1		
L1	L2	OUTRIGGER
1" TO 16"	24"	2X4 FLAT @ 24" O.C.
17" TO 24"	24"	2X6 FLAT @ 24" O.C.
25" OR MORE	CALL ENGINEER	

2 GABLE END TRUSS WITH BRACES
R0131 (2018) : 9/2018

TYPICAL ROOF FRAMING DETAILS

PROJECT NAME:

ALLENDE RESIDENCE
3110 TAIT DRIVE
LOS GATOS, CA

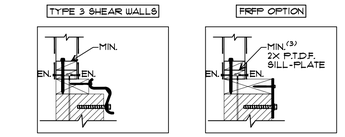
NO.	REVISIONS	BY

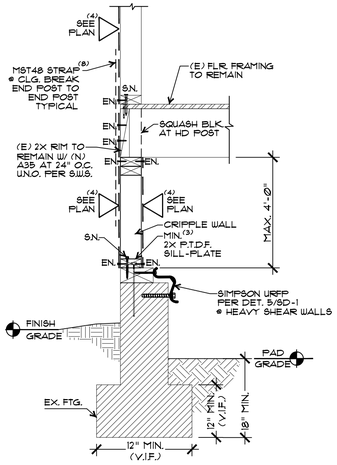
4x Engineering, Inc.
Consulting Structural Engineering Services
1885 Meridian Ave.
San Jose, CA 95125
Phone:(408)-842-5464

REGISTERED PROFESSIONAL ENGINEER EFE SOZKESEN No. C73272 Exp. 12/31/2018 CIVIL STATE OF CALIFORNIA
DATE: 9-20-25

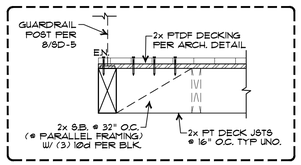
JOB NO:	DRAWN:
25-046	J.V.
DATE: 10/20/25	SCALE: AS NOTED

SHEET NO.
SD-3

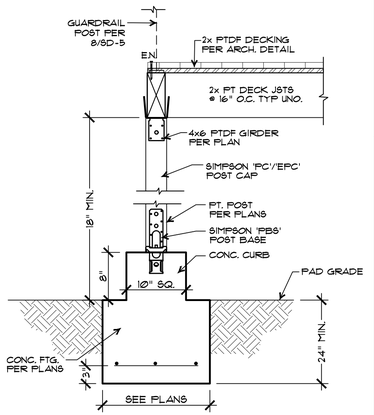




12 (N) SHEARWALL ON (E) FOOTING

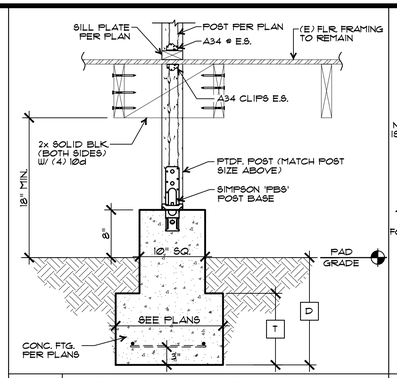


PARALLEL COND.

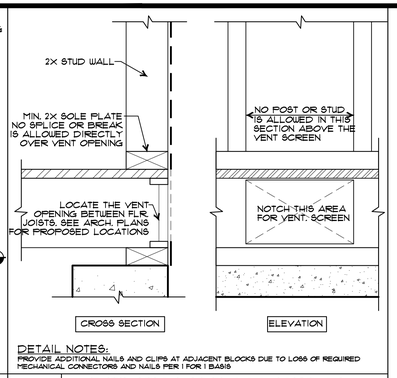


13 DECK FRAMING DETAIL

G0005 (2018)× 9/2019



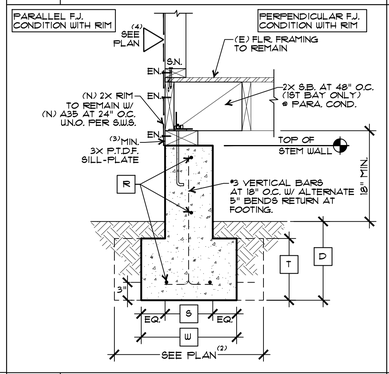
8 INTERIOR POST @ (E) FLR. FRAMING



DETAIL NOTES:
PROVIDE ADDITIONAL NAILS AND CLIPS AT ADJACENT BLOCKS DUE TO LOSS OF REQUIRED MECHANICAL CONNECTORS AND NAILS PER 1 FOR 1 BASIS

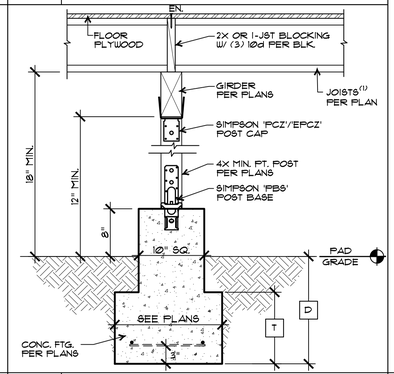
4 VENTILATION AT FLOOR JOIST BAY

FND003 (2018) • 4/2018



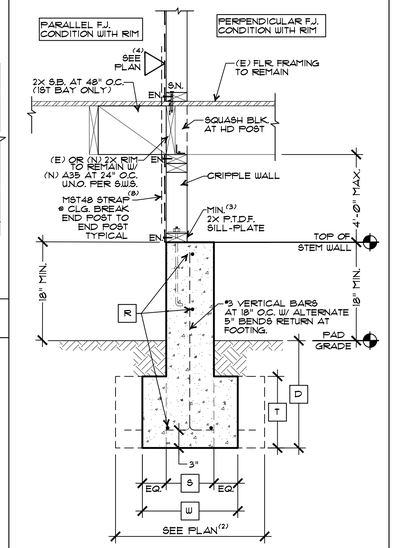
9 (N) FOUNDATION AT EX. WALL

FND005 (2018) • 4/2018



5 GIRDER DETAIL AT INTERIOR PIER

FND005 (2018) • 4/2018

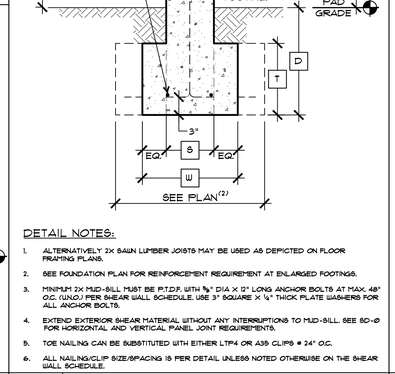


DETAIL NOTES:

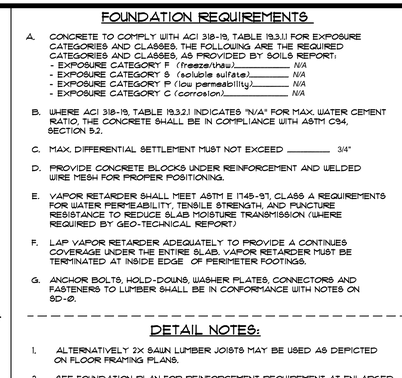
1. ALTERNATIVELY 2X SAUN LUMBER JOISTS MAY BE USED AS DEPICTED ON FLOOR FRAMING PLANS.
2. SEE FOUNDATION PLAN FOR REINFORCEMENT REQUIREMENT AT ENLARGED FOOTINGS.
3. MINIMUM 2X MUD-SILL MUST BE P.T.D.F. WITH ⅝" DIA X 12" LONG ANCHOR BOLTS AT MAX. 48" O.C. (U.N.O.) PER SHEAR WALL SCHEDULE. USE 3" SQUARE X ¼" THICK PLATE WASHERS FOR ALL ANCHOR BOLTS.
4. EXTEND EXTERIOR SHEAR MATERIAL WITHOUT ANY INTERRUPTIONS TO MUD-SILL. SEE SD-2 FOR HORIZONTAL AND VERTICAL PANEL JOINT REQUIREMENTS.
5. TOE NAILING CAN BE SUBSTITUTED WITH EITHER LTP4 OR A35 CLIPS @ 24" O.C.
6. ALL NAILING/CLIP SIZE/SPACING IS PER DETAIL UNLESS NOTED OTHERWISE ON THE SHEAR WALL SCHEDULE.

2 INTERIOR FOOTING (RAISED FLOOR)

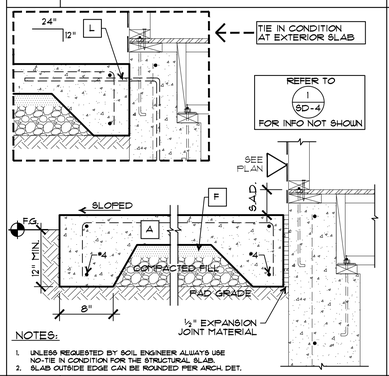
FND003 (2018) • 4/2018



3 FOOTING LEDGER DETAIL



10 NEW INT. SPREAD FOOTING @ (E) SLAB

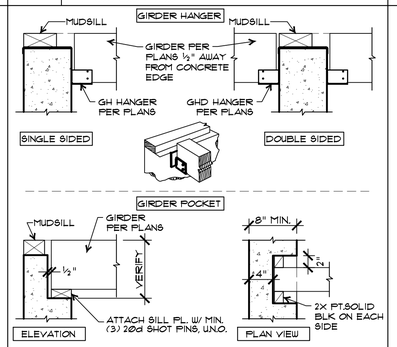


NOTES:

1. UNLESS REQUESTED BY SOIL ENGINEER ALWAYS USE NO-TIE IN CONDITION FOR THE STRUCTURAL SLAB.
2. SLAB OUTSIDE EDGE CAN BE ROUNDED PER ARCH. DET.

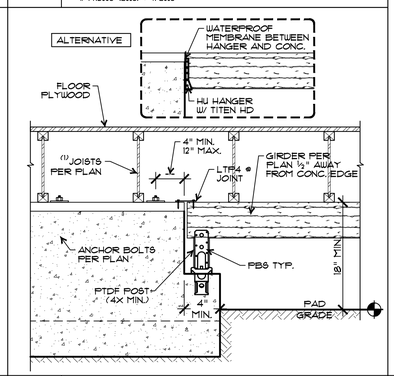
11 CONCRETE SLAB TO FOOTING

FND011 (2018) • 8/2018



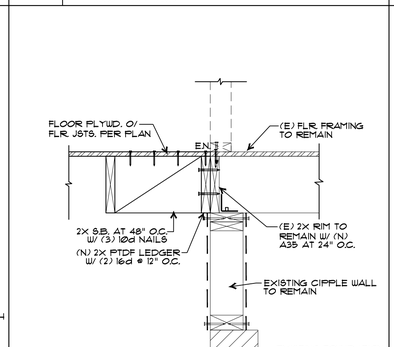
6 GIRDER SUPPORT DETAILS

FND006 (2018) • 4/2018



7 GIRDER BEAM TO CONCRETE CORNER

FND007 (2018) • 4/2018



FOUNDATION REQUIREMENTS

A. CONCRETE TO COMPLY WITH ACI 318-19, TABLE 19.3.1.1 FOR EXPOSURE CATEGORIES AND CLASSES. THE FOLLOWING ARE THE REQUIRED CATEGORIES AND CLASSES, AS PROVIDED BY SOIL'S REPORT:
- EXPOSURE CATEGORY F (freeze/thaw)_____ N/A
- EXPOSURE CATEGORY S (soluble sulfate)_____ N/A
- EXPOSURE CATEGORY P (low permeability)_____ N/A
- EXPOSURE CATEGORY C (corrosion)_____ N/A

B. WHERE ACI 318-19, TABLE 19.3.2.1 INDICATES "N/A" FOR MAX. WATER CEMENT RATIO, THE CONCRETE SHALL BE IN COMPLIANCE WITH ASTM C94, SECTION 5.2.

C. MAX. DIFFERENTIAL SETTLEMENT MUST NOT EXCEED _____ 3/4"

D. PROVIDE CONCRETE BLOCKS UNDER REINFORCEMENT AND WELDED WIRE MESH FOR PROPER POSITIONING.

E. VAPOR RETARDER SHALL MEET ASTM E 1745-97, CLASS A REQUIREMENTS FOR WATER PERMEABILITY, TENSILE STRENGTH, AND PUNCTURE RESISTANCE TO REDUCE SLAB MOISTURE TRANSMISSION (WHERE REQUIRED BY GEO-TECHNICAL REPORT)

F. LAP VAPOR RETARDER ADEQUATELY TO PROVIDE A CONTINUES COVERAGE UNDER THE ENTIRE SLAB. VAPOR RETARDER MUST BE TERMINATED AT INSIDE EDGE OF PERIMETER FOOTINGS.

G. ANCHOR BOLTS, HOLD-DOWNS, WASHER PLATES, CONNECTORS AND FASTENERS TO LUMBER SHALL BE IN CONFORMANCE WITH NOTES ON SD-Ø.

DETAIL NOTES:

1. ALTERNATIVELY 2X SAUN LUMBER JOISTS MAY BE USED AS DEPICTED ON FLOOR FRAMING PLANS.
2. SEE FOUNDATION PLAN FOR REINFORCEMENT REQUIREMENT AT ENLARGED FOOTINGS.
3. MINIMUM 2X MUD-SILL MUST BE P.T.D.F. WITH ⅝" DIA X 12" LONG ANCHOR BOLTS AT MAX. 48" O.C. (U.N.O.) PER SHEAR WALL SCHEDULE. USE 3" SQUARE X ¼" THICK PLATE WASHERS (BPS) FOR ALL ANCHOR BOLTS.
4. EXTEND EXTERIOR SHEAR MATERIAL WITHOUT ANY INTERRUPTIONS TO MUD-SILL. SEE SD-2 FOR HORIZONTAL AND VERTICAL PANEL JOINT REQUIREMENTS.
5. TOE NAILING CAN BE SUBSTITUTED WITH EITHER LTP4 OR A35 CLIPS @ 24" O.C., AT AREAS WHERE THERE IS NO SHEAR WALL ABOVE.
6. ALL NAILING/CLIP SIZE/SPACING IS PER DETAIL UNLESS NOTED OTHERWISE ON THE SHEAR WALL SCHEDULE.
7. ⅝" J-BOLTS CAN BE USED IN LIEU OF THREADED RODS AT SAME SPACING AND PLACEMENT SPECIFIED ON PLANS.

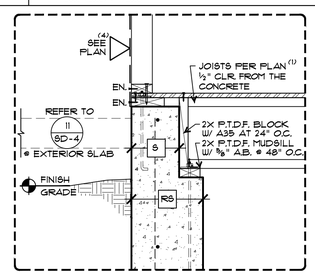
LEGEND AND DIMENSION TABLE

W	16" (INCH)
D	18" (INCH), 24" (INCH) @ ISOLATED FOOTINGS
E	24" (INCH)
T	12" (INCH)
A	MIN. 5" (ACTUAL) CONC. SLAB W/ #4 BARS AT 12" O.C. EACH WAY AT SLAB MID-HEIGHT
F	2" SAND OVER 15 MIL POLYETHYLENE VAPOR BARRIER OVER 6" CAPILLARY BREAK MATERIAL SUCH AS ¾" CLEAN CRUSHED ROCK OR PERMEABLE AGGREGATE OVER PAD GRADE PER SOIL REPORT (IF EXISTS)
R	(1) - #4 AT TOP OF THE STEM WALL #4 BARS AT 16" O.C. AT THE MIDDLE STEM (MIN. 2 BARS) (2) - #4 BARS AT THE FOOTING
G	MIN. 5" (ACTUAL) CONC. SLAB W/ #4 BARS AT 12" O.C. EACH WAY AT SLAB MID-HEIGHT, SAW-CUT SLABS PER DET. 3A/SD-1
S	MIN. 8" (INCH)
RS	MIN. 12" (INCH)
L	#4 L-SHAPED DOWELS AT 24" O.C., L+ 36" LONG (12" INTO FOOTING)

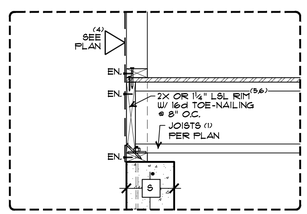
NOTES:
1. DEEPEN AND/OR WIDEN FOUNDATION AT HOLD-DOWNS FOR MIN. REQUIRED ANCHOR BOLT EMBEDMENT PER MANUF. SPECIFICATIONS, U.N.O.
2. CONCRETE SPECIFICATIONS:
   2.1. CEMENT TYPE: II
   2.2. MAX. WATER-TO-CEMENT RATIO: Ø.45
   2.3. MIN. CONCRETE COMP. STRENGTH : 2500 PSI (DESIGNER SPECIFIED) 3000PSI (BUILDER'S SPECIFIED) (NO SPECIAL INSPECTION IS REQUIRED)

Ø FOUNDATION SCHEDULE(S)

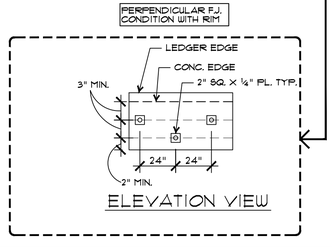
FND000 (2018) • 4/2018



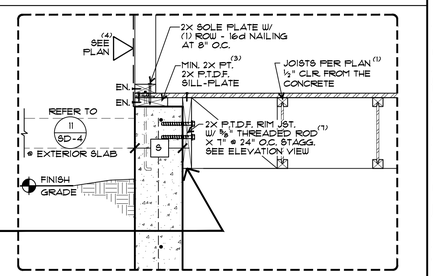
PERPENDICULAR F.J. CONDITION WITH RAISED STEM



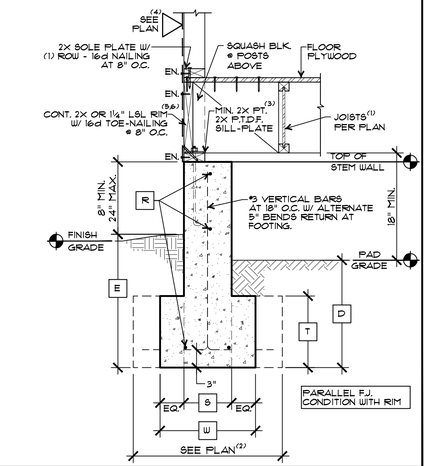
PERPENDICULAR F.J. CONDITION WITH RIM



ELEVATION VIEW



PARALLEL F.J. CONDITION WITH RAISED STEM



PARALLEL F.J. CONDITION WITH RIM

1 EXTERIOR SPREAD FOOTING (RAISED FLOOR)

FND001 (2018) • 4/2018

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 Meridian Ave.
San Jose, CA 95125
Phone:(408)-842-5464

NO.	REVISIONS	BY

TYPICAL FOUNDATION DETAILS

ALLENDE RESIDENCE
310 TAIT DRIVE
LOS GATOS, CA

PROJECT NAME:

REGISTERED PROFESSIONAL ENGINEER — No. C73272 Exp. 12/31/2026 — CIVIL — STATE OF CALIFORNIA

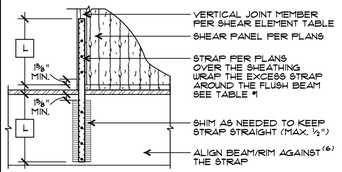
DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

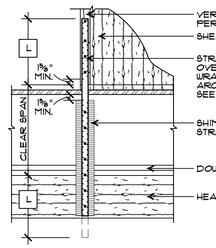
SHEET NO.

SD-4

STRAP OVER FLUSH BEAM (16) (27) (37)



STRAP OVER HEADER (48) (60) (72)



STRAP OVER STACKING POST/STUDS (48) (60) (72) (14) (12)

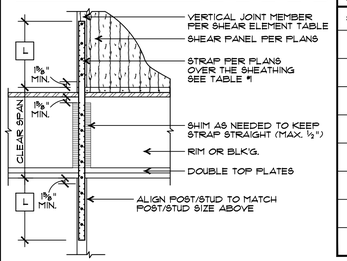
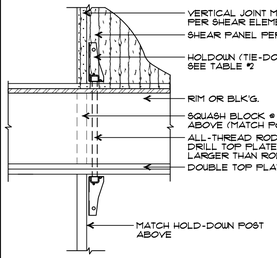


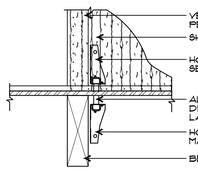
TABLE ¶1

SYMBOL	STRAP	MIN. EDGE POST	L	NAIL TYPE	NAIL COUNT IN L
(16)	CS16	2X4 STUD	11"	10d (0.148" ⌀ X 3")	(10)
			13"	8d (0.131" ⌀ X 2½")	(11)
(27)	MST27	2-2X4 STUD STITCH NAIL 6" O.C. STAGG.	13½"	16d (0.162" ⌀ X 3½")	(15)
(37)	MST37	2-2X4 STUD STITCH NAIL 6" O.C. STAGG.	18¾"	16d (0.162" ⌀ X 3½")	(21)
(48)	MST48	4X4 POST	15"	16d (0.162" ⌀ X 3½")	(16)
(60)	MST60	4X4 POST	21"	16d (0.162" ⌀ X 3½")	(23)
(72)	MST72	4X4 POST	24"	16d (0.162" ⌀ X 3½")	(27)
(14)	CMST14	4X4 POST	26"	16d (0.162" ⌀ X 3½")	(28)
			30"	10d (0.148" ⌀ X 3")	(33)
(12)	CMST12	4X6 POST	33"	16d (0.162" ⌀ X 3½")	(37)
			39"	10d (0.148" ⌀ X 3")	(43)

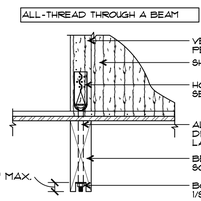
ALIGNING ALL THREAD CONDITION (○) (▲) (●) (⊗) (T)



HOLD-DOWN ON A BEAM FACE (○) (▲) (●) (⊗) (T)



ALL-THREAD THROUGH A BEAM (○) (▲) (●) (⊗) (T)



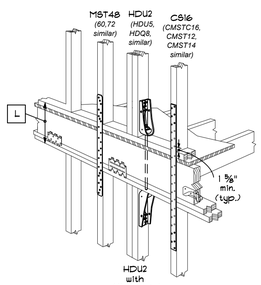
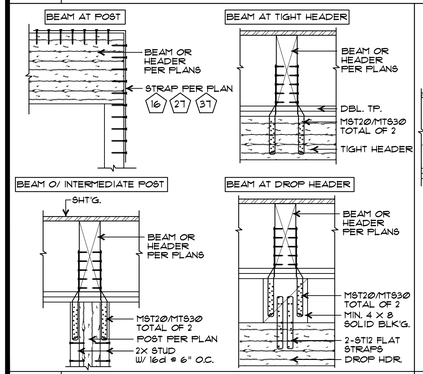


TABLE *2

SYMBOL	BRACKET	MIN. EDGE POST	R	POST/BEAM FASTENERS
(○)	HDU2	2X4 STUD STITCH NAIL 6" O.C. STAGG.	⅝"	(6) ¼" X 2½" SDS
(▲)	HDU5	4X4 POST	⅝"	(14) ¼" X 2½" SDS
(●)	HDQ8	4X4 POST	⅞"	(20) ¼" X 2½" SDS
(⊗)	HHDQII	6X6 POST	1"	(24) ¼" X 2½" SDS
(T)	HDI9	6X6 DF# POST	1¼"	(5) 1" STUD BOLTS

10 TYPICAL HOLDOWN (TIE-DOWN) CONNECTIONS AT UPPER FLOORS

FLR010 (2018) › 4/2018



12 BEAM END CONDITIONS W/ HOLD-DOWNS

FLR012 (2018) › 5/2018

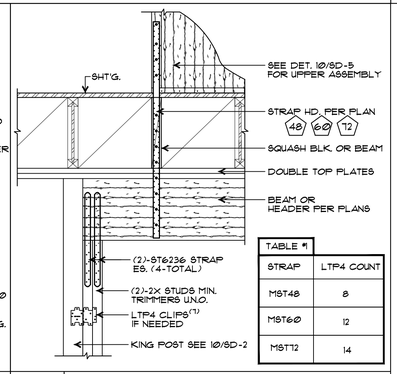
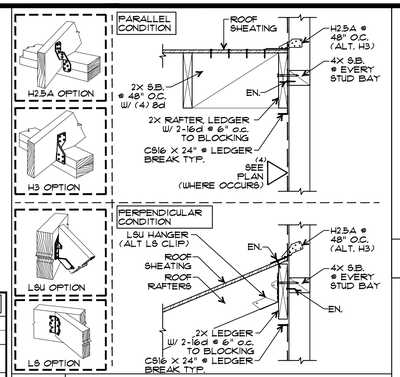


TABLE *1

STRAP	LTP4 COUNT
MST48	8
MST60	12
MST72	14

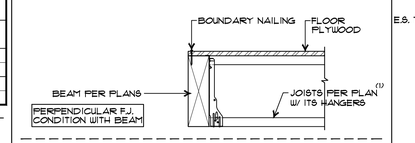
11 DISCONTINUOUS BEAM/HEADER END

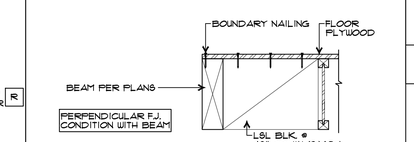
FLR011 (2018) › 5/2018



6 LOW ROOF ATTACHMENT CONDITIONS

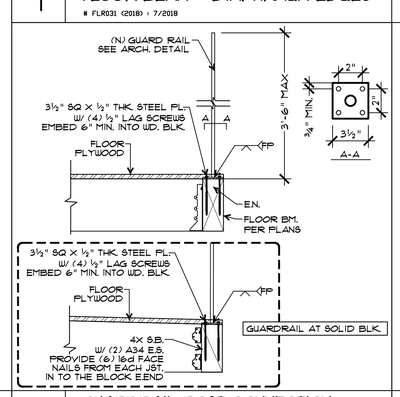
FLR006 (2018) › 9/2019





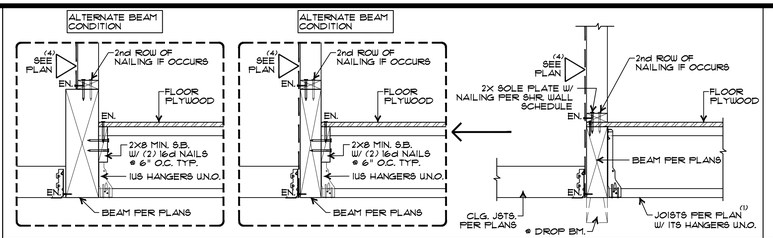
7 FLOOR BEAM @ DIAPHRAGM EDGES

FLR031 (2018) › 7/2018



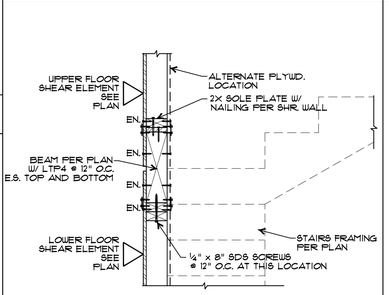
8 GUARDRAIL POST CONNECTION

G0004 (2019) › 1/2019



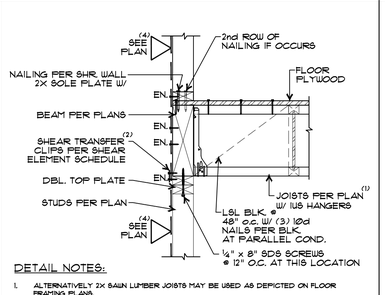
3A FLOOR SHEAR TRANSFER DETAIL AT NON-EXTEDED DIAPHRAGM

FLR003A (2018) › 5/2018



3B FLUSH BEAM DET. AT STAIRS OPENING

FLR0013 (2018) › 5/2018



DETAIL NOTES:

1. ALTERNATIVELY 2X 6AIN LUMBER JOISTS MAY BE USED AS DEPICTED ON FLOOR FRAMING PLANS.
2. USE 16d TOE NAILS @ 6" O.C. WHERE THERE IS NO SHEAR ELEMENT DIRECTLY ABOVE OR BELOW THE WALL SECTION.
3. MATCH THE SQUASH BLOCK SIZE TO THE POST SIZE ABOVE MIN.
4. SHEAR MATERIAL CAN BE APPLIED ON EITHER FACE OF THE STUD WALL. SEE SD-@ FOR HORIZONTAL AND VERTICAL PANEL JOINT REQUIREMENTS.

3C FLOOR SHEAR TRANSFER DETAILS

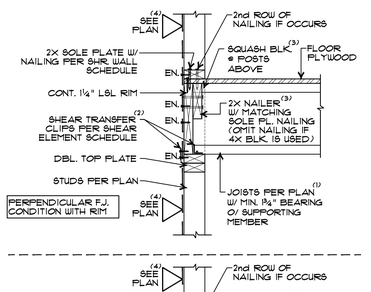
FLR0030 (2018) › 5/2018

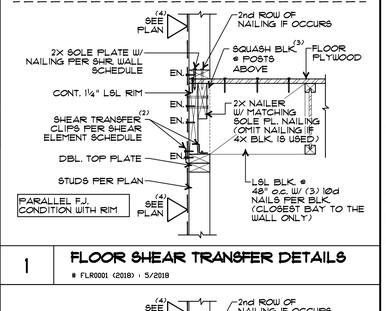
DETAIL NOTES:

1. ALTERNATIVELY 2X 6AIN LUMBER JOISTS MAY BE USED AS DEPICTED ON FLOOR FRAMING PLANS.
2. USE 16d TOE NAILS @ 6" O.C. WHERE THERE IS NO SHEAR ELEMENT DIRECTLY ABOVE OR BELOW THE WALL SECTION.
3. MATCH THE SQUASH BLOCK SIZE TO THE POST SIZE ABOVE MIN.
4. SHEAR MATERIAL CAN BE APPLIED ON EITHER FACE OF THE STUD WALL. SEE SD-@ FOR HORIZONTAL AND VERTICAL PANEL JOINT REQUIREMENTS.
5. SHEAR TRANSFER CLIPS PER SHEAR ELEMENT SCHEDULE CONTRACTOR TO CHOOSE BETWEEN LTP4 OR A35 CLIPS. MINIMUM SPACING IS 24" O.C. ON ANY CONDITION U.N.O.
6. BEAMS SUPPORTING DISCONTINUOUS SHEAR ELEMENTS ABOVE SHOULD HAVE CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION. BEAM ENDS SHOULD BE TREATED ACCORDING TO OUR DETAIL 11/SD-5 U.N.O.
7. IF KING POST IS ALSO SERVING AS A LOWER LEVEL SHEAR WALL END POST CONTRACTOR SHOULD CONNECT TRIPPERS TO THE KING STUD WITH LTP4 CLIPS PER TABLE*

@ FLOOR FRAMING NOTES

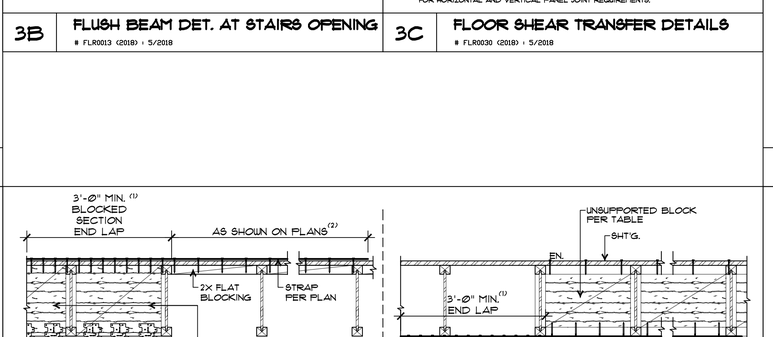
FLR0000 (2018) › 5/2018





1 FLOOR SHEAR TRANSFER DETAILS

FLR0001 (2018) › 5/2018



TABLE

STRAP	END LAP BLOCK	UNSUPPORTED BLK.	END LAP CLIPS	END LAP NAIL (3)
CS16	2X S.B.	2X S.B. / I-JOISTS	A35 @ 16" O.C. OR LTP4 @ 16" O.C.	22-10d MIN. OR 26-8d MIN.
CMSTC16	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 8" O.C. BOTH SIDES	58-16d MIN. SINKER
CMST14	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 4" O.C. BOTH SIDES	66-16d MIN. OR 76-10d MIN.

DETAIL NOTES

1. FILL EVERY NAIL HOLE AT END LAP.
2. FILL EVERY OTHER NAIL HOLE AT AREA USE FASTENERS PER MANUFACTURER'S SPECS.

4 COLLECTOR STRAP DETAIL WALL TO JOISTS

FLR004 (2018) › 5/2018

TABLE

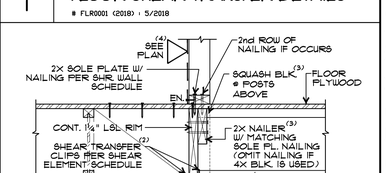
STRAP	END LAP BLOCK	UNSUPPORTED BLK.	END LAP CLIPS	END LAP NAIL (3)
CS16	2X S.B.	2X S.B. / I-JOISTS	A35 @ 16" O.C. OR LTP4 @ 16" O.C.	22-10d MIN. OR 26-8d MIN.
CMSTC16	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 8" O.C. BOTH SIDES	58-16d MIN. SINKER
CMST14	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 4" O.C. BOTH SIDES	66-16d MIN. OR 76-10d MIN.

DETAIL NOTES

1. FILL EVERY NAIL HOLE AT END LAP.
2. FILL EVERY OTHER NAIL HOLE AT AREA USE FASTENERS PER MANUFACTURER'S SPECS.

5 COLLECTOR STRAP DETAIL AT FLOOR BEAM TO JOISTS

FLR005 (2018) › 5/2018



2 INTERIOR SHEAR TRANSFER DETAILS

FLR002 (2018) › 5/2018

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 Meridian Ave.
San Jose, CA 95125
Phone:(408)-842-5464

PROJECT NAME:

TYPICAL FLOOR FRAMING DETAILS

ALLENDE RESIDENCE

310 TAIT DRIVE

LOS GATOS, CA

REGISTERED PROFESSIONAL ENGINEER — No. C73272 Exp. 12/31/2018 — STATE OF CALIFORNIA — CIVIL

DATE: 9-20-25

JOB NO:	DRAWN:
25-046	J.V.
DATE:	SCALE:
10/20/25	AS NOTED

SHEET NO.

SD-5