

TECHNICAL RESOURCES CONFIRMS THE PROPOSED STRUCTURE(S) ON THE SITE PLAN IS OUTSIDE KNOWN PUBLIC EASEMENTS AND THE PROPERTY LAYOUT IS CONSISTENT WITH THE ASSESSOR'S PARCEL PAGE.

NAME: **TOUA THAO** DATE: **01/10/2023**

ENCROACHMENT OF STRUCTURES INCLUDING OVERHANGS IS NOT PERMITTED WITHIN PUBLIC AND PRIVATE EASEMENTS.

ANY WORK WITHIN THE ROAD RIGHT-OF-WAY REQUIRES AN APPROVED ENCROACHMENT PERMIT OR APPROVED IMPROVEMENT PLAN. TECHNICAL RESOURCES DOES NOT APPROVE BUILDING SETBACKS FROM ROADWAYS AND PROPERTY LINES.

THE BUILDING SHALL NOT BE USED AS SLEEPING OR HOUSEKEEPING QUARTERS PURSUANT TO SCZC 5.4.5.A.

SIGNED: **Bonnie Cheung**
DATE: **01/10/2023**

PLANNING APPROVAL				
Date	Planner			
01/10/2023	Bonnie Cheung			
Use Zone	Front St	Side St	Side St	Rear
RD-2	20	N/A	3	3
SPECIAL CONDITIONS/COMMENTS				



SIGNATURE:

PROJECT INFO:

NEW DETACHED GARAGE

ADDRESS: 4205 NEW YORK AVE
FAIR OAKS, CA 95628
APN: 242-0172-007-0000

NO.	DESCRIPTION	DATE

PERMIT SET

DRAWING TITLE: **SITE PLANS**

DATE: **03.06.2023**

DRAWN BY: **MJH**

SCALE: **AS SHOWN**

SHEET #: **A0.2**

JOB
03/10/2023 10:19 am

ROOF VENT CALCULATION:

ROOF AREA: 2,328.8 SF
 TOTAL NET FREE VENTILATING AREA: 2,328.8/150= 15.5 SQ FT
 ROOF REQUIRED VENT AREA: 15.5 SQ FT

VENT TYPE:
 O'HAGIN FLAT VENT, N.F.A = 72 SQ. IN. = 0.5 S.F
 32 x O'HAGIN VENTS = 0.5 x 32 = 16

16 > 15.5 VENT AREA PROVIDED IS GREATER THAN REQUIRED

NOTES:

- FOR INFO NOT NOTED SEE A2.0
- ALL NEW CEILINGS EXPOSED TO UNCONDITIONED SPACE SHALL BE INSULATED WITH MIN R-30 INSULATION.
- OPENINGS FOR ALL VENTS SHALL BE COVERED WITH CORROSION RESISTANT METAL MESH WITH 1/4" OPENING DIMENSIONS
- ALL NEW ROOF MATERIAL TO MATCH (E) MAIN HOUSE, UON
- DOWNSPOUTS MAY DRAIN TO SPLASH BLOCKS, COBBLESTONES, OR SWALES THAT DIRECT WATER AWAY FROM THE BUILDING

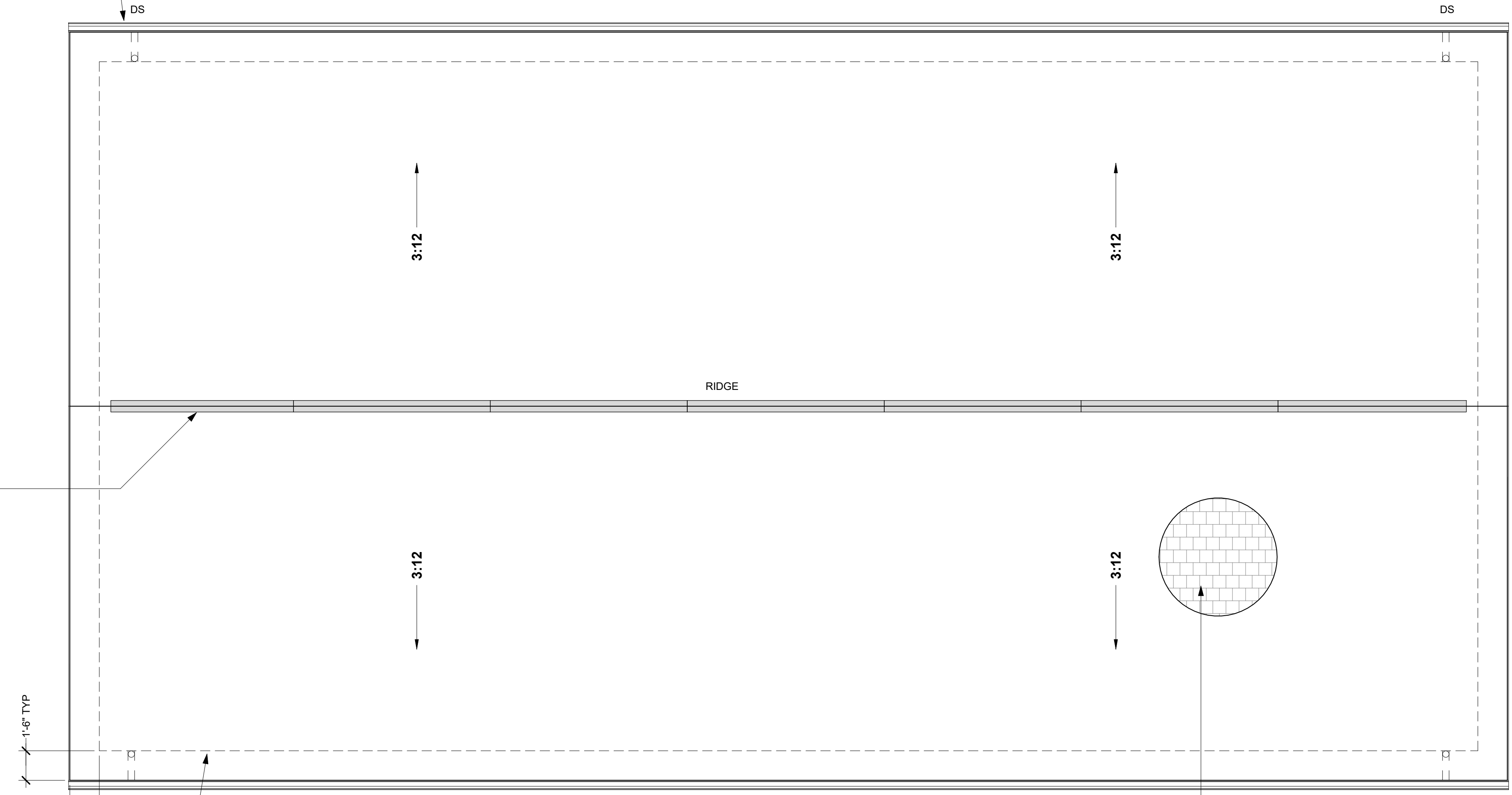
(N) STONE OR PEBBLE BASIN OR SPLASHBLOCK TO DRAIN WATER AWAY FROM BUILDING TYP FOR ALL DOWNSPOUTS

(N) RIDGE VENT INSTALL MANUF INSTALLATION INSTRUCTIONS

(N) EAVE VENTS AT EA BAY, TYP

1'-6" TYP

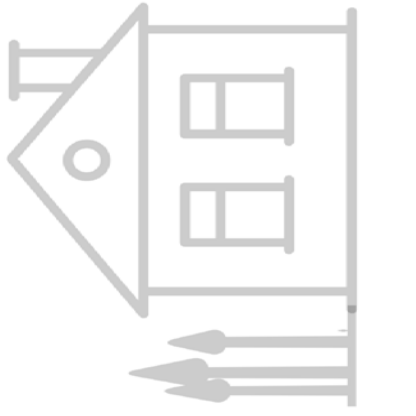
1'-6" TYP



CLASS 'A' COMP SHINGLE ROOF MATCH MAIN HOUSE COLOR & STYLE

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

Redwood ADU
Built in California



SIGNATURE:

NEW DETACHED GARAGE

ADDRESS: 4205 NEW YORK AVE
 FAIR OAKS, CA 95628
 APN: 242-0172-007-0000

PROJECT INFO:

NO.	DESCRIPTION	DATE
△		

PERMIT SET

DRAWING TITLE:
ROOF PLAN

DATE: 03.06.2023

DRAWN BY: MJH

SCALE: AS SHOWN

SHEET #:

A2.3

APPROVED
 By Donovan Doyon at 10:20 am, Mar 10, 2023

JOB
 03/10/2023 10:19 am

FOOTING SCHEDULE				
FOOTING #	SIZE	REINFORCING	DISCRIBTION	POINT CAPACITY
F1	12" CONTINUOUS	#4 TOP & BOTTOM	STRIP FOOTING	5,000 lb.
F2				
1. UNO, ALL PERIMETER AND INTERIOR STRP FOOTINGS SHALL BE TYPE F1 2. 2-POUR FOOTINGS SHALL HAVE #4@32" DOWELS 16" MIN IN EACH POUR. 3. REINFORCEMENT SHALL HAVE MIN 3" CLEARANCE WHEN POURED AGAINST SOIL 4. FOOTING DEPTH: UNO, ALL FOOTINGS SHALL BE POURED MIN 12" BELOW LOWEST FINISH GRADE IN COMPETENT ORIGINAL GROUND. 5. DESIGN SOIL PRESSURE = 1500 PSF 6. TYP STEM WIDTH 6" @ 1 STORY PLANS 8" @ 2 STORY PLANS				

CONCRETE SLAB NOTES

- A. FOR INTERIOR SLABS, USE 4" CONCRETE SLAB W/ MIN. 10x10x6 W.W.M. OR #3 BARS @ 18" OC EA WAY, CENTERED IN SLAB, OVER OPTIONAL 1"-2" SAND LAYER, OVER MINIMUM 10 MIL VAPOR RETARDER, OVER 4" GRAVEL BASE, OVER PREPARED SUB-GRADE
- B. FOR GARAGE SLABS, USE 4" CONCRETE SLAB W/ MIN. 10x10x6 W.W.M. OR #3 BARS @ 18" OC EA WAY, CENTERED IN SLAB, OVER OPTIONAL 10MIL POLYETHYLENE VAPOR BARRIER OVER 4" GRAVEL BASE, OVER PREPARED SUB-GRADE.
- C. FOR EXTERIOR CONCRETE FLAT WORK, USE MIN. 4" THICK CONCRETE SLAB W/ MIN. 10x10x6 W.W.M. OR #3 BARS @ 18" OC EA WAY, CENTERED IN SLAB, SLOPED 1/4" PER 1'-0" AWAY FROM STRUCTURE.

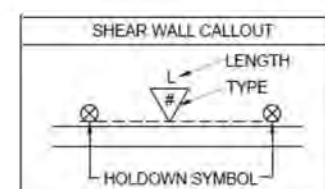
SHEAR WALL SCHEDULE

SHEARWALL NAILING & TRANSFERS										All Values Conforming to the CBC	
DESCRIPTION		NAILING 1		ANCHOR BOLTS 2		SHEAR TRANSFERS					
SW No.	MATERIALS	BOTH SIDES	HOLD DOWN POST	SIZE	SPACING EN-FN	SPACING	TOP PLATE CONNECTOR ₃ RBC, LPT or A35	SILL PLATE NAILS 4	STRAP 6		
1	7/16" OSB OR CDX PLYWOOD	N	(2)2x or 4x	8d	6"-12"	5/8" @ 48"	@24" o/c	16d @ 9" o/c	CS16		
2	7/16" OSB OR CDX PLYWOOD	N	(2)2x or 4x	8d	4"-12"	5/8" @ 48"	@24" o/c	16d @ 9" o/c	CS16		
3	7/16" OSB OR CDX PLYWOOD	N	(2)2x or 4x	8d	3"-12"	5/8" @ 24"	@2" o/c	16d @ 3" o/c	CS16		

- FOOTNOTES:**
- ALL SHEAR WALLS TO BE FULLY BLOCKED.
 - PROVIDE 0.228" THICK X 3" SQUARE, FLAT PLATE WASHERS AT ALL ANCHOR BOLTS.
 - FOR WALLS WHICH BEAR TRUSSES: H-1 CLIP, FROM TRUSS TO TOP PLATE, MAY BE USED IN PLACE OF A35 TOP PLATE CONNECTOR.
 - USE RBC @ 3X SILL PLATE TO RIM JOIST OR SOLID BLOCKING WITH SPACING PER "TOP PLATE CONNECTOR".
 - 3/8" OSB OR PLYWOOD W/ 1" TIGHTER EDGE NAILING MAY BE USED IN LIEU OF 7/16" OSB OR PLYWOOD
 - FOR FTAO SHEAR WALLS, STRAP TO BE PLACED PER DETAIL 8/SD1. FOR PF SHEARWALL STRAP TO BE PLACED PER DETAIL 7/SD1.

HOLDOWN KEY:

H = HDU2 W/ SSTB16 ANCHOR
 AT CORNERS WHERE TWO SHEAR WALLS SHARE HOLDOWN POST, ONE OF THE HOLDOWNS COULD BE ELEMINTED



ANCHOR BOLT NOTE:

- ALL PARAMETER FOOTING SILL PLATES SHALL HAVE 1/2" ANCHOR BOLTS EMBEDDED 7" MINIMUM AND SPACED AT 6 FEET O.C. MAX UNLESS NOTED OTHERWISE ON SHEAR WALL SCHEDULE.
- BOLTS SHALL BE A MAXIMUM OF 12" FROM SILL ENDS AND SPLICES WITH A MINIMUM OF 2 BOLTS PER SPLICE.
- USE 3" X 3" X 0.228" THICK FLAT PLATE WASHERS WITH 1/2" MAXIMUM EDGE DISTANCE FROM SHEATHING AT EACH ANCHOR BOLT.
- IF THE FOUNDATION WAS NOT POURED MONOLITHICALLY, MINIMUM EMBEDMENT REQUIREMENT SHOULD BE APPLIED TO THE FIRST POUR OR PLACE VERTICAL DOWEL PER ENGINEER RECOMMENDATION OR ADD VERTICAL #4 DOWELS AT 16" OC WITH 12" MINIMUM EMBEDMENT.

FRAMING SCHEDULE	
MEMBER DESCRITION	SPECIFICATION
Garage Header BM1	1 piece(s) 6 x 10 DF No.1
Garage Header BM2	1 piece(s) 4 x 8 DF No.2
Headers 8ft Slider HDR	1 piece(s) 6 x 8 DF No.1
Headers up to 8ft HDR	1 piece(s) 4 x 8 DF No.2

NOTES:
 P2 - 2-2x TRIMMER POST.

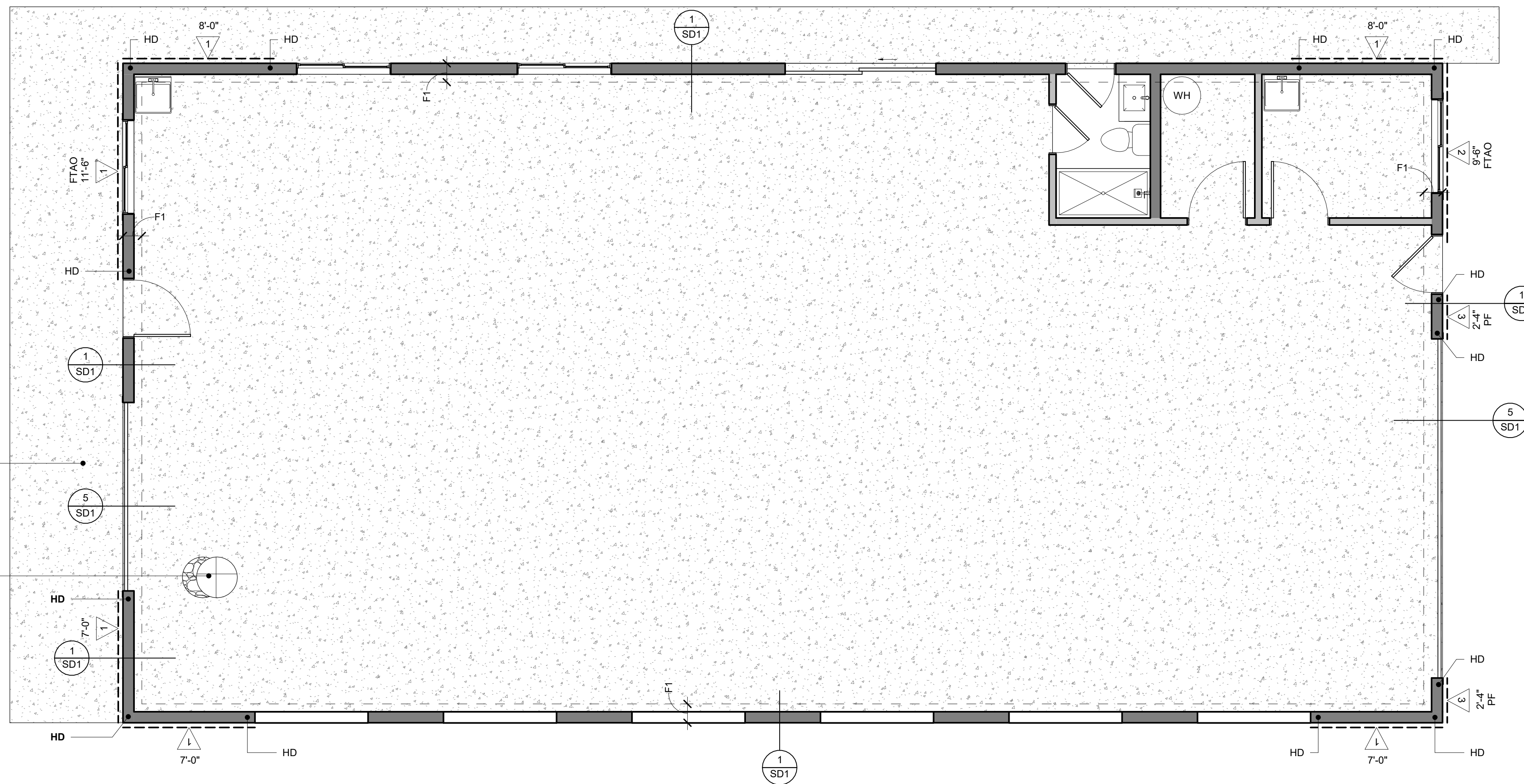
TRUSS NOTES

- B. ALL TRUSS CONNECTIONS ARE AS FOLLOWS UNO ON PLAN OR TRUSS MFR LAYOUTS:

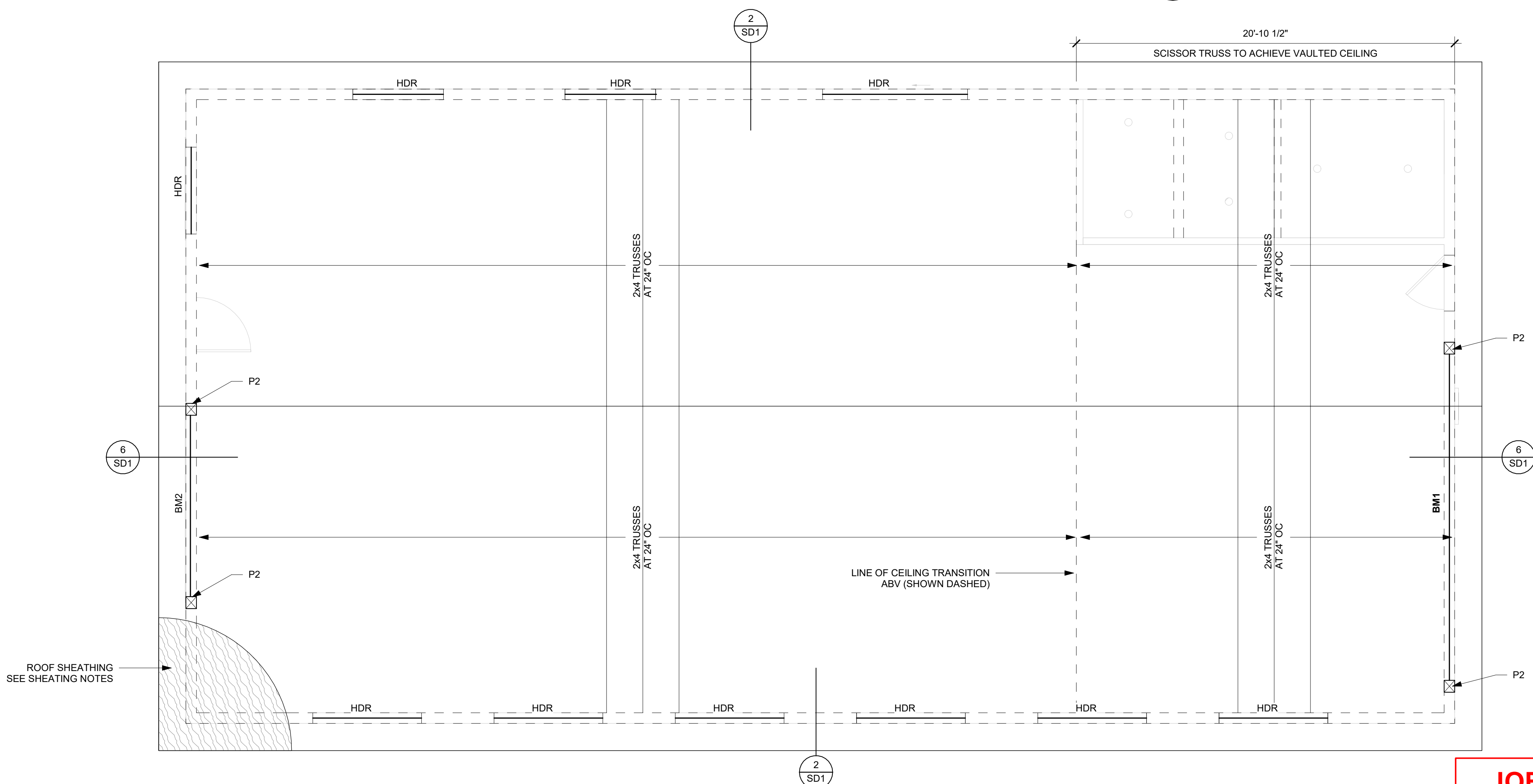
TRUSS TYPE	CONNECTION
SINGLE PLY NON-GIRDER W/ MAX SPAN OF 8' - 0"	LUS24, HANGER
SINGLE PLY W/SPAN GREATER THAN 8'-0"	HUS26, HANGER
SINGLE PLY GIRDER	HUS26, HANGER
TWO PLY GIRDERS	HGUS26-2 HANGER
THREE PLY GIRDERS	HGUS28-3 HANGER
- C. ALL SINGLE-PLY TRUSSES TO HAVE SIMPSON HI OR H2.5A CLIPS @ ALL TOP PLATE OR DROPPED BEAM BEARING POINTS.
- D. ALL MULT I-PLY TRUSSES TO HAVE SIMPSON LGT CLIPS TO FIT NO. OF PLYS @ ALL TOP PLATE OR DROPPED BEAM BEARING POINTS.

SLAB 'C'

SLAB 'B'
 6MIL VAPOR BARRIER REQUIRED UNDER SLAB FOR CONDITIONED SPACES



2 FOUNDATION PLAN
 1/4" = 1'-0"



1 APPROVED FRAMING PLAN
 By Donovan Doyon at 10:20 am, Mar 10, 2023

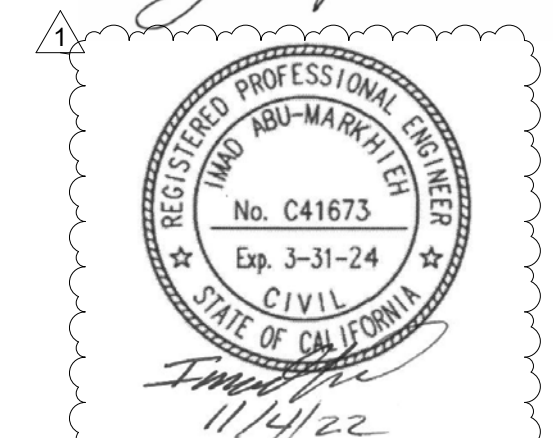
JOB
 03/10/2023 10:19 am

Redwood ADU
 Built in California



SIGNATURE:

[Handwritten Signature]



NEW DETACHED GARAGE
 ADDRESS: 4205 NEW YORK AVE
 FAIR OAKS, CA 95628
 APN: 242-0172-007-0000

PROJECT INFO:

NO.	DESCRIPTION	DATE

PERMIT SET

DRAWING TITLE:
FOUNDATION AND FRAMING PLAN
 DATE: 03.06.2023
 DRAWN BY: MJH
 SCALE: AS SHOWN
 SHEET #:

A2.4

GENERAL REQUIREMENTS

- Work performed shall comply with the following:
- These General Requirements unless otherwise noted on plans or specifications.
- Building Code - CBC 2019
- All applicable local, State and Federal Codes, Ordinances, Laws, regulations and Protective Covenants governing the site of work.
- Standard Specifications of ASTM as noted herein and as required by the Building Code.
- All work needs to be performed by qualified and experienced contractors familiar with this type of project.
- In case of conflict, the more stringent requirement shall govern.
- On site verification of all dimensions and conditions shall be the responsibility of the contractor and sub-contractors. Noted dimensions take precedence over scale of drawings.
- Engineer or architect of record is to be notified immediately by the contractor should any question arise or any discrepancy be found pertaining to the working drawings and/or specifications.
- No deviations from these requirements and structural details shall be made without the written approval of E.O.R.. Approval by the inspector does not constitute authority to deviate from plans or specifications.

DESIGN CRITERIA

DESIGN IS IN CONFORMANCE WITH THE 2019 CALIFORNIA BUILDING CODE WITH THE FOLLOWING SITE SPECIFIC CRITERIA.

A. FLOOR AND ROOF LIVE LOADS.

- ROOF 20 PSF
- FLOOR 40 PSF

B. SNOW LOAD.

- THE GROUND SNOW (PG) 0 PSF

C. WIND LOAD

- DESIGN WIND SPEED 95 MPH
- ASD DESIGN WIND SPEED 73.6 MPH
- WIND EXPOSURE CATEGORY C
- RISK CATEGORY CATEGORY II

D. SEISMIC LOAD.

- SEISMIC DESIGN CATEGORY CATEGORY D
 - $S_s = 0.444g$ $S_1 = 0.221g$ $R = 6.5$
 - $S_a = 0.428g$ $S_m = 0.641g$ $C_s = 0.070$
- SITE SOIL CLASS CLASS D
- IMPORTANCE I
- ANALYSIS EQUIVALENT LATERAL

E. FOUNDATION.

- NO FOUNDATION REPORT
- DESIGN LOAD-BEARING VALUES OF SOILS = 1500 PSF.

STRUCTURAL WOOD

MINIMUM QUALITY

- All structural wood shall be of Douglas Fir Larch species, (19% maximum moisture content at the time of construction U.N.O.).
- All machine bolts shall conform to ASTM A307. Holes for bolts should be drilled 1/16" larger than bolt diameter.
- For non-shear wall applications, round washers shall be used on all bolts and should conform with ANSI/ASME B 18.22.1. Use min. 1 3/8" ϕ x 7/64" thick washer for 1/2" ϕ bolt, 1 3/4" ϕ x 9/64" thick washer for 5/8" ϕ bolt and 2 1/2" ϕ x 11/64" thick washer for 1" ϕ bolt. U.N.O.
- All nails shall be sinker nails and staggered U.N.O., except as shown in Nailing Schedule.
- Adhesive used to attach floor sheathing to framing elements shall conform with APA specification AFG-01.
- Manufactured hardware specified on the drawings are to be Simpson Strong Tie (Unless specifically authorized in writing by E.O.R.. Follow all manufacturer's requirements & recommendations for installation & handling of the product.
- LUMBER GRADES (U.N.O.)
 - 6x & 8x posts / beams / headers: DFL #1
 - 4x posts / beams / headers: DFL #2
 - 2x joists / rafters: DFL #2
 - Studs: D.F.L. Stud Grade (up to 9'-0"), DFL #2 (taller than 9'-0")
 - Top plates & Mud sills: DFL construction grade or better
 - See structural wood note #11 for additional mud sill requirements

The following beams/headers/rafters can be from any manufacturer with current approved ICC evaluation report with the following mechanical properties:

- a. LVL BEAMS DOUGLAS FIR 2.0E, 5G+50, E=2000000 PSI, Fb=2600 PSI, Fv=285 PSI
- b. PSL BEAMS DOUGLAS FIR 2.2E, 5G+50, E=2200000 PSI, Fb=2900 PSI, Fv=290 PSI

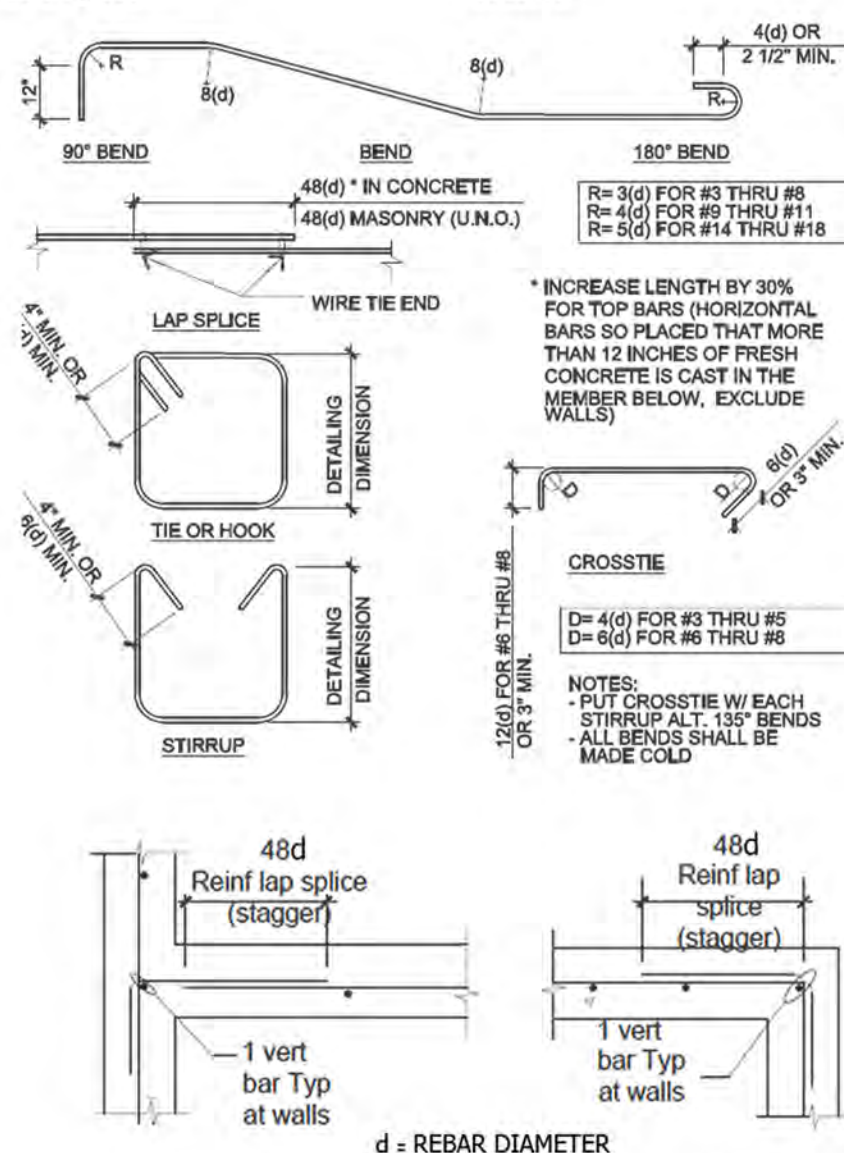
8. TYPICAL FLOOR SHEATHING
23/32" APA rated Sturd-I-Floor T&G Exp I with min. span rating of 24" o.c. Refer to NER 108 for installation and conditions of use.
B.N.:10d common nails at 6" o.c.
E.N.:10d common nails at 6" o.c.
F.N.:10d common nails at 12" o.c.

- TYPICAL ROOF SHEATHING
15/32" APA rated sheathing Exp 1 with a min. panel index of 32/16. Refer to NER 108 for installation and conditions of use.
B.N.:8d common nail at 6" o.c.
E.N.:8d common nail at 6" o.c.
F.N.:8d common nail at 12" o.c.
*Note: All structural rated panels must be stamped by one of the following approved agencies, APA, PFS/TECO or Pittsburg.
- All framing, bracing, nailing, notching, drilling or boring shall be in accordance with Building Code unless more stringent requirements are specified or required by the local jurisdiction.
 - Top plates of all wood stud walls to consist of (2) 2x's the same width as the studs U.N.O. Top plates shall lap a min. of 48" and be spliced with not less than 6-16d nails spaced not more than 12" o.c.
 - Fasteners in contact with preservative treated lumber and fire retardant treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Exception: Plain carbon steel fasteners in steel/dot and zinc borate preservative-treated wood in an interior, dry environment shall be permitted.
 - Stud walls perpendicular to a concrete or masonry wall shall be bolted to the concrete or masonry wall with 5/8" diameter x 8" A307 bolts at top, mid-height and bottom.
 - All wood exposed to weather conditions must be pressure treated with hot dipped galvanized connectors as specified in note 11.
 - Conventional light framed construction requirements of chapter 23 should be followed as required.
 - All ledgers shall be spliced with ST22 strap, unless noted otherwise.
 - Provide post/multiple studs at lower floor under post/multiple studs above. Each post/stud shall be fastened by Gypsum Wall Board w/ 5d cooler nails @ 7" o.c. U.N.O. on plan. Provide full width and depth compression block between floors at such locations.

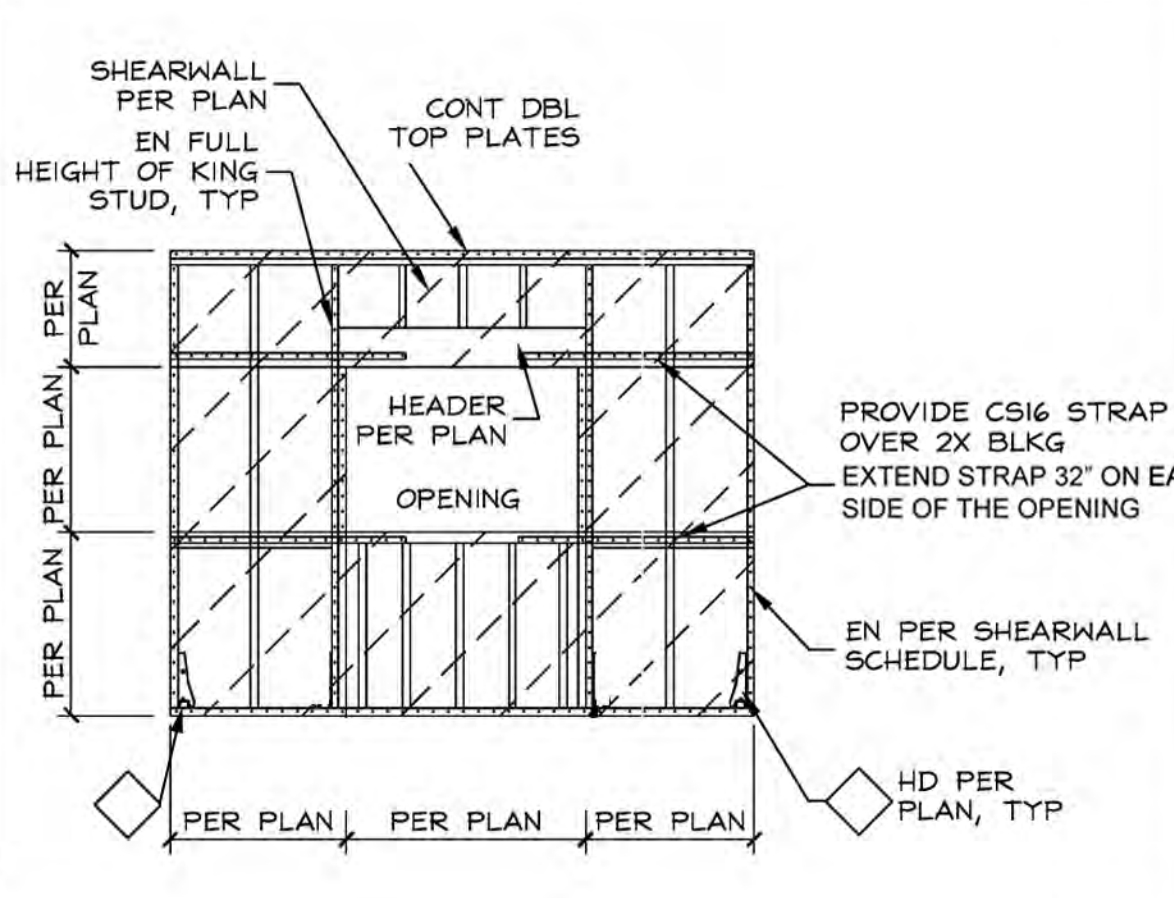
REINFORCED CONCRETE

GENERAL

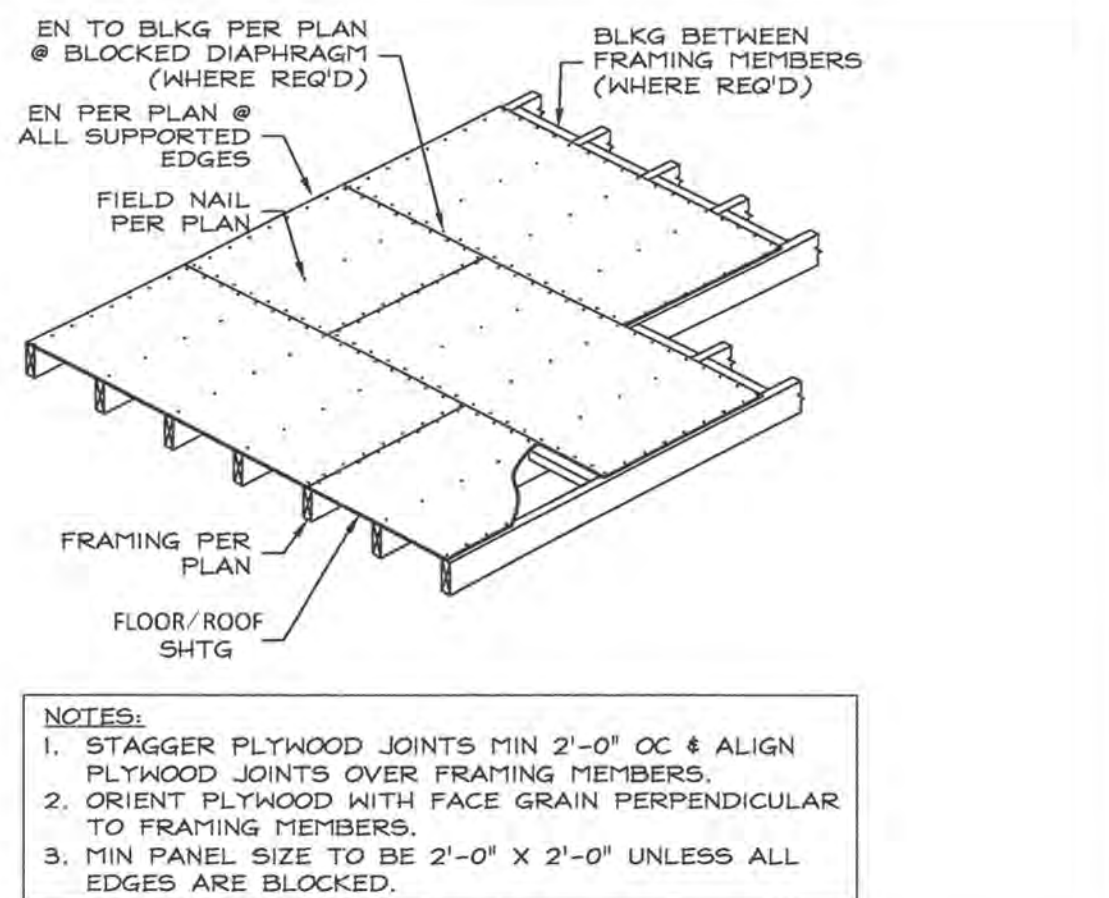
- All reinforced concrete materials and construction shall conform to Building Code, chapter 19.
- Cement shall conform to Section 1903 of Building Code and shall correspond to that on which the selection of concrete proportions were based.
- Concrete aggregates shall conform to Building Code Section 1903.
- Portland cement shall be Type I or conforming to ASTM C150. For concrete in contact with soil containing sulfate $So_2 \geq 0.2\%$ by weight use Type II cement, containing sulfate $So_2 \geq 0.2\%$ by weight use Type V cement. Weight percentage of So_2 shall be per soils report. Refer to Section 1904 of the Building Code for special exposure conditions as required by soils engineer & see corrosion engineer's recommendations for concrete exposed to corrosive elements.
- Reinforcing steel shall conform to ASTM A615, Grade 60 for all sizes.
- Dowels shall be equal in size and spacing.
- STRENGTH
The (28 days) concrete compressive strength, f'_c , shall be min 2500 psi U.N.O.
- Special inspection is required for concrete with $f'_c > 2500$ psi
- All reinforcing, dowels, holdowns, and other inserts shall be secured in position and approved by the local building official prior to the pouring of any concrete.
- Min. concrete cover for reinforcing:
 - a- Concrete, placed against earth not formed - 3" - 2"
 - b- Concrete formed or troweled - 1 1/2" - 1"
 - c- Walls and curbs - 1 1/2" - 1"
 - d- Slab on grade - at center



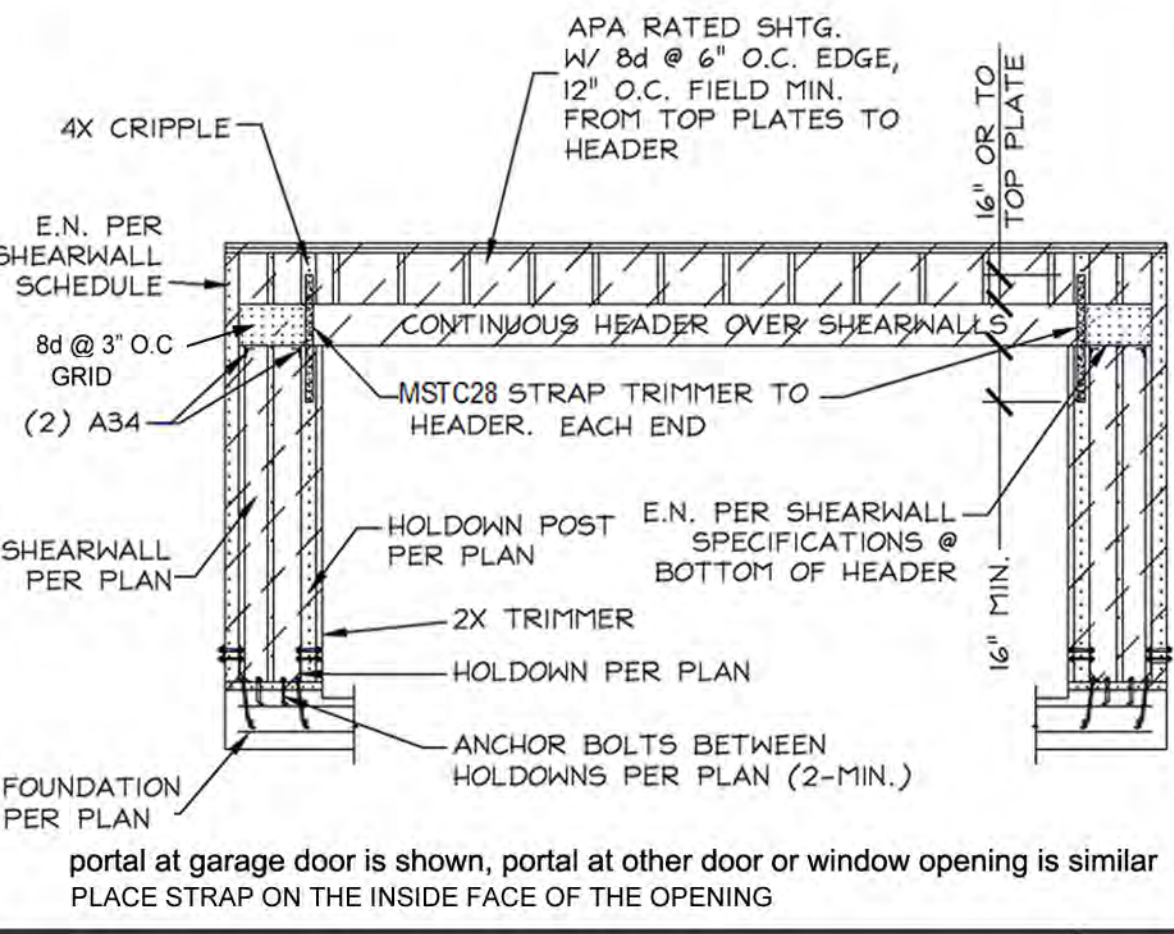
TYP. REINFORCING DETAILS



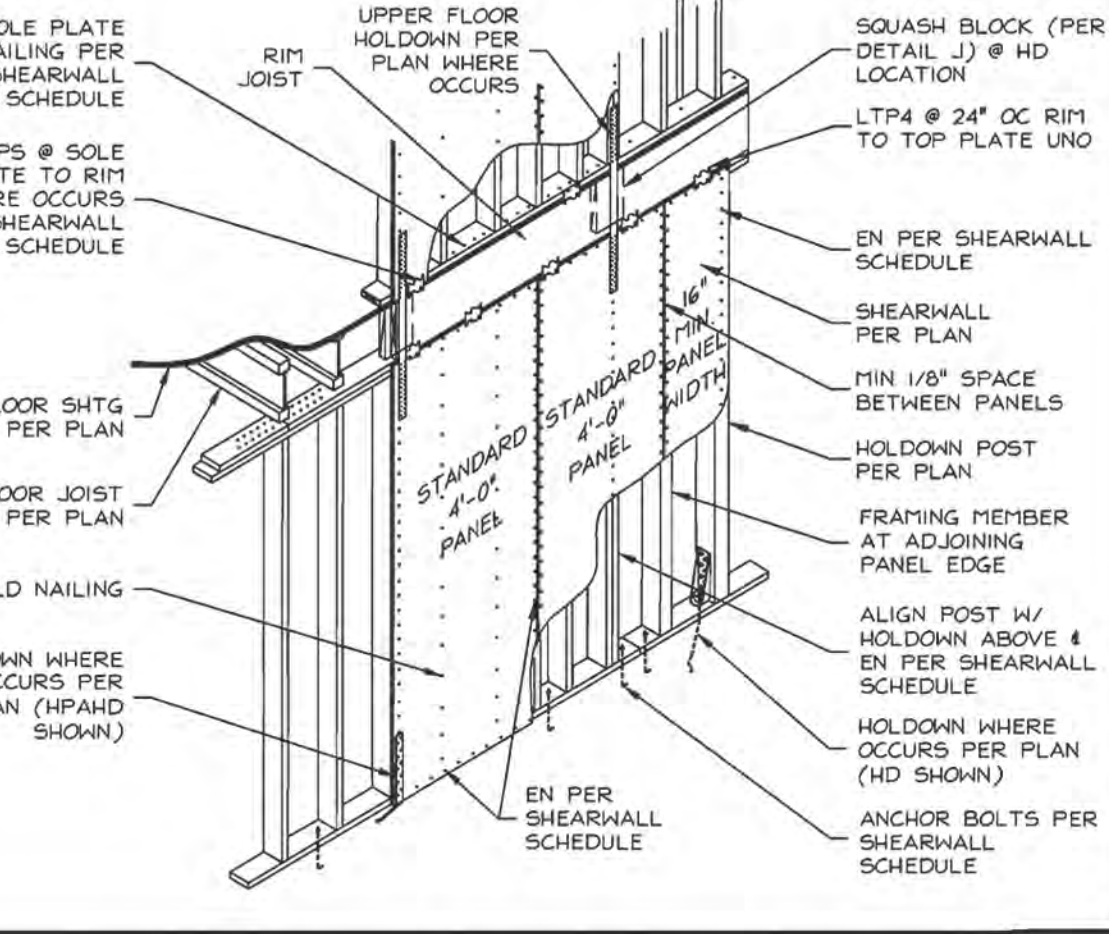
SHEAR WALL WITH OPENING (FTAO) 8



TYPICAL DIAPHRAGM NAILING 4



PORTAL FRAMING 7



TYPICAL DIAPHRAGM NAILING 3

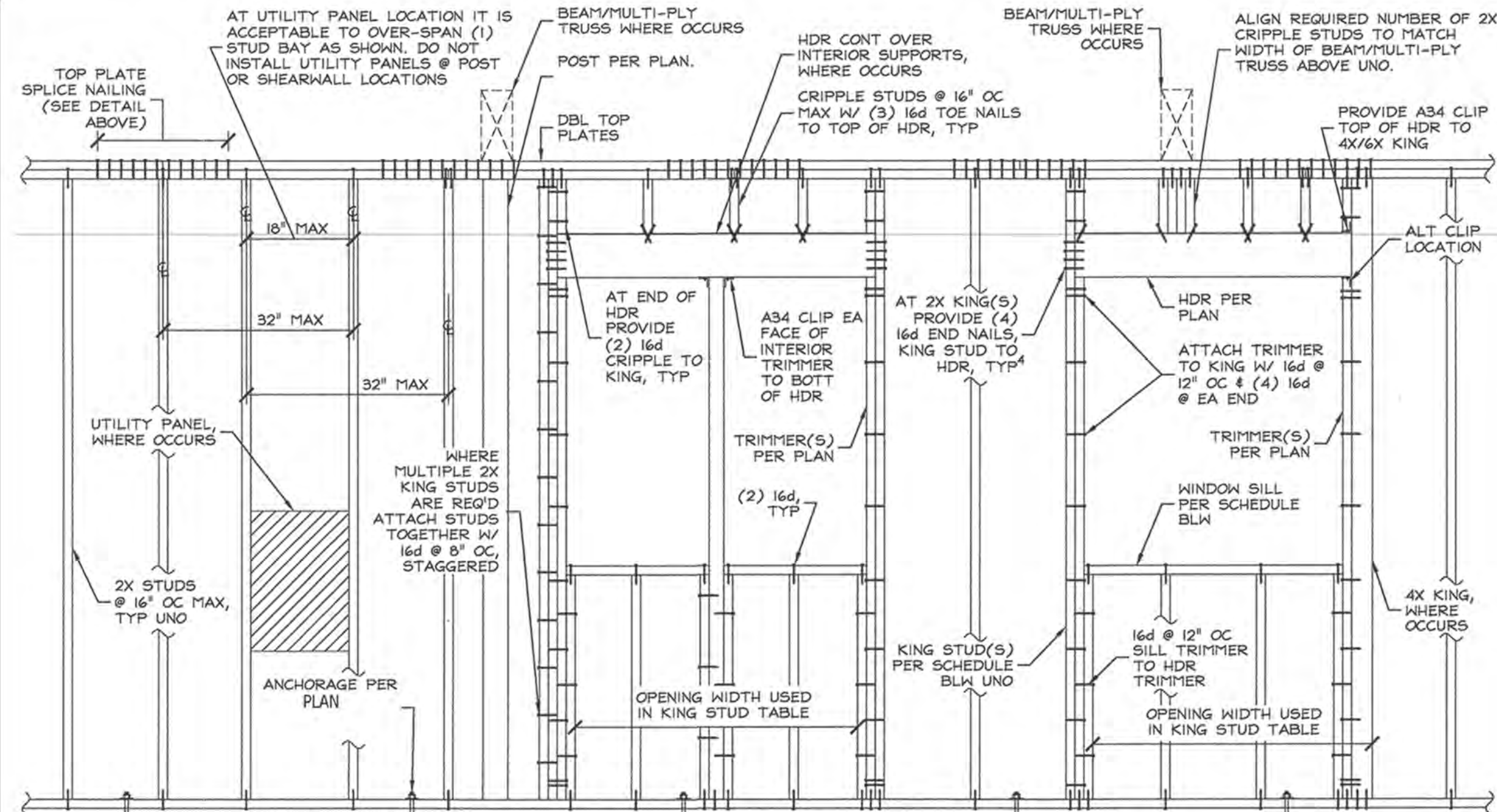
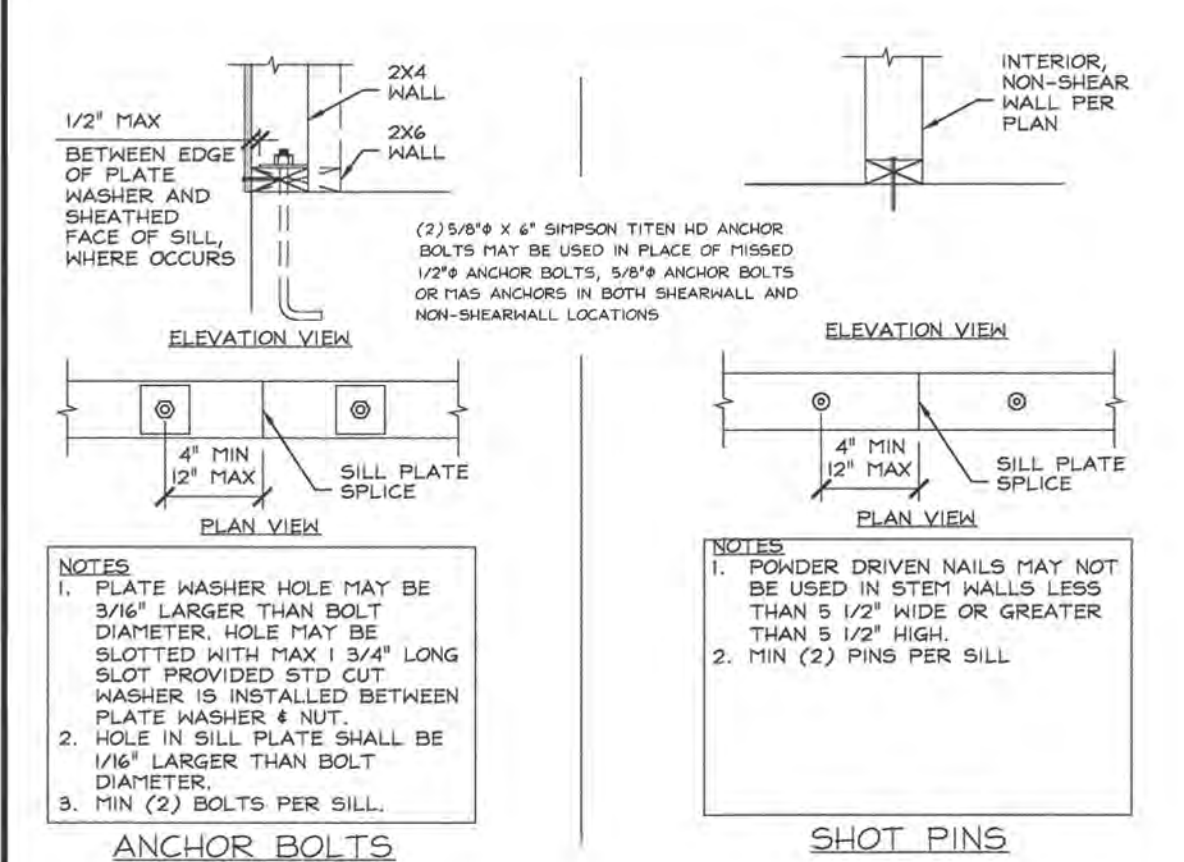
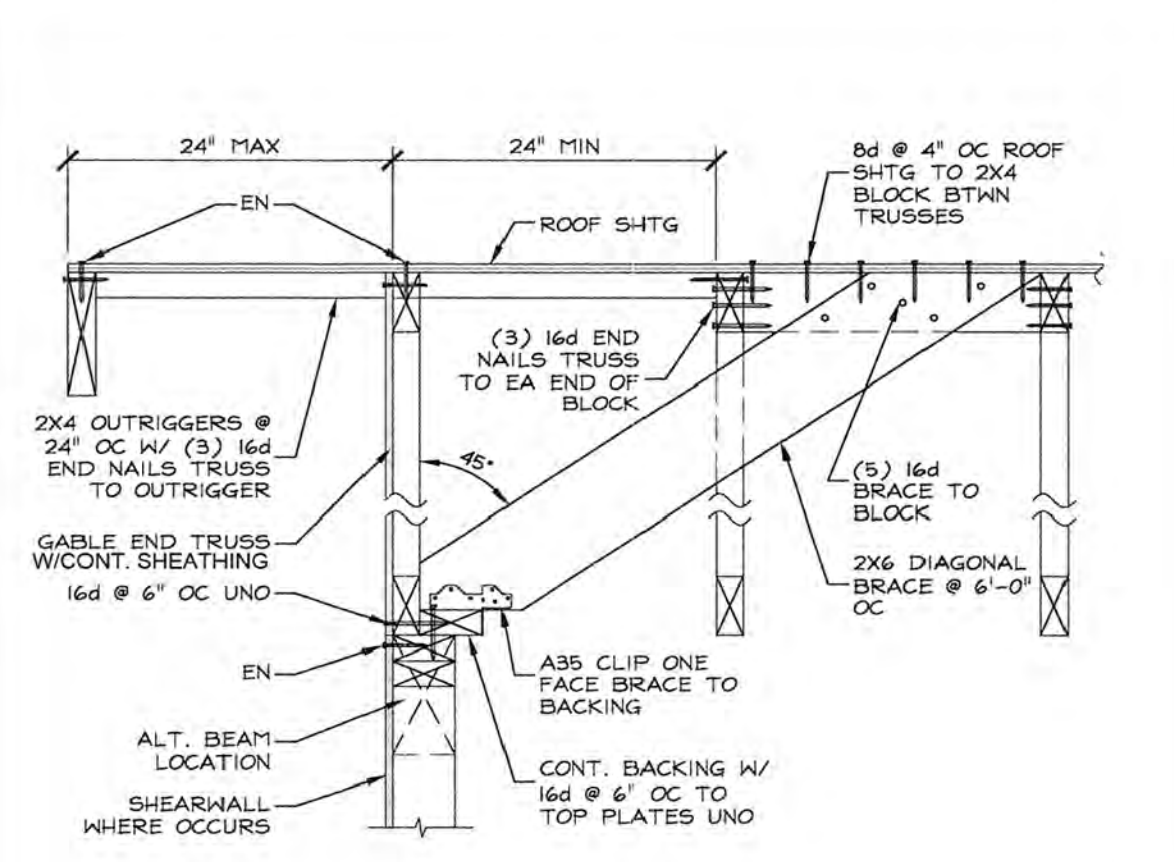


PLATE HEIGHT	STANDARD KING STUDS AT EXTERIOR WALLS						NON-BEARING WALL HEADER SCHEDULE*						WINDOW SILLS			
	3'-0"	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"	3'-0"	6'-0"	8'-0"	12'-0"	16'-0"	WALL SIZE	OPENING WIDTH	6'-0"	8'-0"	
8'-1 1/2"	2X	2X	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(4) 2X OR 4X8	2X4	4X4 OR (2) 2X4	4X6	4X8	4X10	4" WALL	2X	2X	(2) 2X	
9'-1 1/2"	2X	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(5) 2X OR 4X8	(6) 2X OR 4X10	2X6	4X6	4X8	4X10	4X12	6" WALL	2X6	2X	(2) 2X	
10'-1 1/2"	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(5) 2X OR 4X8	(6) 2X OR 4X10	(6) 2X OR 4X12	2X8	4X8	4X10	4X12	4X14	FRAMING NOTES:				
UP TO 10'-1 1/2"	2X	2X	2X	2X	2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	1. FOR BACK TO BACK OPENINGS W/ A FULL-HEIGHT CENTER KING, SIZE FOR SUM OF OPENING WIDTHS. (EXAMPLE: (2) 3'-0" OPENINGS - KING FOR A 6'-0" OPENING)				
12'-1 1/2"	2X	2X	2X	2X	2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	(2) 2X	2. PROVIDE (1) 2X TRIMMER & (2) 2X KING STUDS MIN @ GARAGE DOOR & PORCH HEADERS, UNO				
REDUCED KING STUDS AT WALLS W/ L/240 DEFLECTION CRITERIA												3. AT INTERIOR & GARAGE/HOUSE WALLS PROVIDE (1) 2X KING STUD AT OPENINGS UP TO 12' & (2) 2X KINGS OPENINGS UP TO 16', UNO, W/ (2) 16d END NAILS KING STUD TO HEADER.				
8'-1 1/2"	2X	2X	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(4) 2X OR 4X8	2X4	4X4 OR (2) 2X4	4X6	4X8	4X10	4" WALL	2X	2X	(2) 2X	
9'-1 1/2"	2X	(2) 2X	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(4) 2X OR 4X8	2X6	4X6	4X8	4X10	4X12	6" WALL	2X6	2X	(2) 2X	
10'-1 1/2"	2X	(2) 2X	(2) 2X	(3) 2X OR 4X4	(4) 2X OR 4X6	(4) 2X OR 4X8	2X8	4X8	4X10	4X12	4X14	FRAMING NOTES:				
												1. L890 W/ (2) 16d @ EA BLOCK. DO NOT CONNECT TO DOUBLE TOP PLATE				

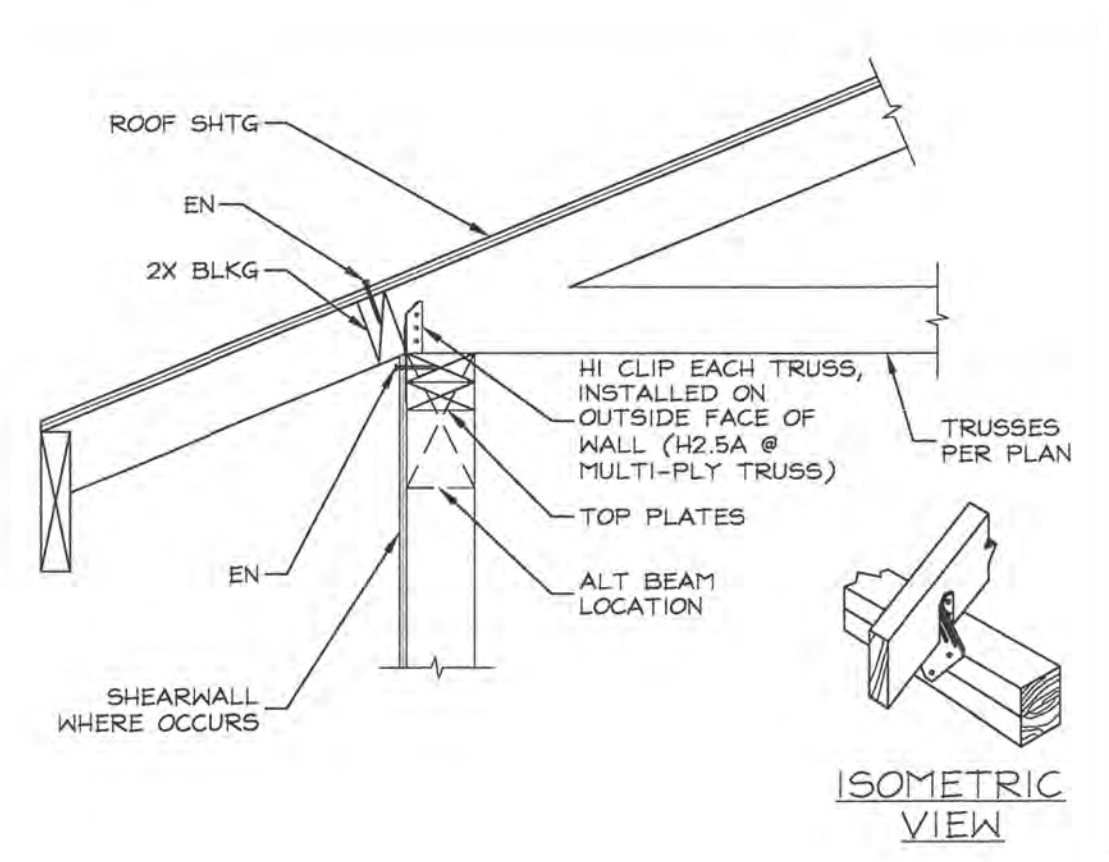
TYPICAL WALL FRAMING



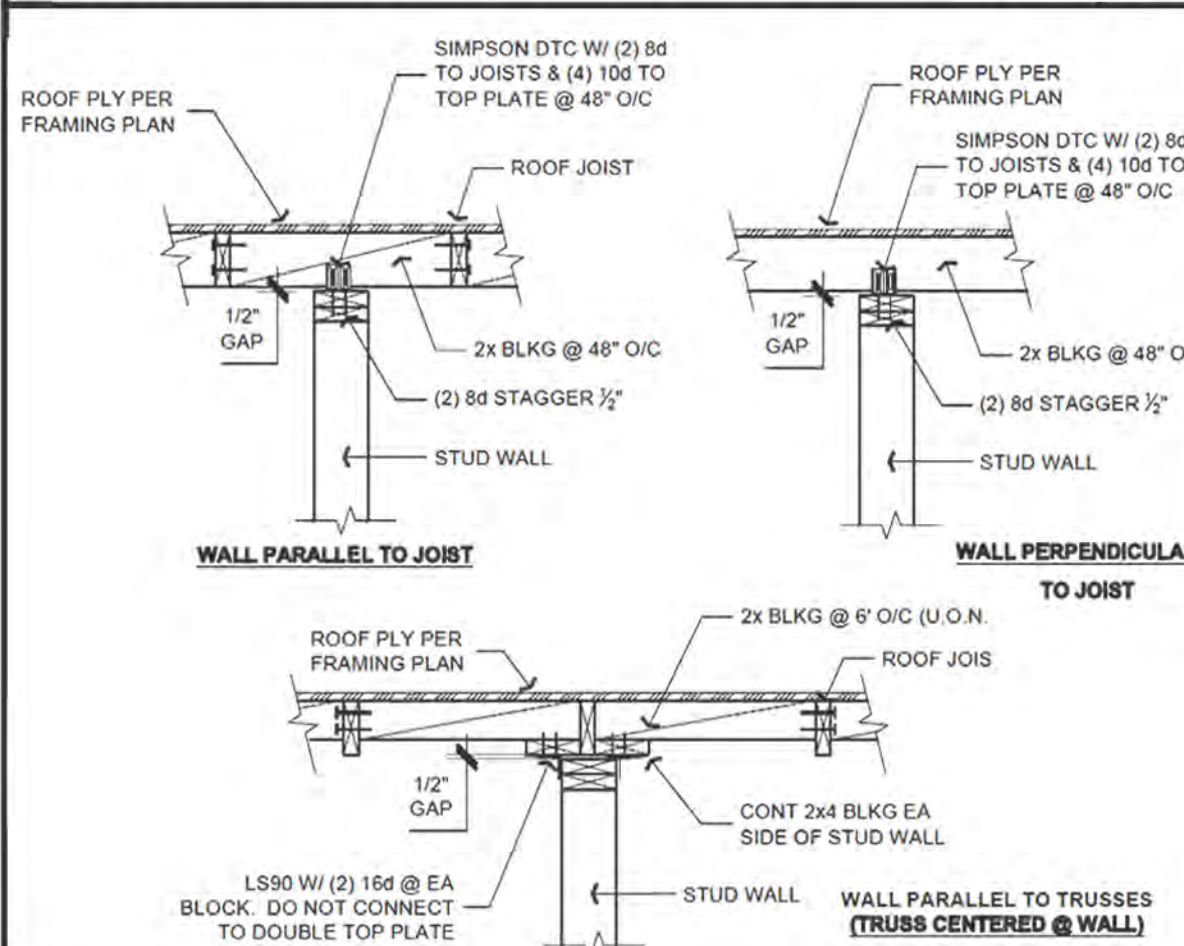
ANCHOR PLACEMENT & REQUIREMENTS 10



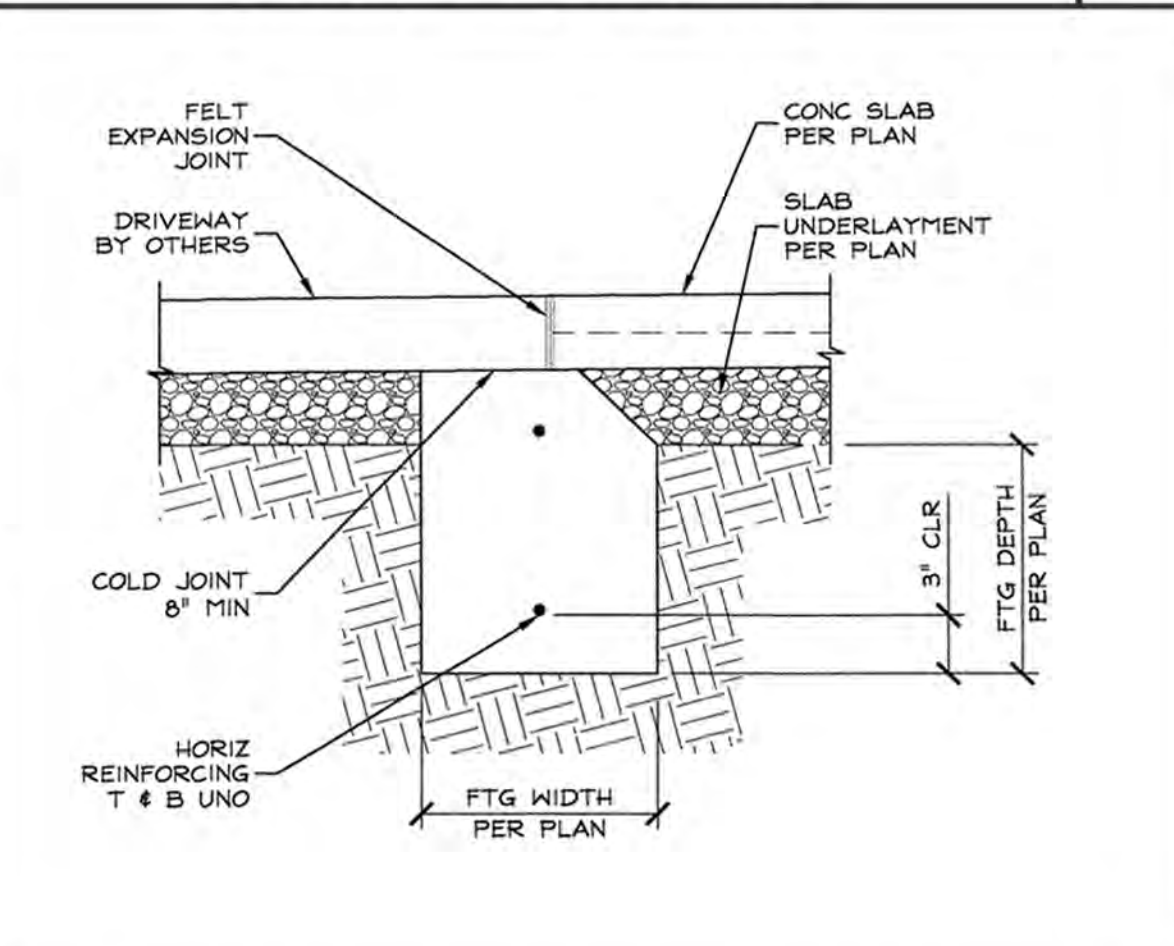
GABLE END BRACE 6



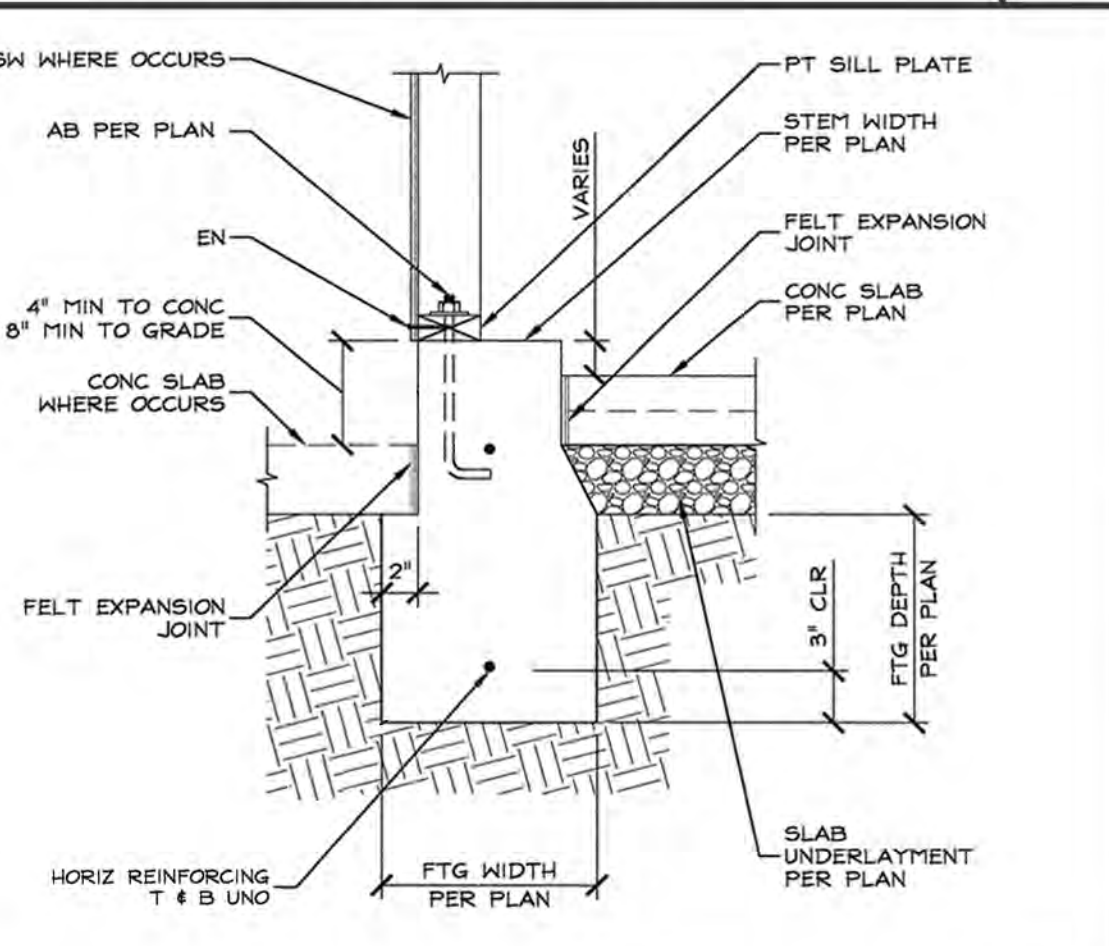
H1 HURRICANE TIE 2



FRAMING TO NON-BEARING WALLS 9



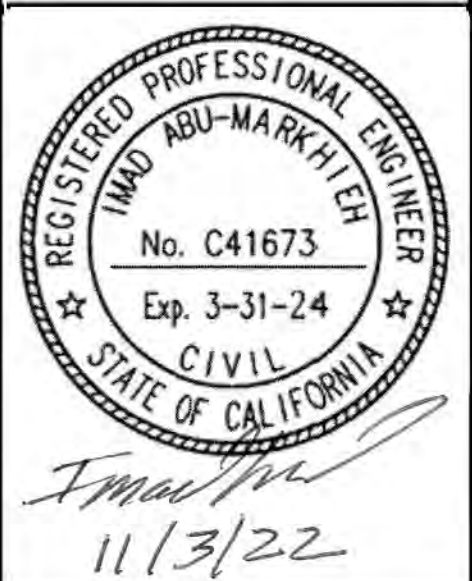
CONT FOOTING AT GARAGE DOOR 5



PERIMETER FOOTING W/STEM 1

I MAD ABU-MARKHIEH

CIVIL AND STRUCTURAL ENGINEERING
BODEGA CT 3590
SACRAMENTO, CA 95864
TEL: 916-468-3768
markhieh@gmail.com



Design



ADDRESS:

NEW DETACHED GARAGE
4205 NEW YORK AVE
FAIR OAKS, CA 95628

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NUMBER:
N/A

SHEET NAME:

STRUCTURE DETAILS

SHEET NUMBER:
SD1

