

FOUNDATION GENERAL NOTES:

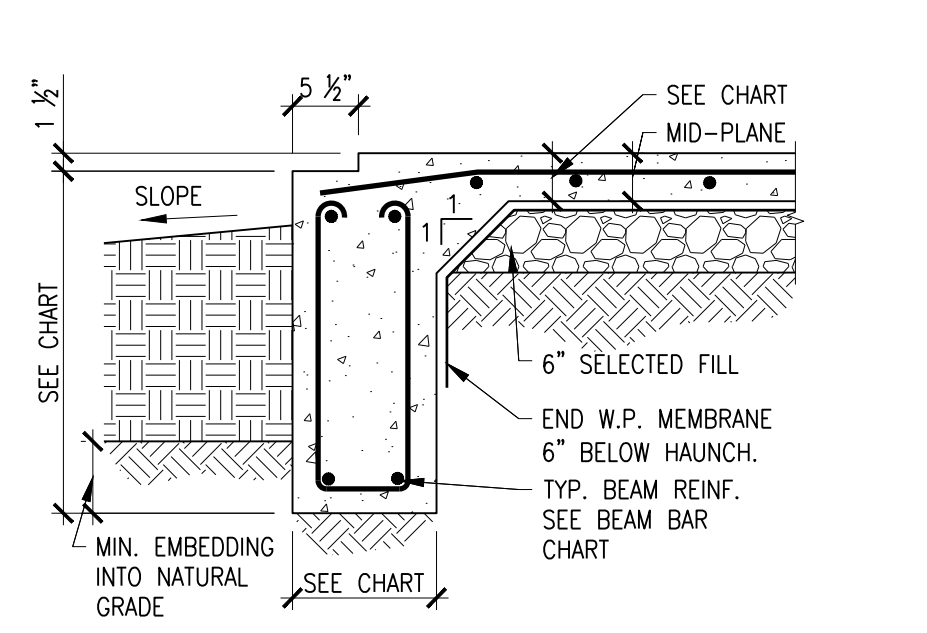
1. GENERAL:
- A. THIS FOUNDATION HAS BEEN DESIGNED AS A SOIL SUPPORTED STIFFENED GRID TYPE BEAM AND SLAB FOUNDATION; AND AS SUCH, WILL MOVE WITH THE SOILS UPON WHICH IT BEARS.
- B. CONTRACTOR IS TO VERIFY ALL DIMENSIONS, DROP AREAS, FLOOR PENETRATIONS, AND BLOCK OUT LOCATIONS WITH THE ARCHITECT'S FLOOR PLAN.
- C. CONTRACTOR SHALL VERIFY ANY DEVIATION FROM THE INFORMATION ON THIS FOUNDATION DESIGN WITH ENGINEER OF RECORD.
- D. THE CONTRACTOR SHALL NOT PLACE ANY CONCRETE UNTIL ENGINEER OF RECORD HAS CONDUCTED A PRE-POUR INSPECTION AND HAS GIVEN APPROVAL TO PLACE THE CONCRETE.
- E. CONTRACTOR IS TO CALL ENGINEER OF RECORD IF FOUNDATION REQUIRES MULTIPLE CONCRETE POURS OF THREE (3) OR MORE.
- F. CONTRACTOR SHALL FURNISH THE LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO PERFORM ALL WORK SHOWN ON PLANS AND SPECIFICATIONS.
- G. IT IS THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR TO NOTIFY THE HOMEOWNER OF THE IMPORTANCE OF ITEMS 2C AND 2D BELOW AND OF THE LIMITATIONS AS EXPRESSED IN ITEM NO. 1 ABOVE. NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED.
2. FOUNDATION SITE PREPARATION & FINISH:
- A. AREA OF FOUNDATION IS TO BE CLEARED AND GRUBBED OF ALL DELETERIOUS AND ORGANIC MATERIALS DOWN TO A SOLID BASE.
- B. PROVIDE A VAPOR BARRIER BENEATH THE FLOOR SLAB BY USING A WATERPROOFING MEMBRANE OF 10 MIL POLYETHYLENE. THE MEMBRANE SHALL BE TAPED AT ALL SPLICES AND TEARS. THE MEMBRANE SHALL EXTEND TO WITHIN 6-INCHES OF THE BOTTOM OF THE BEAM TRENCHES.
- C. POSITIVE DRAINAGE AWAY FROM THE PERIMETER OF THE FINISHED FOUNDATION MUST BE PROVIDED. THE TOP OF THE FOUNDATION SLAB SHOULD BE A MINIMUM OF 8-INCHES ABOVE THE FINISHED GRADE. THE GROUND ADJACENT TO THE FOUNDATION SHOULD SLOPE AWAY A MINIMUM OF 6-INCHES IN THE FIRST 5-FEET.
- D. ANY TREES PLANTED AFTER PLACEMENT OF THE FOUNDATION SHOULD BE PLANTED NO CLOSER TO THE FOUNDATION THAN ONE-HALF THE POTENTIAL HEIGHT OF THE TREE.
- E. ALL AIR CONDITIONING CONDENSER DRAIN LINES SHOULD DISCHARGE A MINIMUM OF 5-FEET FROM THE PERIMETER OF THE FOUNDATION.
3. CONCRETE:
- A. CONCRETE TO BE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, AND SHALL BE IN ACCORDANCE ACI 301. CEMENT SHALL BE TYPE 1 AND FLY ASH (IF USED) SHALL BE MONEX RESOURCES CLASS C. IF FLY ASH IS USED, IT SHALL NOT EXCEED 20% OF THE TOTAL AMOUNT OF FLY ASH AND CEMENT USED BY WEIGHT. NO AIR ENTRAINMENT OR CALCIUM CHLORIDE SHALL BE USED. CONTRACTOR SHALL SATISFY HIMSELF THAT THE MIX DESIGN IS ACCEPTABLE FOR IT'S INTENDED PURPOSE.
- B. CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH ACI 302.1R. FINISH TOLERANCE SHALL BE IN ACCORDANCE WITH ACI 117. A MINIMUM SET OF TWO TEST CYLINDERS FOR 28-DAY COMPRESSIVE STRENGTH TESTS ARE RECOMMENDED TO BE PERFORMED IN ACCORDANCE WITH ASTM C42.
- C. PLACE 1/2" X 10" EMBEDMENT ANCHOR BOLTS FOR ALL SILL PLATES ON EXTERIOR WALLS NOT EXCEEDING 4-0" O.C. AND A MINIMUM OF 2 ANCHOR BOLTS PER WALL AND NOT FARTHER THAN 12-INCHES FROM WALL ENDS.
4. GRADE BEAMS:
- A. ALL GRADE BEAM DEPTHS MAY BE REDUCED WHEN BEARING ON SOLID UNFRAGMENTED ROCK. ROUGHEN THE ROCK SURFACE A MINIMUM OF 3" AND MAINTAIN A MINIMUM OF 8" ABOVE THE GRADE. FOR DOWNSLOPING EXTERIOR BEAMS MORE THAN 5% GRADE, REMOVE A 10" DIAMETER BOULDER EVERY 4' TO PROVIDE ADDITIONAL ROUGHNESS AND ENGAGEMENT TO THE HILL.
- B. FOR GRADE BEAMS WITH DEPTHS EQUAL TO OR IN EXCESS OF 36-INCHES, INCREASE THE AMOUNT OF REINFORCING STEEL BY ADDING TWO- #4 BARS HORIZONTALLY EVERY 18-INCHES OF VERTICAL. IF THE EXTERIOR GRADE BEAMS EXCEED 8-FEET IN DEPTH, SEE DETAIL 16 PER THIS DRAWING.
5. REINFORCING STEEL:
- A. REINFORCING BARS SHALL BE NEW BILLET STEEL, DEFORMED BARS, CONFORMING TO ASTM A615 GRADE 60.
- B. LAPS AND SPLICES PER TABLE 1 THIS SHEET
- C. ALL BARS TO BE SUPPORTED IN THE FORMS AND SLAB WITH CHAIRS OR WIRE BOLSTERS, AND SHALL BE TIED AT EVERY OTHER INTERSECTION.
- D. ALL BARS SHALL HAVE A MINIMUM CLEAR COVER OF 3-INCHES FROM THE BOTTOM AND SIDES OF THE BEAMS. SLAB REINFORCEMENT SHALL BE IN MID PLANE.
- E. CORNER REINFORCING BARS: TWO CORNER BARS AT EACH CORNER OF THE PERIMETER GRADE BEAM/WALL, AS PER DETAIL 14, AND FOUR CORNER BARS AT THE INTERSECTION OF ALL INTERIOR GRADE BEAMS WITH THE PERIMETER GRADE BEAM/WALL, AS PER DETAIL 13.
- F. STIRRUP ANCHOR HOOKS SHALL NEVER BE CUT WITHOUT THE AUTHORIZATION OF THE ENGINEER. IF STIRRUPS ARE TOO LONG, THEY MAY BE BENT IN THE DIRECTION OF THE BEAM.
6. CONSTRUCTION:
- A. FOR ALL SLAB DROPS GREATER THAN 36-INCHES, THE CONTRACTOR SHALL CONSTRUCT A FRENCH DRAIN SYSTEM OF CAPACITY SUFFICIENT TO INTERCEPT AND TRANSPORT WATER FROM BENEATH THE FOUNDATION TO A POINT AWAY FROM THE FOUNDATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH THE DIRECTION OF FLOW AND POINT OF DISCHARGE TO DAYLIGHT. DISCHARGE OUTLET TO BE A MINIMUM OF 5-FEET AWAY FROM FOUNDATION. SOLID WALL PIPE MAY BE USED OUTSIDE OF FOUNDATION. WRAP ALL PERFORATED PIPE WITH MIRAFI N-SERIES FILTER FABRIC.
- B. ALL FOUNDATIONS THAT ARE TO HAVE A FILL DEPTH GREATER THAN 2-FEET BELOW BOTTOM OF INTERIOR GRADE BEAM SHALL MEET ONE OF THE FOLLOWING:
1. INTERIOR GRADE BEAMS MAY BE DEEPENED TO MAINTAIN 2- FEET MAXIMUM DEPTH OF FILL BELOW BOTTOM OF BEAM. INTERMEDIATE BARS PER NOTE 4-B SHALL BE ADDED IF REQUIRED.
2. IF BEARING ON SOLID ROCK - 14-INCHES DIA. PIERS, FORMED WITH SONO-TUBES, SHALL BE PLACED AT ALL INTERIOR BEAM INTERSECTIONS. PIERS ARE TO BE REINFORCED WITH A MINIMUM OF FOUR-#4 VERTICAL BARS WITH #3 TIES @ 12-INCHES O.C. VERTICALLY. REFER TO DETAIL 15.
3. IF EARTH SUPPORTED - SELECT FILL EQUAL TO TXDOT NO. 2 BASE SHALL BE COMPACTED TO A MINIMUM 95-PERCENT MODIFIED PROCTOR PER ASTM D-1557. FILL IS TO BE PLACED IN 8-INCH LIFTS AND TESTED BY A SOILS TESTING LAB.
4. ALTERNATIVELY, IF EARTH SUPPORTED - CRUSHED LIMESTONE BASE FILL WITH 100% PASSING 1 1/2-INCH SIEVE, AND 0% PASSING NO. 4 SIEVE, CAN BE PLACED WITHOUT COMPACTION. BEFORE INSTALLATION OF BASE FILL, FILTER FABRIC SUCH AS MIRAFI N-SERIES IS TO BE PLACED OVER EXISTING EARTH.
- C. WHERE PIPES PASS THROUGH BEAMS, INCREASE BEAM SIZE AT PIPE PENETRATIONS TO MAINTAIN MINIMUM BEAM WIDTH AND HEIGHT. PLACEMENT OF OVERSIZED DIAMETER SLEEVES IS ALSO RECOMMENDED.
- D. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE SLAB PERIMETER DURING CONSTRUCTION.
- E. CONCRETE SHALL NOT BE PLACED ON SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR SEEPAGE, AND ALL BEARING SURFACES SHALL BE FREE OF LOOSE SOIL, PONDED WATER, AND DEBRIS PRIOR TO PLACING THE CONCRETE.

SOILS INFORMATION				
DESIGN LEVEL	SOIL TYPE	P.I.	BY	DATE
E	CLAY	---		

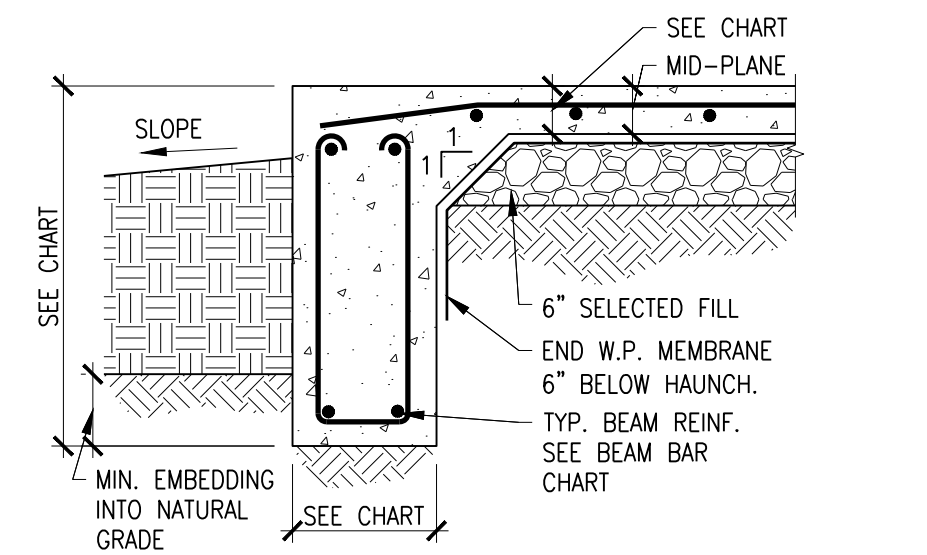
BEAM AND SLAB INFORMATION							
BEAM WIDTH	EXT. BEAM DEPTH	EXT. BEAM DEPTH IN GRADE	INT. BEAM DEPTH	BEAM BARS	STIRRUP EXT. BEAM	STIRRUP INT. BEAM	PAD BARS
12" MIN.	36" MIN.	12" MIN.	30" MIN.	2-#6 TOP 2-#6 BOT.	#3 @ 18" O.C.	#3 @ 18" O.C.	#3 @ 12" O.C.
							SLAB THICKNESS
							4"

TABLE 1 REBAR SPLICE DISTANCES (INCHES) FOR 3000 PSI CONCRETE			
BAR SIZE	BEAM TOP BARS	OTHER BARS	
3	22	17	
4	29	22	
5	36	28	
6	43	33	
7	63	48	
8	72	55	
9	81	62	

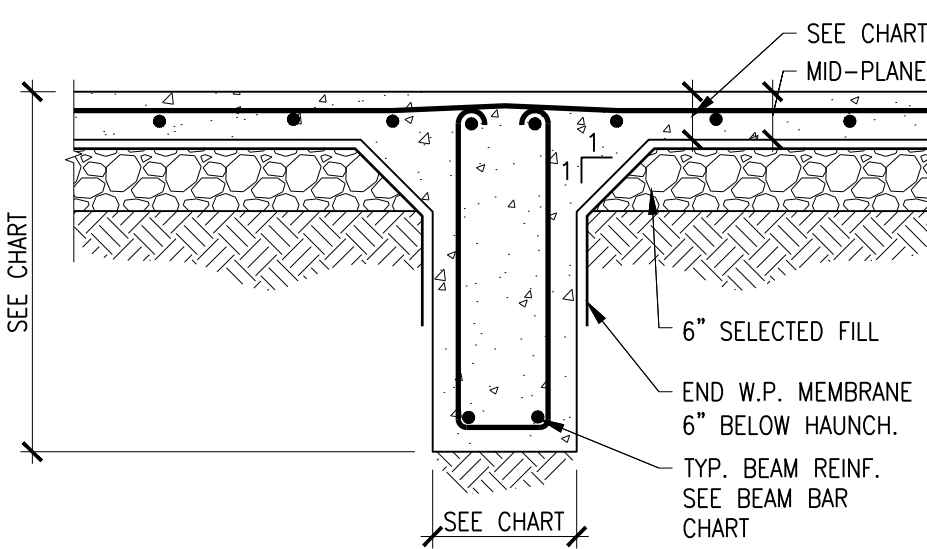
FOUNDATIONS ON EXPANSIVE CLAY SUBGRADES ARE SUBJECT DIFFERENTIAL SETTLEMENT AND MOVEMENT WITH CHANGES TO MOISTURE CONTENT OF THE SOILS UNDER THE FOUNDATION. THESE MOVEMENTS ARE EXPECTED TO STAY WITHIN INDUSTRY ACCEPTED RANGES. HOWEVER, SOIL IMPROVEMENT BY REMOVAL OF THE TOP 5' OF SOIL, TO 5' OUT FROM THE BUILDING PERIMETER AND REPLACING IT WITH LOW PLASTICITY SELECT FILL CAN MITIGATE SOME OF THE FOUNDATION MOVEMENT. THE DEPTH OF SOIL REPLACEMENT IS THE OWNER'S DECISION BASED ON AN EVALUATION OF THE RISK



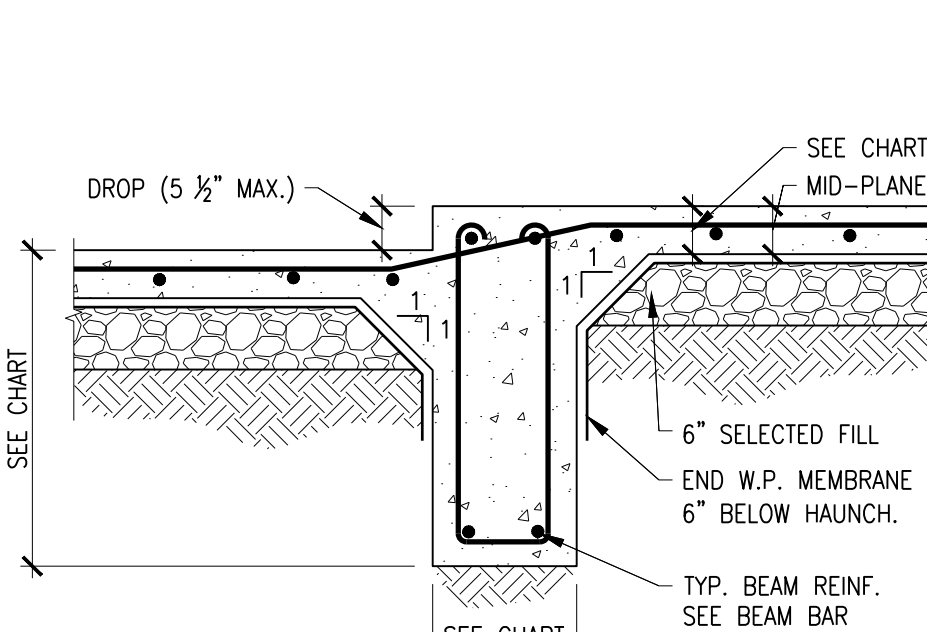
1 SECTION
EXTERIOR BEAM W/BRICK LUG



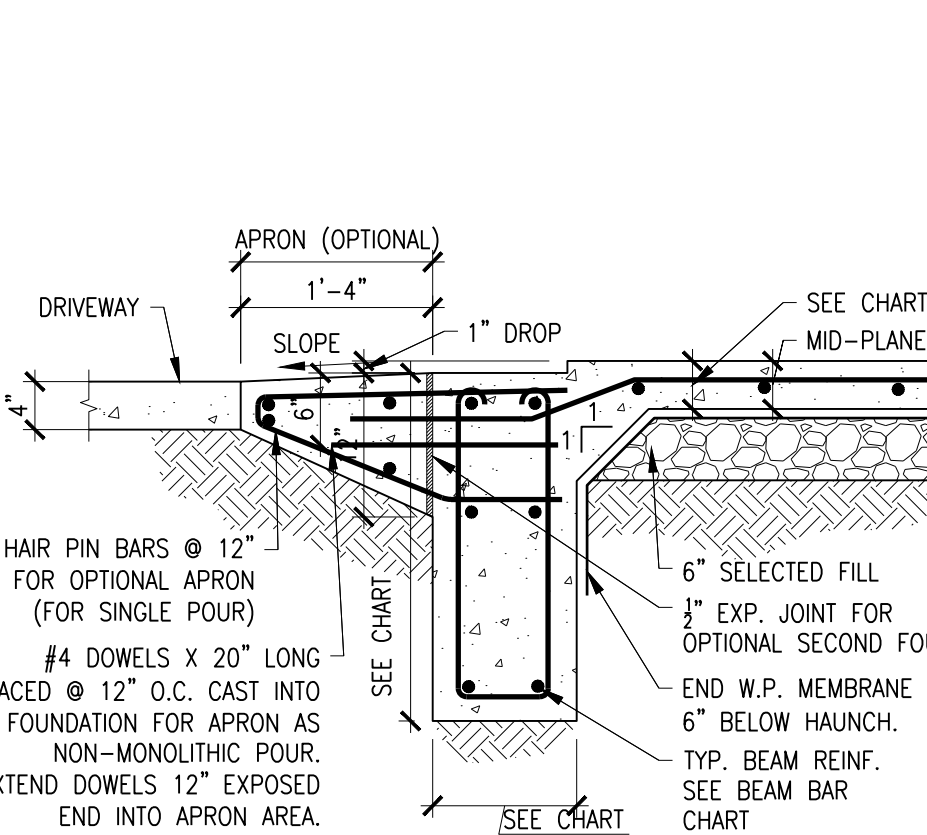
2 SECTION
EXTERIOR BEAM - NO BRICK LUG



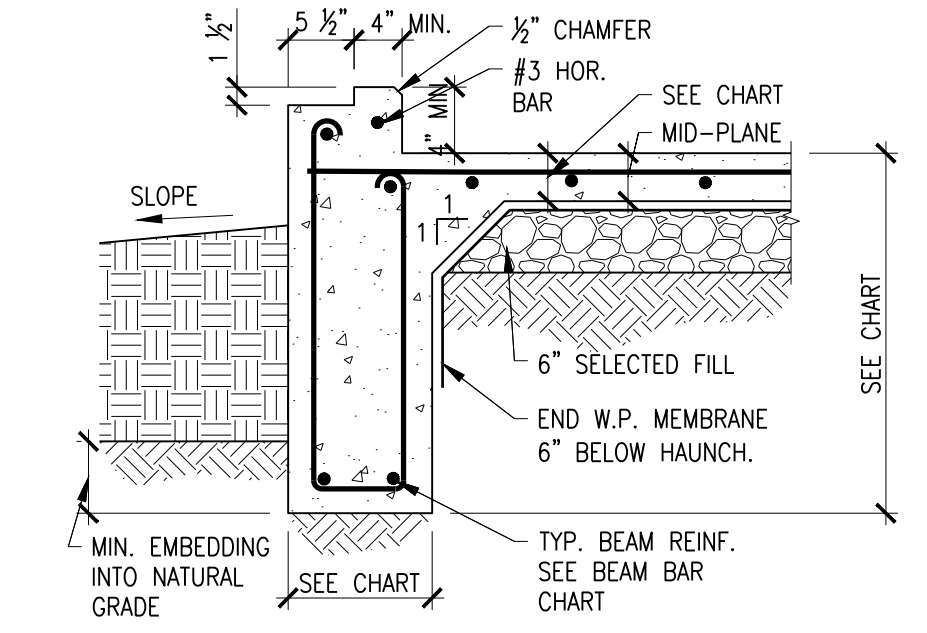
3 SECTION
TYPICAL INTERIOR BEAM DETAIL



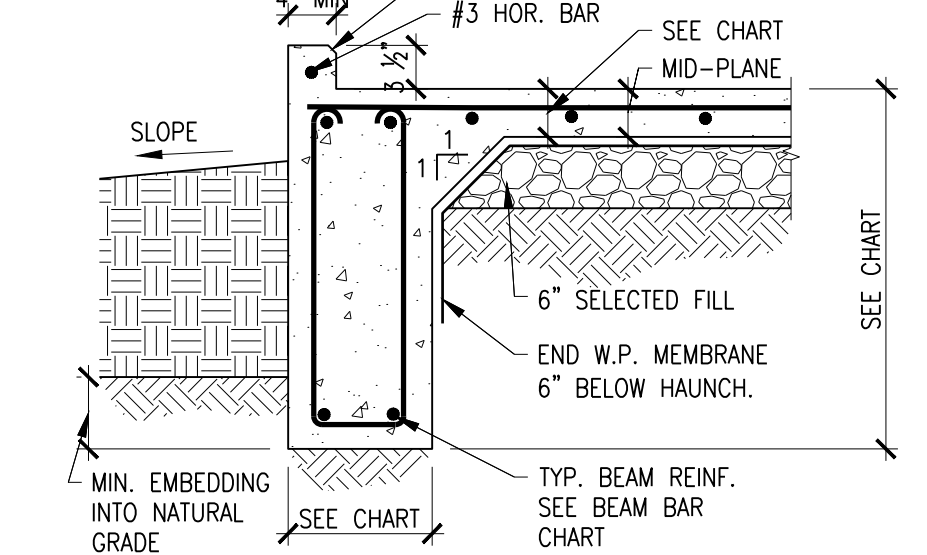
4 SECTION
DROPS 5 1/2" OR SMALLER



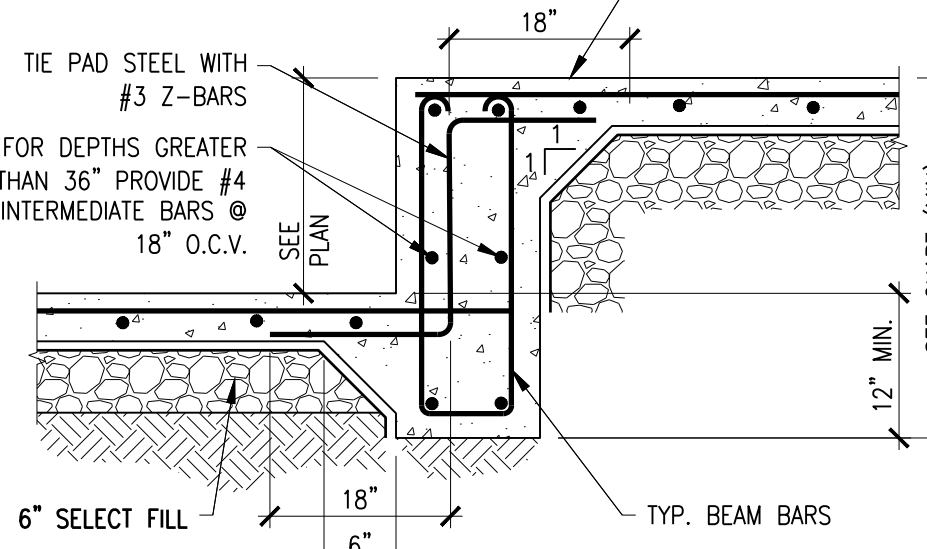
5 SECTION
GARAGE RAMP DETAIL



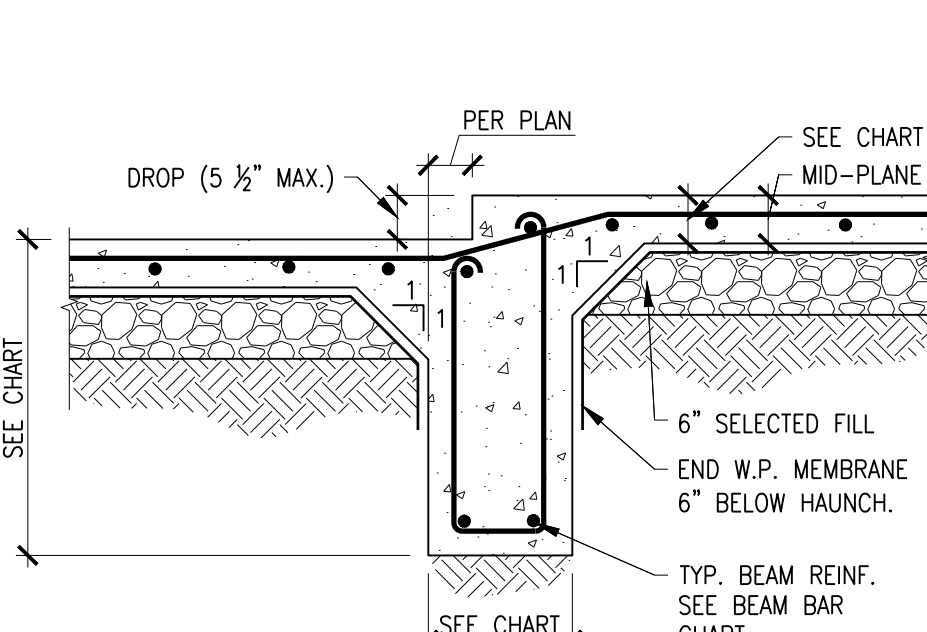
6 SECTION
EXTERIOR BEAM W/BRICK LUG



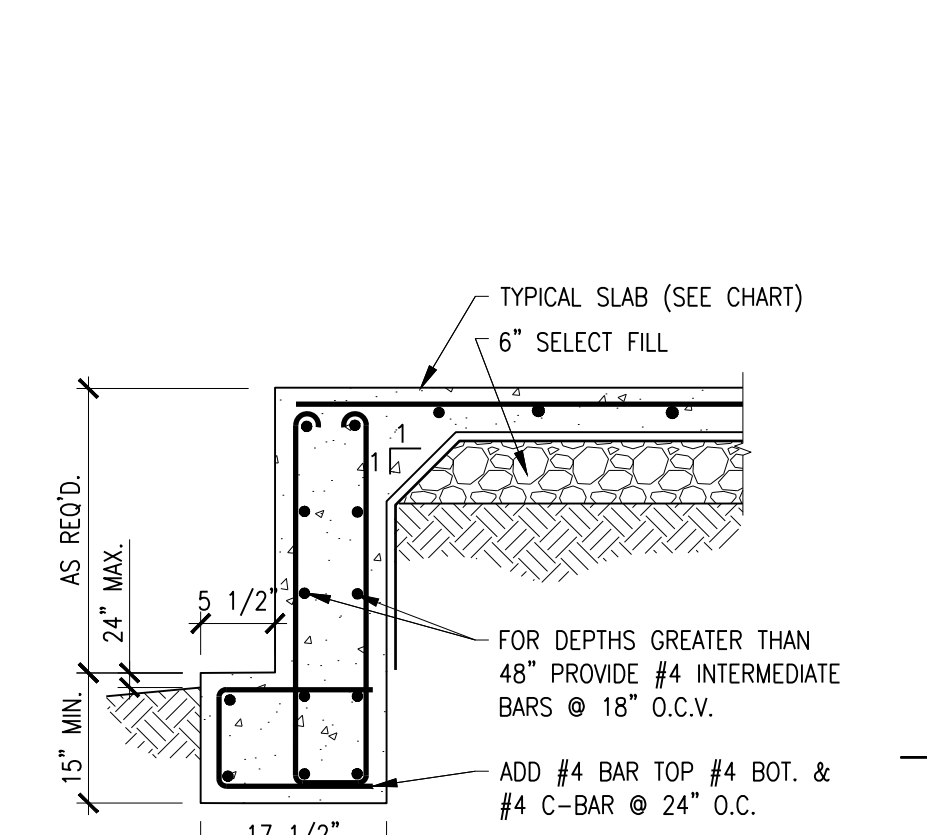
7 SECTION
EXTERIOR BEAM W/BRICK LUG



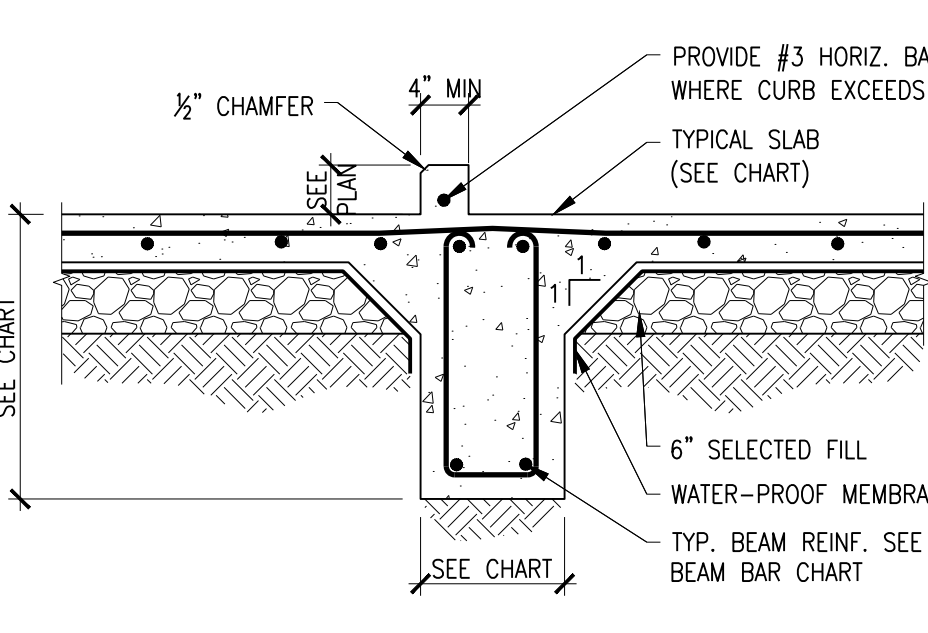
8 SECTION
FOR DROPS 6"-35 1/2"



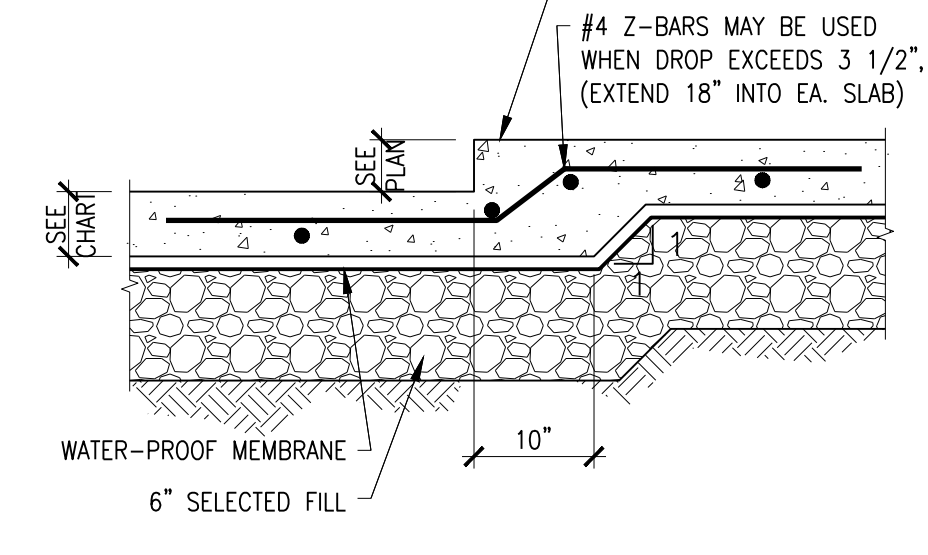
9 SECTION
DROPS IN BEAM AREA UP TO 5 1/2" OR SMALLER



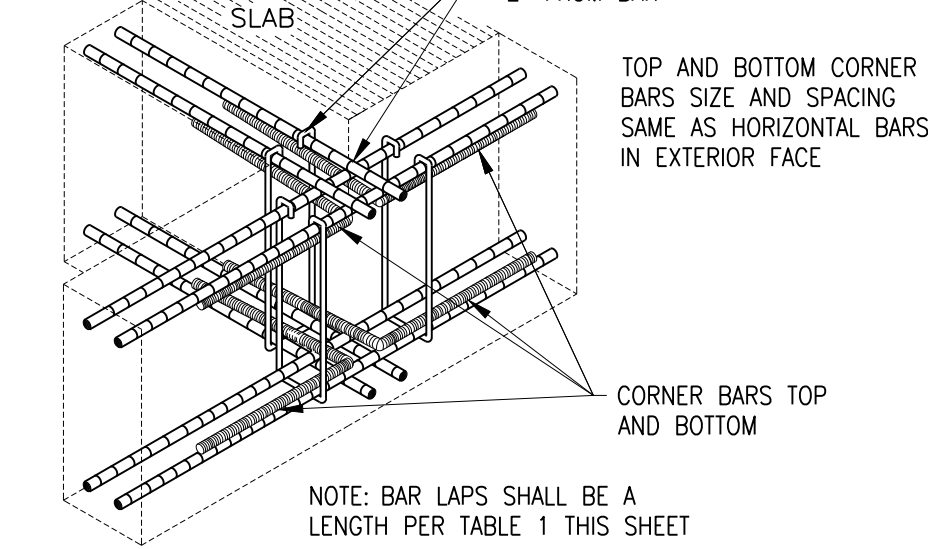
10 TYP. DROP LUG
EXTERIOR DROP BRICK/ROCK LUGS



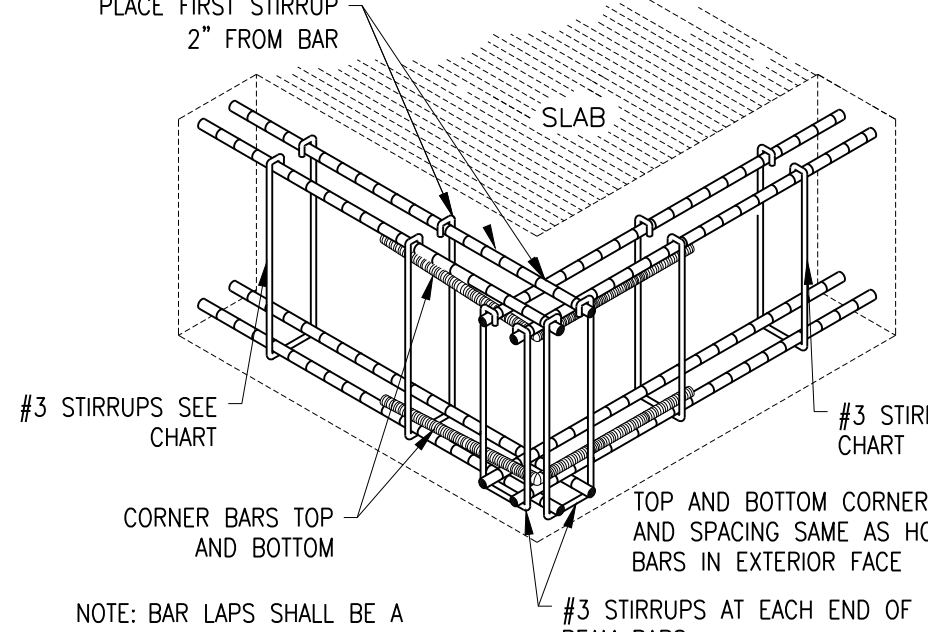
11 SECTION
CURB & BEAM



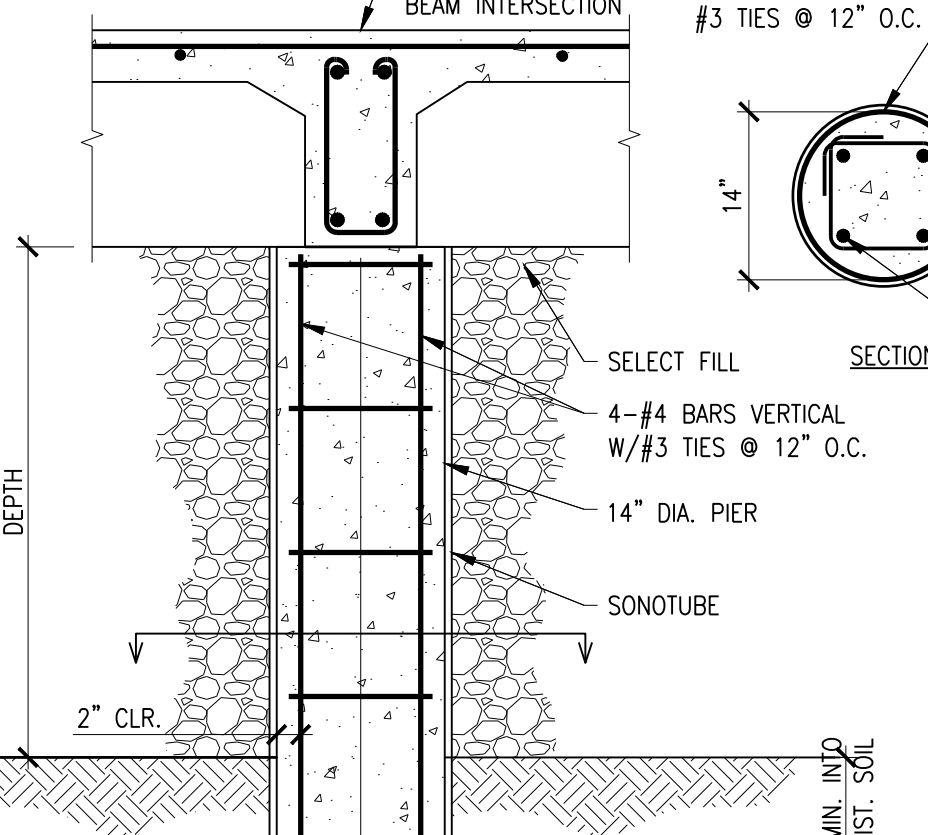
12 SECTION
DROPS IN BEAM AREA UP TO 5 1/2" OR SMALLER



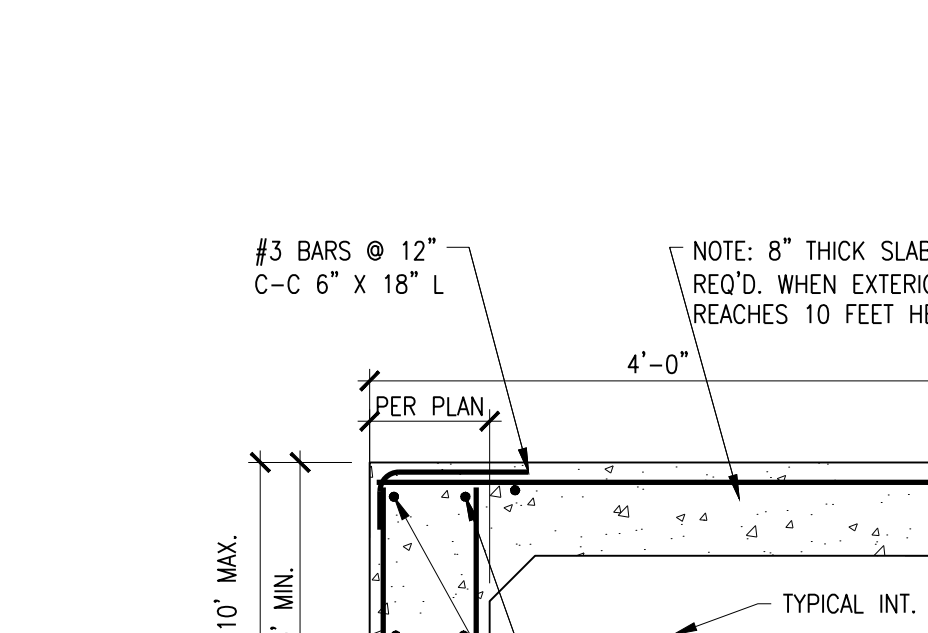
13 DETAIL
PLACE FIRST STIRRUP 2" FROM BAR



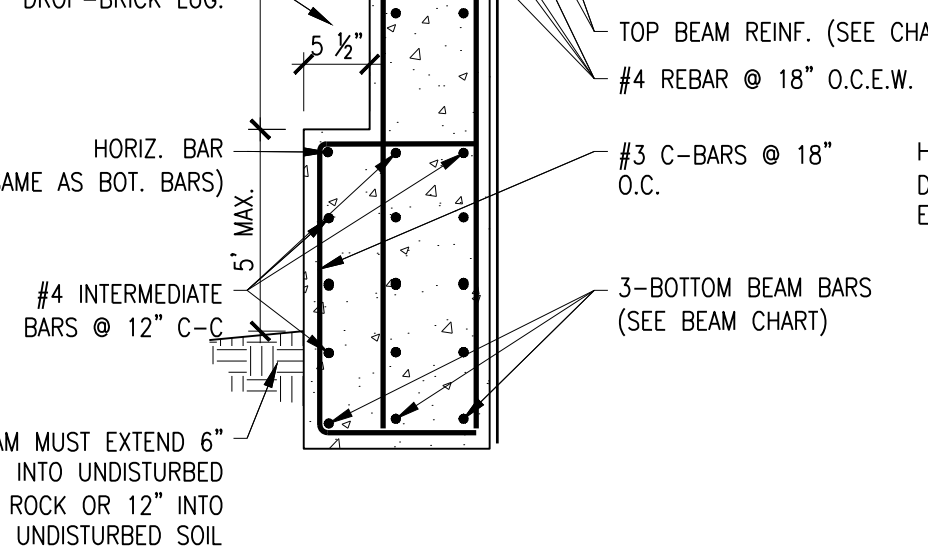
14 DETAIL
PLACE FIRST STIRRUP 2" FROM BAR



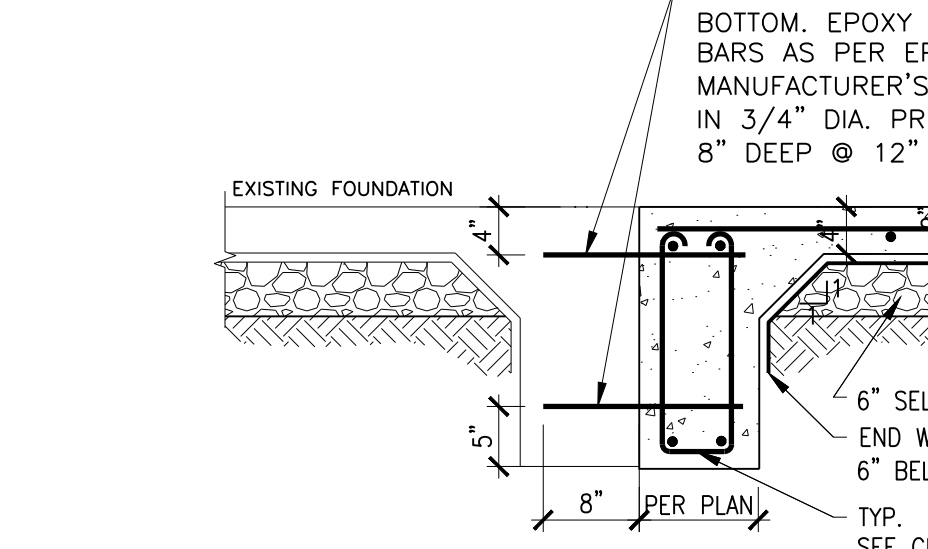
15 TYP. BEAM INTERSECT PIER
REQUIRED WHEN DEPTH EXCEEDS 2'-0"



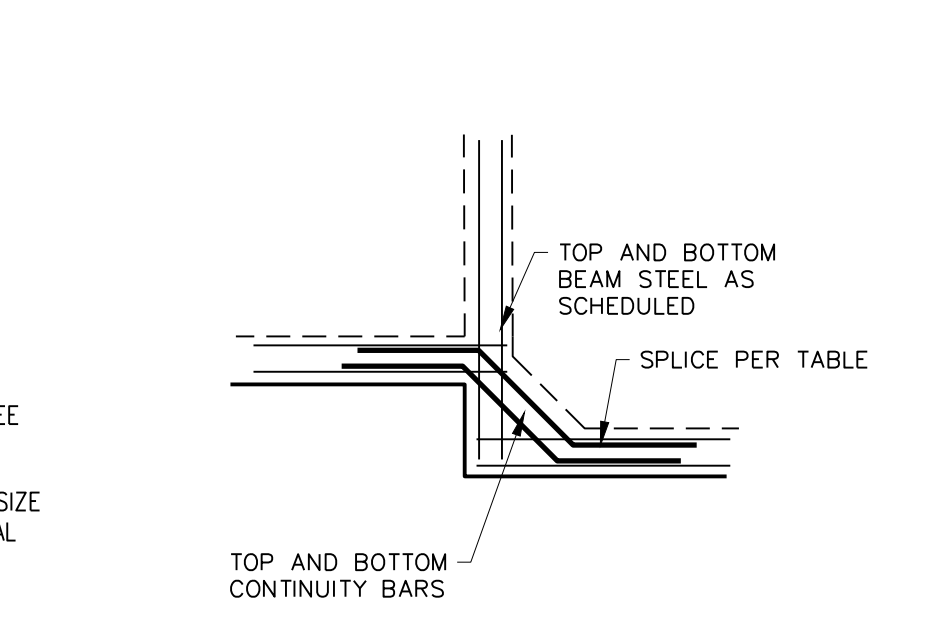
16 TYP. DEEP BEAM
DEEP BEAMS 10-15 FEET DEEP



17 SECTION
EXISTING SLAB TO NEW SLAB



18 PLAN
STRESS CONTINUITY EXTENSION BARS



19 SECTION
CANTILEVER DETAIL

REVISIONS		DATE	APPR.
NO.	DESCRIPTION		



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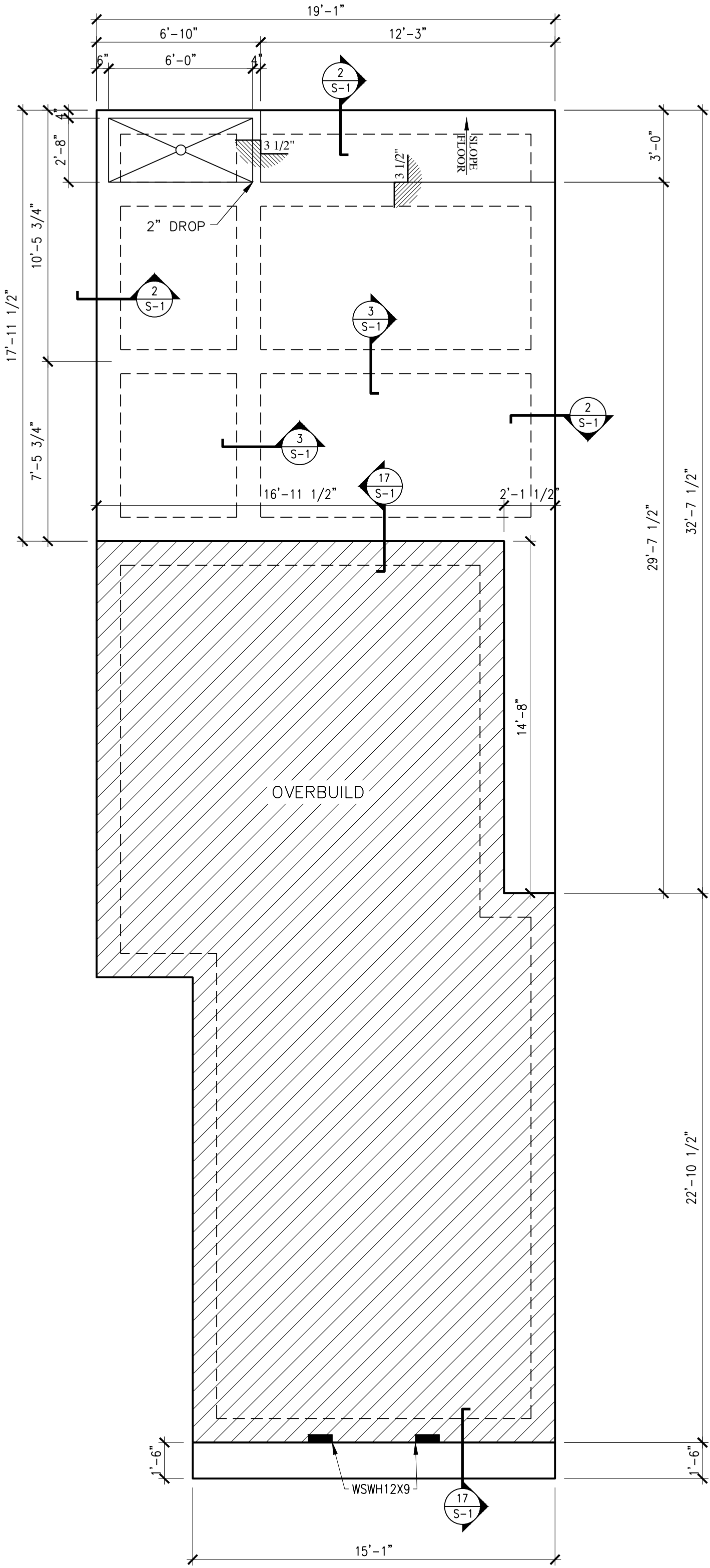
FOUNDATION DETAILS

NEW RESIDENCE
326 GARFIELD ALLEY
SAN ANTONIO, TX 78210

SHEET TITLE:	JOB NO:
	26-219
	DATE: 7/13/26
	DESIGNER: MR
	CHECKED: JIV, PE
	DRAWN: MR

SHEET:
S-1
OF 6

APPROXIMATE HORIZONTAL AREA: XXX SF



FOUNDATION PLAN
Scale: 1/4" = 1'-0"

REVISIONS			
NO.	DESCRIPTION	DATE	APPR.
FILE:			



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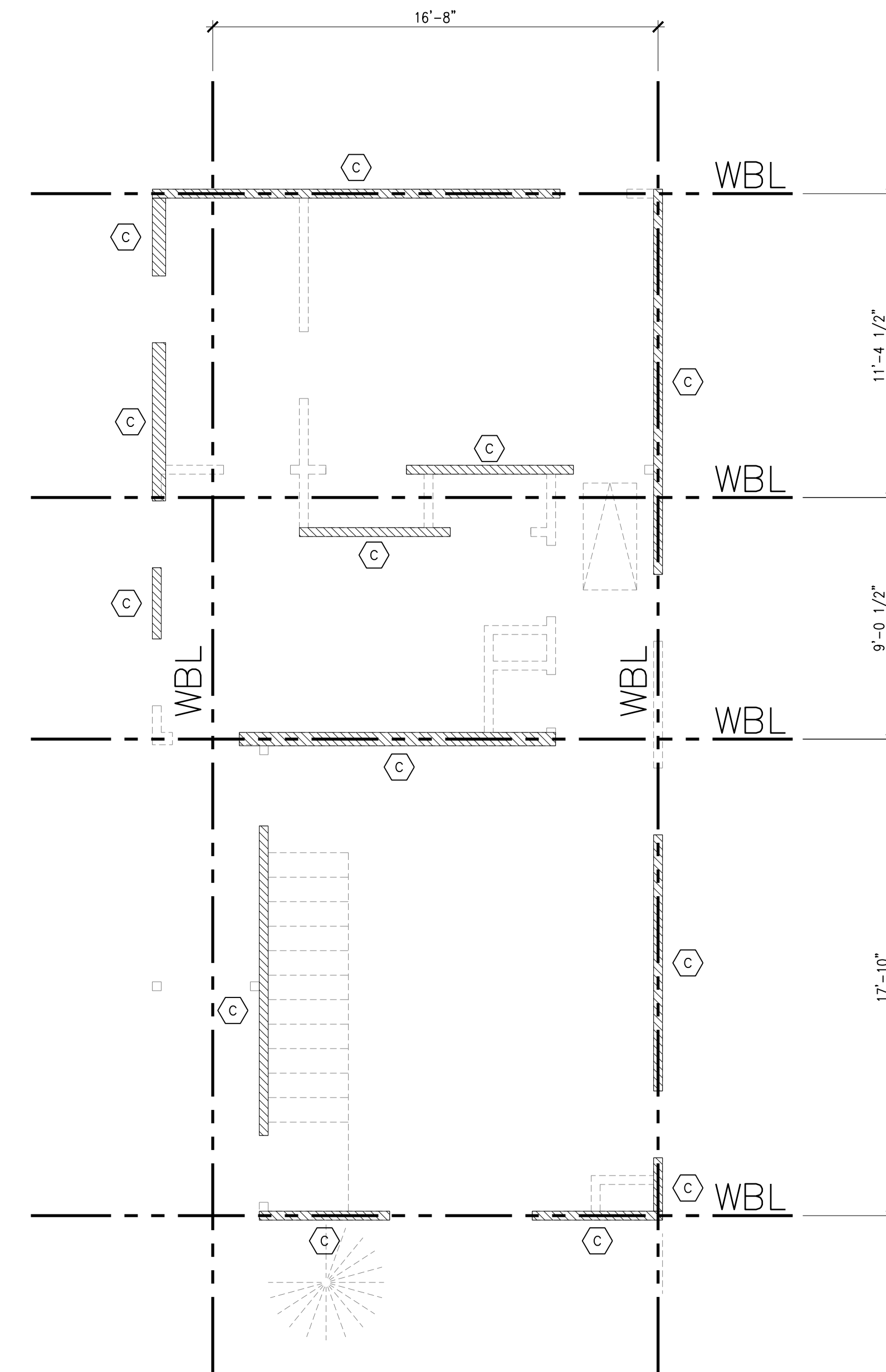
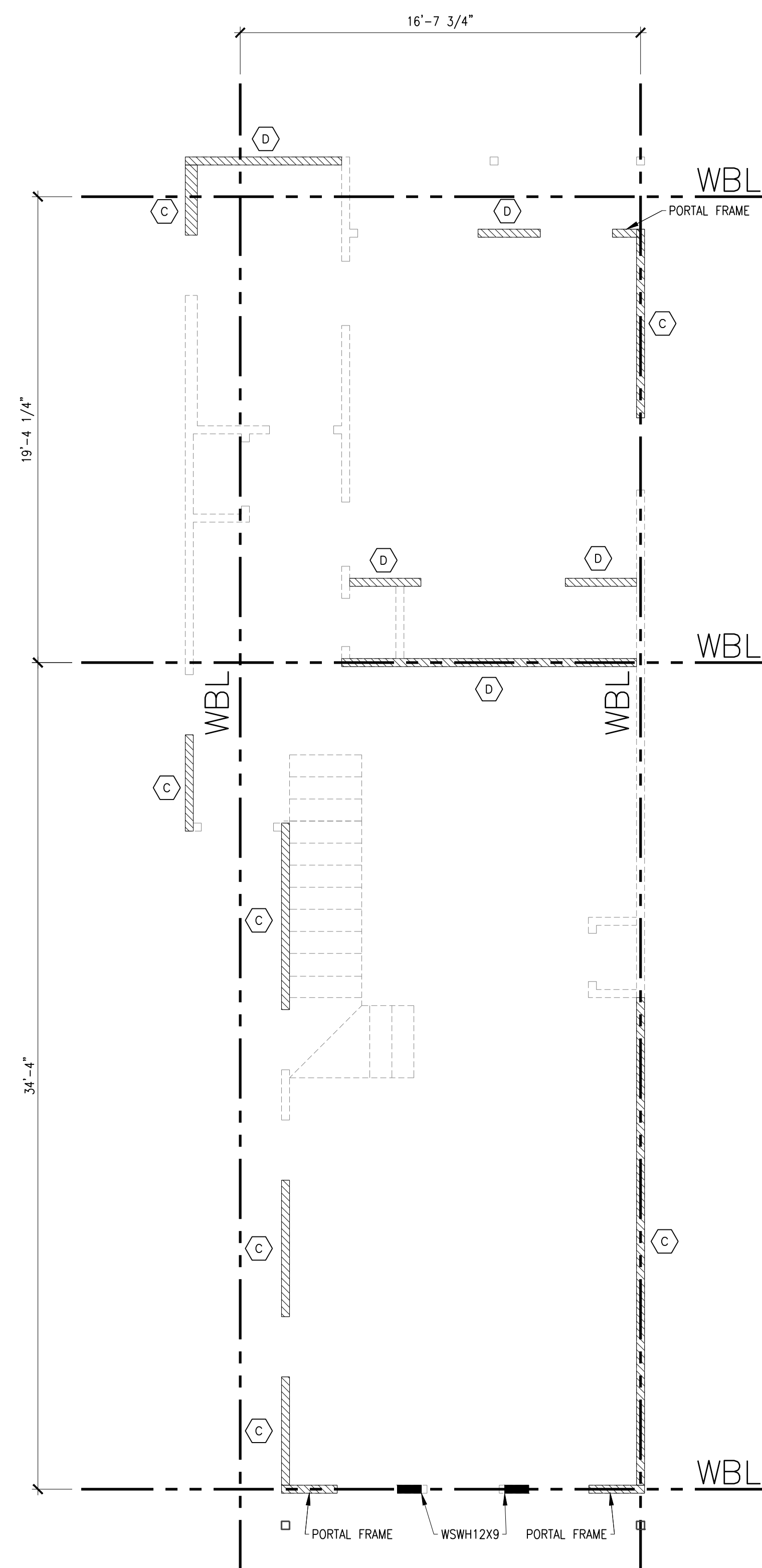
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NEW RESIDENCE
326 GARFIELD ALLEY
SAN ANTONIO, TX 78210

JOB NO:	26-219
DATE:	7/13/26
DESIGNER:	MR
CHECKED:	JIV, PE
DRAWN:	MR

SHEET: S-2
OF 6

NEW RESIDENCE
326 GARFIELD ALLEY
SAN ANTONIO TX 78210



WIND BRACING PLANS

SHEET TITLE:

JOB NO:	26-219
DATE:	7/13/26
DESIGNER:	MR
CHECKED:	JIV, PE
DRAWN:	MR

SHEET:

194

S-4

OF 6

SHEET:
S-4
OF 6

OF 6

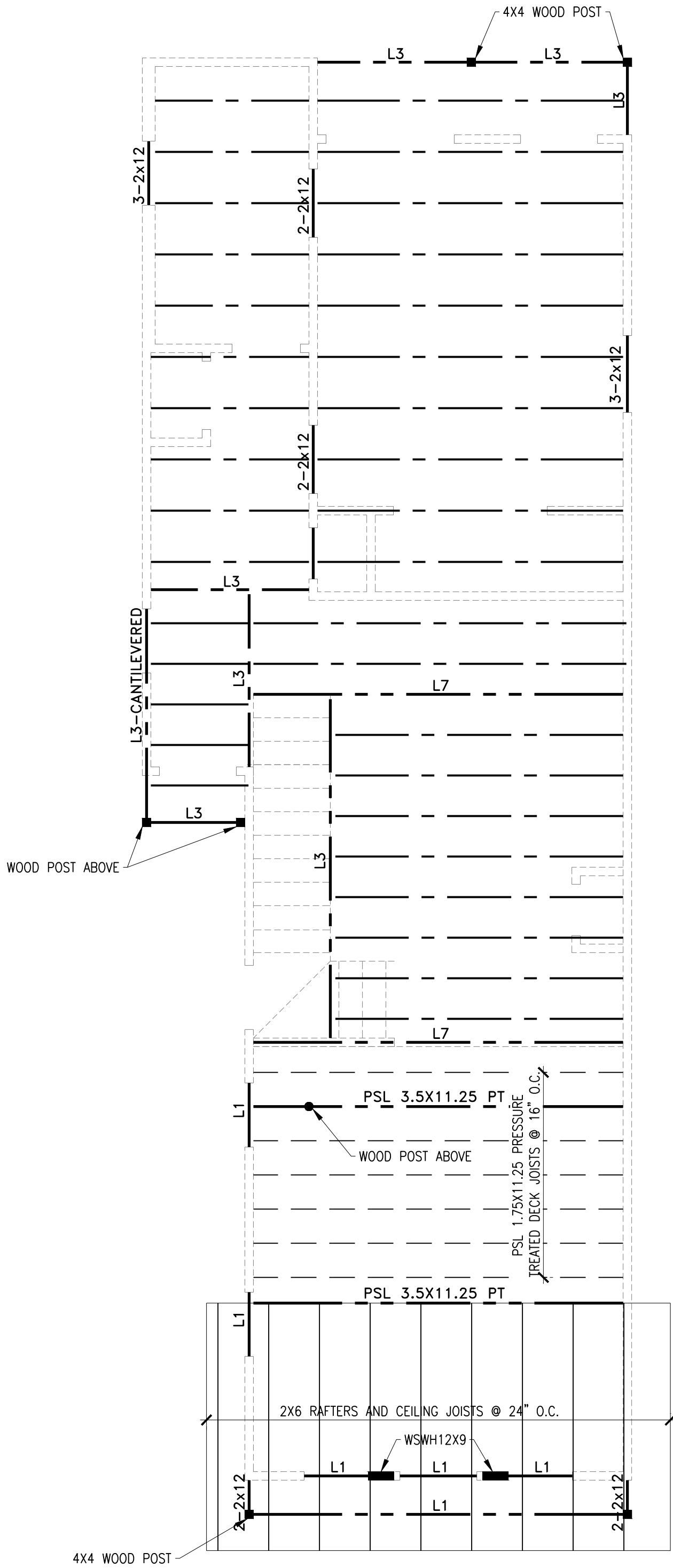
**Villarreal
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Group, LLC**

7/14/26

SEAL: 

[illegible]

PRIOR TO CONSTRUCTION, CONTRACTOR/ARCHITECT/OWNER TO VERIFY IF HVAC UNITS AND PIPES IN FLOOR/ROOF FRAMING SPACE IS CLASHING WITH STRUCTURAL MEMBERS. CONTACT ENGINEER OF RECORD IF THAT IS THE CASE. ALTERNATIVELY USE TRUSSES DESIGNED BY MANUFACTURER.



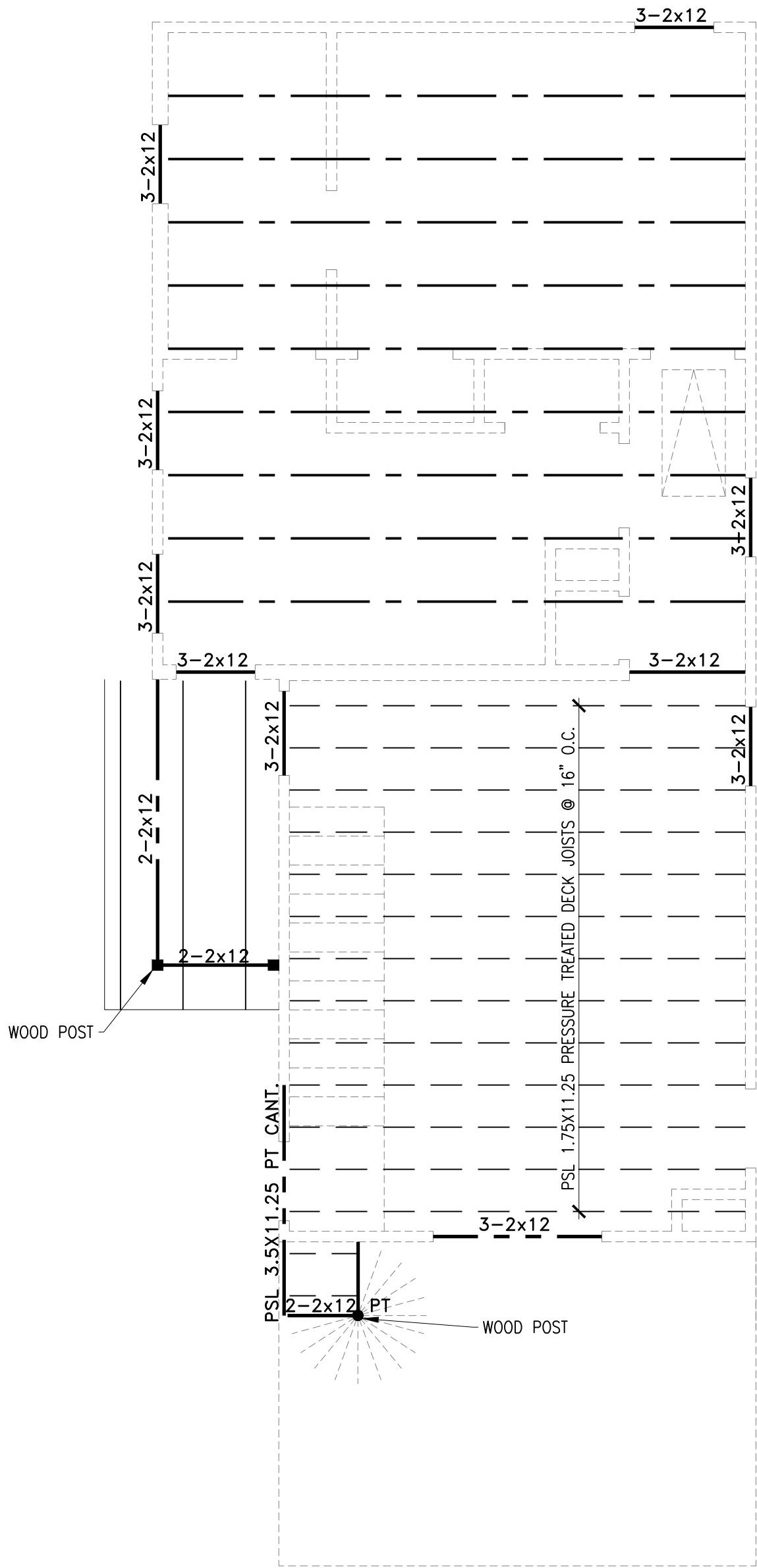
FIRST FLOOR FRAMING PLAN

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

ALL FLOOR JOISTS TO BE 16" PRI-40 @ 24" O.C. U.O.N.
ALL ALL EXTERIOR AND ALL INTERIOR BEARING WALLS
ON FIRST FLOOR TO BE 2X6 @ 16" O.C.

DECK JOISTS SHALL HAVE BLOCKING NOT TO EXCEED 8" SPACING

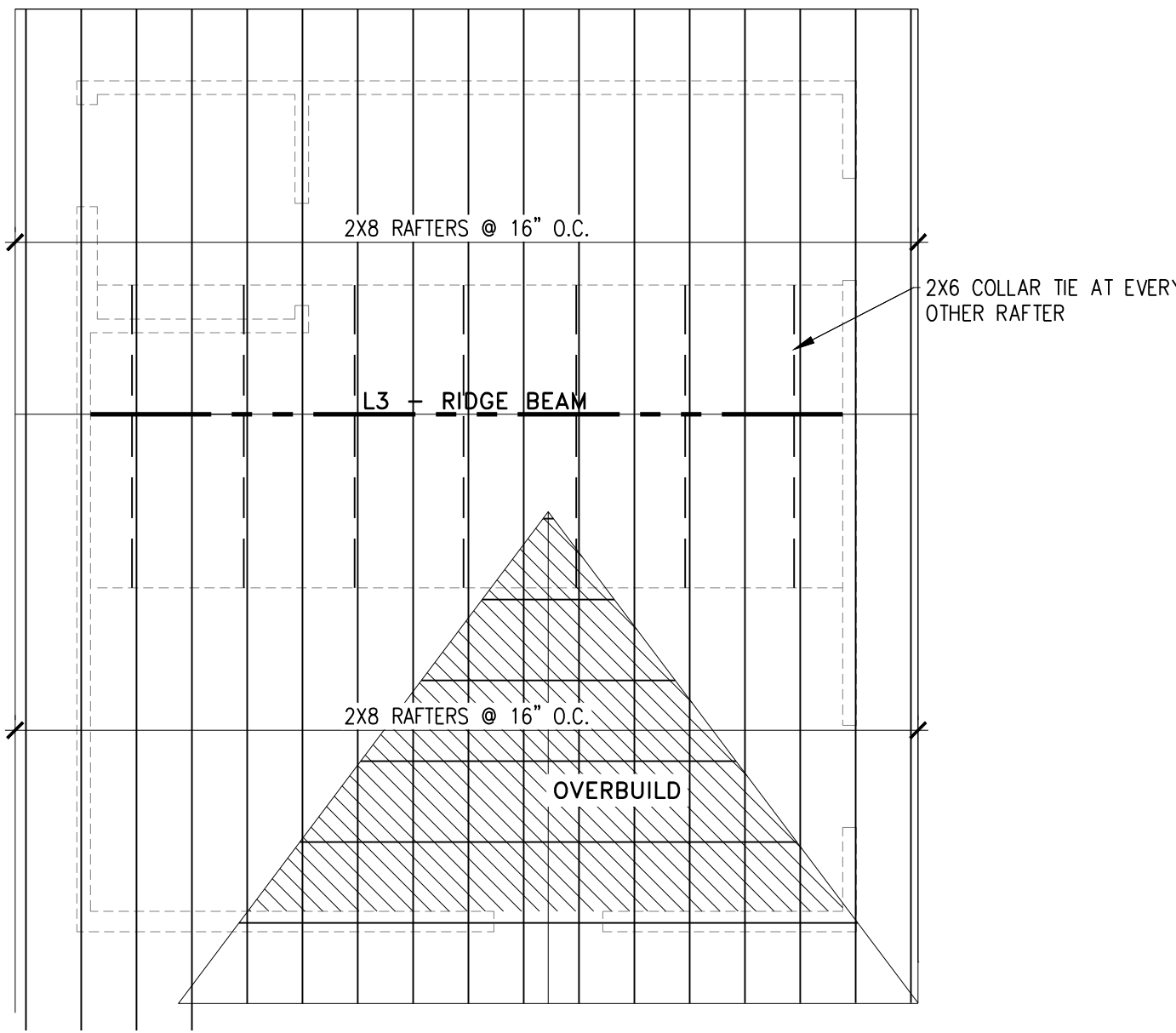
ALL POSTS IN GALVANIZED POST BASE ANCHORS.
PORCH RAFTERS SHALL HAVE WIND CLIPS, BEAM TO COLUMN CONNECTIONS SHALL HAVE METAL STRAPS.



SECOND FLOOR FRAMING PLAN

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

ALL FLOOR JOISTS TO BE 16" PRI-40 @ 24" O.C. U.O.N.



ROOF FRAMING PLAN

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

REVISIONS			
NO.	DESCRIPTION	DATE	APPR.



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FRAMING PLANS

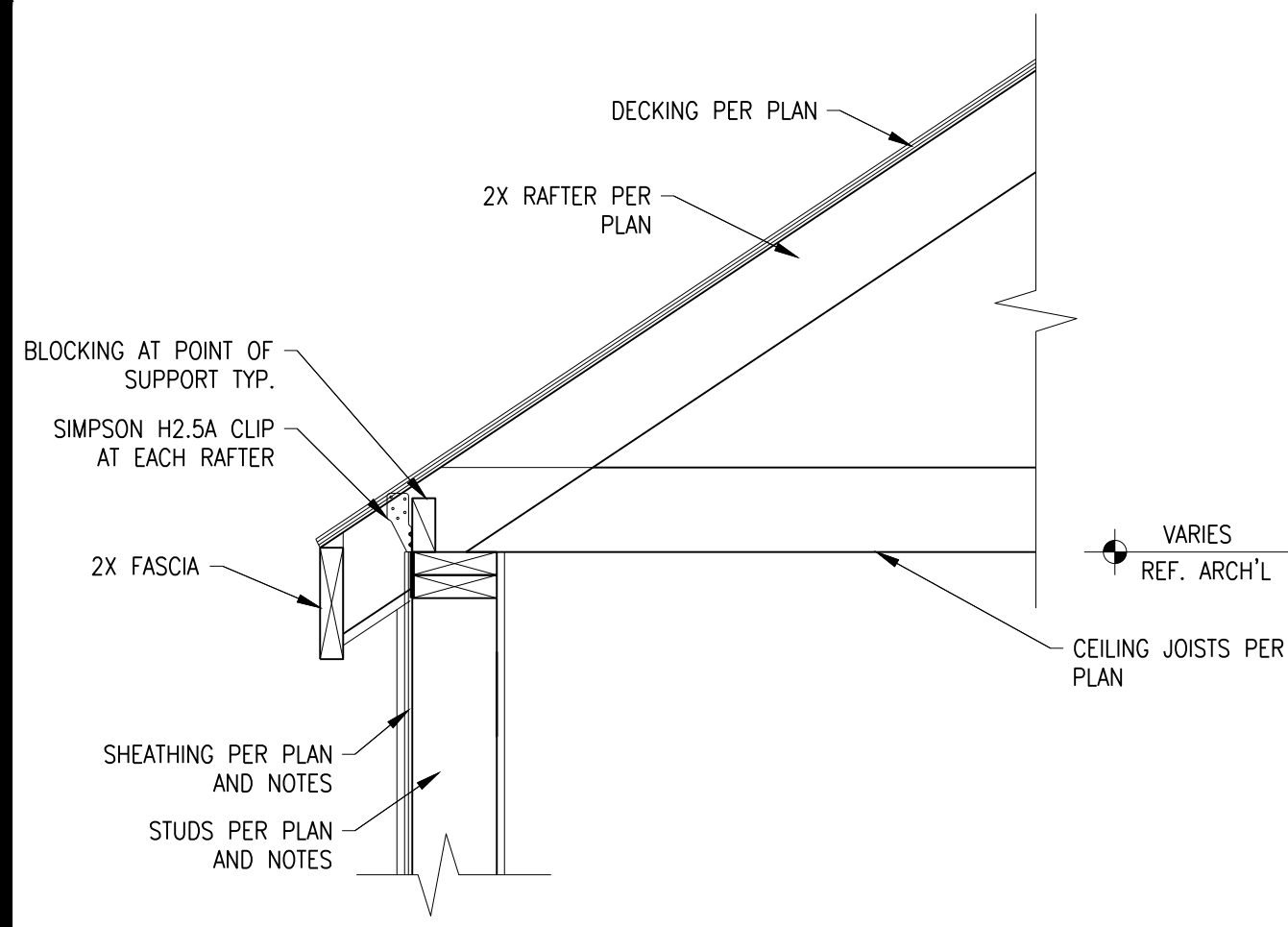
NEW RESIDENCE
326 GARFIELD ALLEY
SAN ANTONIO, TX 78210

SHEET TITLE:

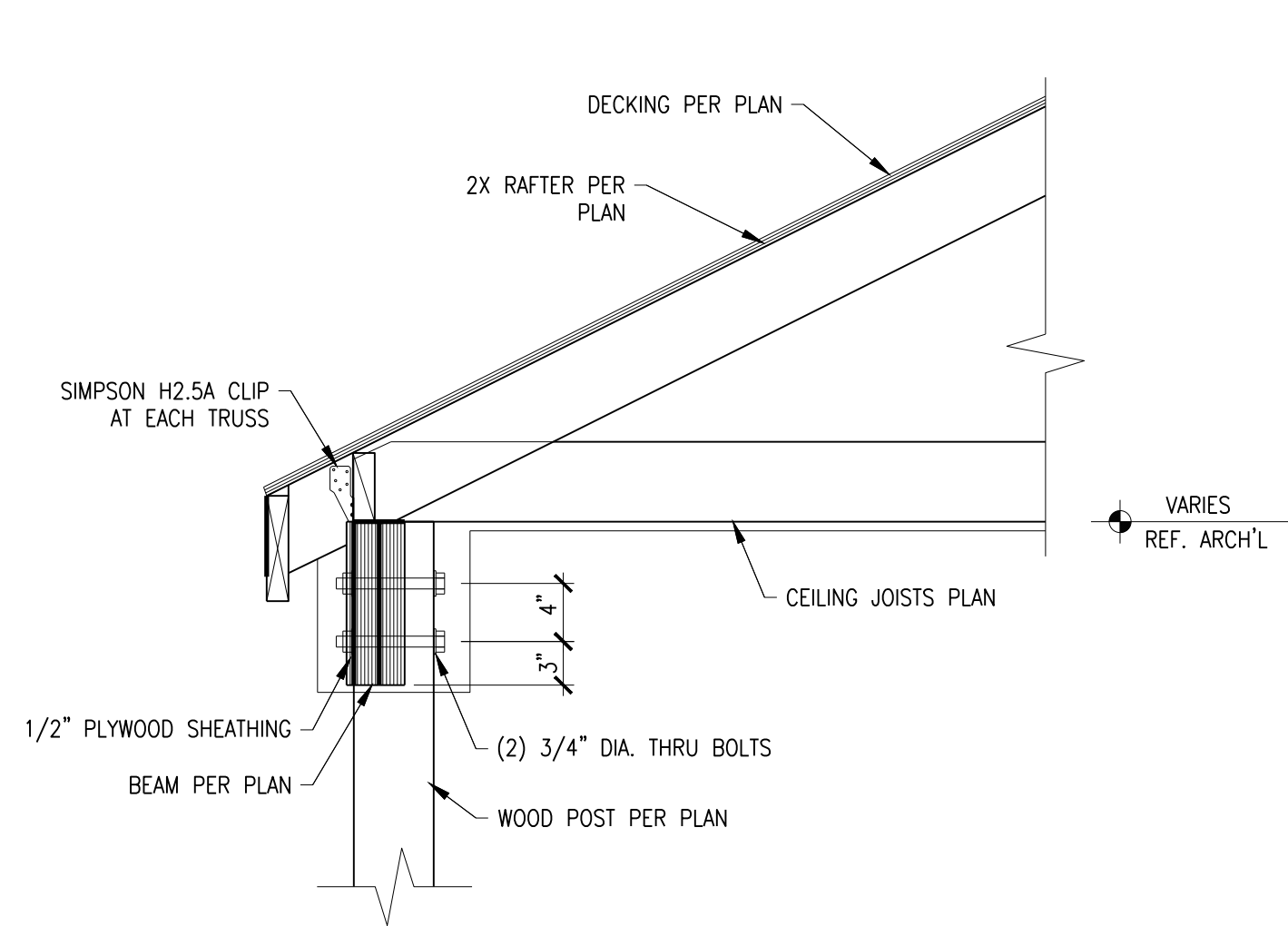
JOB NO:	26-219
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CHECKED:	JIV, PE
DRAWN:	MR

SHEET:

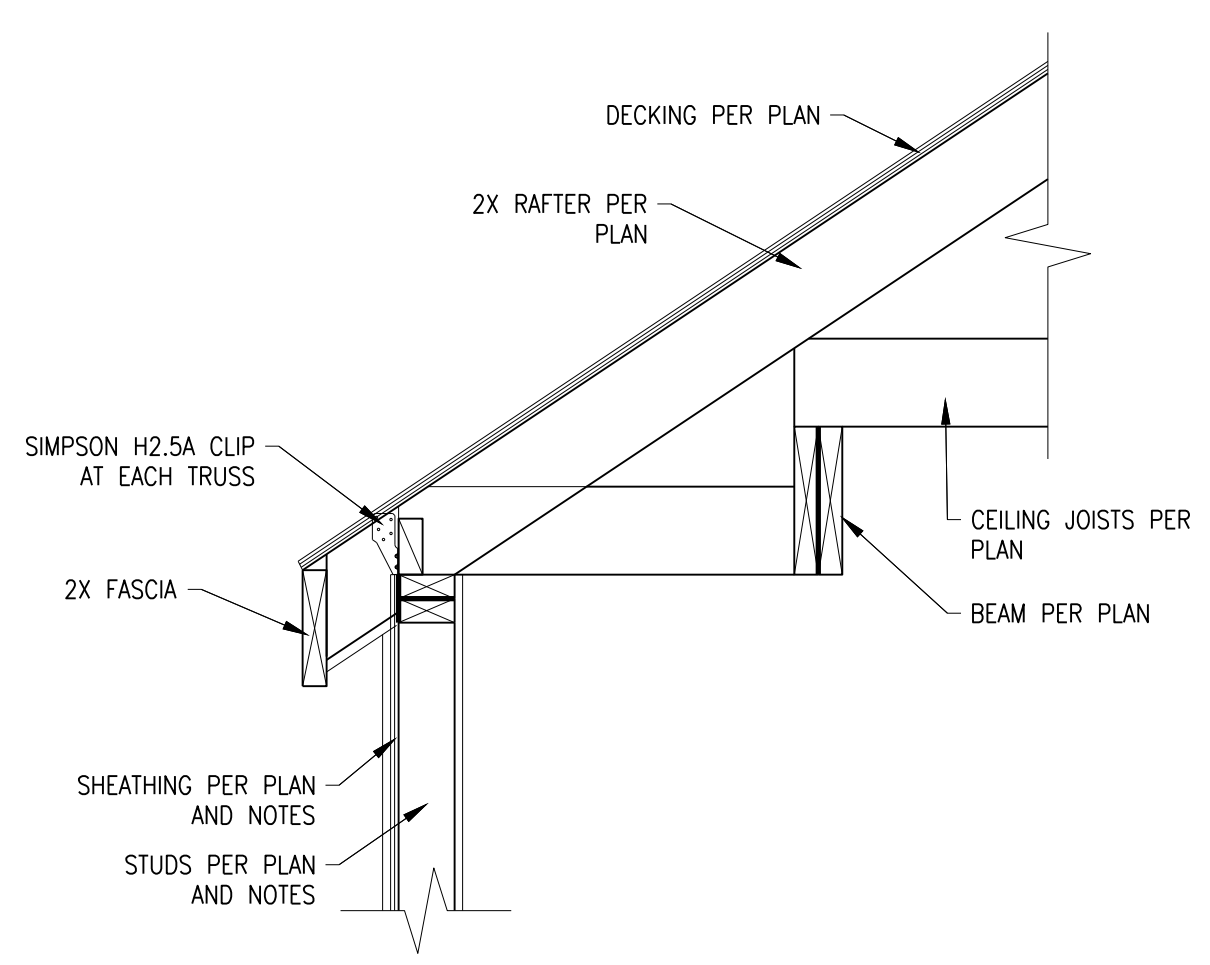
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OF 6



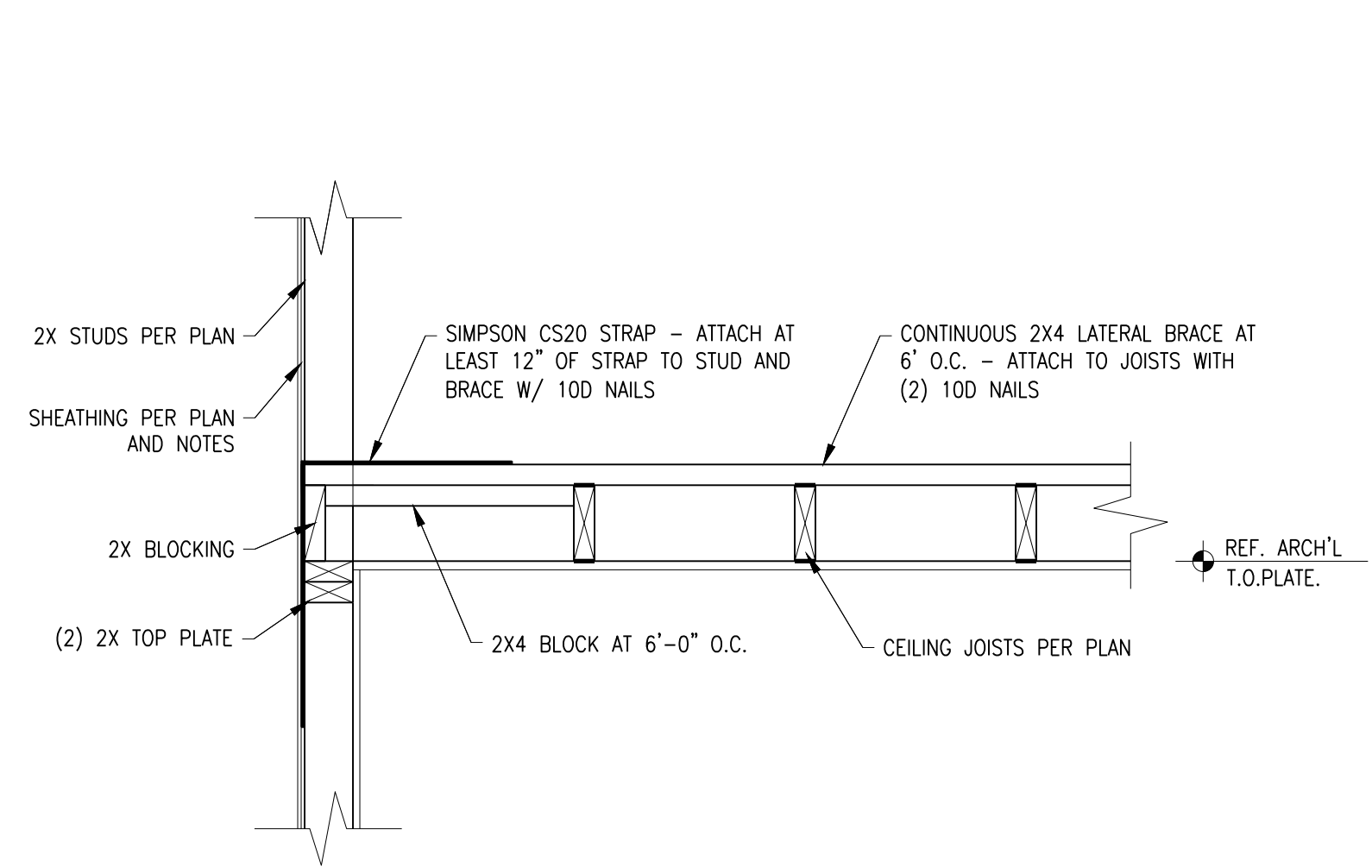
1 TYP. PERIMETER DETAIL SCALE: 1"=1'-0"



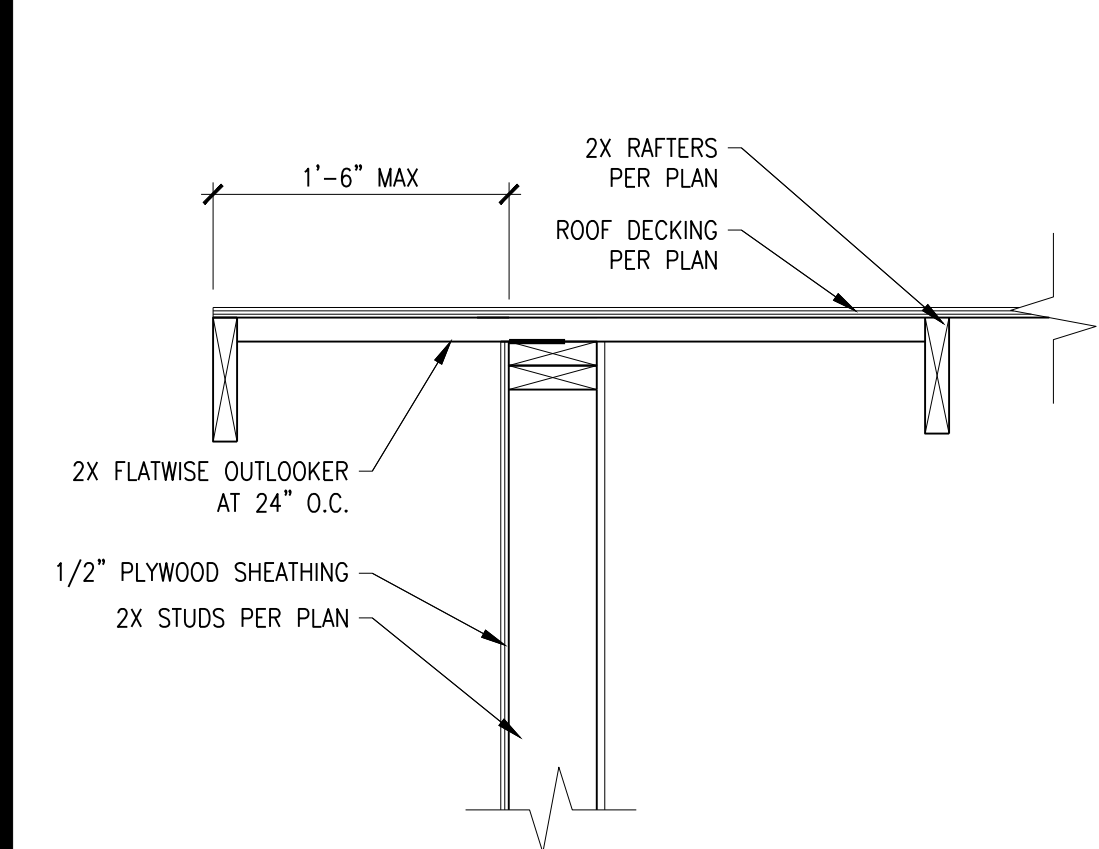
2 BEAM CONN. AT PORCH SCALE: 1"=1'-0"



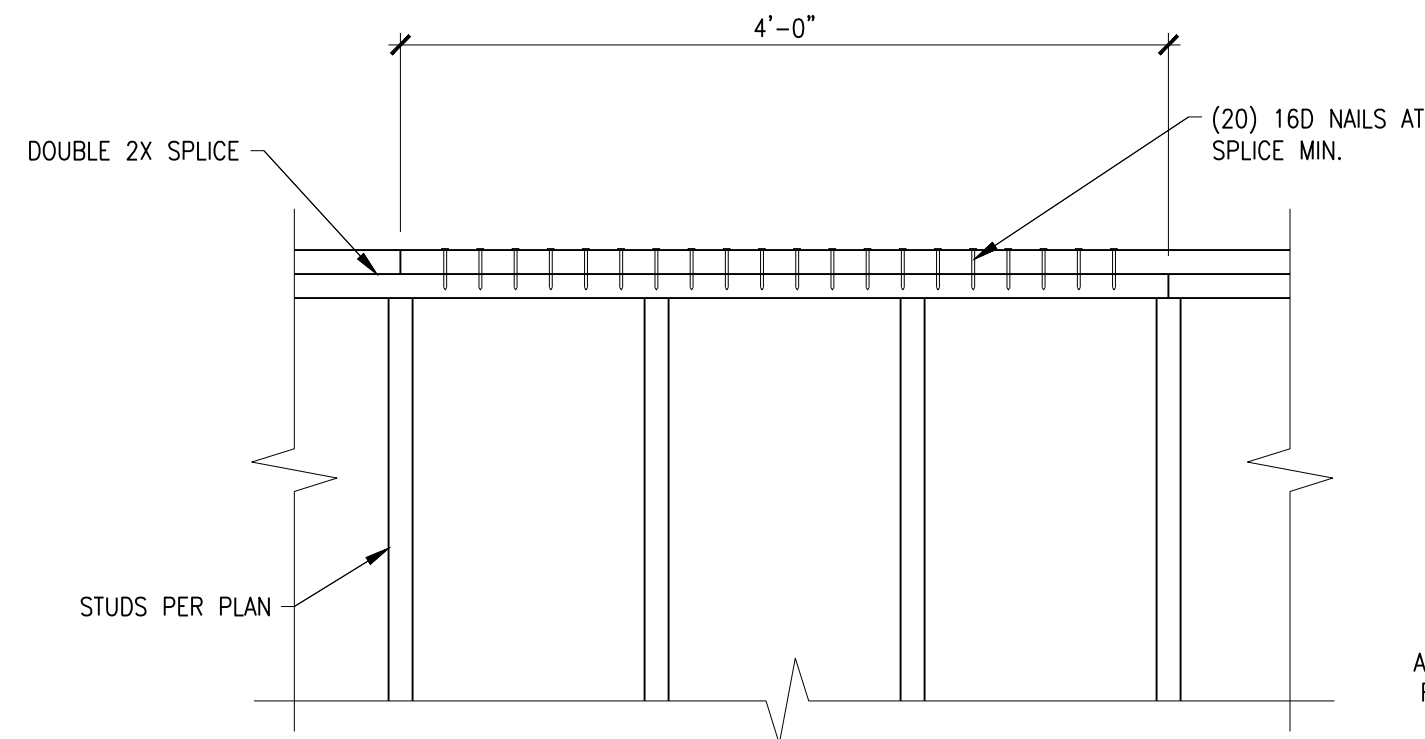
3 TRAY CEILING DETAIL SCALE: 1"=1'-0"



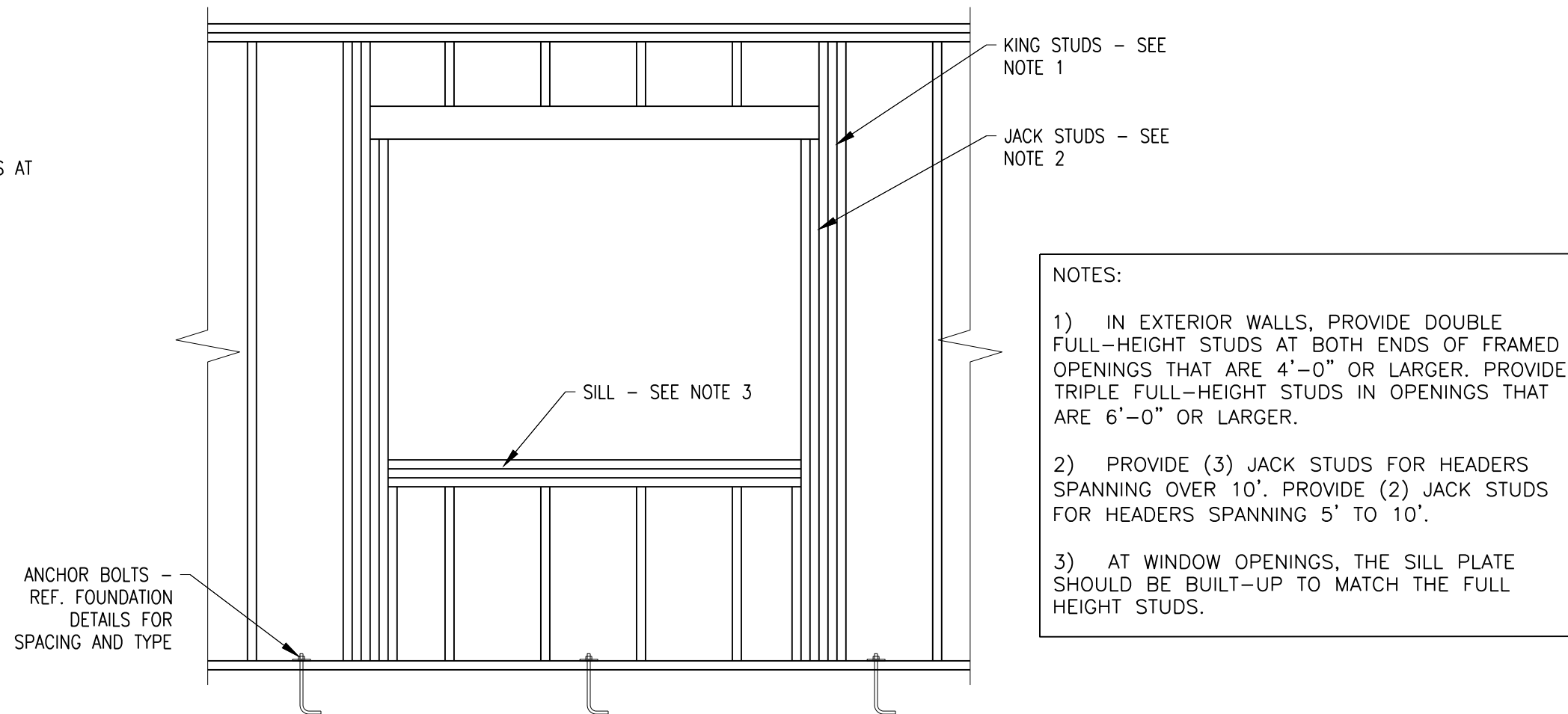
4 TYP. GABLE ENDWALL BRACING SCALE: 1"=1'-0"



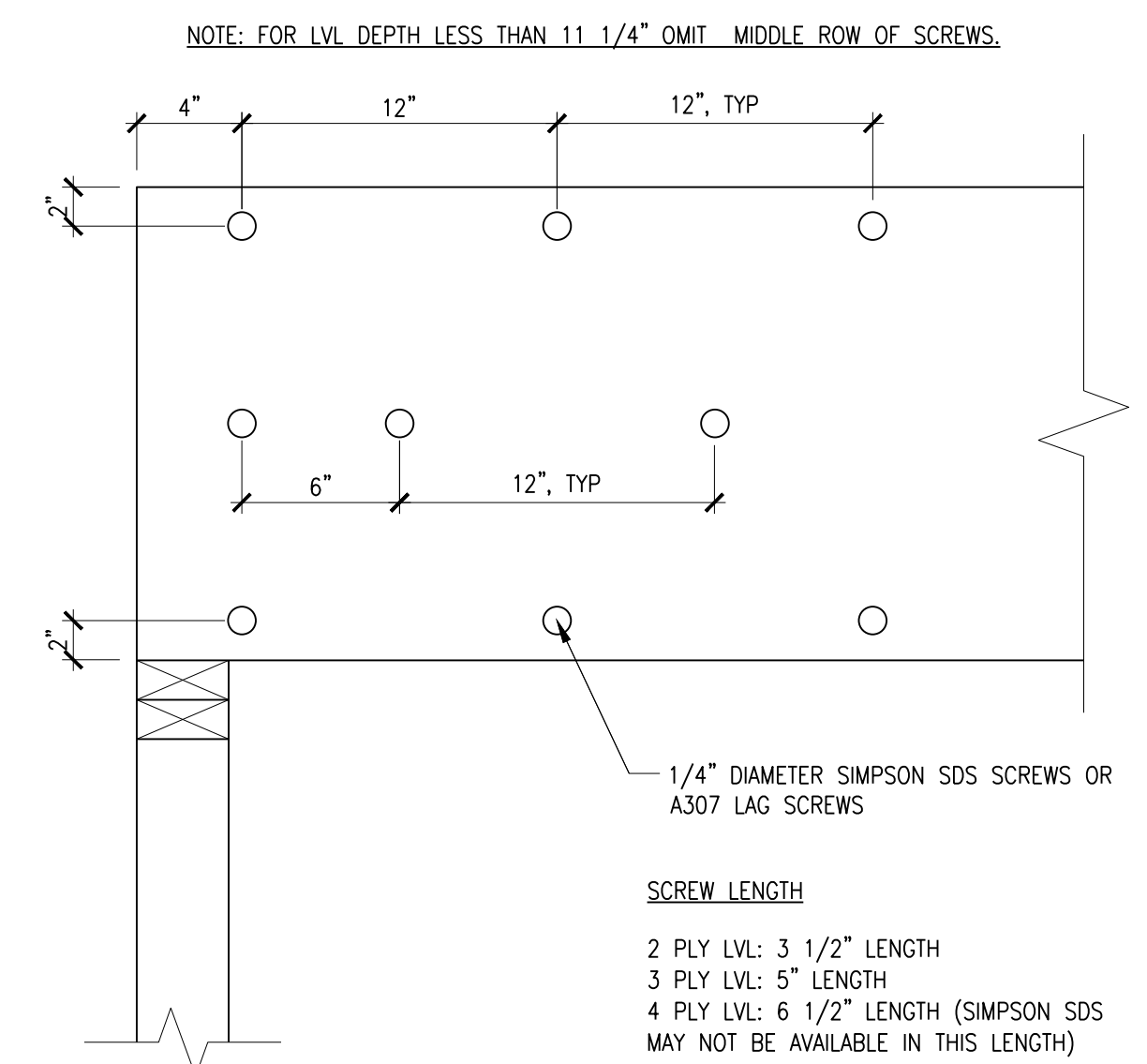
5 TYP. RAKE OVERHANG SCALE: 1"=1'-0"



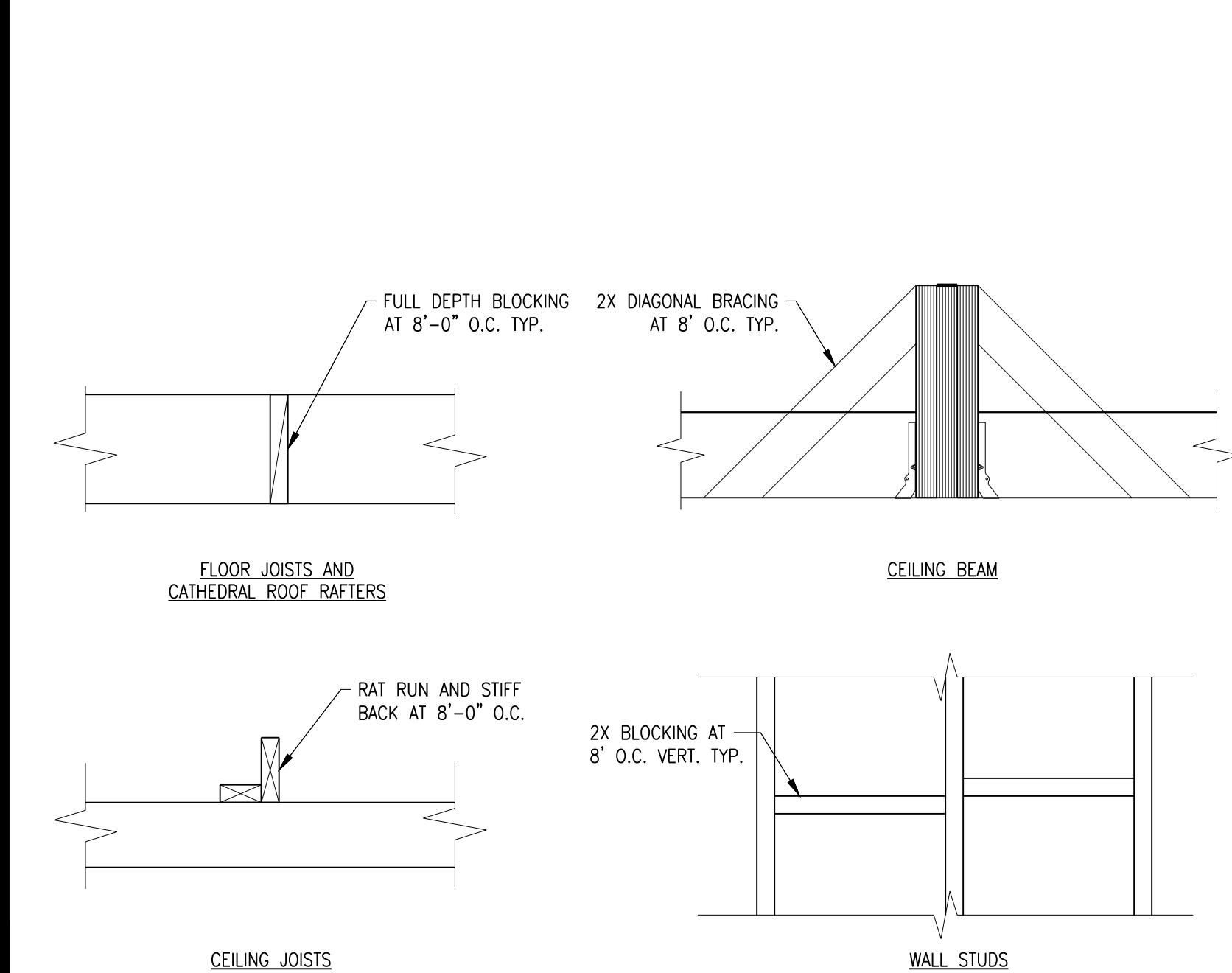
6 TYP. TOP PLATE SPLICE DETAIL SCALE: 1"=1'-0"



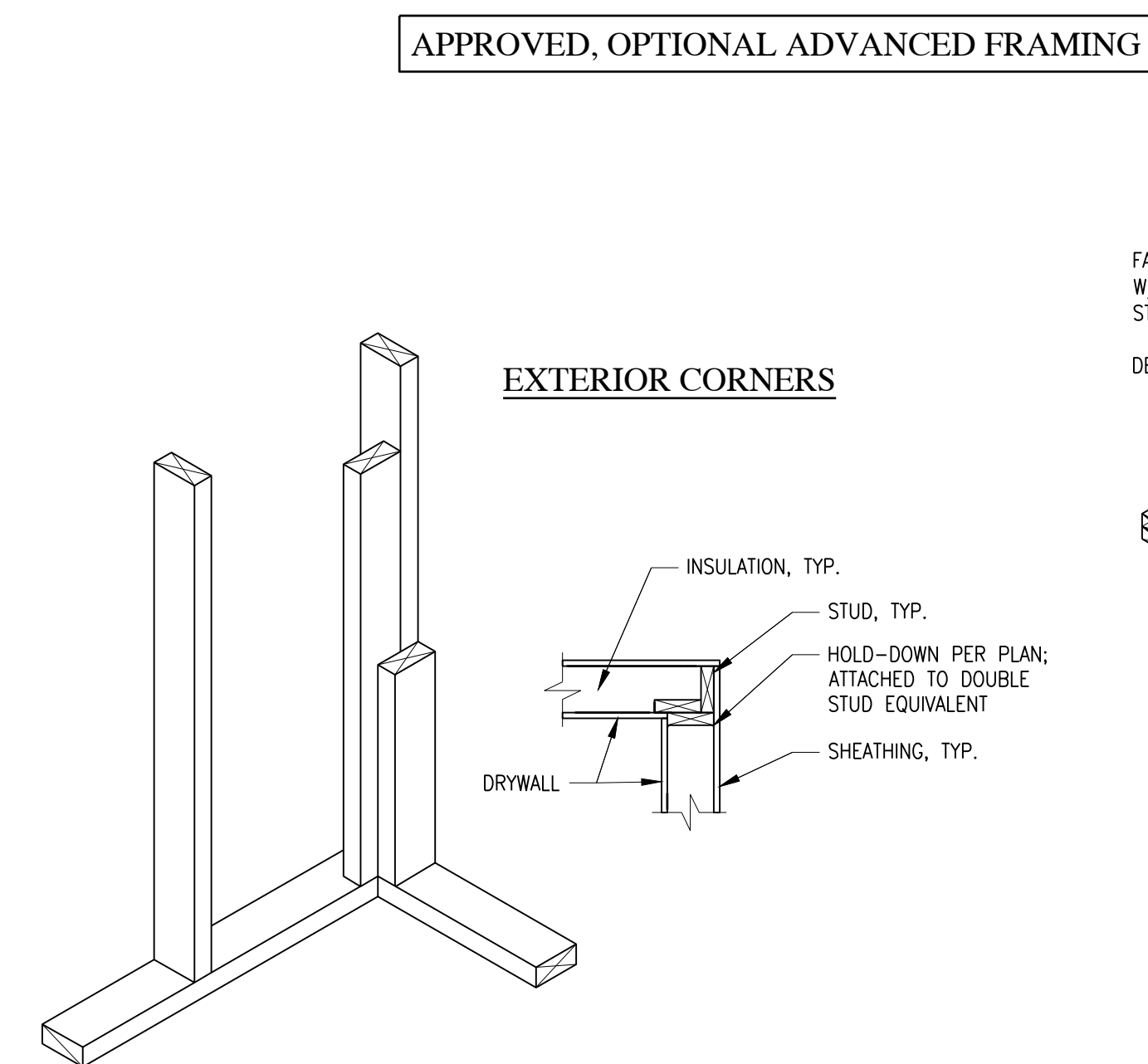
7 TYP. FRAMING AROUND OPENINGS SCALE: 1/4"=1'-0"



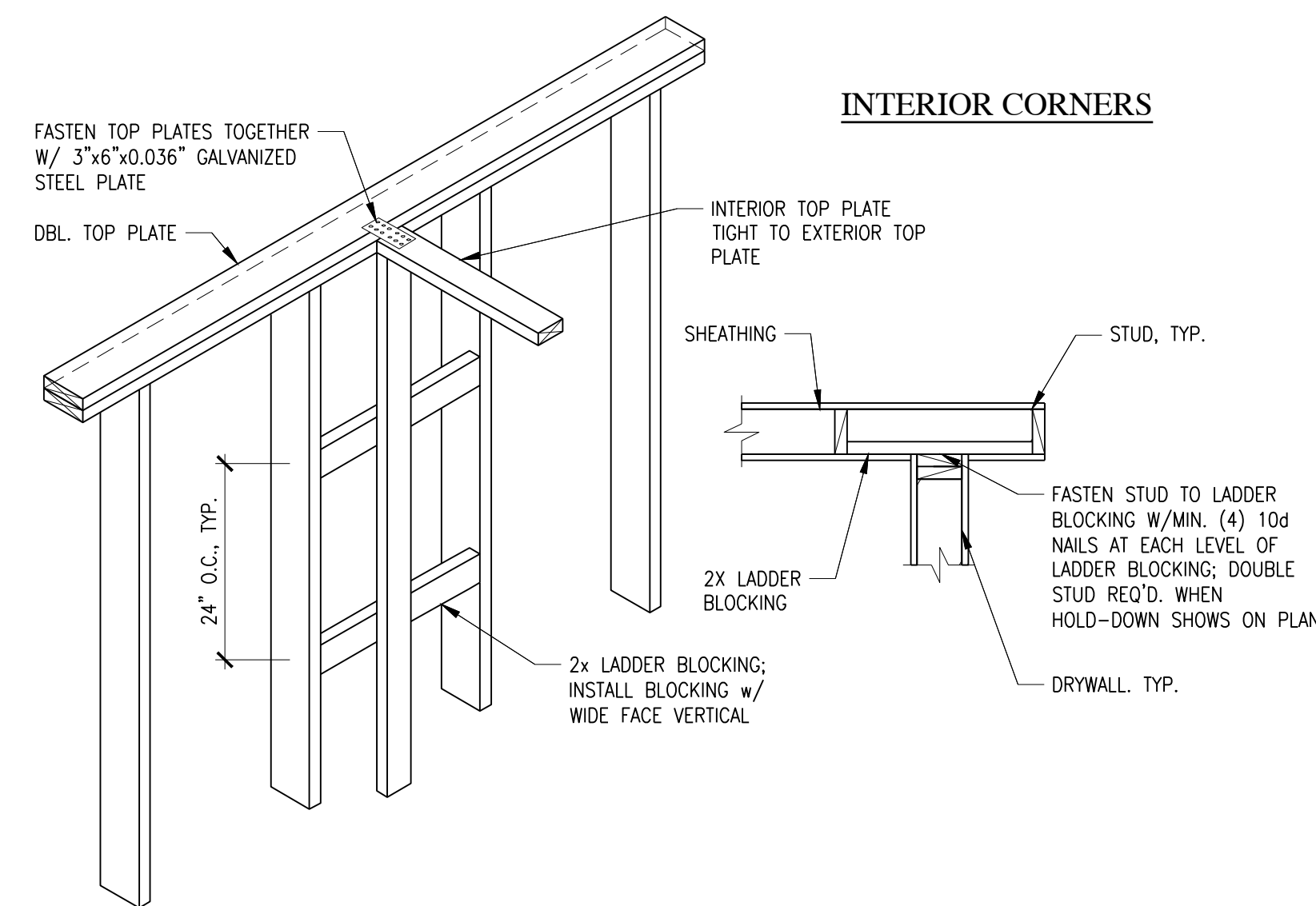
8 MULTIPLE-PLY LVL BEAM CONNECTION SCALE: 1"=1'-0"



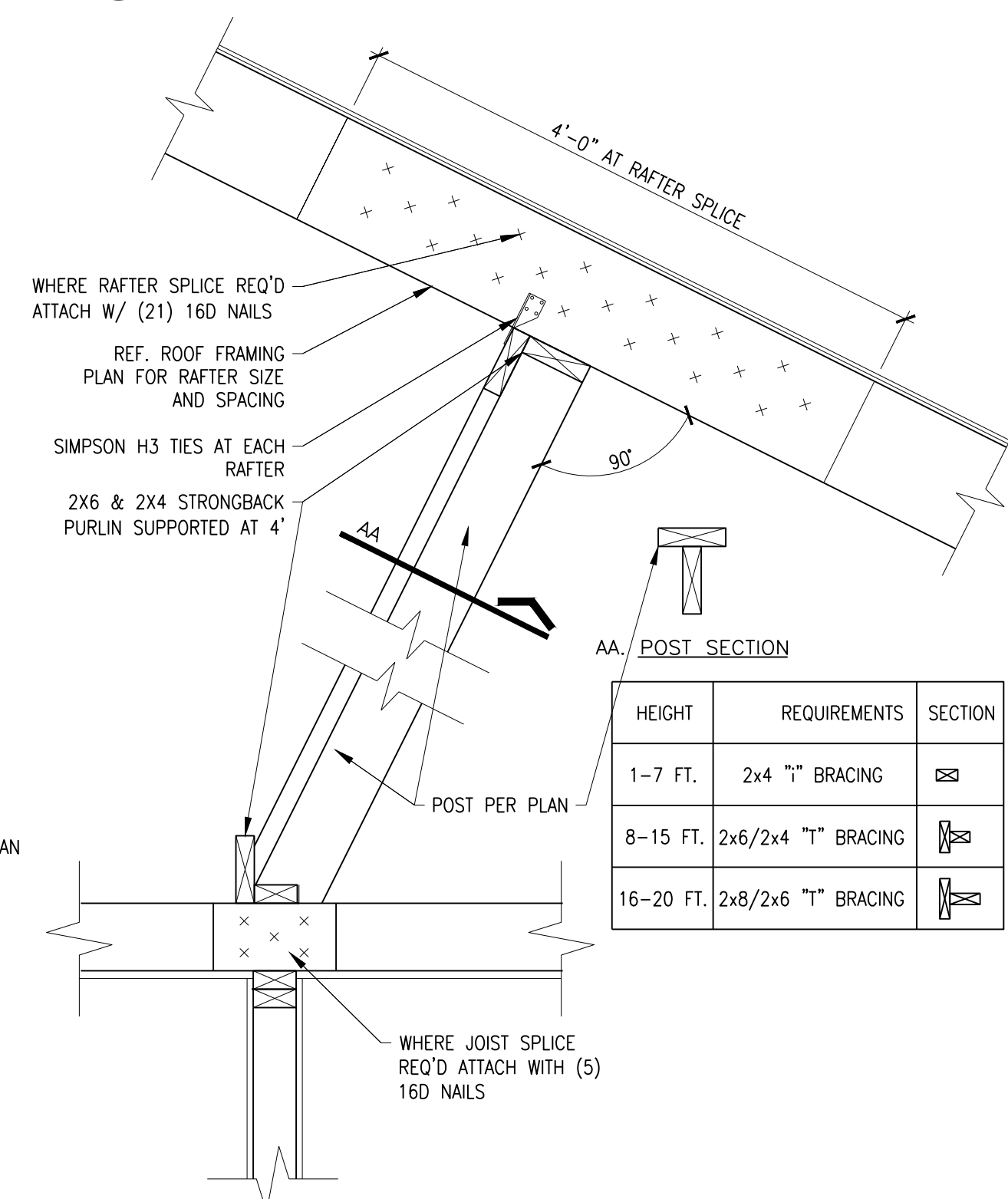
9 TYP. BLOCKING AT VARIOUS MEMBERS SCALE: 1"=1'-0"



10 CALIFORNIA CORNER SCALE: 1"=1'-0"



11 "T" INTERSECTION SCALE: 1"=1'-0"



12 STRONGBACK DETAIL SCALE: 1"=1'-0"

APPROVED, OPTIONAL ADVANCED FRAMING

REVISIONS			
NO.	DESCRIPTION	DATE	APPR.



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TYPICAL FRAMING DETAILS IF APPLICABLE

NEW RESIDENCE
 326 GARFIELD ALLEY
 SAN ANTONIO, TX 78210

JOB NO:	26-219
DATE:	7/13/26
DESIGNER:	MR
CHECKED:	JIV, PE
DRAWN:	MR

SHEET:
S-6
 OF 6