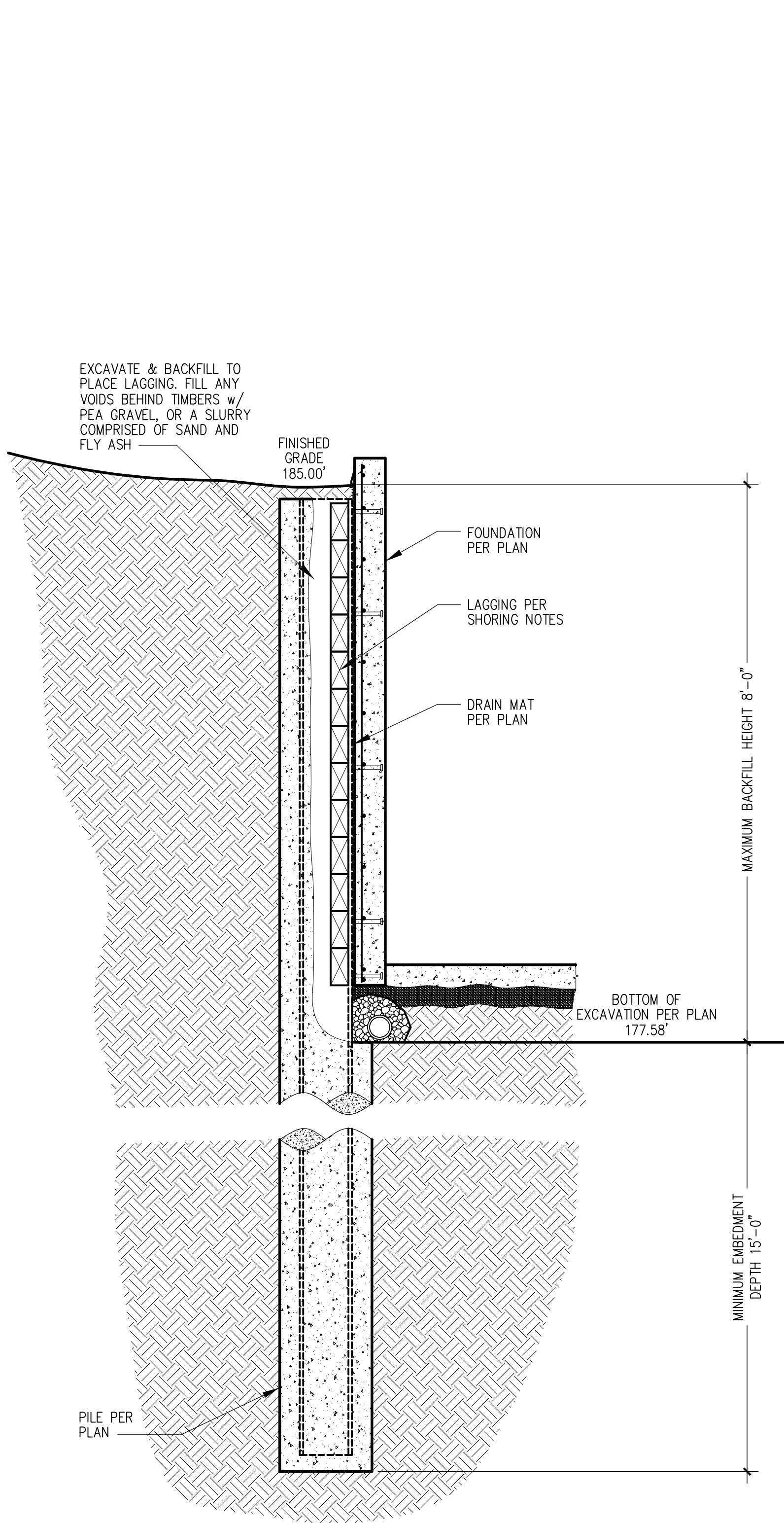
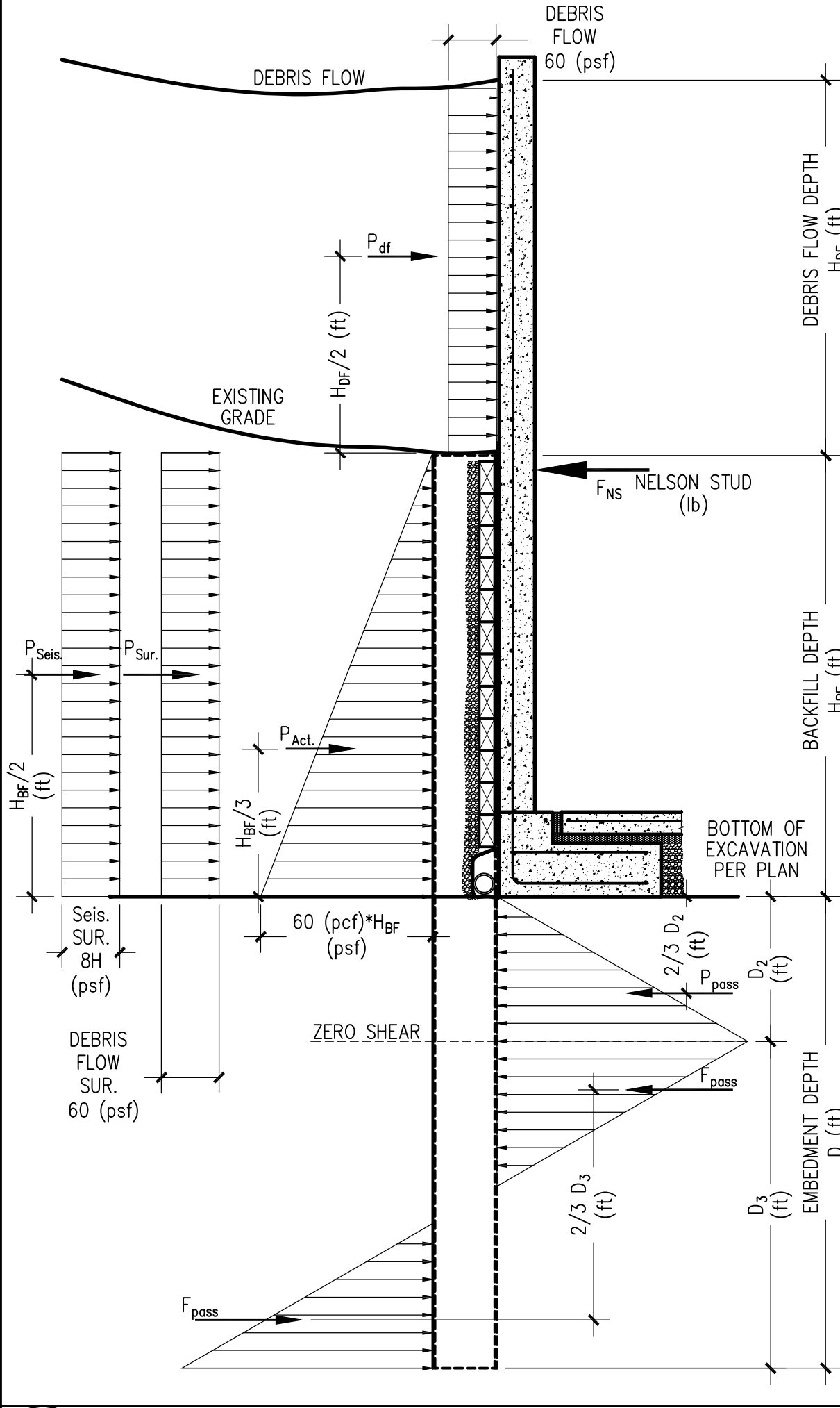


1 TYPICAL PILE SECTION (MAIN HOUSE)



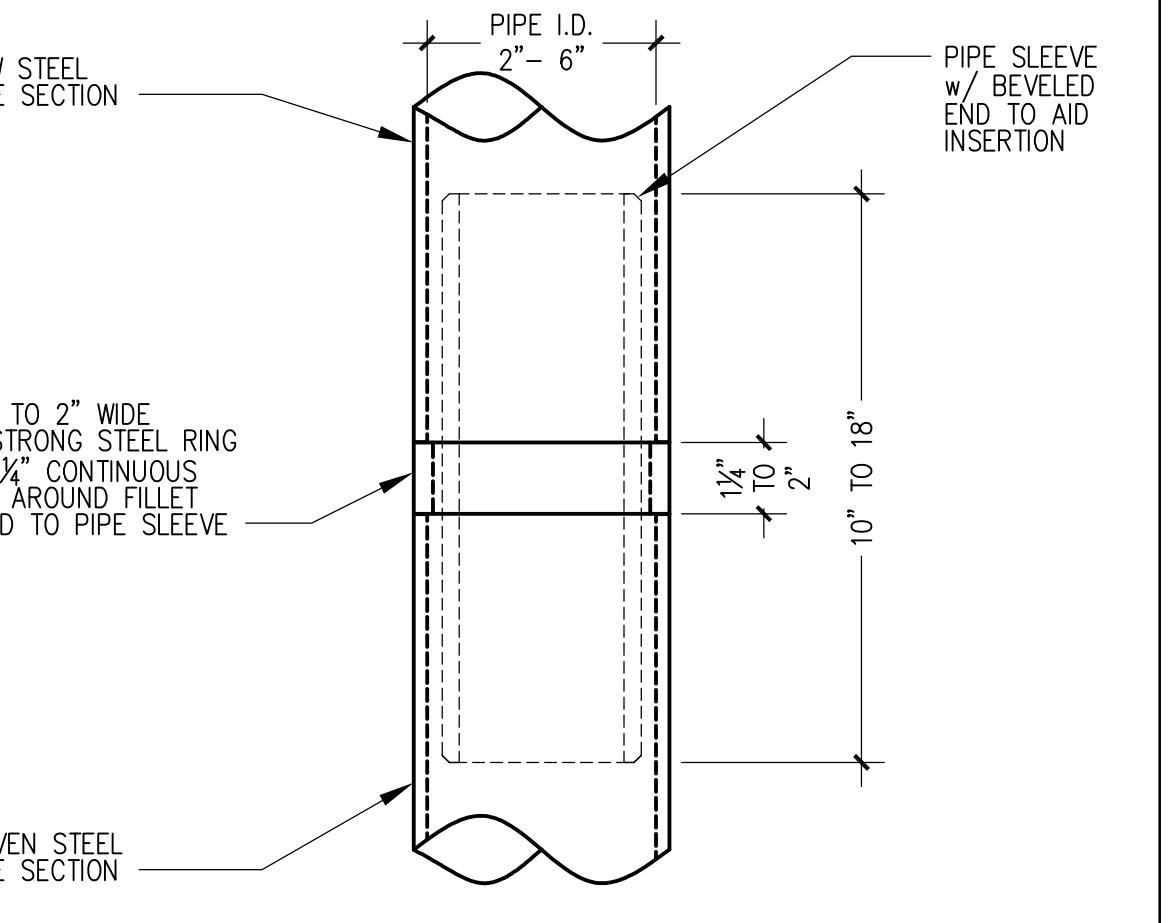
2 TYPICAL PILE SECTION (SITE WALL)



3 PILE LOADING DIAGRAM

PILE #	HEIGHT OF BACKFILL H (ft)	MIN. PILE DEPTH D (ft)	MAX. PILE SPACING S _P (ft)	AUGER DIA. d (in)	STEEL SECTION	TIMBER LAGGING
1-9	7'-2"	31'-6"	6'-0"	24"	W10x45	4x8 P.T. HF#2
10-13	9'-0"	30'-10"	6'-0"	24"	W10x54	4x8 P.T. HF#2
14-16	8'-0"	28'-2"	6'-0"	24"	W10x39	4x8 P.T. HF#2

4 PILE SCHEDULE



5 TYPICAL PIN PILE SPLICING DETAIL

GENERAL STRUCTURAL SHORING NOTES

REFERENCE DOCUMENTS:
 GEOTECHNICAL ENGINEERING STUDY
 GEO GROUP NORTHWEST, INC.
 REPORT #G-3637 DATED: FEB. 14, 2016

DESIGN LOADS:
 THE SOIL PRESSURES INDICATED ON THE SOILS PRESSURE DIAGRAM DETAIL 3/P1.0 WERE USED FOR DESIGN.

SOILS:
 CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE CONDUCTED FOR ALL PHASES OF PILE INSTALLATION. ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF PILE. SEE GEOTECHNICAL ENGINEERING STUDY FOR COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS FOR SHORING IN GENERAL, SHORING MONITORING, EXCAVATION, LAGGING AND DRAINING.

CONCRETE:
 CONCRETE SHALL CONFORM TO ALL REQUIREMENT OF OF CHAPTER 19 OF THE IBC. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD CYLINDER TESTS. UNLESS APPROVED OTHERWISE, REQUIRED ULTIMATE COMPRESSIVE STRENGTHS OF STRUCTURAL GROUT SHALL BE REACHED BY 28 DAYS FOR PILES.

f _c (psi)	MIN. SACKS OF CEMENT PER YARD OF CONCRETE	MAX. WATER PER 94lb SACK CEMENT	USE
3000	1} SACKS 6SACKS	6 GALLONS	PILE LEAN CONCRETE PILE STRUCTURAL GROUT

STRUCTURAL TIMBERS:
 ALL GRADES SHALL CONFORM TO WCLIB GRADING RULES FOR "WEST COAST LUMBER", LATEST EDITION. ALL PERMANENT TIMBER LAGGING SHALL BE PRESSURE TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPB LP-22 TO A MINIMUM RETENTION OF 0.4. ALL STRUCTURAL LUMBER SHALL BE AS NOTED BELOW.

FRAMING GRADES:
 4x TIMBER LAGGING HEM-FIR#2..... F_b = 680PSI

STRUCTURAL STEEL:
 STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS (14th EDITION). STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM DESIGNATION A992, 50KSI UNLESS NOTED OTHERWISE. WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE LAWS. ALL WELDING SHALL BE BY CERTIFIED WELDERS (W.A.B.O. OR EQUAL) USING E60 OR E70 ELECTRODES. SHOP DRAWINGS OF ALL STRUCTURAL STEEL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. ALL STEEL MEMBERS SHALL BE GIVEN ONE SHOP COAT OF APPROVED PRIMER. SURFACES TO BE EMBEDDED IN CONCRETE, FIREPROOFED OR FIELD WELDED SHALL NOT BE PRIMED. ALL BOLTS SHALL BE A325 UNLESS NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE ASTM A307

STATEMENT OF SPECIAL INSPECTION REQUIREMENTS:
 SPECIAL INSPECTIONS PER IBC CHAPTER 1704 SHALL BE PERFORMED ON THE FOLLOWING BUILDING COMPONENTS. INSPECTIONS SHALL BE PROVIDED BY A QUALIFIED INSPECTION AGENCY APPROVED BY THE BUILDING DEPARTMENT AND RETAINED BY THE OWNER/CONTRACTOR:

- ALL STRUCTURAL STEEL SHALL BE PERIODICALLY INSPECTED TO VERIFY MEMBER SIZE, GRADE, AND INSTALLATION PER PLAN. ANY ON SITE WELDING SHALL BE INSPECTED BY AN AWS D1.1 QUALIFIED INSPECTOR. CONTINUOUS INSPECTION IS NOT REQUIRED IF THE PROCEDURES AND QUALIFICATIONS OF THE WELDERS ARE VERIFIED PRIOR TO THE START OF THE WORK. TESTING AGENCY AND CREDENTIALS TO BE PROVIDED FOR APPROVAL UPON CONTRACT AGREEMENT.
 - AUGERCAST PILE PLACEMENT
- HOLE DIGGING:
 PILE HOLES SHALL BE DRILLED WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED PILES. THIS MAY INVOLVE CASING HOLES OR OTHER METHODS OF PROTECTION FROM CAVING. REFER TO TO GEOTECHNICAL ENGINEERING STUDY FOR RECOMMENDED HOLE DIGGING PROCEDURE.
- STEEL PLACEMENT TOLERANCES:
 1" INSIDE PERPENDICULAR TO SHORING WALL
 1" OUTSIDE PERPENDICULAR TO SHORING WALL
 3" LATERALLY
- LAGGING:
 TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER IN THE FIELD. VOIDS BETWEEN LAGGING AND SOIL SHALL BE BACKFILLED WITH EITHER PEA GRAVEL OR SLURRY PER GEOTECHNICAL ENGINEER. DRAINAGE BEHIND THE WALL MUST BE MAINTAINED. IT IS THE CONTRACTOR RESPONSIBILITY TO LIMIT THE AMOUNT OF EXPOSED SOIL WITHOUT LAGGING TO AVOID LOSS OF SOIL. MAXIMUM HEIGHT OF 4 FEET IS RECOMMENDED. SPECIAL CARE SHOULD BE TAKEN TO AVOID GROUND LOSS DURING EXCAVATION.
- SHORING MONITORING:
 CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE CONDUCTED FOR ALL PHASES OF THE SHORING PROJECT EXECUTION TO DETERMINE THE EFFECT OF CONSTRUCTION ON ADJACENT STRUCTURES IN ORDER TO PROTECT THEM FROM DAMAGE. REFER TO GEOTECHNICAL ENGINEERING STUDY FOR COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS.

GENERAL STRUCTURAL PIN PILE NOTES

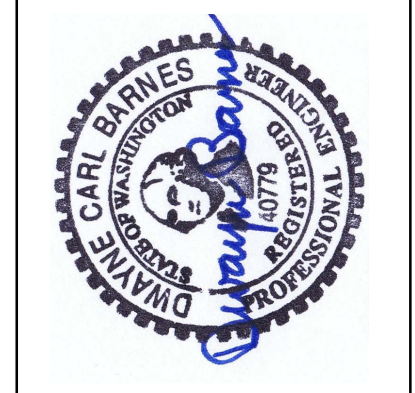
REFERENCE DOCUMENTS:
 GEOTECHNICAL ENGINEERING STUDY
 GEO GROUP NORTHWEST, INC.
 REPORT #G-3637 DATED: MAR. 15, 2015

PIN PILES:
 1. ALL PIN PILES SHALL CONSIST OF 4" GALVANIZED SCHEDULE 40 ASTM A-53 GRADE "A" PIPE, AND DRIVEN SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS AND PILE CAPS AS INDICATED IN DETAIL 5/P1.0 & 6/P1.0

- PILES SHALL BE DRIVEN WITH A TELEDYNE TB325 PNEUMATIC HAMMER (OR EQUIVALENT) TO A REFUSAL PENETRATION RATE OF 16SEC/INCH SUSTAINED THROUGH AT LEAST 3 MINUTES OF CONTINUOUS DRIVING. BATTERED PILES SHALL BE DRIVEN AT A RATIO OF 2 HORIZ: TO VERT. PILE CAPACITY 8 TONS FOR VERTICAL PILES, AND 7.8 TONS FOR BATTERED PILES.
- CONTRACTOR SHALL SUPPLY THE GEOTECHNICAL ENGINEER WITH ALL EQUIPMENT AND HAMMER ENERGY INFORMATION TO BE USED ON THE PROJECT, PRIOR TO ARRIVING ON SITE.
- FILED LOAD TESTING PER ASTM STANDARD D 1143-81, SHALL BE CONDUCTED ON AT LEAST (1) PILE, OR A MINIMUM OF 3% OF THE PILES, UP TO A MAXIMUM OF (5).

PIN PILE MONITORING:
 CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE CONDUCTED FOR ALL PHASES OF PIN PILE INSTALLATION. ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF PILE. REFER TO GEOTECHNICAL ENGINEERING STUDY FOR COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS.

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 425-644-9500



MI Treehouse, LLC
 5637 East Mercer Way
 Mercer Island, WA 98084

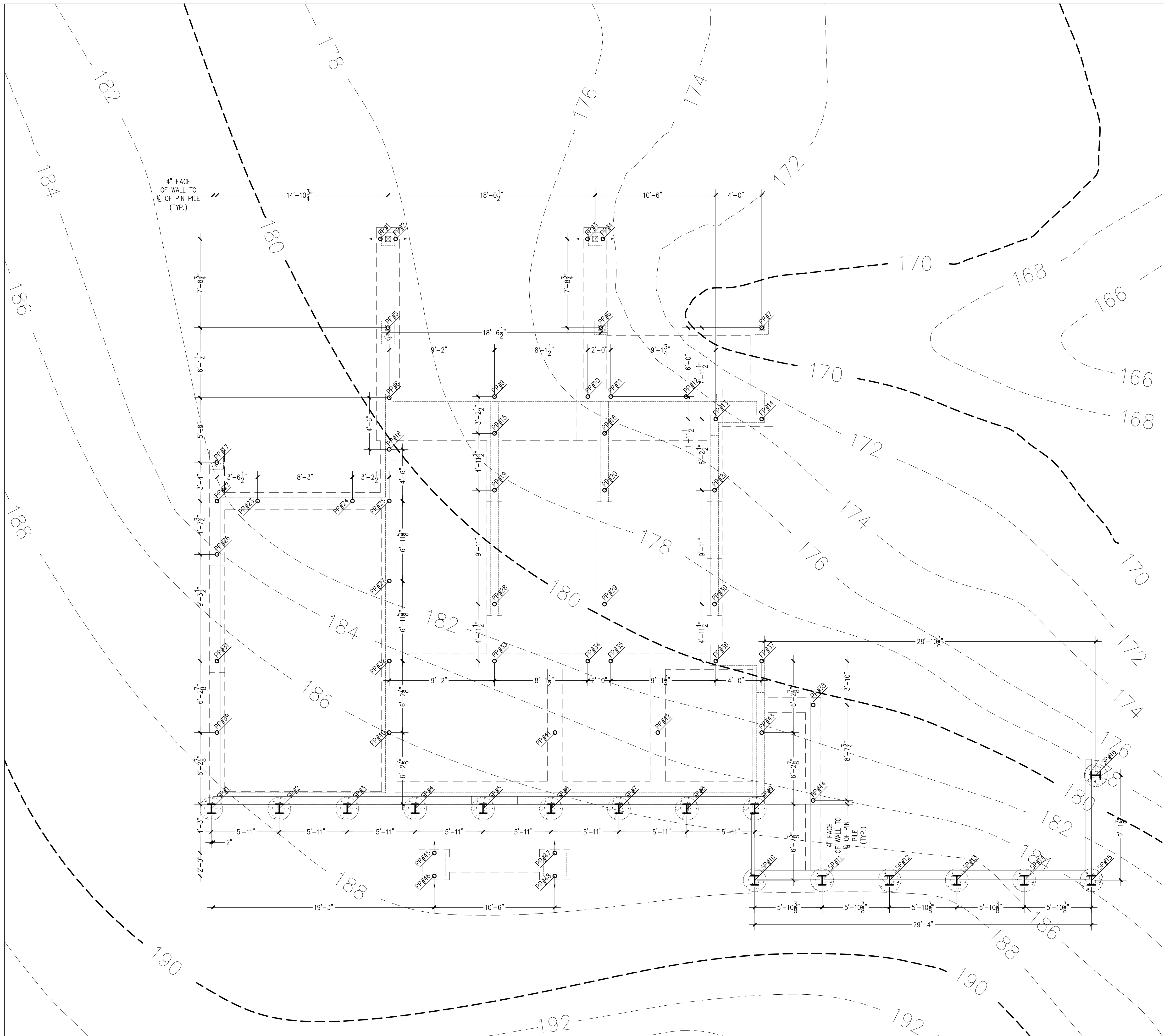
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Issued	Date
Permit Plans	03/30/20

18-025

P1.0
 SHORING/PIN PILE DETAILS



PILE PLAN

SCALE 1/4" = 1'-0"

PILE PLAN NOTES

1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE CONTACT STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
2. WRITTEN DIMENSIONS TAKE PRECEDENT OVER SCALED DIMENSIONS.
3. VERIFY ALL DIMENSIONS AND FIELD CONDITIONS.
4. REFER TO SHEET P1.0 FOR GENERAL SHORING AND PILE NOTES AND ADDITIONAL SHORING AND PIN PILE INFORMATION.
5. INDICATES LOCATION AND NUMBER OF 4" PIN PILE PER PLAN.
6. INDICATES LOCATION AND NUMBER OF A BATTERED 4" PIN PILE PER PLAN. ARROW INDICATES DIRECTION TO DRIVE PILE. BATTERED PILES SHALL BE DRIVEN AT A RATIO OF 2 HORIZ:10 VERT.
7. INDICATES LOCATION AND NUMBER OF AUGERCAST PILE PER PLAN. SEE TABLE 4/P1.0 FOR STEEL SIZE AND AUGER DEPTH AND DIAMETER.
8. REFER TO SOILS REPORT G-3837 FROM GEO GROUP NORTHWEST, INC. FOR ADDITIONAL INFORMATION.
9. GEOTECHNICAL SPECIAL INSPECTOR SHALL BE CONTINUOUSLY ONSITE DURING PILE INSTALLATION TO OBSERVE AND VERIFY CORRECT INSTALLATION OF ALL SHORING AND PIN PILES.

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 425-644-9500



MI Treehouse, LLC
 5637 East Mercer Way
 Mercer Island, WA 98084

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P1.1
 SHORING/PIN PILE PLAN

STRUCTURAL NOTES

CODE:
DESIGN IS IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE (I.B.C.) AS AMENDED BY THE LOCAL BUILDING DEPARTMENT.

LIVE LOADS:
ROOF..... 25 PSF
FLOOR..... 40 PSF
DECKS..... 60 PSF

LATERAL:
WIND..... BASIC WIND SPEED,110 MPH
(ASCE 7-10 Ch. 26-27)
(DIRECTIONAL PROCEDURE) EXPOSURE CATEGORY, D
K_{zt}= 1.00

SEISMIC..... S_{ds} = 1.336
(ASCE 7-10 Ch. 12.14) S_{ps} = 0.891
(SIMPLIFIED METHOD) SEISMIC DESIGN CATEGORY, D
SITE CLASS, D
SITE COEFFICIENT, F_a =1.0

FOUNDATIONS:
BEAR ALL FOUNDATION ON 4"Ø PIN PILES PER GEO GROUP NORTHWEST, INC.
REPORT #G-3837 DATED: FEB. 14, 2016. ALL EXTERIOR FOOTINGS SHALL EXTEND A MINIMUM OF 1'-6" BELOW ADJACENT EXTERIOR FINISHED GRADE.

CAST-IN-PLACE-CONCRETE:
F_c = 3000 PSI @ 28 DAYS. MINIMUM 5½ SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND A MAXIMUM OF 6¼ GALLONS OF WATER PER 94# SACK OF CEMENT. IN ADDITION, TO BASEMENT WALLS, AND FOUNDATION WALLS, ALL EXTERIOR CONCRETE EXPOSED TO WEATHER AND GARAGE SLABS SHALL BE AIR ENTRAINED WITH AN AIR-ENTRAINING AGENT TO 5%-7% BY VOLUME OF CONCRETE. MAXIMUM SIZED AGGREGATE SHALL BE 1". MAXIMUM SLUMP IS 5" OR LESS. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. ALL REINFORCED STEEL DOWELS, ANCHOR BOLTS AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO POURING CONCRETE. ANCHOR BOLTS FOR SILL PLATES TO FOUNDATION WALLS SHALL BE A MINIMUM OF ¾"Ø WITH A MINIMUM OF 7" EMBEDMENT INTO CONCRETE AND A MAXIMUM SPACING OF 48" O.C. MINIMUM OF 2 BOLTS PER SILL PLATE. ONE BOLT TO BE PLACED WITHIN 12" OF EACH END OF THE SILL PLATE.

REINFORCING STEEL:
ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND THE MANUAL STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION BY CRSI. DEFORMED REINFORCING STEEL BARS SHALL CONFORM TO ASTM GRADE 60. ALL REINFORCING BAR BENDS SHALL BE MADE COLD, WITH A MINIMUM RADIUS OF 6 BAR DIAMETERS. CORNER BARS (2"-0" BEND) SHALL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. LAP ALL BARS A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE. UNLESS NOTED OTHERWISE ON THE DRAWINGS REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM COVER:
CONCRETE CAST AGAINST EARTH..... 3"
CONCRETE EXPOSED TO EARTH OR WEATHER..... 2"
#6 THRU #18 BARS..... 2"
#5 BAR AND SMALLER..... 1½"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER..... 1½"
#11 BAR AND SMALLER..... ¾"
SLAB ON GRADE (FROM THE SURFACE)..... 1½"

WELDED WIRE FABRIC (WWF):
WWF SHALL CONFORM TO ASTM A-185. WWF SHALL BE LAPPED ONE CROSSWIRE PLUS 2" (i.e. 8" FOR 6X6 MESH). WWF SHALL BE CHAIRED IN POSITION WITH A MAXIMUM CHAIR SPACING OF 4'

STRUCTURAL STEEL:
STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS (14th EDITION). STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM DESIGNATION A992 UNLESS NOTED OTHERWISE. SQUARE AND RECTANGULAR STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM DESIGNATION A500, GRADE B. STEEL PIPE SHALL CONFORM TO ASTM DESIGNATION A53, TYPE E OR S, GRADE B (F_y= 46,000 PSI). ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS AT MEMBERS AND CONNECTIONS OF THE SEISMIC-FORCE-RESISTING SYSTEM SHALL BE MADE WITH A FILLER MATERIAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT-0 DEGREES F, AS DETERMINED BY THE APPLICABLE AWS A5 CLASSIFICATION TEST METHOD. ALL COMPLETE JOINT PENETRATION GROOVE WELDS AT DEMAND CRITICAL WELDS SHALL BE MADE WITH A FILLER MATERIAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT-0 DEGREES F, AS DETERMINED BY THE APPLICABLE AWS A5 CLASSIFICATION TEST METHOD. AND 40 FT-LBS AT-70 DEGREES F, AS DETERMINED BY SECTION A3.4A. FILLER METAL PRODUCING WELDS ARE REQUIRED TO MEET THE MINIMUM REQUIREMENTS FOR CHARPY V-NOTCH TOUGHNESS AS SPECIFIED IN THE WELDING PROCEDURE SPECIFICATIONS. ATTACHMENTS ARE NOT PERMITTED WITHIN THE PROTECTED ZONE AND DISCONTINUITIES SHALL BE REPAIRED IN ACCORDANCE WITH SECTION D1.5 OF AISC 41-10. ALL STEEL MEMBERS SHALL BE GIVEN ONE SHOP COAT OF APPROVED PRIMER. SURFACES TO BE EMBEDDED IN CONCRETE, FIREPROOFED OR FIELD WELDED SHALL NOT BE PRIMED. ALL BOLTS SHALL BE A325 UNLESS NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE BE ASTM A307.

STATEMENT OF SPECIAL INSPECTION REQUIREMENTS:
SPECIAL INSPECTIONS PER IBC CHAPTERS 1704, AND 1705 SHALL BE PERFORMED ON THE FOLLOWING BUILDING COMPONENTS:
1. PERIODIC GEOTECHNICAL INSPECTIONS FOR VERIFICATION AND COMPLIANCE TO SOILS REPORT ON SITE EXCAVATION AND GRADING, OVER EXCAVATION AND PLACEMENT OF STRUCTURAL FILL, CONSTRUCTION DEWATERING, PER PAGE 3 OF THE GEOTECHNICAL REPORT. PLACEMENT OF STRUCTURAL FILL AND SOIL COMPACTION, AND VERIFICATION OF SOIL-BEARING CAPACITY.
2. CONTINUOUS INSPECTION FOR INSTALLATION OF CONCRETE EXPANSION, ADHESIVE, AND SCREW ANCHORS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

5. PERIODIC INSPECTION ON FABRICATION, WELDING, HIGH STRENGTH BOLTING, AND INSTALLATION OF STRUCTURAL STEEL OTHER THAN PREFABRICATED STRUCTURAL STEEL MEMBERS TO VERIFY MEMBER SIZE, GRADE, WELDS, AND INSTALLATION PER PLAN.
7. CONTINUOUS INSPECTION ON WELDING OF STRUCTURAL STEEL MEMBERS FOR OTHER THAN SINGLE-PASS FILLET WELDS (MAXIMUM 5/16-INCH).

** SPECIAL INSPECTION IS REQUIRED ON THE PREMISES FOR THE FABRICATION OF ALL PREFABRICATED STEEL ELEMENTS, INCLUDING BUT NOT LIMITED, TO STEEL STAIRS, AND STEEL MOMENT FRAMES, UNLESS THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTION.

STRUCTURAL TESTING:
STRUCTURAL TESTING BY QUALIFIED TESTING FACILITIES SHALL BE CONDUCTED ON THE FOLLOWING BUILDING COMPONENTS:
1. NON DESTRUCTIVE TESTING OF THE COMPLETE JOINT PENETRATION AND PARTIAL JOINT PENETRATION GROOVE-WELDED JOINTS ON THE STEEL ENTRY STAIRS.

STRUCTURAL SUBMITTALS:
SHOP DRAWINGS, REPORTS, CERTIFICATES AND OTHER DOCUMENTS RELATING TO SPECIAL STRUCTURAL ELEMENTS, INSPECTIONS, AND TESTS SHOULD BE SUBMITTED TO THE CONTRACTOR, THE CITY OF BELLEVUE, AND THE ENGINEER OF RECORD. THE CERTIFICATES OF COMPLIANCE ARE REQUIRED TO STATE THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. CERTIFICATES SHALL BE SUBMITTED ON THE FOLLOWING BUILDING COMPONENTS:
1. SHOP DRAWINGS FOR PREFABRICATED METAL-PLATE-CONNECTED WOOD TRUSSES, AND TJ ROOF FRAMING.
2. CERTIFICATES OF COMPLIANCE FROM STEEL FABRICATORS ON ALL PREFABRICATED STEEL MEMBERS AT THE COMPLETION OF FABRICATION, INCLUDING BUT NOT LIMITED TO, BEAMS AND COLUMNS, PREFABRICATED STAIR SYSTEMS,

3. SUBMITTAL OF ALL WELDING PROCEDURE SPECIFICATIONS VERIFYING THAT ALL WELDS WERE MADE PER APPROVED CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED

TO, ALL BEAMS, AND COLUMNS, MEMBERS AND CONNECTIONS.
4. WABO CERTIFICATE INDICATING STEEL FABRICATION SHOP IS QUALIFIED TO WELD WITHOUT SPECIAL INSPECTIONS.

PRESSURE TREATED WOOD:
ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, EARTH, OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED WOOD IN ACCORDANCE WITH AWPA U1 AND M4 STANDARDS.

MISCELLANEOUS HARDWARE:
ALL MISCELLANEOUS HANGERS AND HARDWARE TO BE SIMPSON OR APPROVED EQUAL. ALL HANGERS SHALL BE FASTENED TO WOOD WITH PROPER NAILS AND ALL NAIL HOLES FILLED. ALL NAILS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED PER ASTM STANDARD 153 AND I.B.C. SECTION 2304.9.5. ALL METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE ZMAX (HDG PER ASTM A653, CLASS G-185) OR EQUAL.

FLOOR SHEATHING:
FLOOR SHEATHING SHALL BE 1½" TONGUE AND GROOVE, A.P.A. RATED SHEATHING WITH A SPAN RATING OF 48/36, WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. UNLESS NOTED OTHERWISE, NAIL WITH 16d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES, AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

ROOF SHEATHING:
ROOF SHEATHING SHALL BE ¾" A.P.A. RATED PLYWOOD OR ¾" OSB A.P.A. RATED SHEATHING WITH A SPAN RATING OF 32/16, WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. UNLESS NOTED OTHERWISE, NAIL WITH 8d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES, AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

WALL SHEATHING:
WALL SHEATHING SHALL BE ¾" A.P.A. RATED PLYWOOD OR 7/8" OSB A.P.A. RATED SHEATHING WITH A SPAN RATING OF 24/0. PANEL END JOINTS SHALL OCCUR AT SUPPORTS. NAIL ALL PANEL EDGES WITH 8d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

FLOOR FRAMING:
FLOOR JOIST TO BE AS SPECIFIED ON PLANS. PROVIDE FULL DEPTH BLOCKING FOR JOIST AT THE SUPPORTS. FLUSH BEAMS (FB) AND HEADERS NOT CALLED OUT ON THE PLANS SHALL BE (2) 2x8 DOUG-FIR #2. ALL LAMINATED BEAMS SHALL BE SPIKED TOGETHER WITH 16d NAILS @ 6" O.C. STAGGERED

BEARING WALL FRAMING:
ALL DOOR AND WINDOW HEADERS NOT CALLED OUT ON THE PLANS SHALL BE 4x8 DOUGLAS-FIR #2 WITH (1) CRIPPLE STUD AND (1) KING STUD ON EACH END FOR OPENINGS 5' AND LESS AND (2) CRIPPLE STUDS AND (1) KING STUD ON EACH END FOR OPENINGS GREATER THAN 5'. ALL COLUMNS NOT CALLED OUT ON THE PLANS SHALL BE A MINIMUM OF TWO LAMINATED STUDS. NAIL LAMINATED COLUMNS TOGETHER WITH (2) 16d NAILS @ 12" O.C. WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATES AND BOTTOM PLATES TO EACH STUD WITH MINIMUM (2) 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d NAILS AT 16" O.C. STAGGERED. LAP AND FACE NAIL NAIL TOP PLATES WITH (3) 16d NAILS @ EACH CORNER AND INTERSECTION. STAGGER TOP PLATE SPLICES A MINIMUM OF 48" AND NAIL w/ (4) 16d NAILS EACH SIDE OF SPLICE. FACE NAIL BOTTOM PLATE WITH (2) 16d NAILS AT 16" O.C. OR PER SHEARWALL SCHEDULE. PROVIDE (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER AT CONTACT SURFACES BETWEEN ALL WOOD AND CONCRETE.

PRE-MANUFACTURED FLOOR JOIST:
JOIST SHALL BE MANUFACTURED IN A PLANT APPROVED FOR FABRICATION BY THE BUILDING DEPARTMENT AND UNDER THE SUPERVISION OF AN APPROVED THIRD PARTY INSPECTION AGENCY. EACH JOIST SHALL BE IDENTIFIED BY A STAMP INDICATING THE JOIST TYPE, C.A.B.O. NER REPORT NUMBER, MANUFACTURERS NAME, PLANT NUMBER, AND THE INDEPENDENT INSPECTION AGENCY LOGO AND EVALUATION REPORT NUMBER. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON SITE AT TIME OF INSPECTION FOR INSPECTOR'S USE AND REFERENCE.

PRE-MANUFACTURED FLOOR AND ROOF TRUSSES:
ALL TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH APPROVED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL PLATE CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANS/TFP 1. ALL TRUSS DESIGN DRAWINGS SHALL BE PREPARED, STAMPED, AND SIGNED BY A WASHINGTON STATE LICENSED STRUCTURAL ENGINEER. ALL TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE MANUFACTURER'S PROVIDED CONSTRUCTION DOCUMENTS FOR THE BUILDING. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICES, SUCH THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL CONNECTED WOOD TRUSSES. TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE PRIOR APPROVAL OF THE TRUSS MANUFACTURER'S DESIGN ENGINEER. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON SITE AT TIME OF INSPECTION FOR INSPECTOR'S USE AND REFERENCE.

GLUED-LAMINATED TIMBERS:
LAMINATED TIMBERS SHALL BE DOUGLAS-FIR/LARCH KILN DRIED STRESS GRADED COMBINATION 24F-V4 (F_y = 2400 PSI, F_v = 109 PSI) FOR SIMPLE SPANS AND 24F-V8 FOR CANTILEVER AND CONTINUOUS BEAMS. A.I.T.C. CERTIFICATE OF PERFORMANCE REQUIRED. COLUMNS SHALL CONFORM TO TO A.I.T.C. STANDARDS 117.

STRUCTURAL TIMBERS:
ALL GRADES SHALL CONFORM TO WMPA GRADING RULES FOR WESTERN LUMBER, LATEST EDITION. PROVIDE CUT WASHERS UNDER ALL NUTS AND BOLTS BEARING AGAINST WOOD. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL STRUCTURAL LUMBER SHALL BE AS NOTED BELOW:

FRAMING GRADES:	
2x ROOF RAFTERS	DOUG-FIR/LARCH #2..... F _b =900PSI
2x FLOOR/DECK JOIST	DOUG-FIR/LARCH #2..... F _b =900PSI
4x BEAMS	DOUG-FIR/LARCH #2..... F _b =900PSI
6x BEAMS	DOUG-FIR/LARCH #1..... F _b =1350PSI
4x COLUMNS	DOUG-FIR/LARCH #1..... F _b =1000PSI
6x COLUMNS	DOUG-FIR/LARCH #1..... F _b =1200PSI
2x STUDS	HEM-FIR..... F _b =875PSI
LSL	LSL 1.55E..... F _b =2325PSI
LVL	LVL 2.0E..... F _b =2600PSI
PSL	PSL 2.2E..... F _b =2900PSI
GLB	GLU-LAM (24F-V4)..... F _b =2400PSI

Stoney Point Engineering

Drwayne Barnes P.E.
dwayne@stoneypointengineering.com
Office: 425-644-9500



MI Treehouse, LLC
5637 East Mercer Way
Mercer Island, WA 98084

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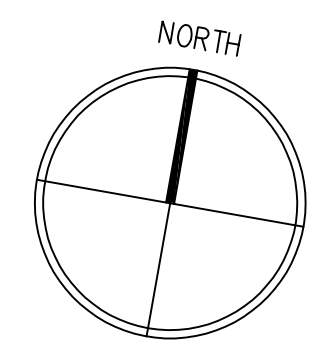
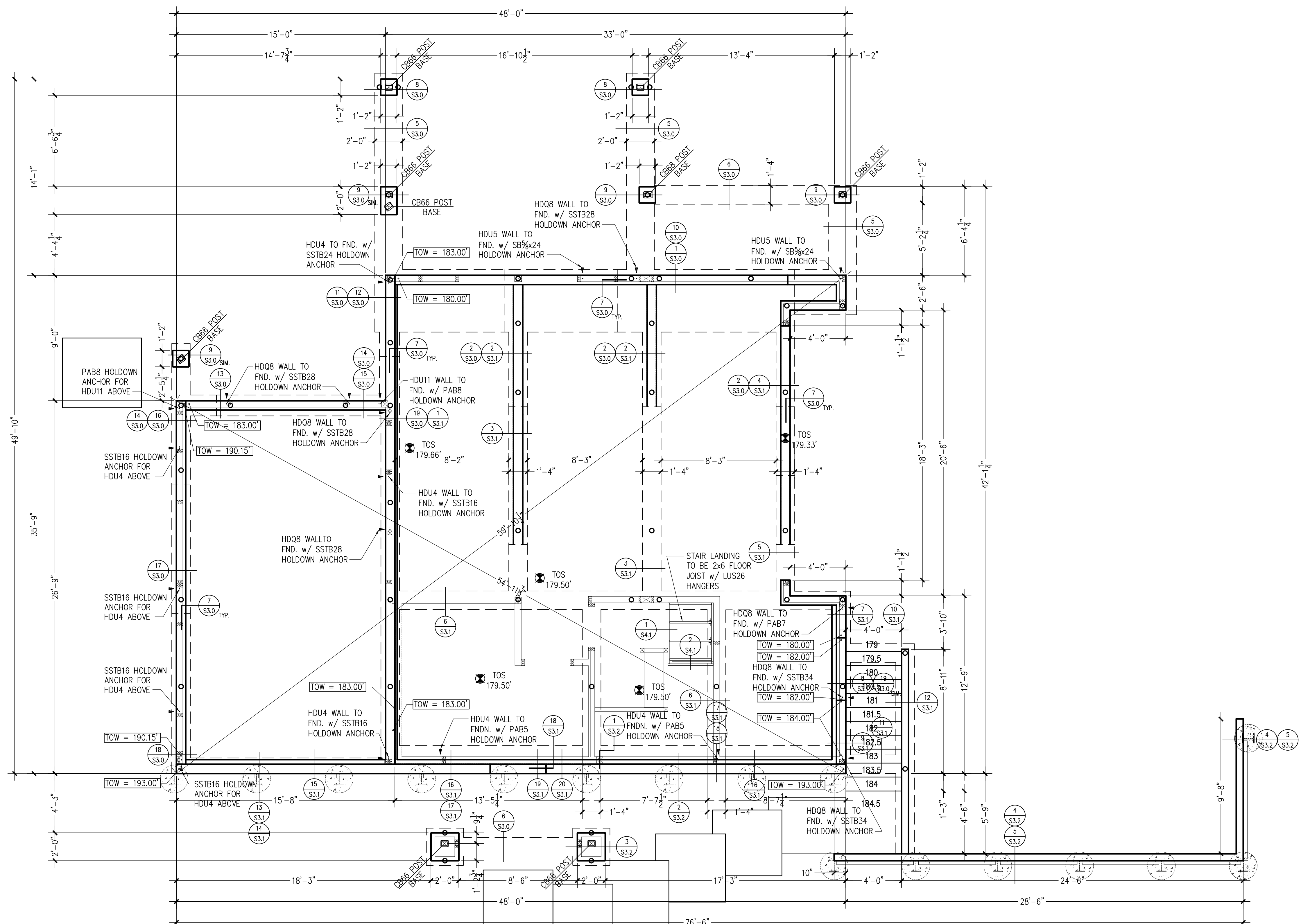
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S1.0

STRUCTURAL NOTES



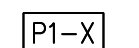


FOUNDATION PLAN

SCALE 3/4" = 1'-0"

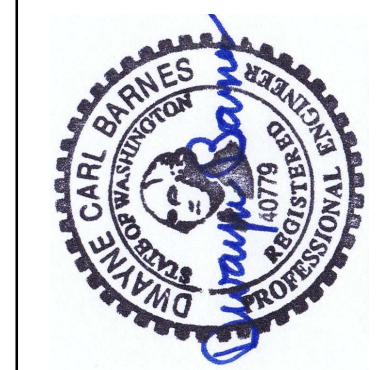
FOUNDATION PLAN NOTES

- PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE CONTACT STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
- WRITTEN DIMENSIONS TAKE PRECEDENT OVER SCALED DIMENSIONS.
- ALL FOOTINGS TO HAVE A MINIMUM DEPTH OF 18" BELOW FINISH GRADE.
- ALL CONCRETE FOOTINGS TO BEAR ON 4" Ø PIN PILES OR WIDE-FLANGE SHORING PILES PER PLAN.
- STEP FOUNDATION PER SITE CONDITIONS.
- CONCRETE COMPRESSIVE STRENGTH F'C = 3,000 PSI, GRADE 60 REINFORCEMENT.
- ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, EARTH, OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
- VERIFY ALL DIMENSIONS AND FIELD CONDITIONS.
- PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED.
- CONCRETE PROTECTION FOR REINFORCEMENT:
 - 3" CAST AGAINST EARTH.
 - 1 1/2" EXPOSED TO EARTH OR WEATHER.
 - 3/4" NOT EXPOSED TO EARTH OR WEATHER.
- METAL FRAMING CONNECTORS SPECIFIED ARE MANUFACTURED BY THE SIMPSON COMPANY. SEE LATEST CATALOG EDITION. INSTALL PER SPECS. USE ONLY EQUIVALENT SUBSTITUTIONS.
- ALL METAL CONNECTORS SUPPORTED BY PRESSURE TREATED MATERIAL SHALL BE "ZMAX" (G185 HDG PER ASTM A653) OR EQUIVALENT AND FASTENERS SHALL BE PER ASTM A153.

SHEARWALL NOTES

- ALL EXTERIOR WALLS TO BE P1-6 U.N.O.
-  DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
-  DENOTES LOCATION OF TIE STRAP PER PLAN.
-  DENOTES LOCATION HOLDOWN PER PLAN.
- SEE SHEETS S3.0, S3.1, S3.2, S4.1, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS.

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 425-644-9500



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 5637 East Mercer Way
 Mercer Island, WA 98084

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S2.0

FOUNDATION PLAN

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S2.1

MAIN FLOOR FRAMING PLAN

SCALE 1/8" = 1'-0"

MAIN FLOOR FRAMING PLAN NOTES

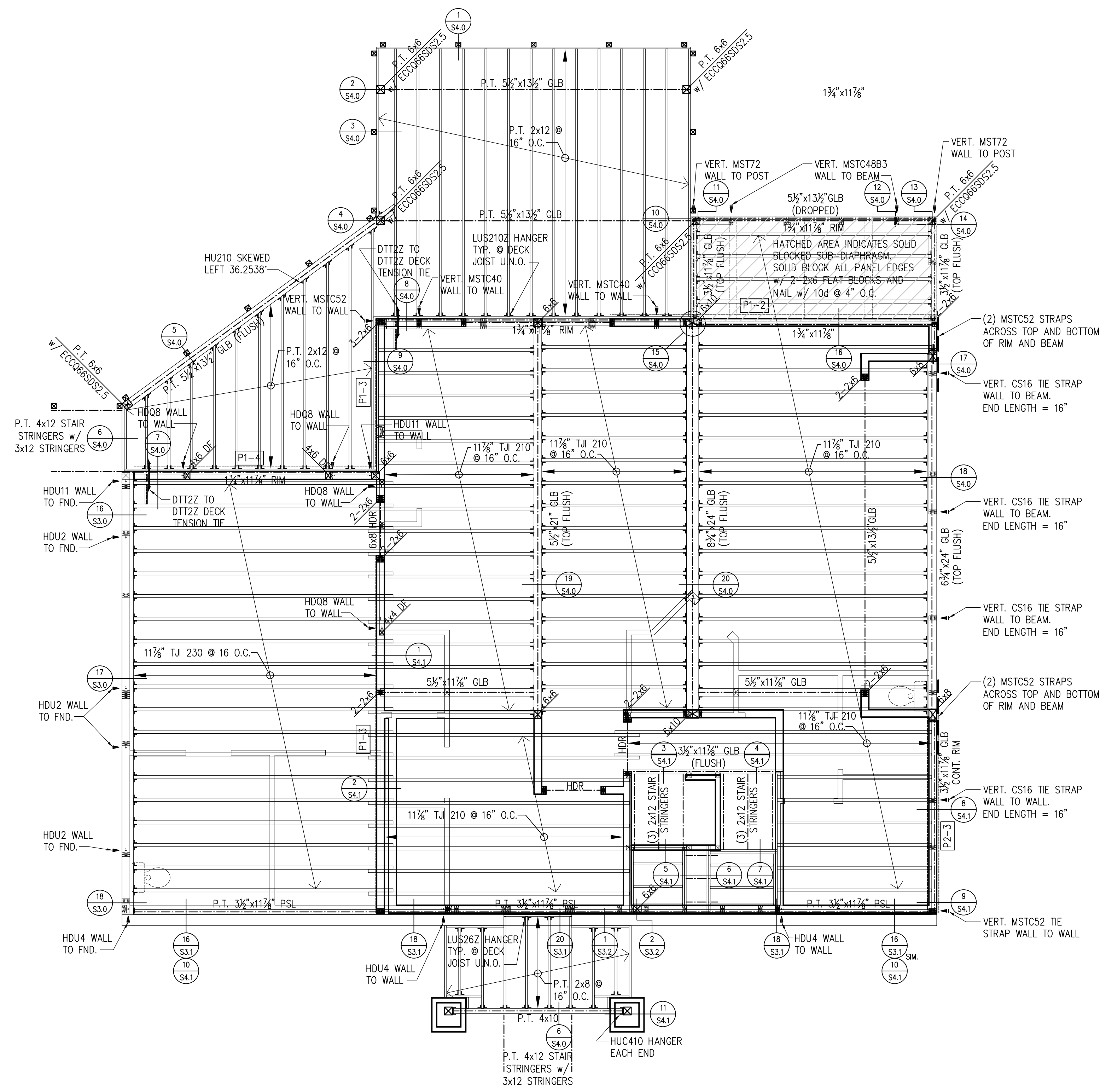
- PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
- ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2015 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.
- ALL FLOOR JOIST TO BE 11 1/8" TJI 230 @ 16" O.C. U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY BE REPLACED W/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL, U.N.O.
- ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED THE DESIGN STRESS VALUES INDICATED ON SHEET S1.0. INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

- ALL EXTERIOR WALLS TO BE P1-6 U.N.O.
- DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
- DENOTES LOCATION OF THE STRAP PER PLAN
- DENOTES LOCATION HOLDOWN PER PLAN.
- SEE SHEETS S3.0, S3.1, S3.2, S4.0, S4.1, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

LEGEND

- DENOTES INTERIOR LOWER FLOOR BEARING WALLS
- DENOTES LOWER FLOOR WALLS
- DENOTES BEAMS, HEADERS



S2.1



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S2.2
 UPPER FLOOR
 FRAMING PLAN

UPPER FLOOR FRAMING PLAN

SCALE 1/4" = 1'-0"

UPPER FLOOR FRAMING PLAN NOTES

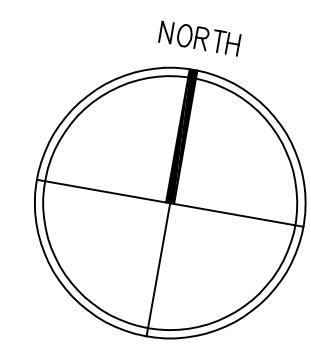
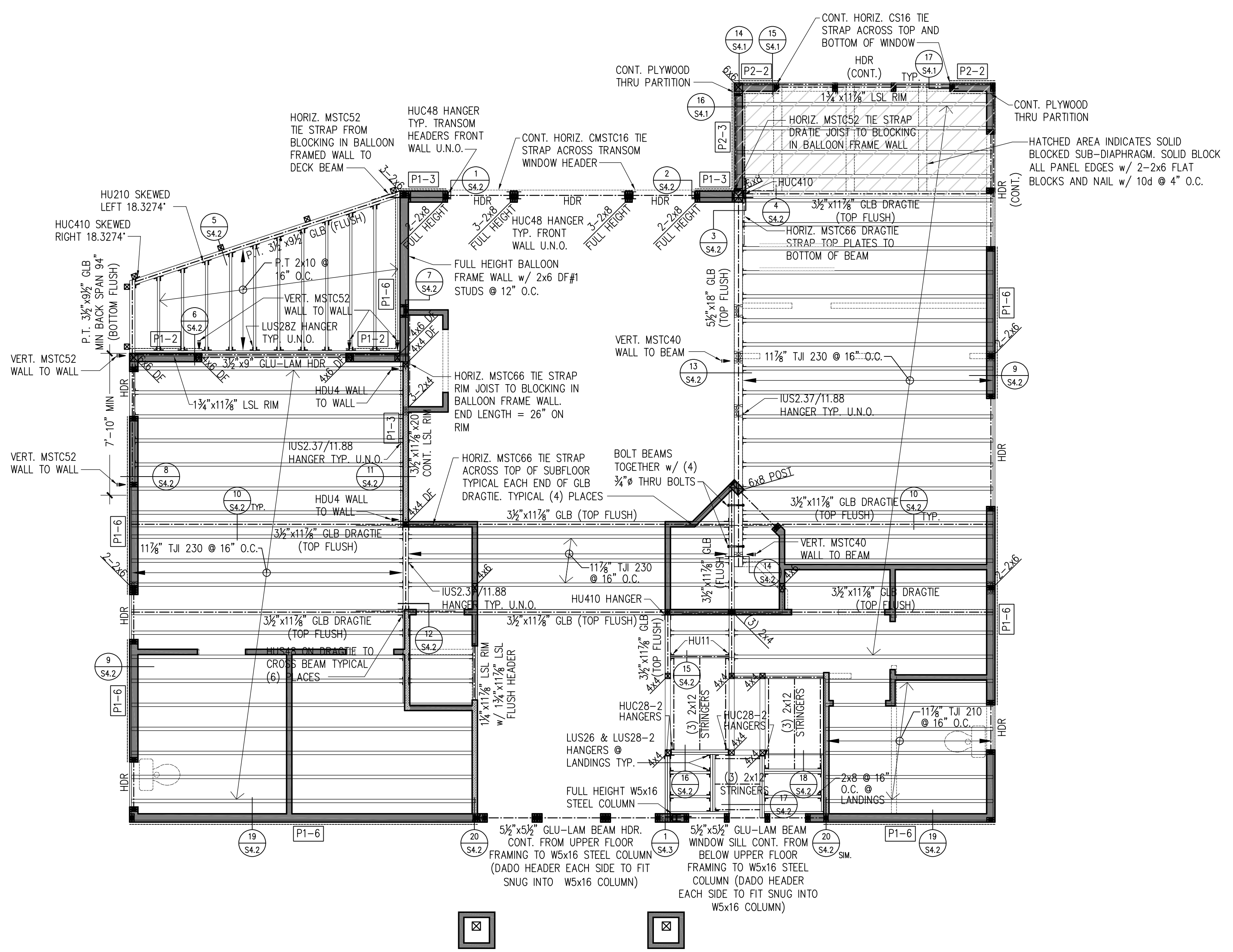
- PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
- ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2015 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL. U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.
- ALL FLOOR JOIST TO BE 1 1/8" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 1 1/2" x 1 1/8" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY BE REPLACED W/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL, U.N.O.
- ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED THE DESIGN STRESS VALUES INDICATED ON SHEET S1.0 INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

- ALL EXTERIOR WALLS TO BE P1-6 U.N.O.
- DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
- DENOTES LOCATION OF TIE STRAP PER PLAN
- DENOTES LOCATION HOLDOWN PER PLAN.
- SEE SHEETS S1.0, S4.1, S4.2, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

LEGEND

- DENOTES INTERIOR MAIN FLOOR BEARING WALLS
- DENOTES MAIN FLOOR WALLS
- DENOTES BEAMS, HEADERS





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S2.3
 ROOF FRAMING PLAN

ROOF FRAMING PLAN

SCALE 1/8" = 1'-0"

ROOF FRAMING NOTES

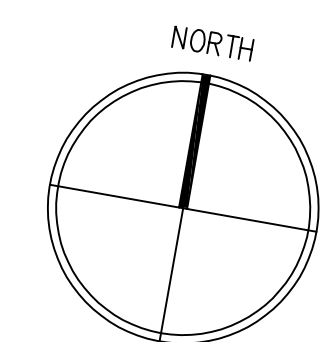
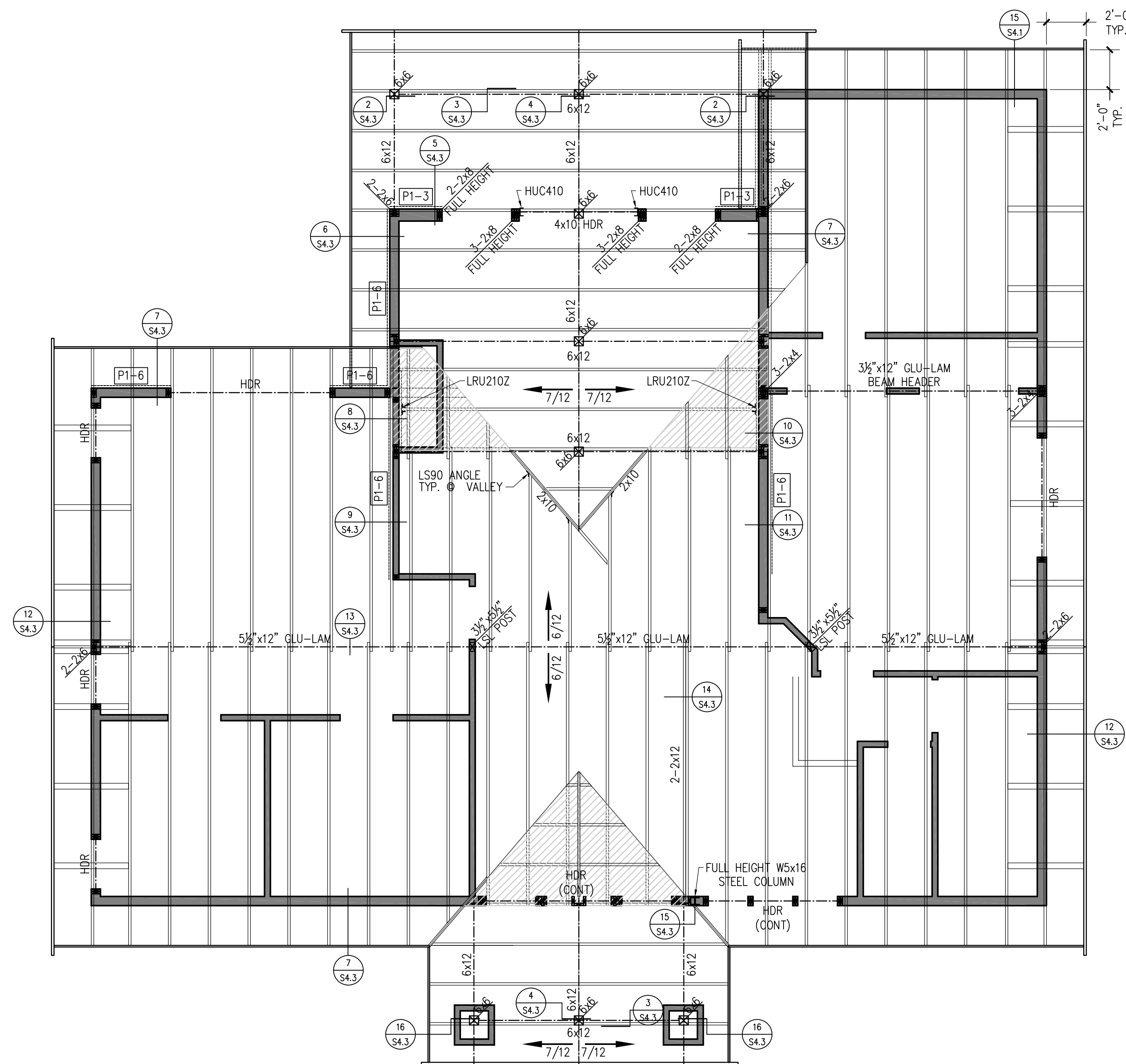
- PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
- ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2015 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- ALL HDRS TO BE 4x8 D.F.#2 TYPICAL U.N.O.
- ROOF FRAMING TO BE 2x12 DE#1 RAFTERS @ 24" O.C. TYPICAL U.N.O.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY BE REPLACED w/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL U.N.O.
- ROOF PITCH TO BE AS NOTED, U.N.O.
- CONTRACTOR TO VERIFY LOCATION OF ALL ROOF SUPPORT BRACING AND POSTING AND PROVIDE ADEQUATE BEARING TO FOUNDATION.
- ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED DESIGN STRESS VALUES INDICATED ON SHEET S1.0 INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

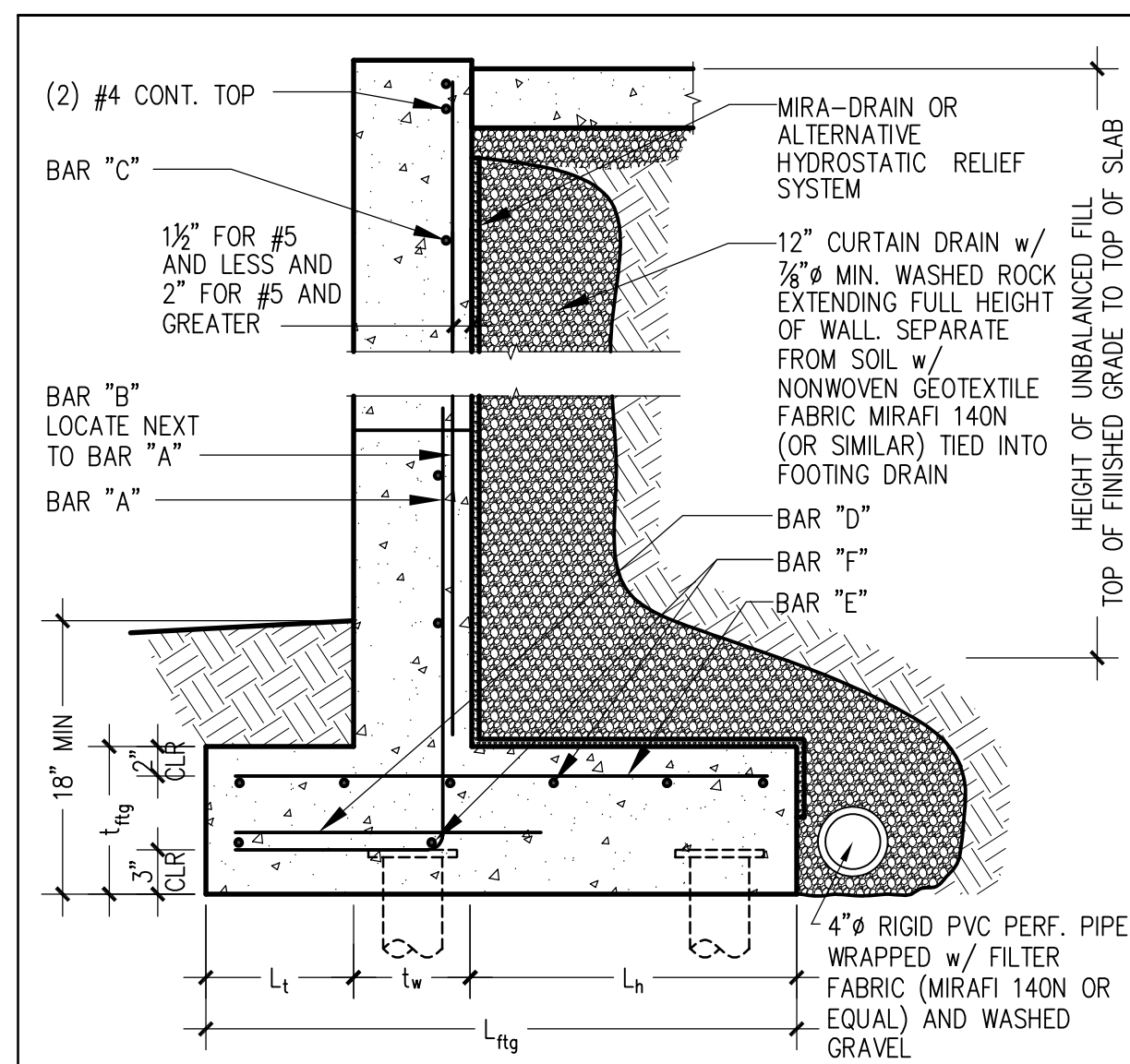
SHEARWALL NOTES

- ALL EXTERIOR WALLS TO BE P1-6 U.N.O.
- DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
- DENOTES LOCATION OF TIE STRAP PER PLAN.
- DENOTES LOCATION HOLDOWN PER PLAN.
- SEE SHEETS S1.0, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS.

LEGEND

- DENOTES INTERIOR UPPER FLOOR BEARING WALLS
- DENOTES UPPER FLOOR WALLS
- DENOTES BEAMS, HEADERS

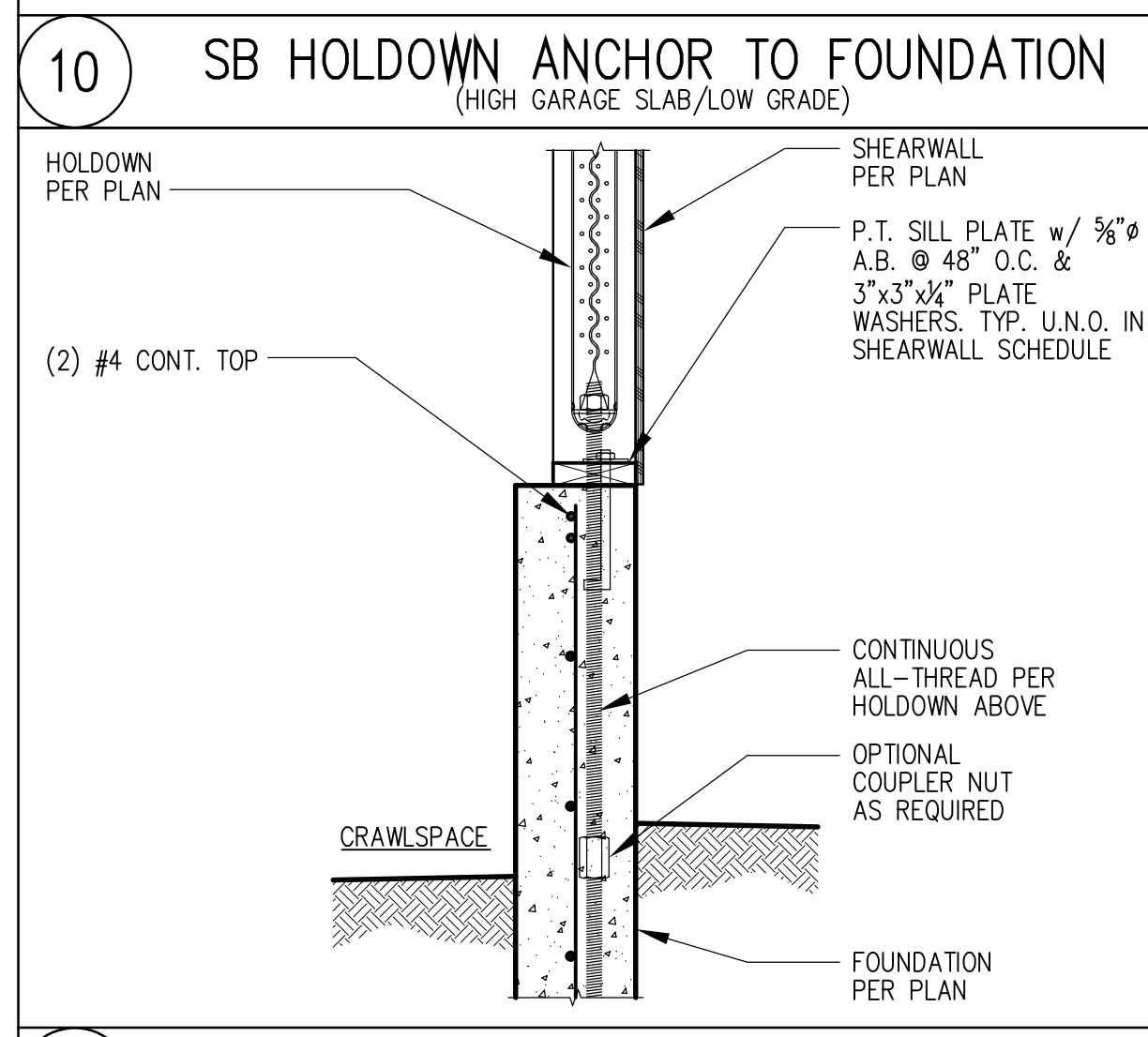
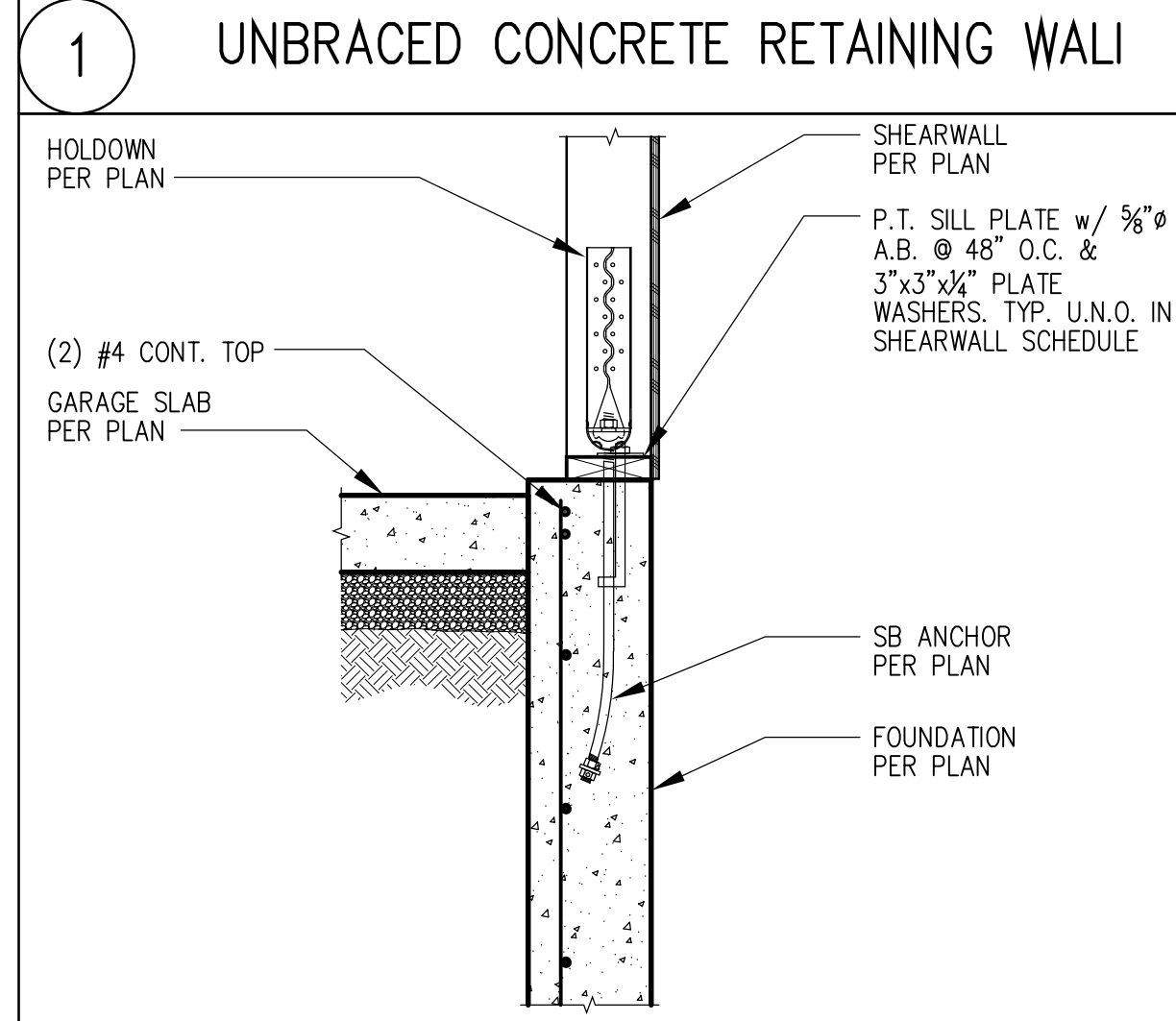




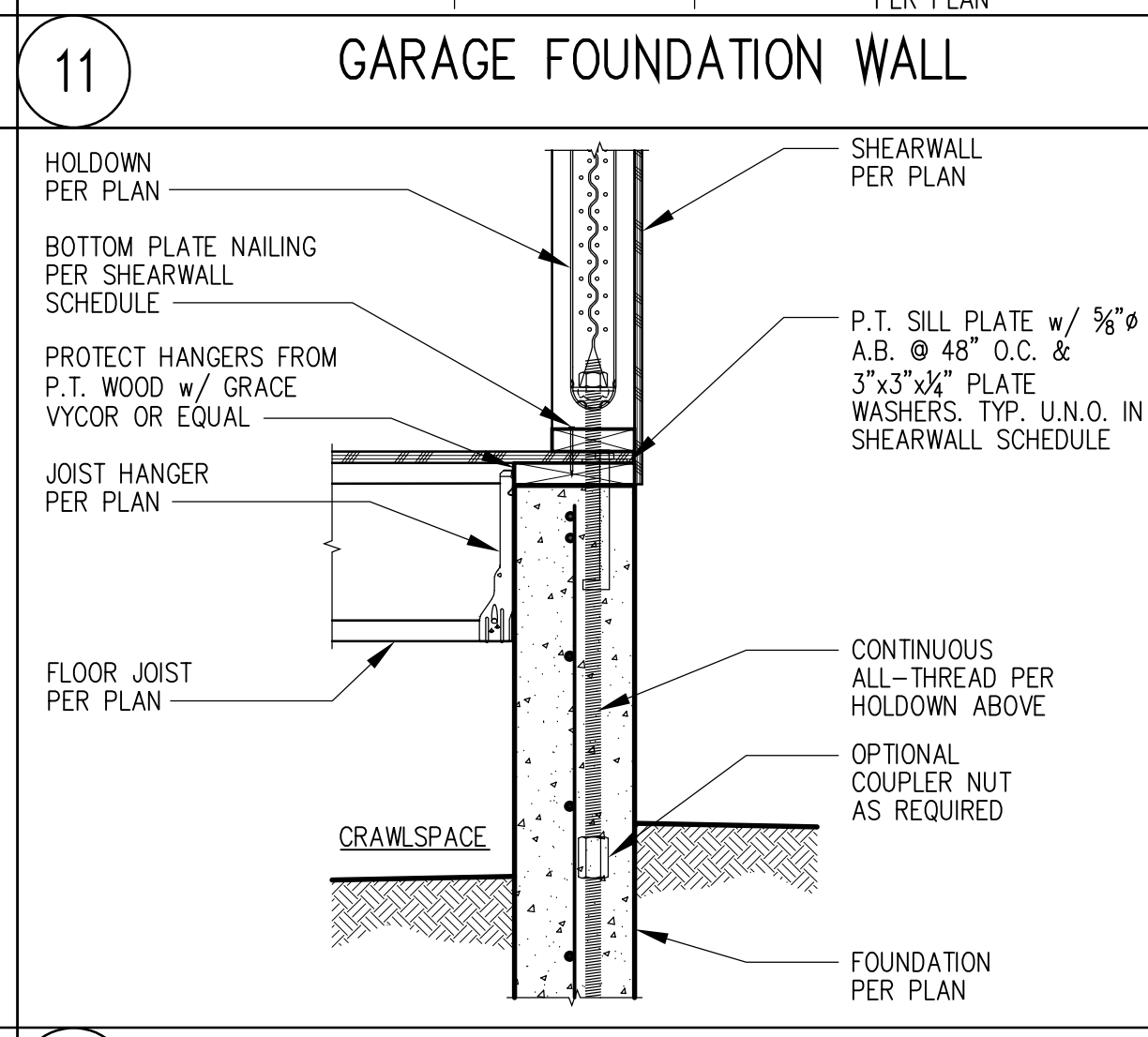
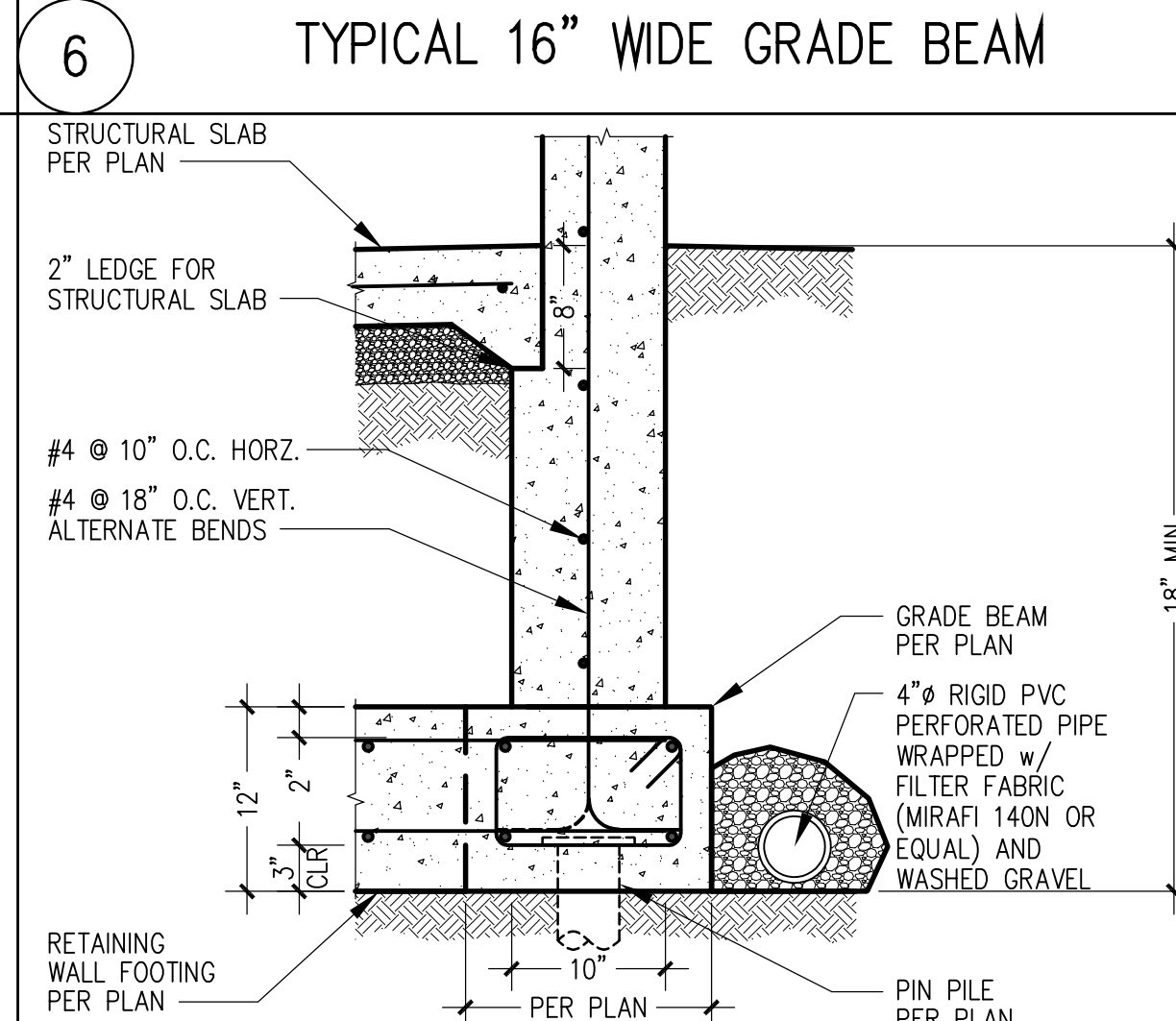
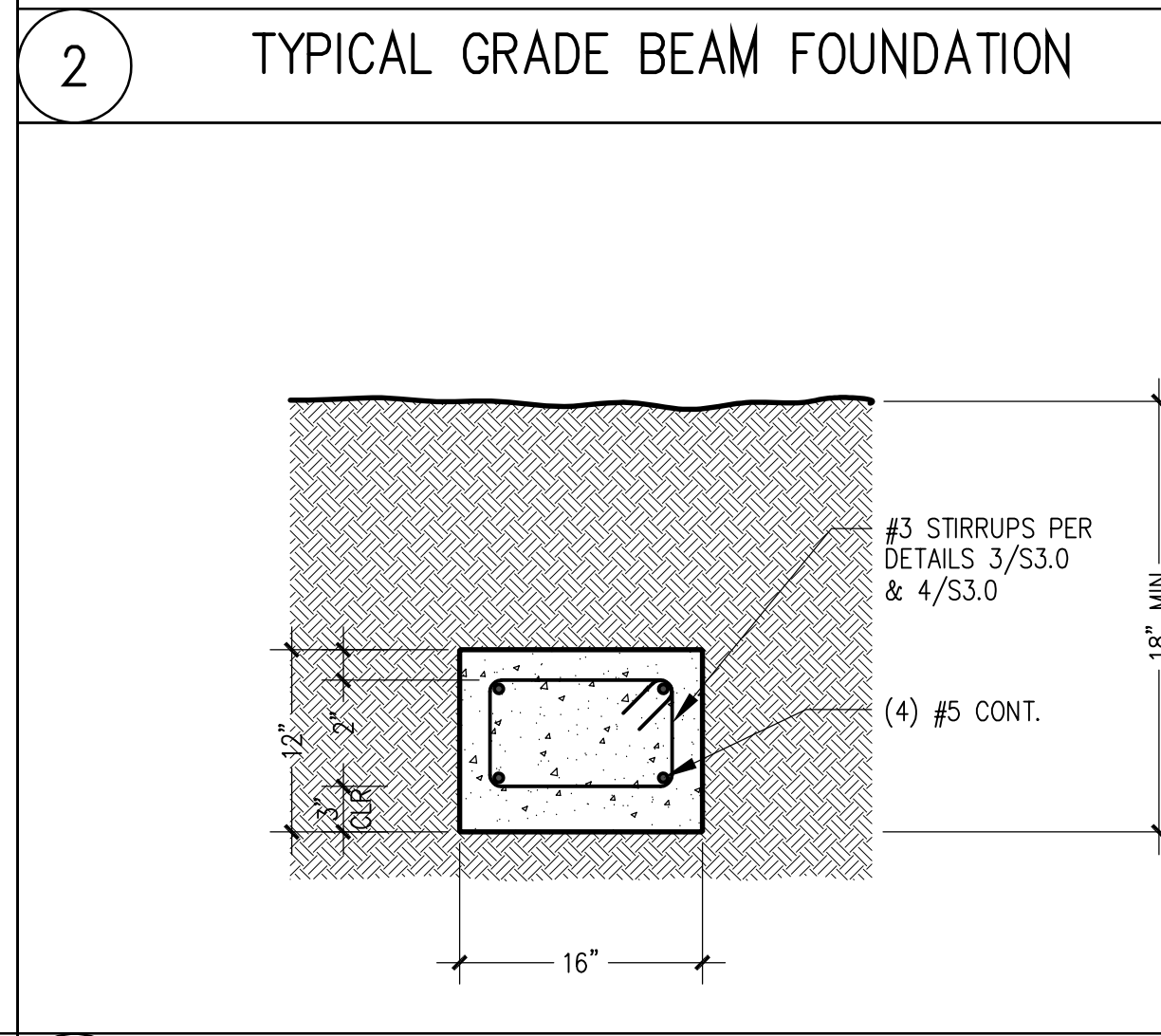
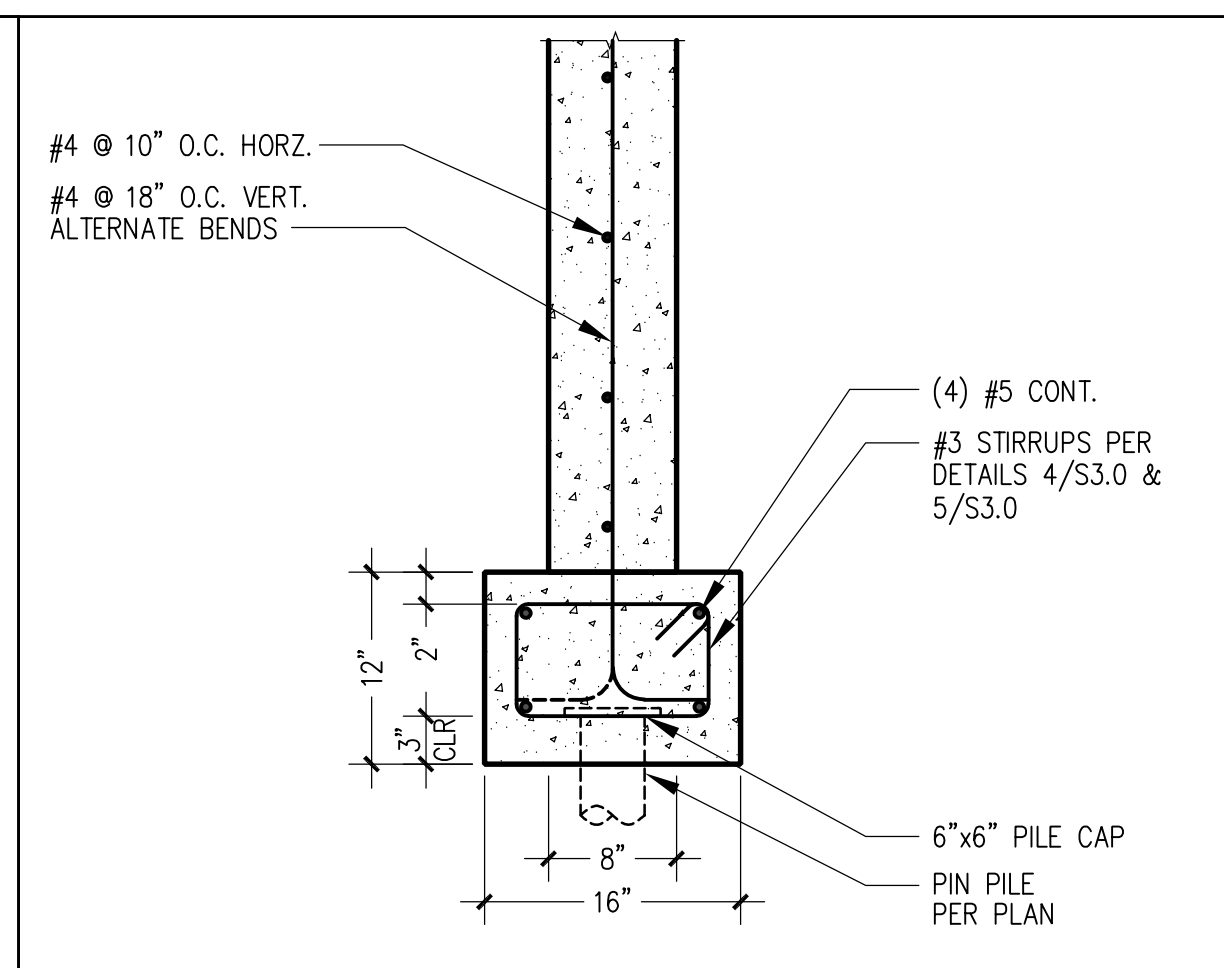
RETAINING WALL SCHEDULE

WALL DIMENSIONS				REINFORCEMENT							
H _{UNBAL}	L _t	t _w	L _h	T _{ftg}	BAR A	BAR B	BAR C	BAR D	BAR E	BAR F	BAR G
4'-0"	6'	8"	1'-0"	10"	#4@18" 1'-4"	4'-5"	N/A	#4@10"	N/A	N/A	(2) #4 TOP (2) #4 BOT
5'-0"	6'	8"	1'-6"	10"	#4@18" 1'-4"	5'-5"	N/A	#4@10"	N/A	#4@16"	(2) #4 TOP (2) #4 BOT
6'-0"	12'	8"	1'-10"	10"	#4@18" 1'-4"	3'-0"	#4@18"	#4@10"	N/A	#4@12"	(2) #4 TOP (2) #4 BOT
7'-0"	12'	8"	2'-6"	12"	#4@12" 1'-4"	3'-6"	#4@18"	#4@10"	N/A	#4@12"	(2) #4 TOP (2) #4 BOT
8'-0"	12'	8"	3'-0"	12"	#4@9" 1'-4"	4'-6"	#4@18"	#4@10"	N/A	#4@12"	(2) #4 TOP (2) #4 BOT
9'-0"	12'	8"	3'-8"	14"	#5@9" 1'-4"	6'-0"	#4@18"	#4@10"	N/A	#5@12"	(2) #4 TOP (2) #4 BOT
10'-0"	12'	8"	4'-2"	16"	#5@9" 1'-4"	6'-10"	#5@18"	#4@10"	N/A	#5@12"	(2) #4 TOP (2) #4 BOT

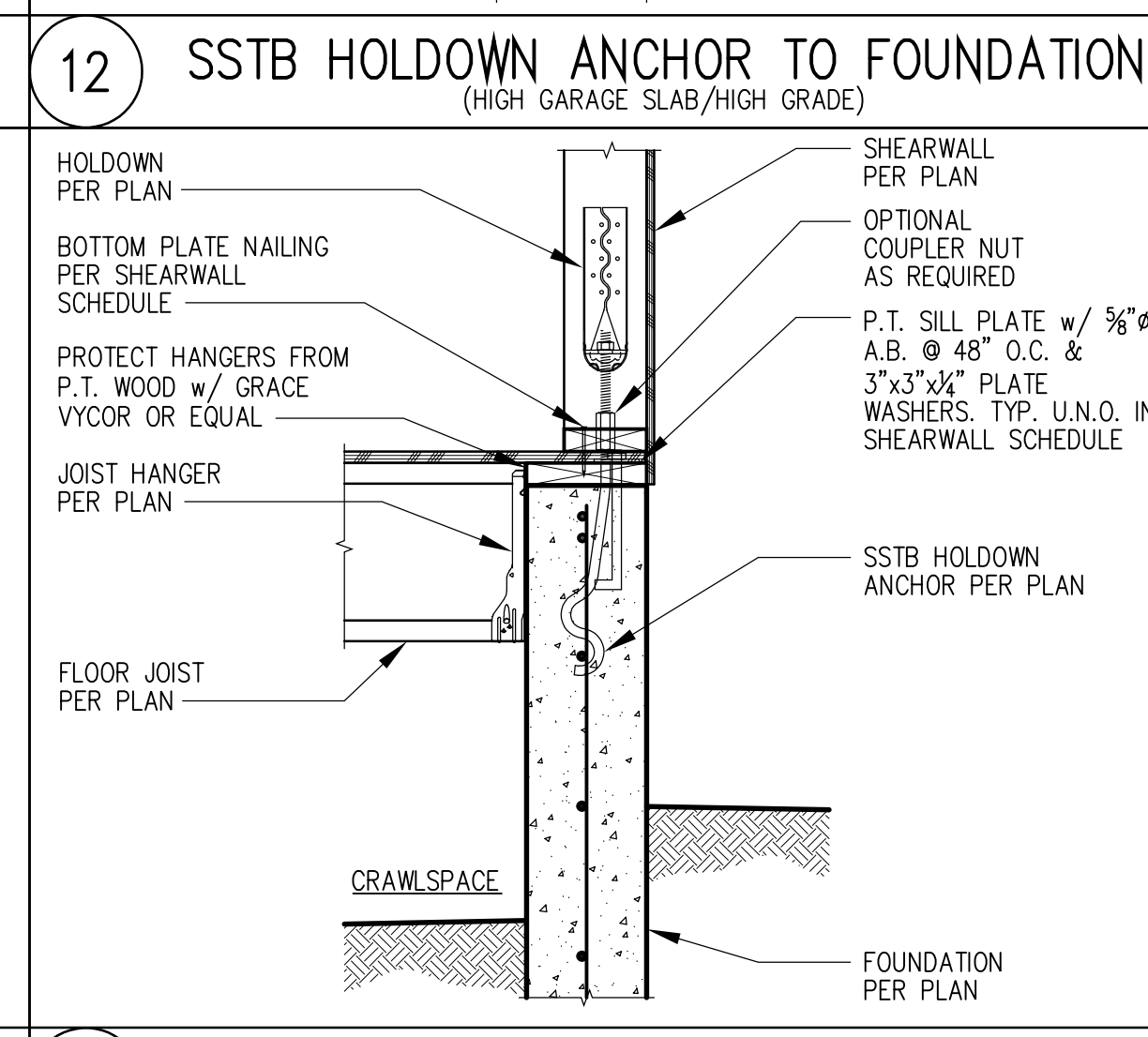
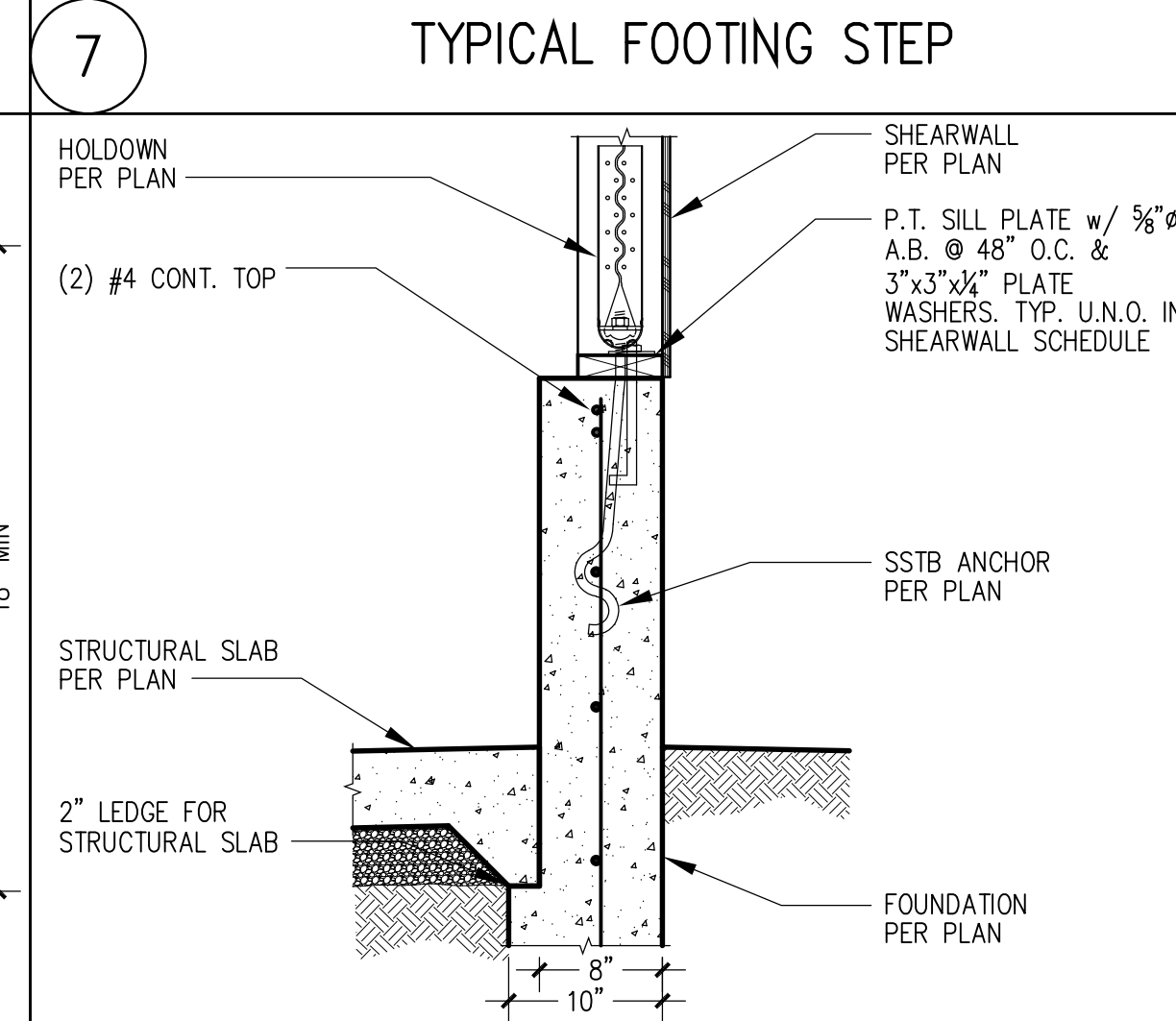
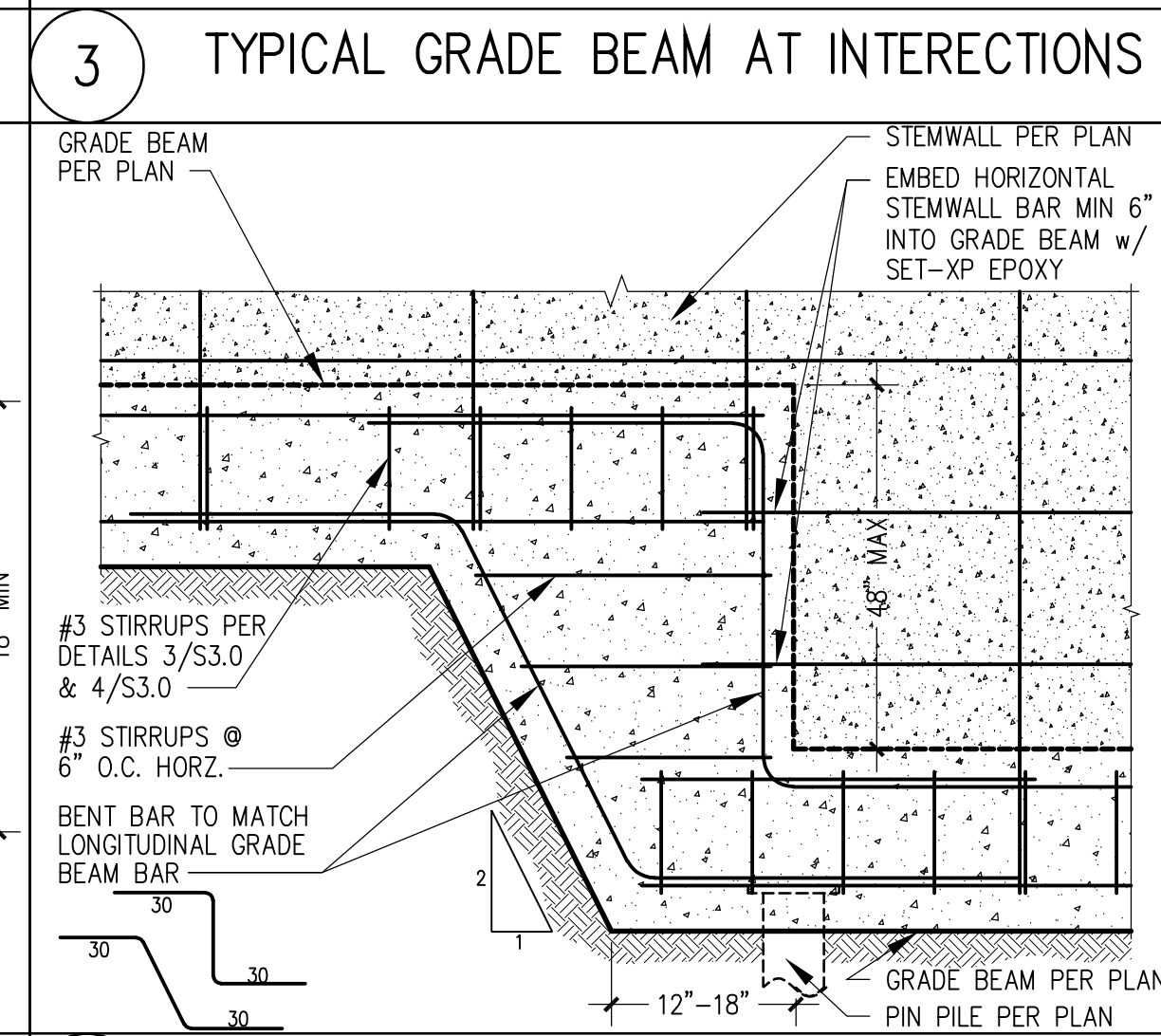
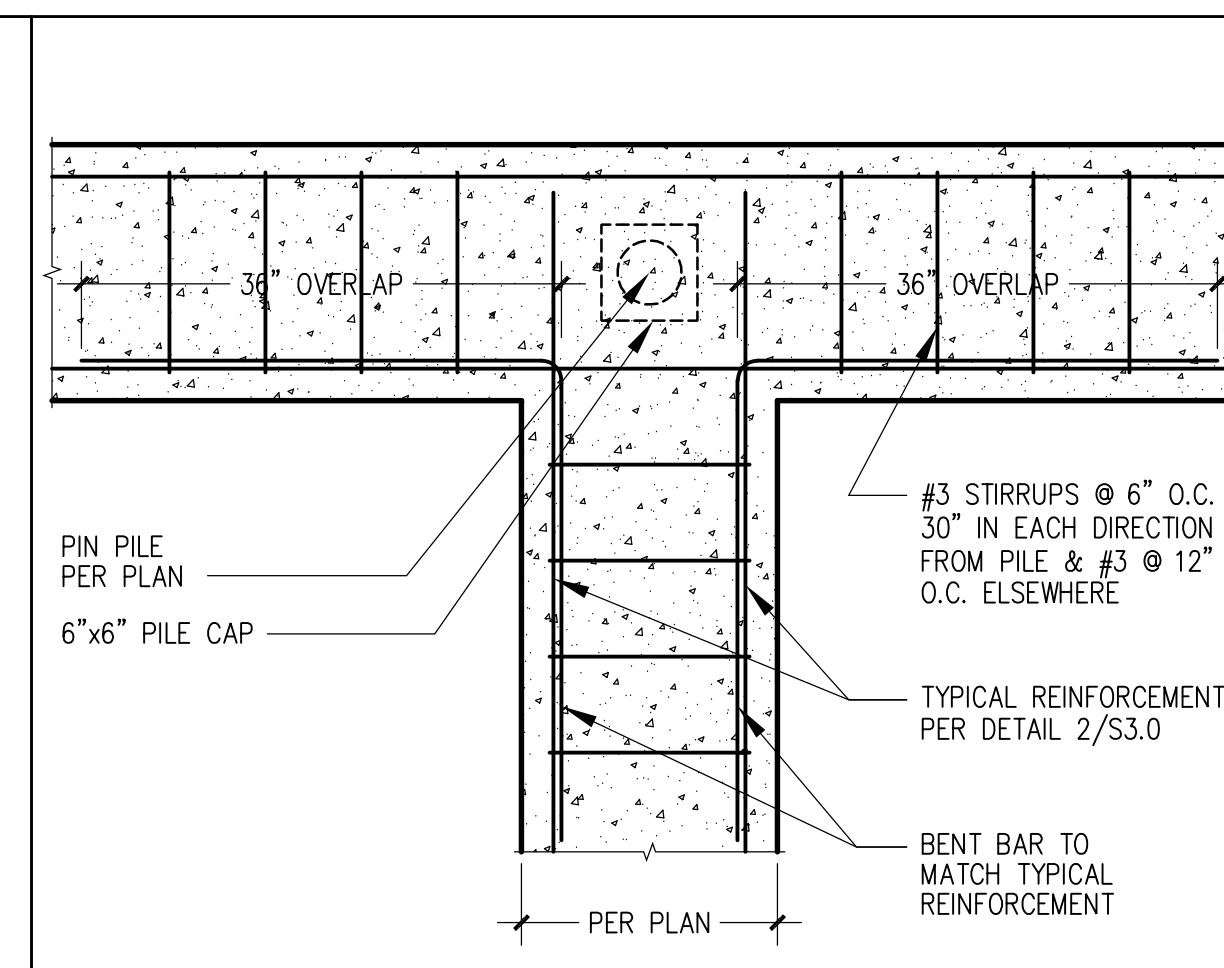
NOTES FOR UNBRACED RETAINING WALL:
1. EQUIVALENT FLUID PRESSURE = 35 PCF. ALL FOOTINGS TO BEAR ON 4" PIN PILES.
2. CONCRETE COMPRESSIVE STRENGTH f'_c = 2500 PSI. REBAR GRADE = 60 KSI.
3. BACKFILL HEEL SIDE OF WALL AFTER COMPACTING FILL AND/OR POURING CONCRETE SLAB AT TOE SIDE.



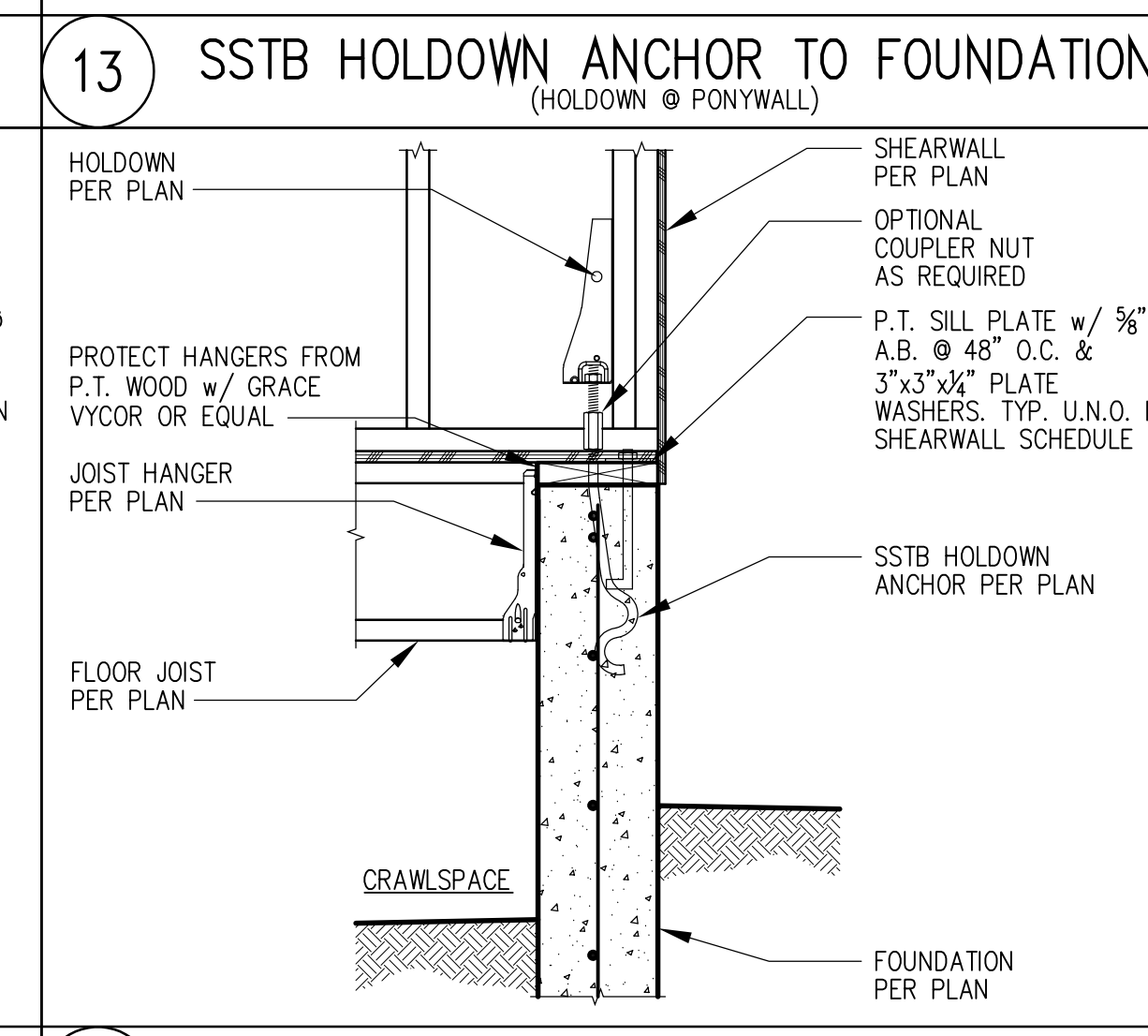
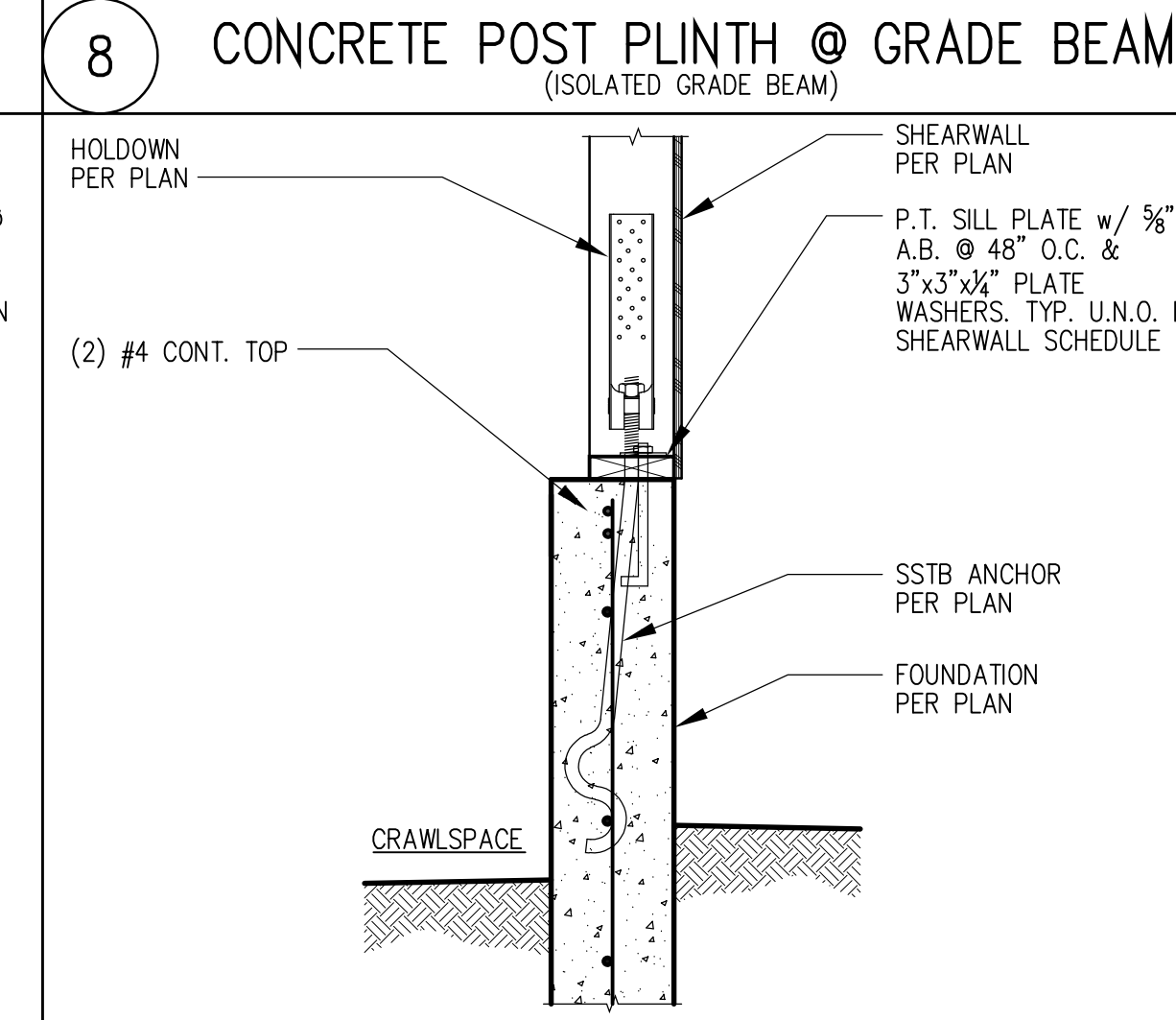
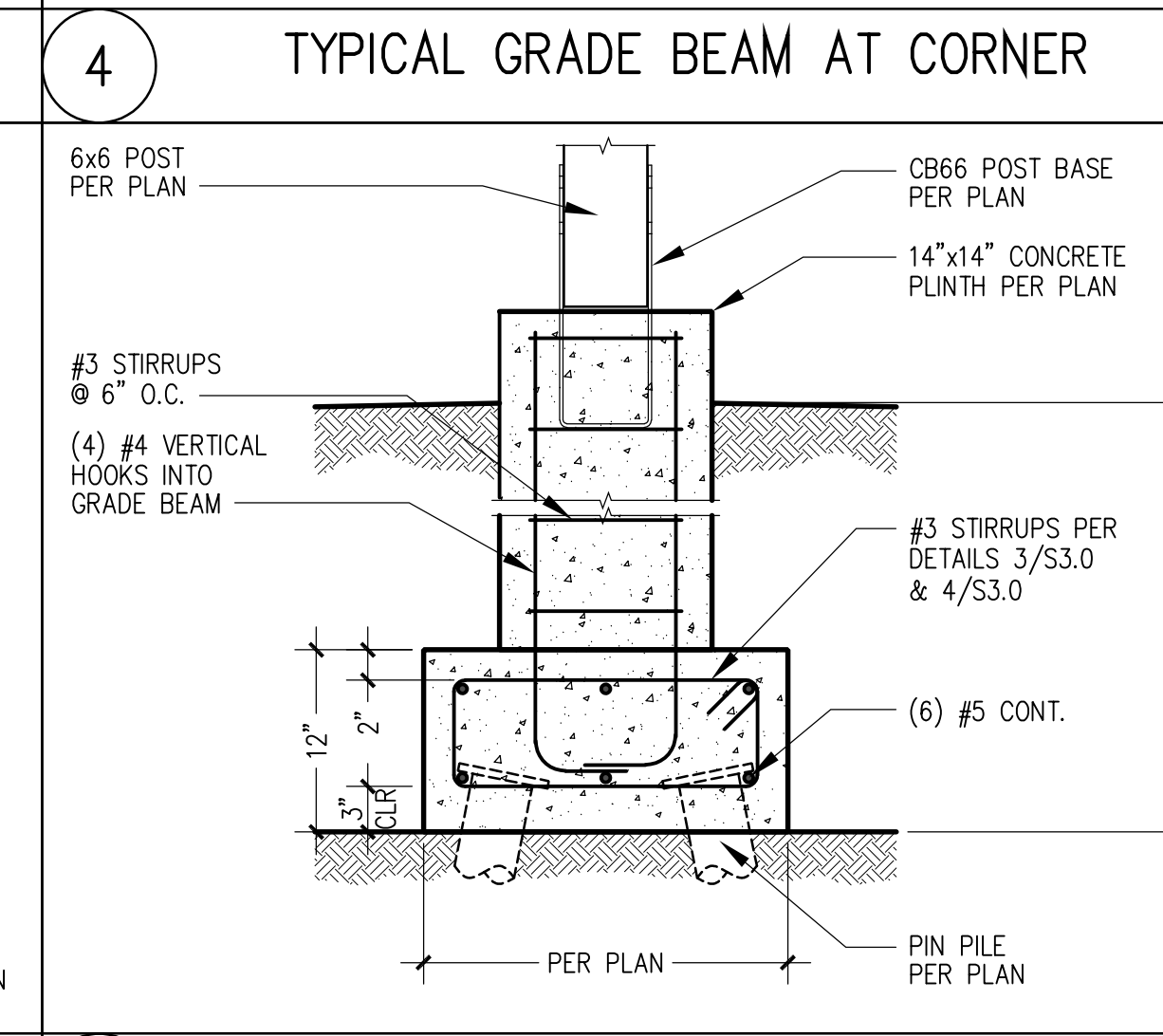
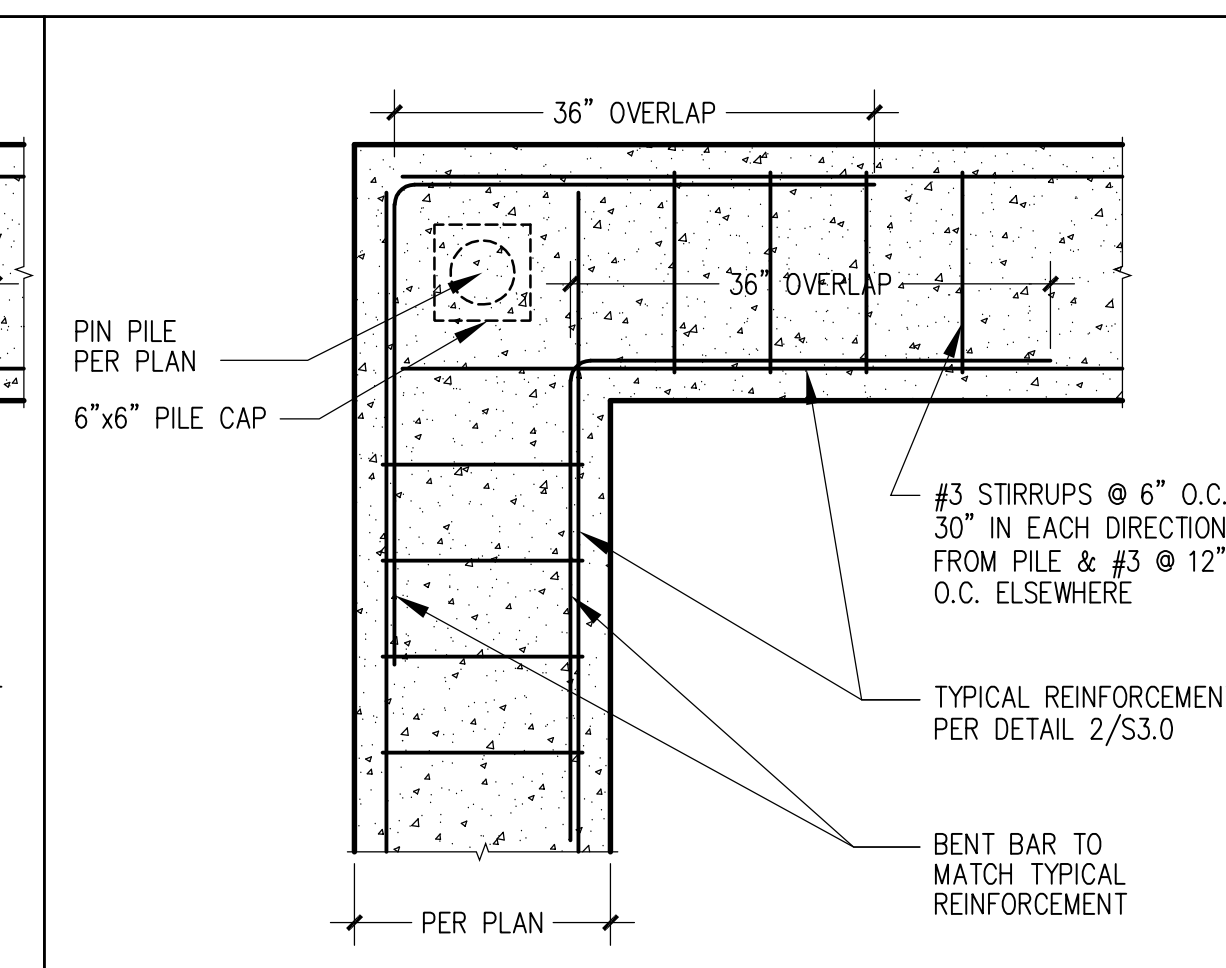
(15) PAB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ PONYWALL)



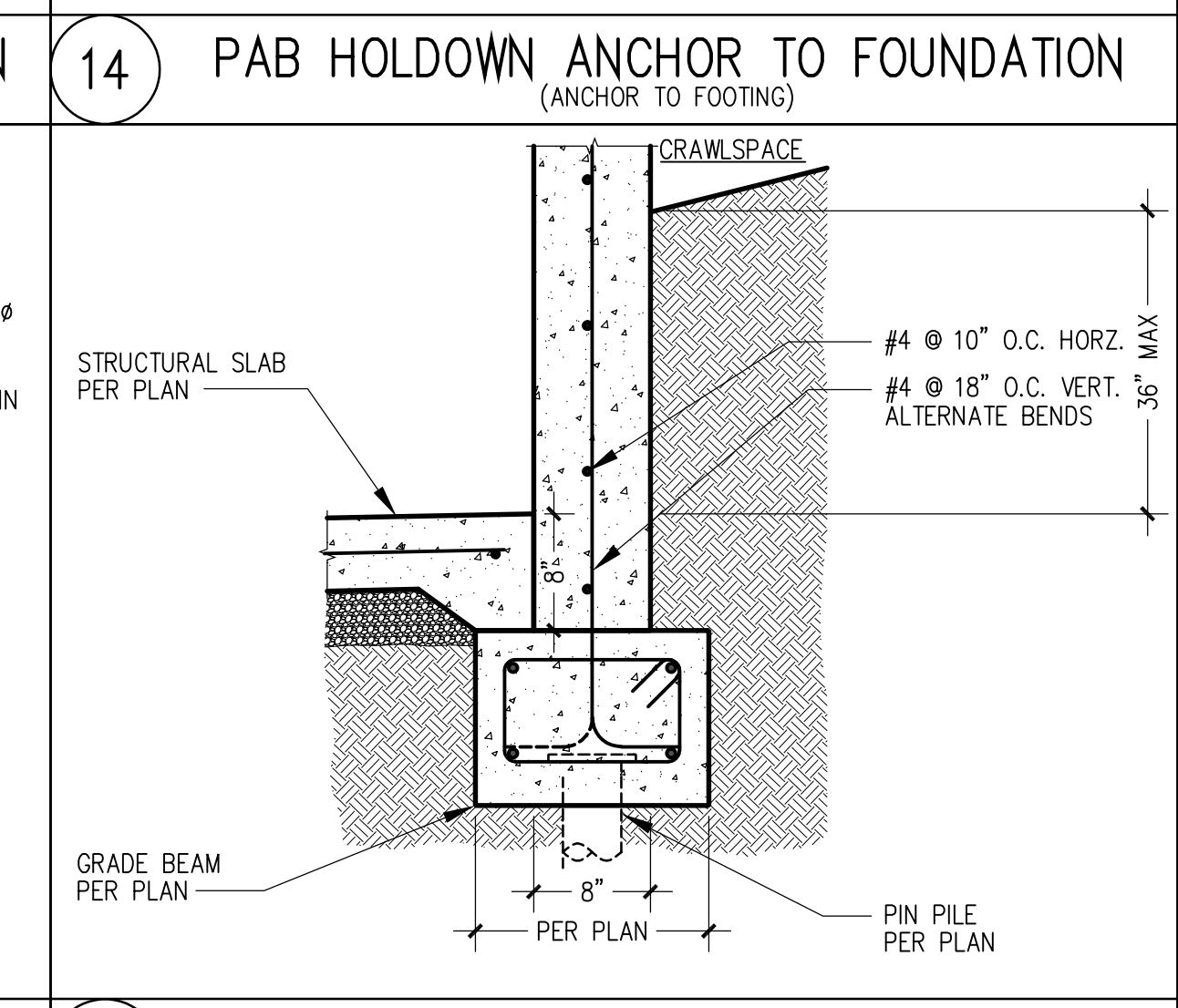
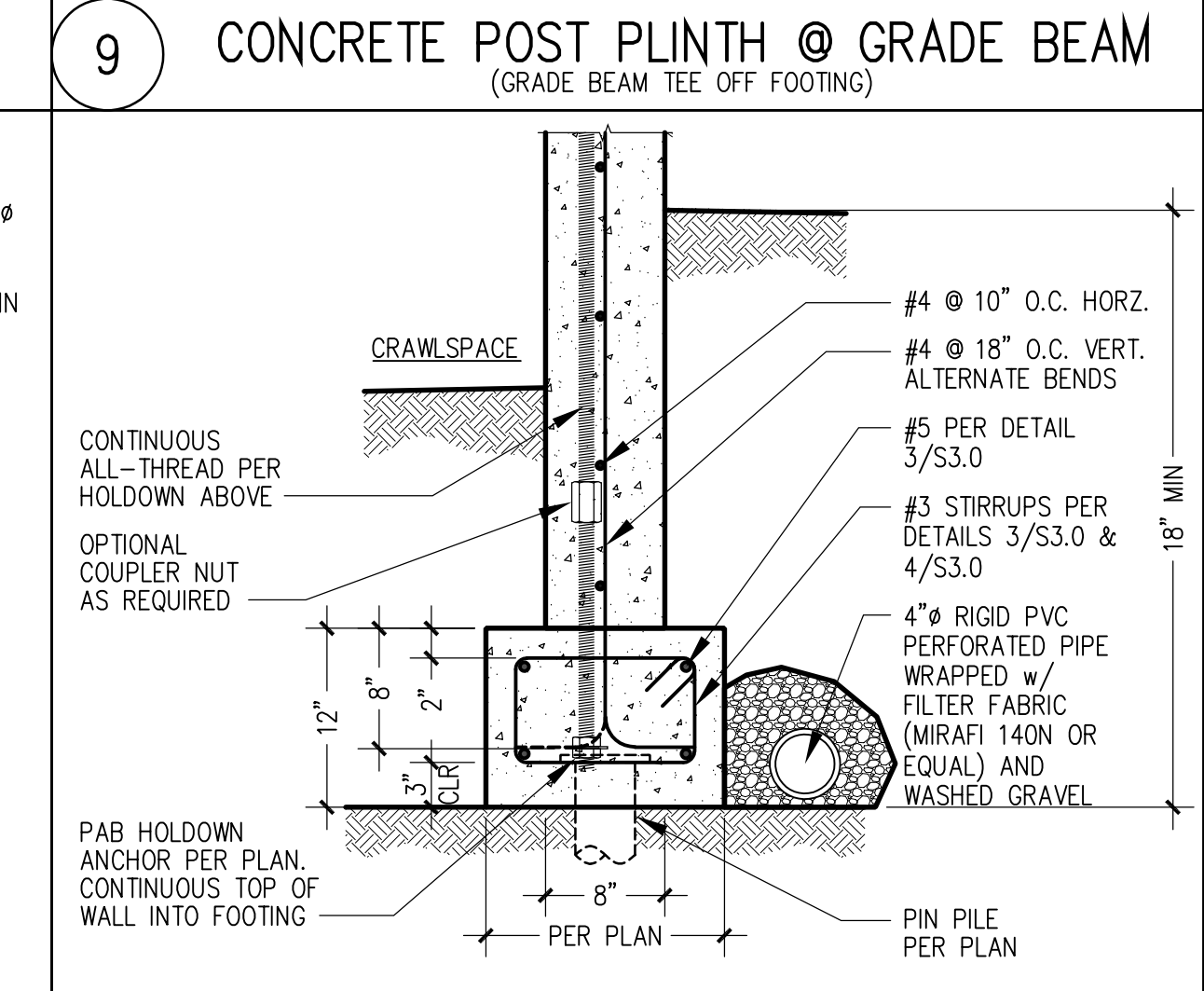
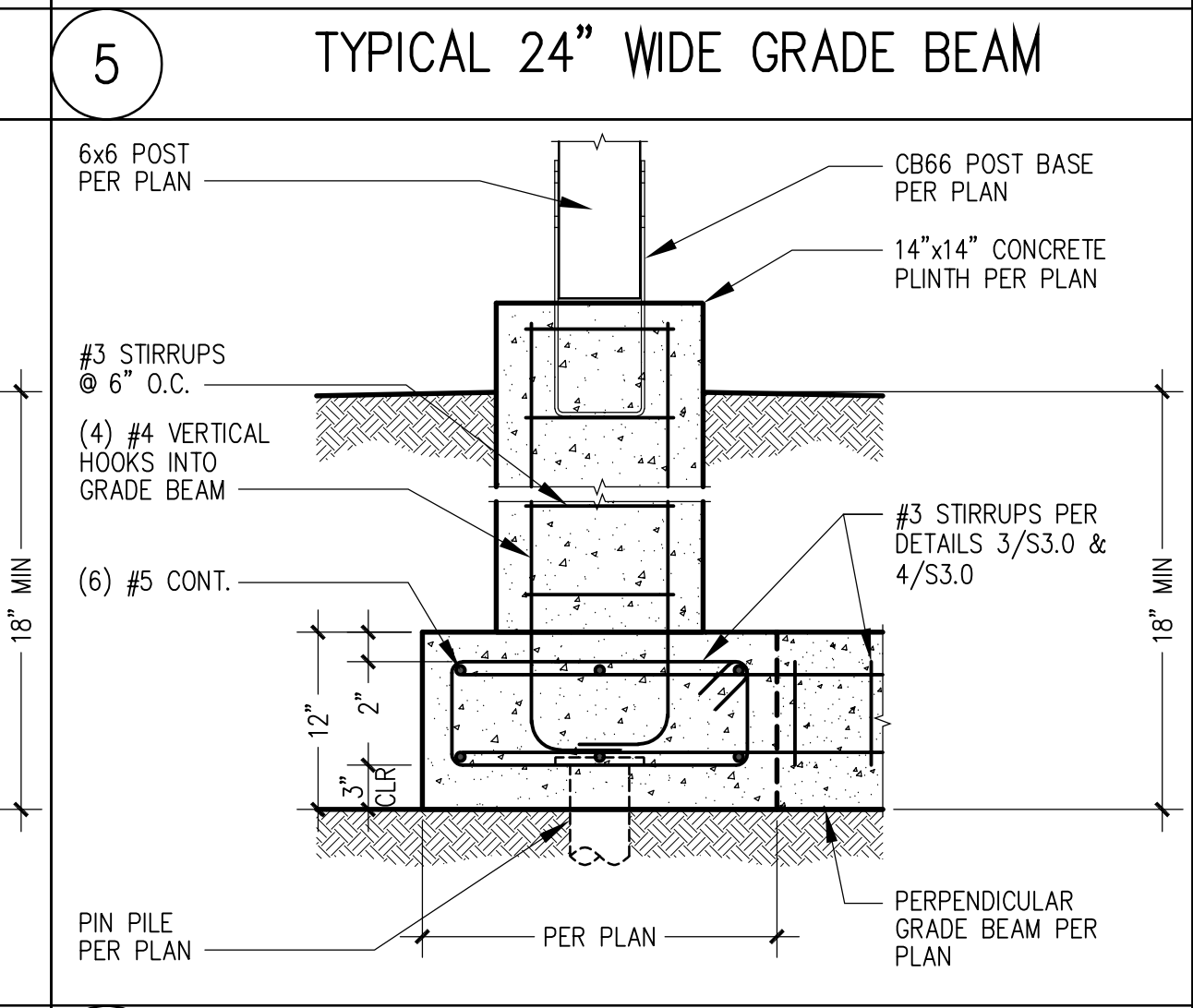
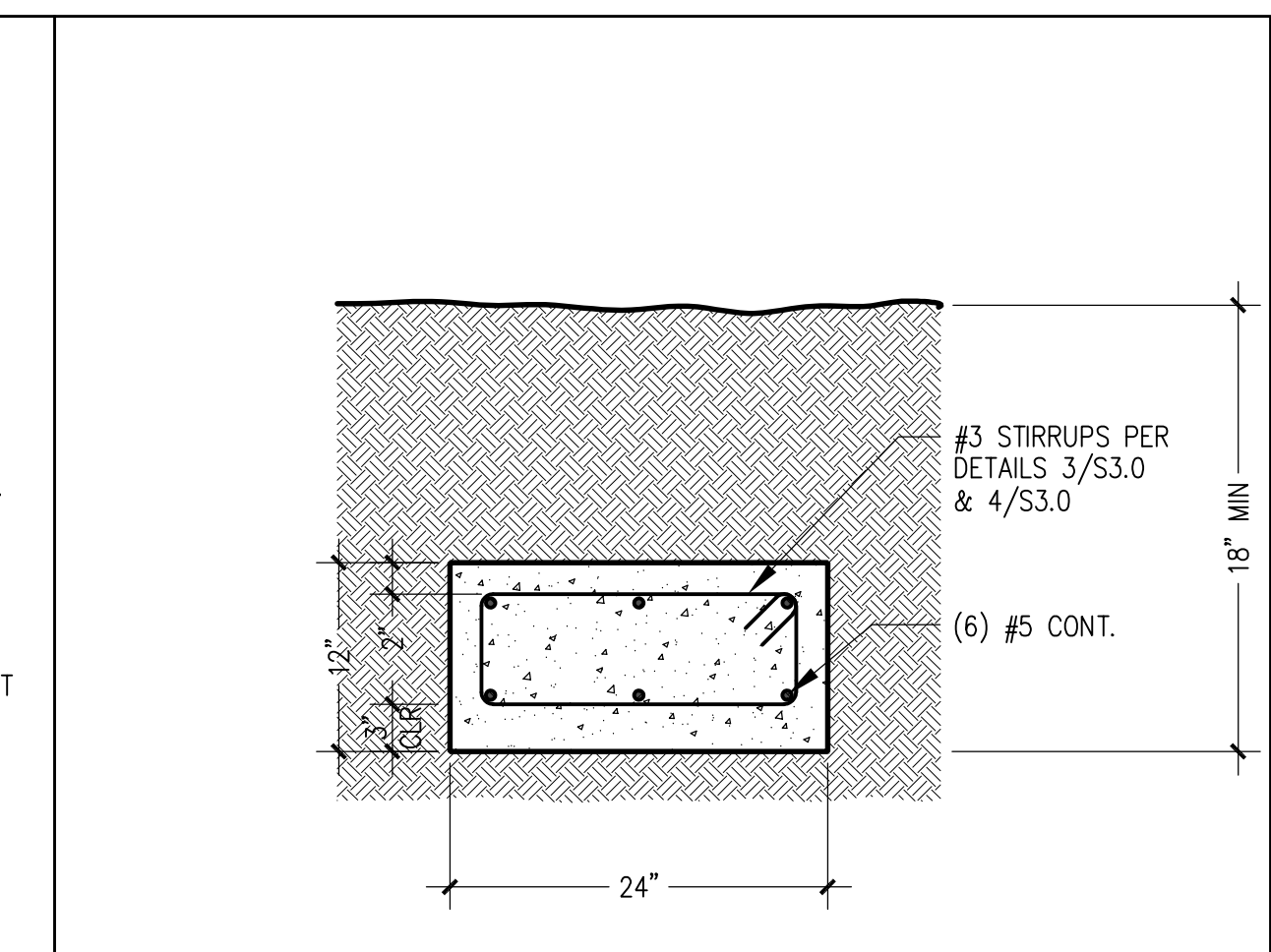
(16) PAB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ FLUSH FLOOR FRAMING)



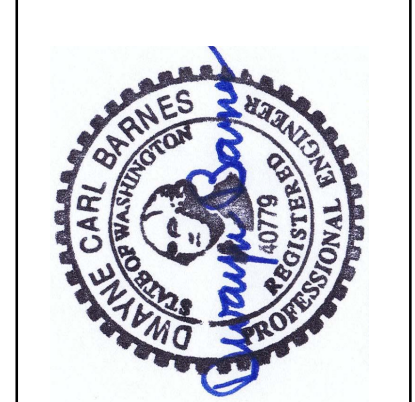
(17) SSTB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ FLUSH FLOOR FRAMING)



(18) SSTB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ FLUSH FLOOR FRAMING)

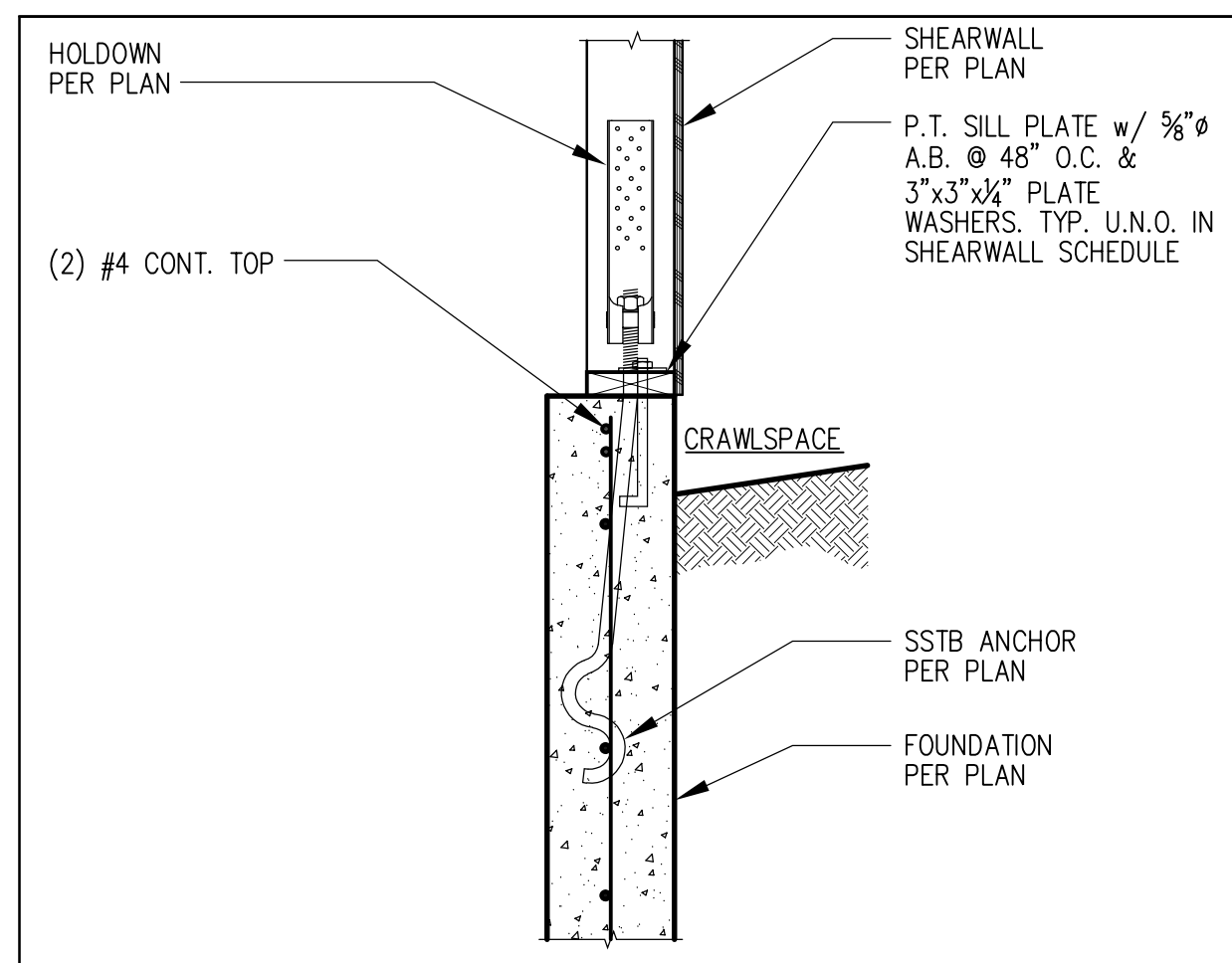


(19) GARAGE SLAB @ CRAWLSPACE WALL

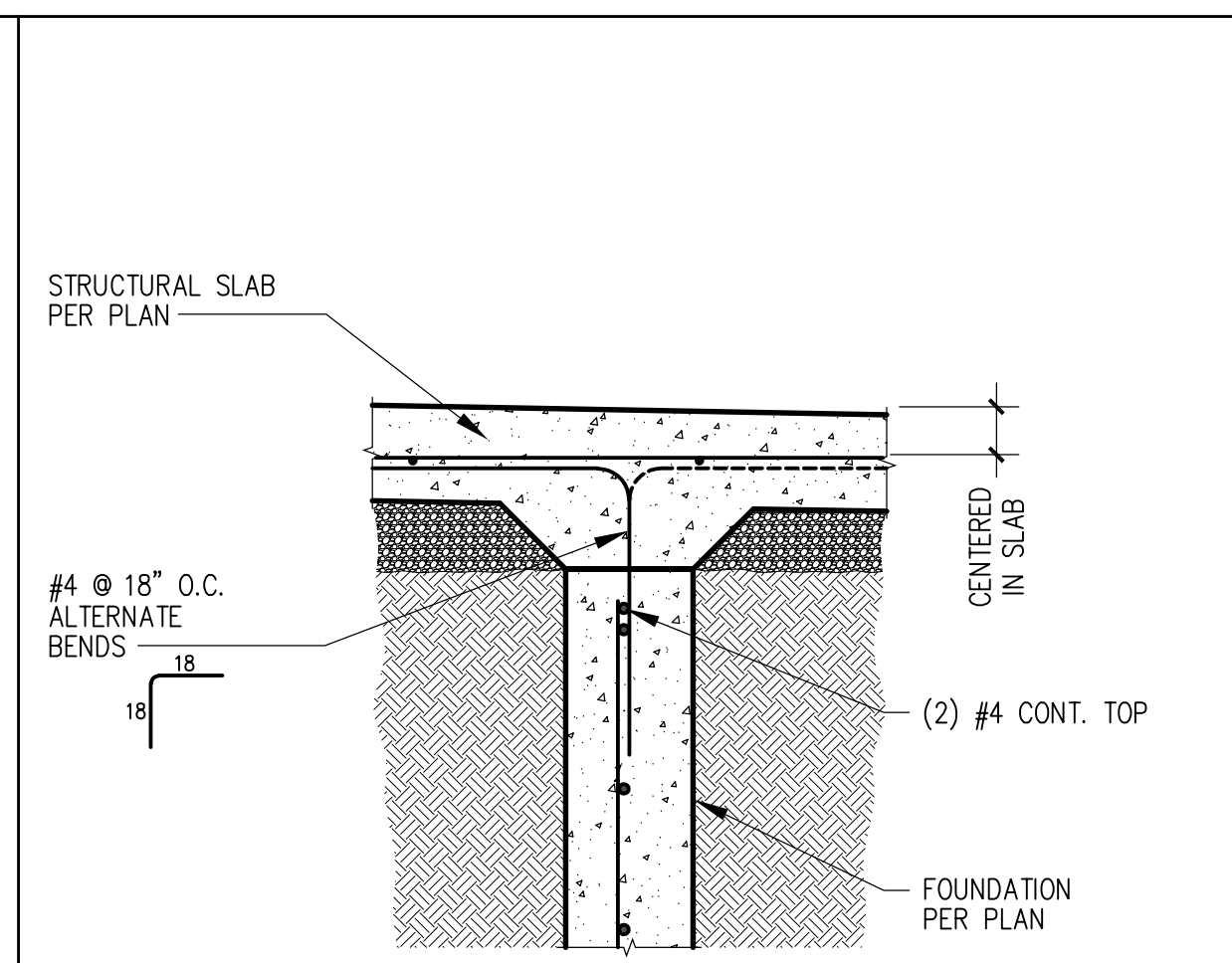


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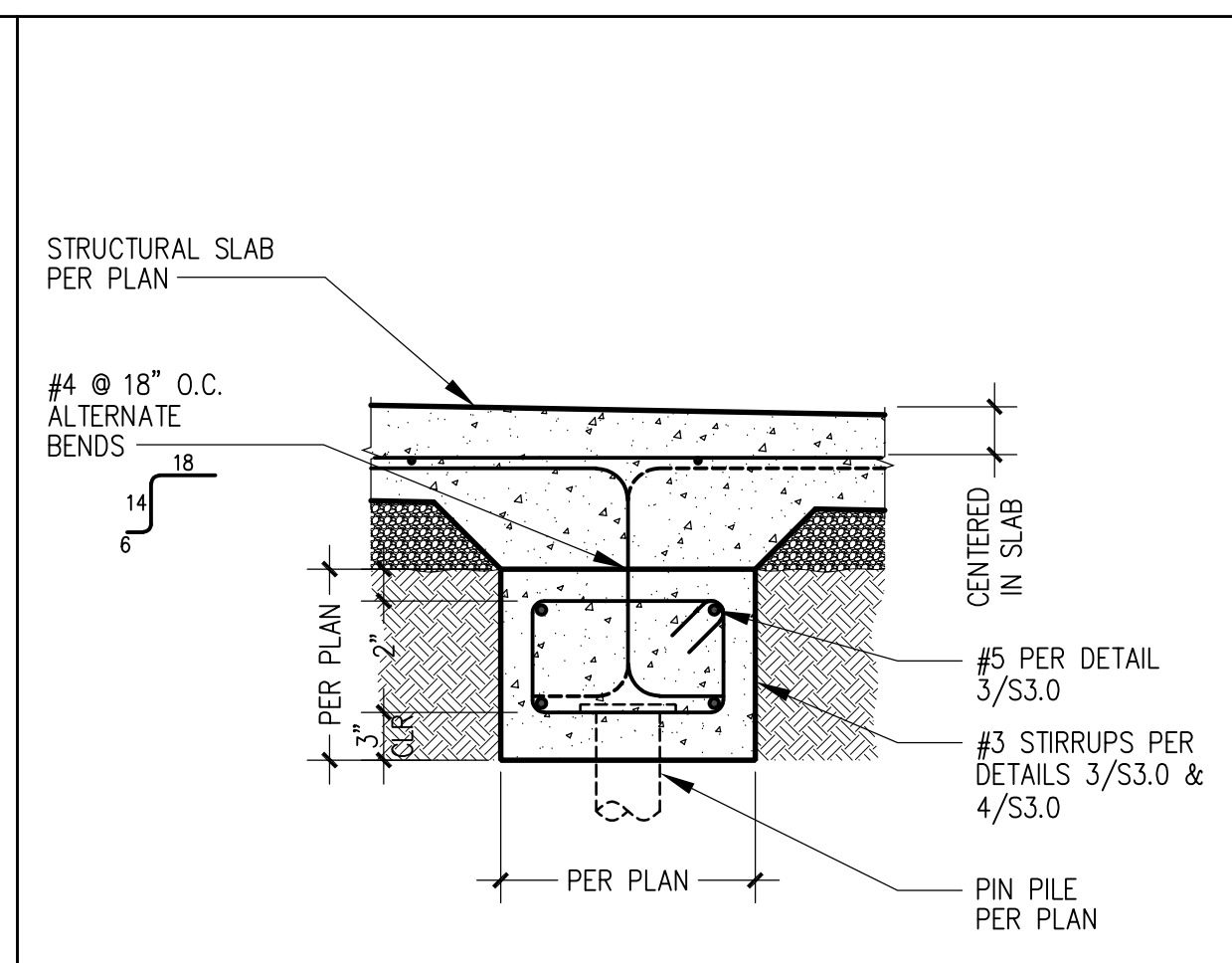
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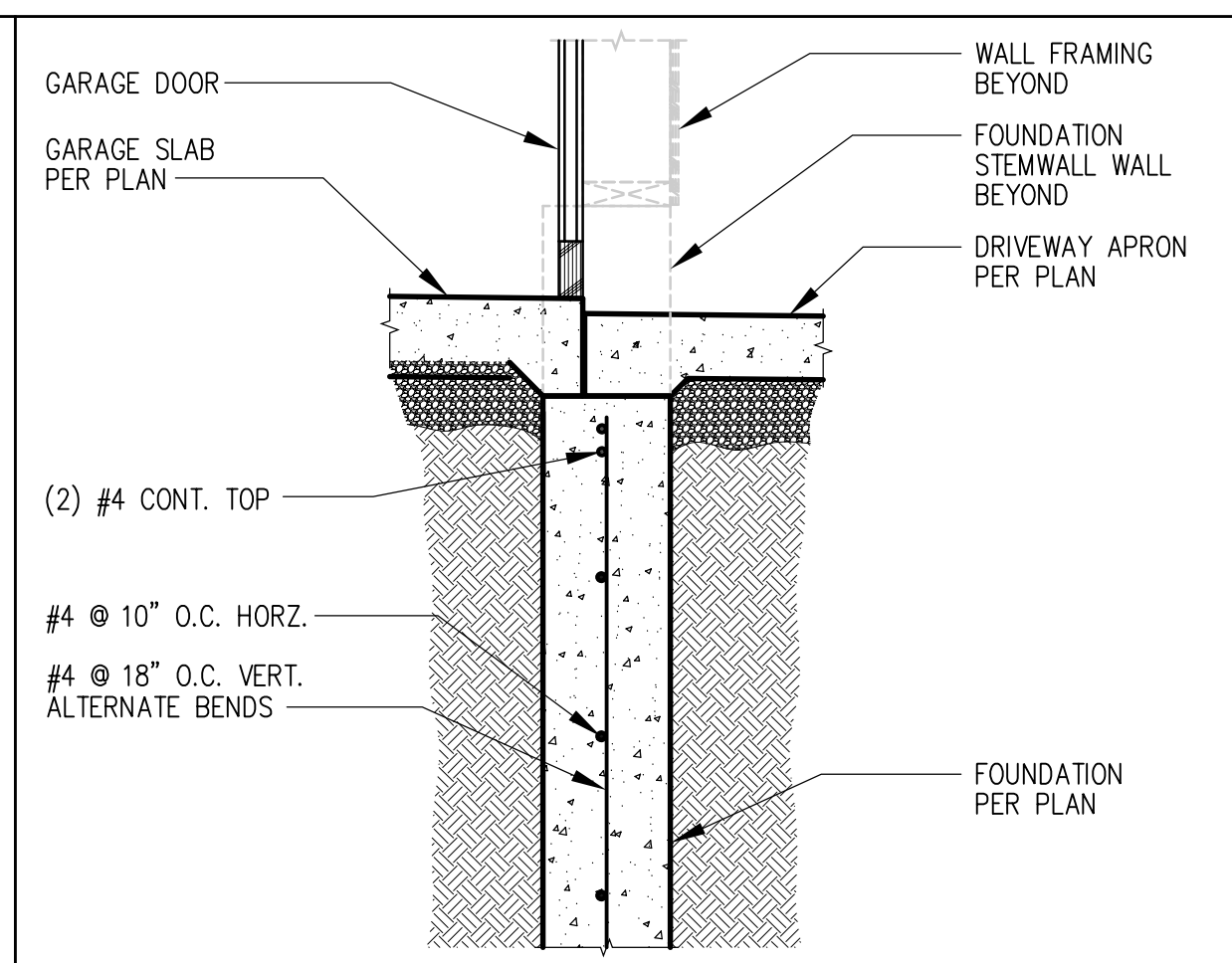
1 SSTB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ INTERIOR GARAGE PONYWALL)



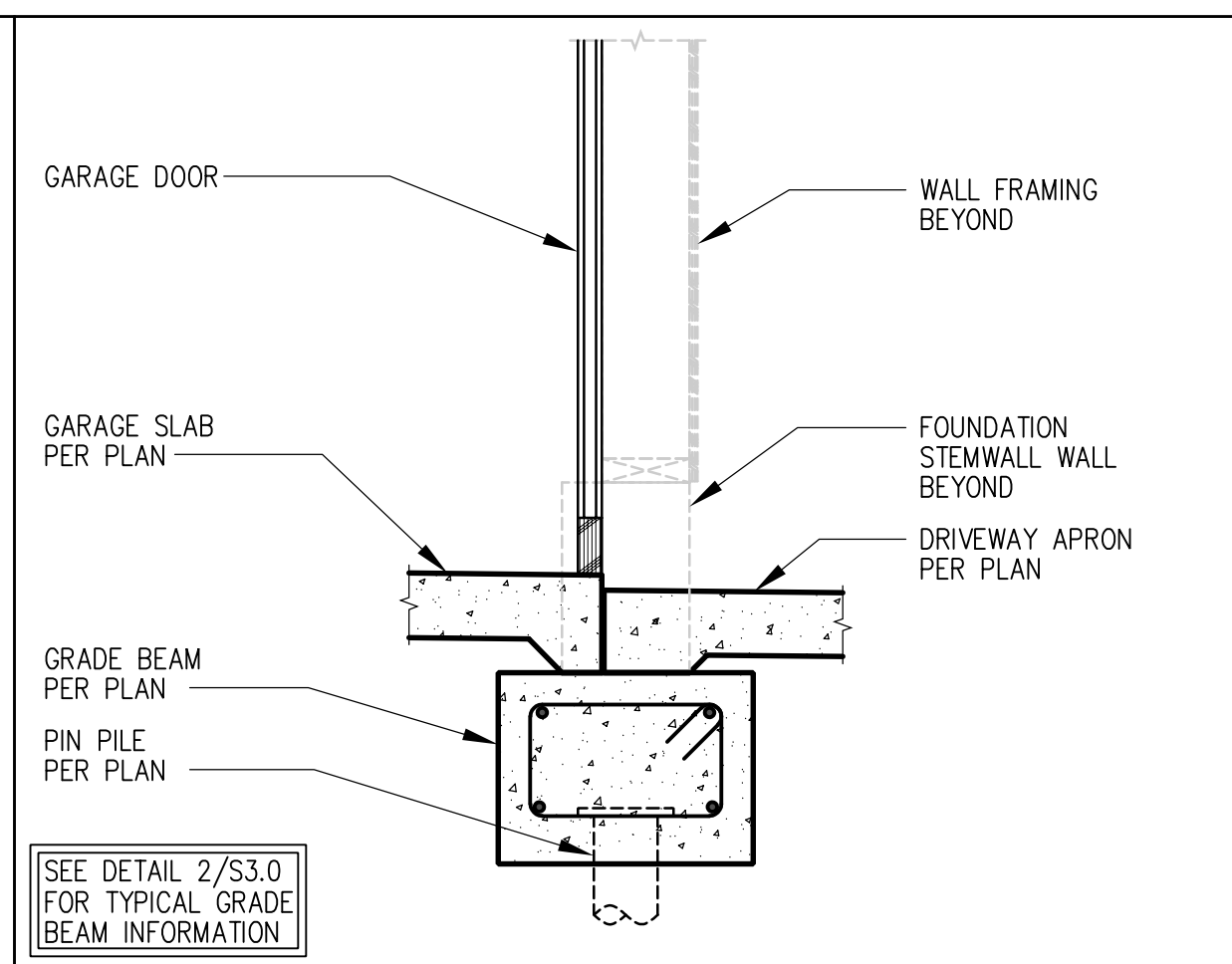
2 GARAGE SLAB @ STEMWALL



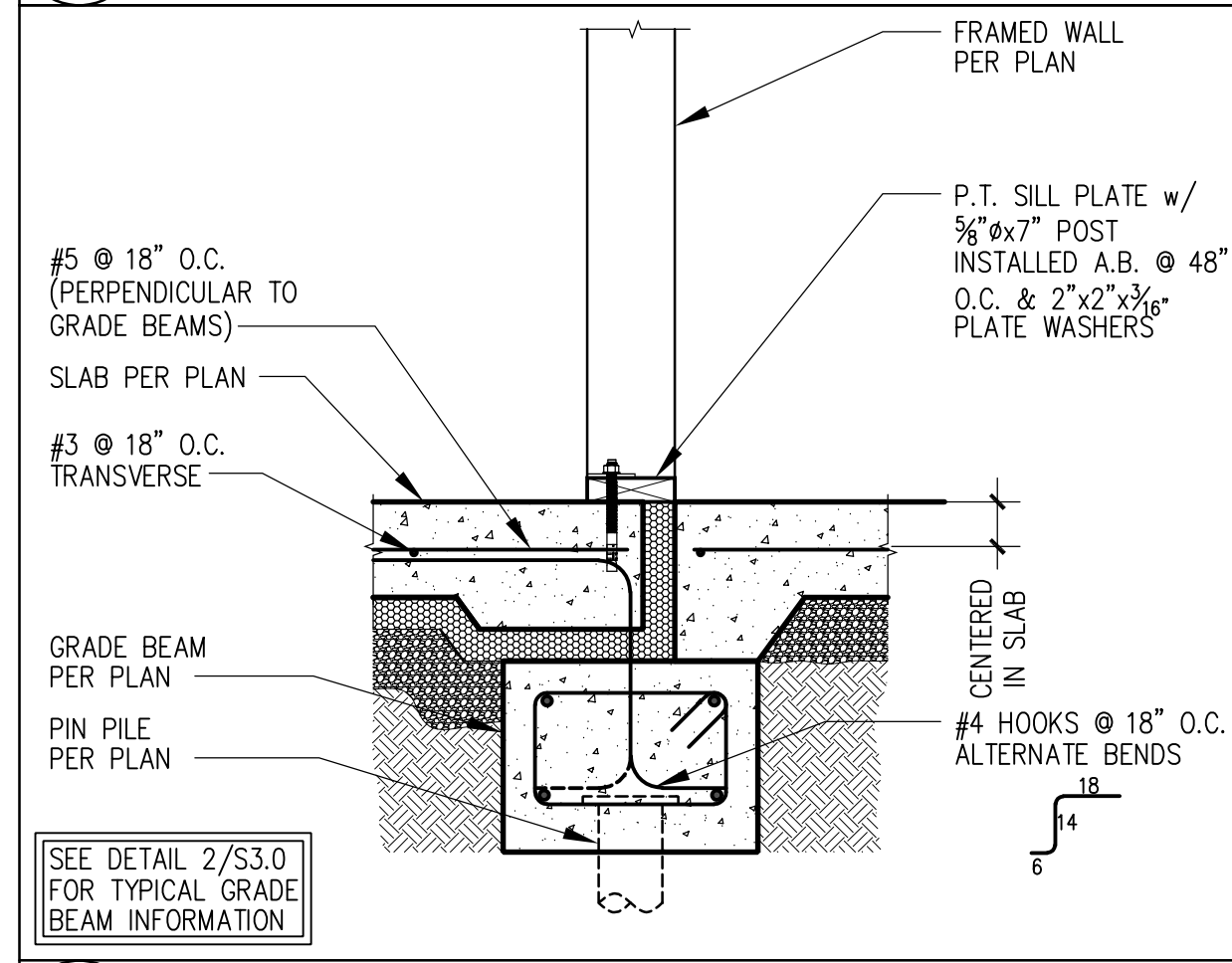
3 GARAGE SLAB @ GRADE BEAM



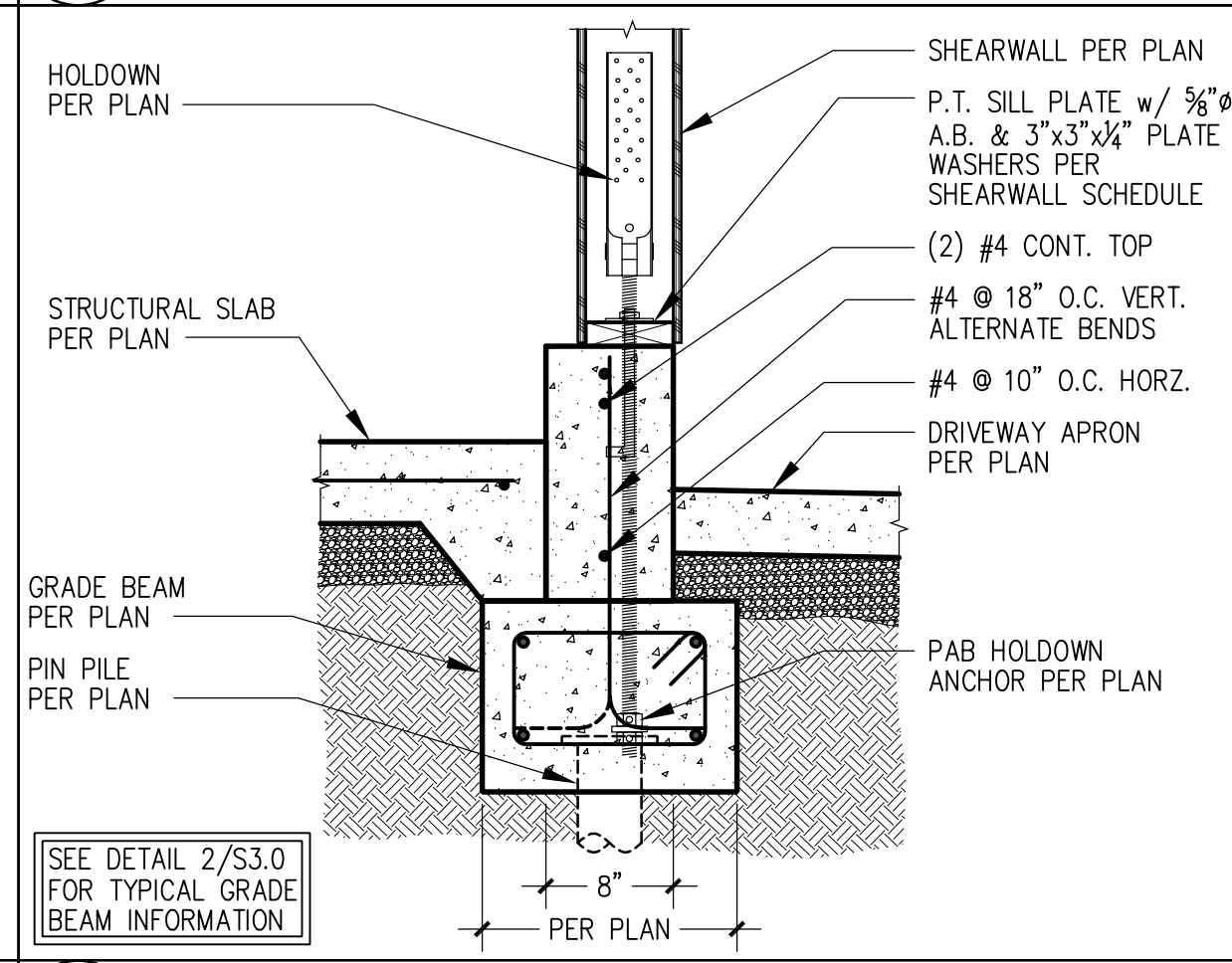
4 GARAGE SLAB @ FOUNDATION WALL (UNHEATED SLAB)



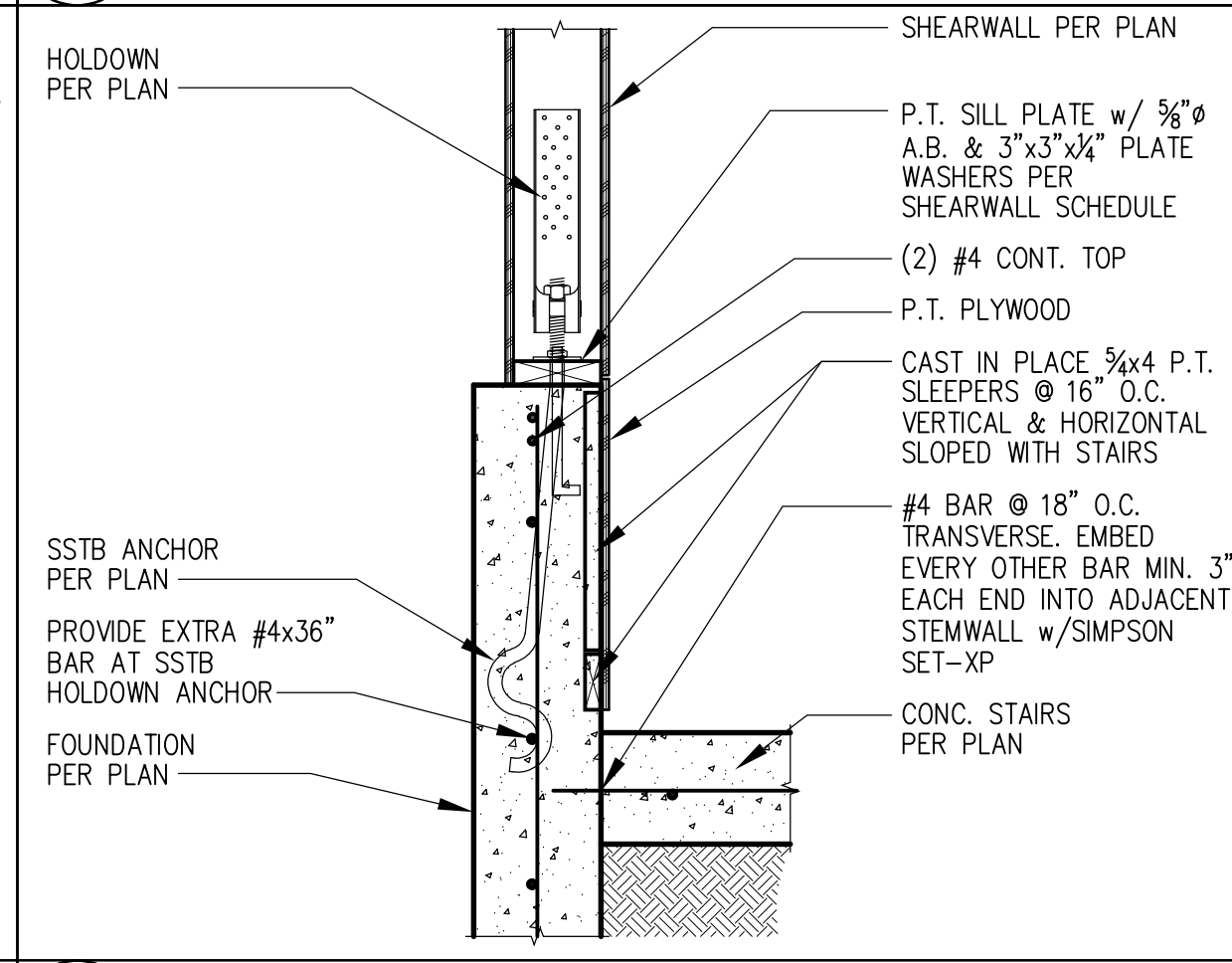
5 TYPICAL GRADE BEAM @ DRIVEWAY APRON



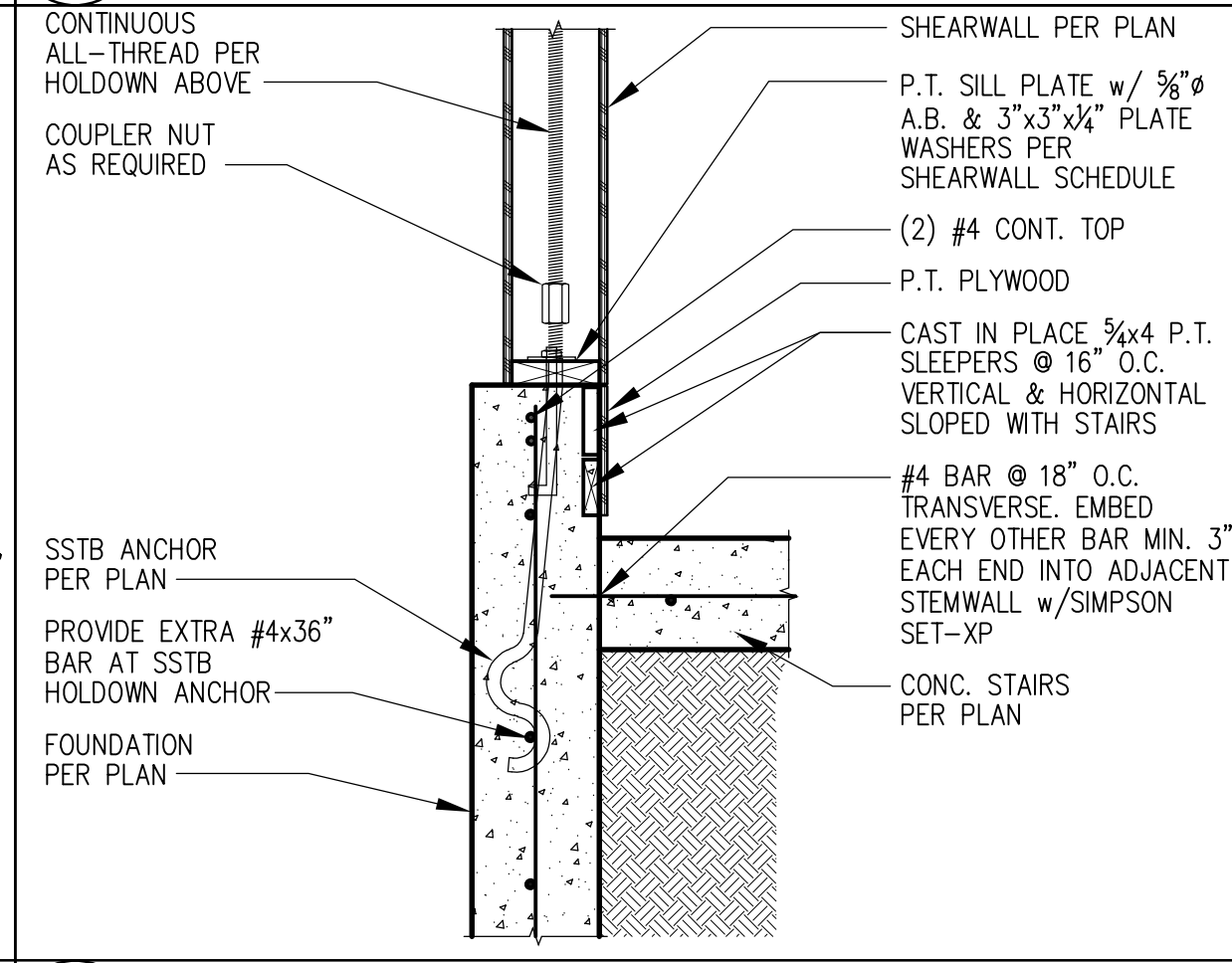
6 TYPICAL BEARING WALL @ SLAB



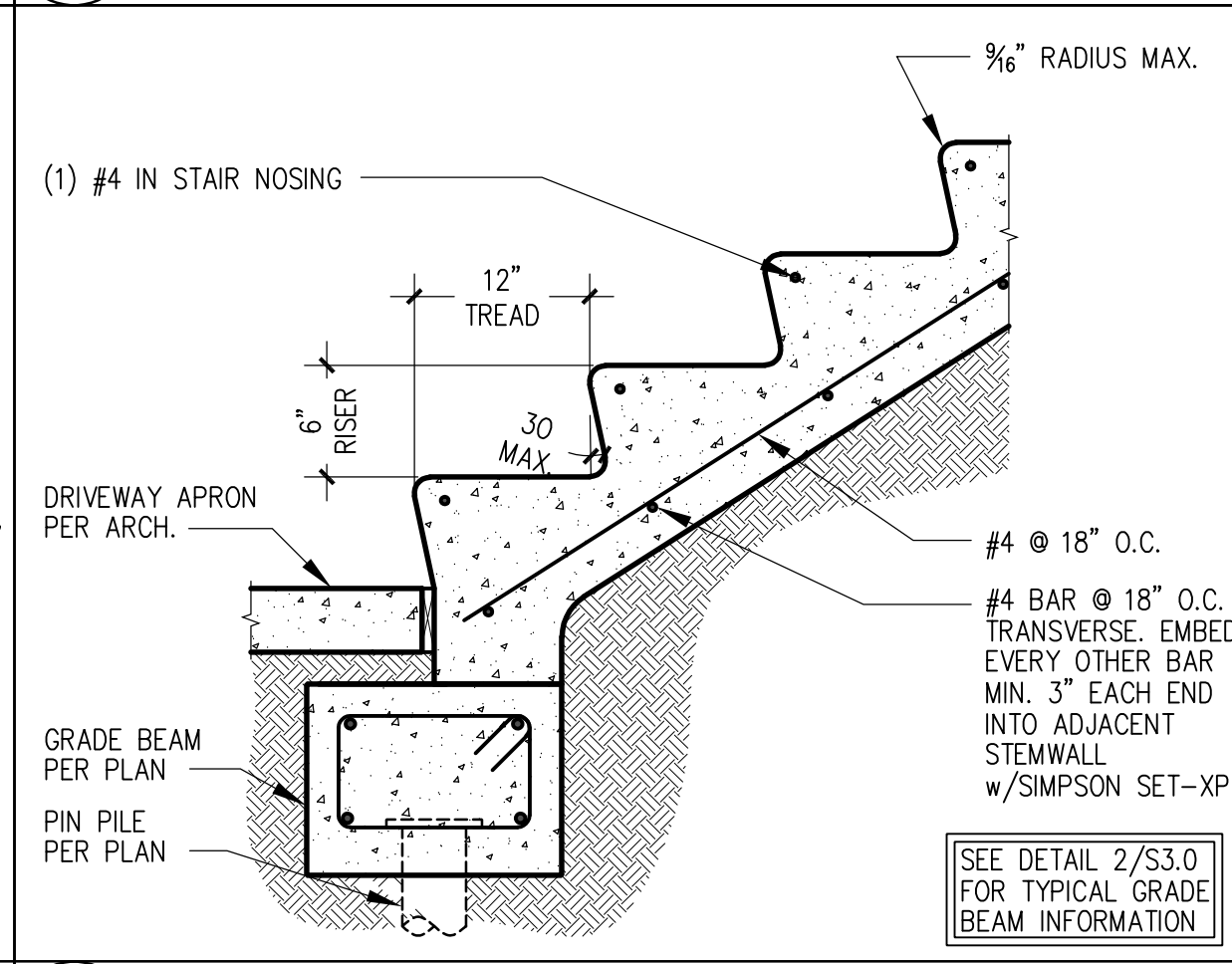
7 HOLDOWN @ GARAGE FNDN.



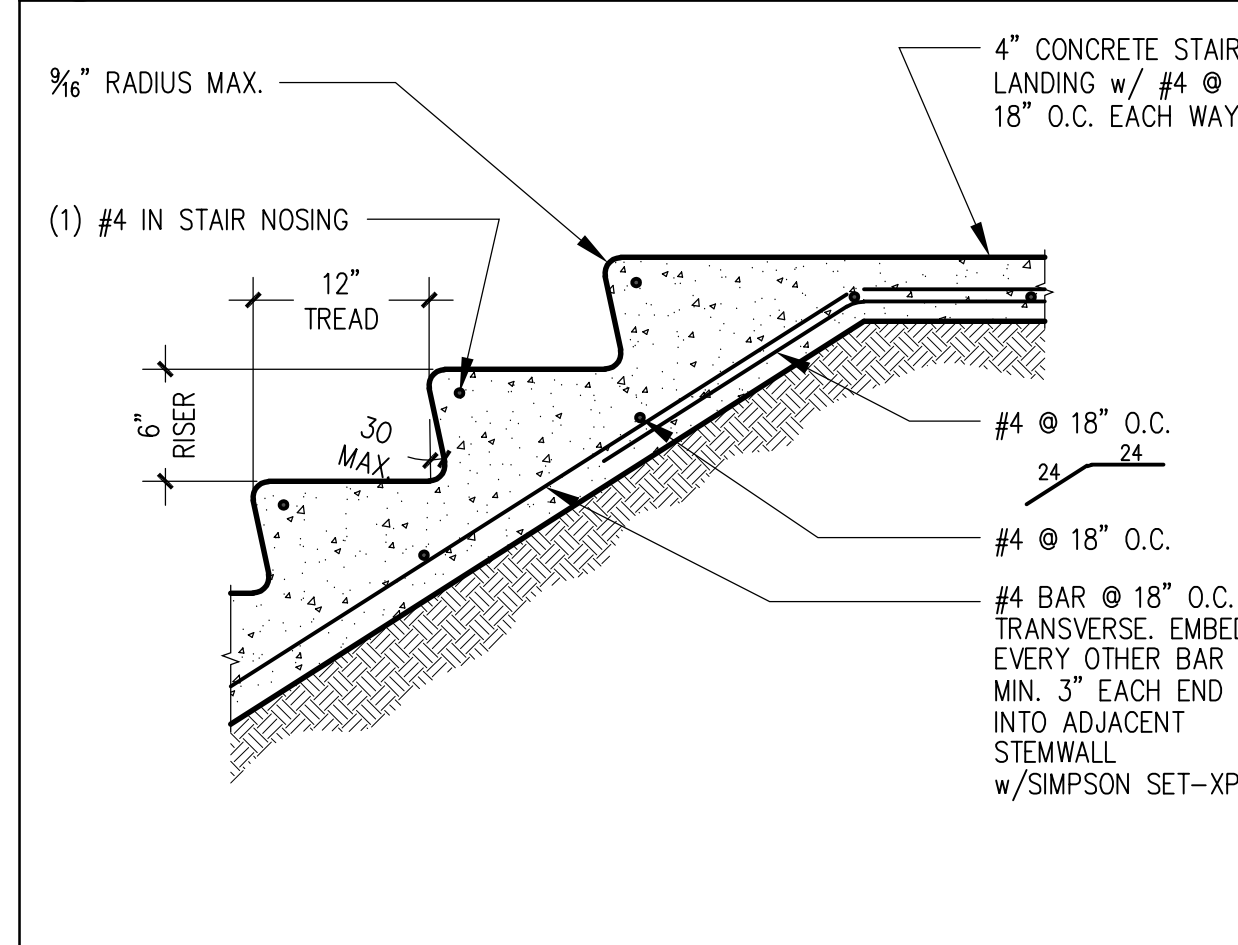
8 SSTB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ PONYWALL/EXTERIOR STAIRS)



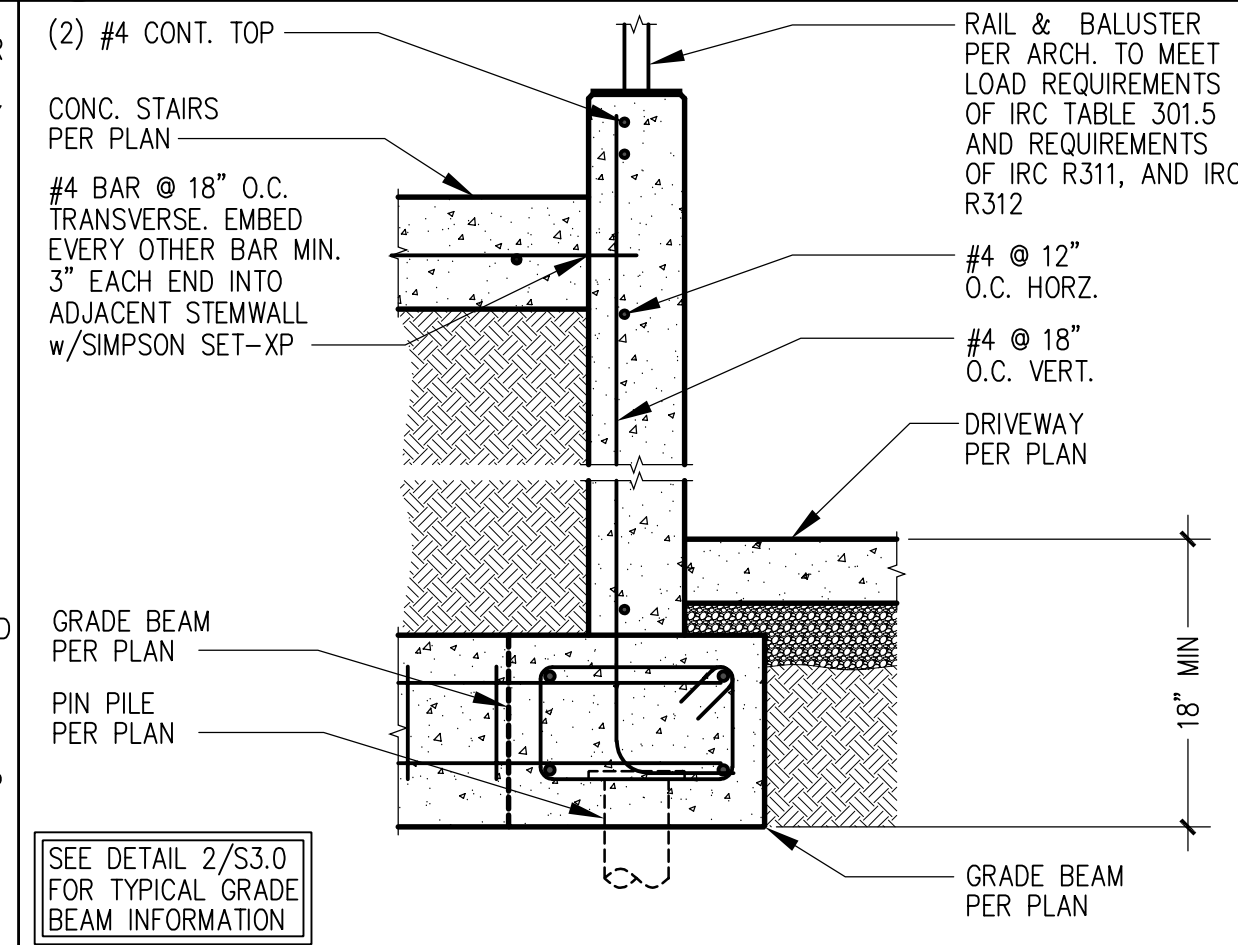
9 SSTB HOLDOWN ANCHOR TO FOUNDATION (ALL-THREAD @ PONYWALL)



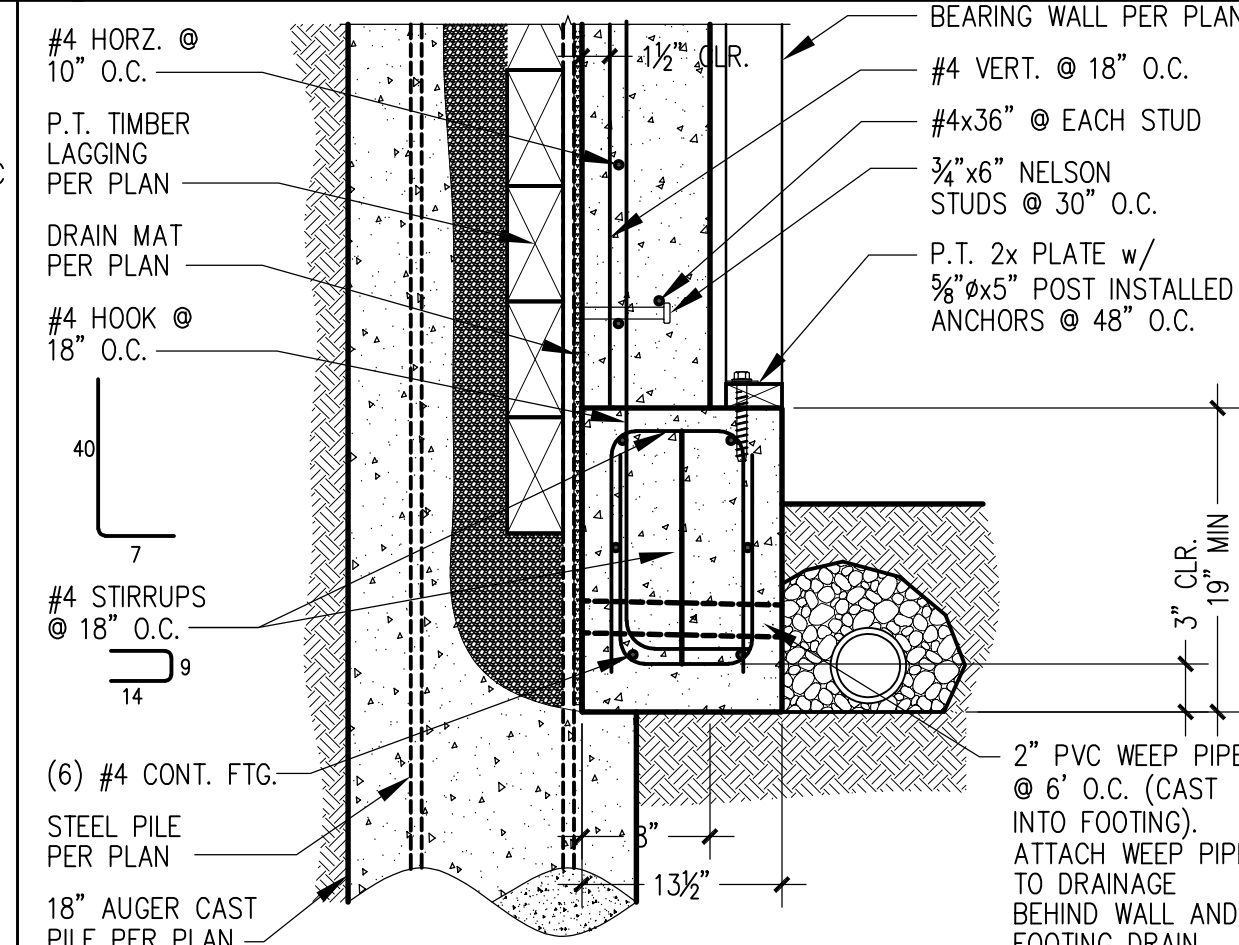
10 CONCRETE STAIRS @ GRADE BEAM



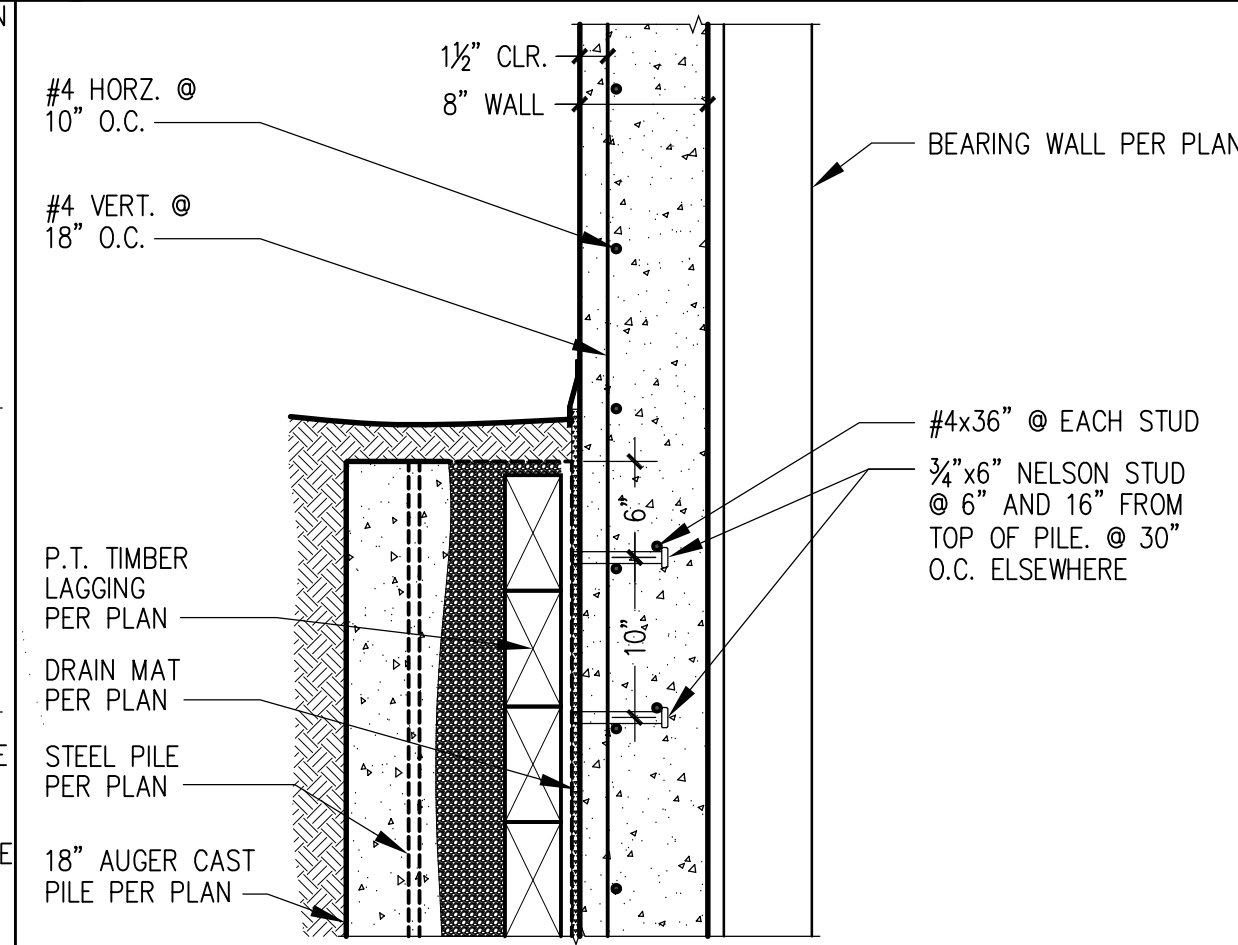
11 CONCRETE STAIRS @ UPPER LANDING



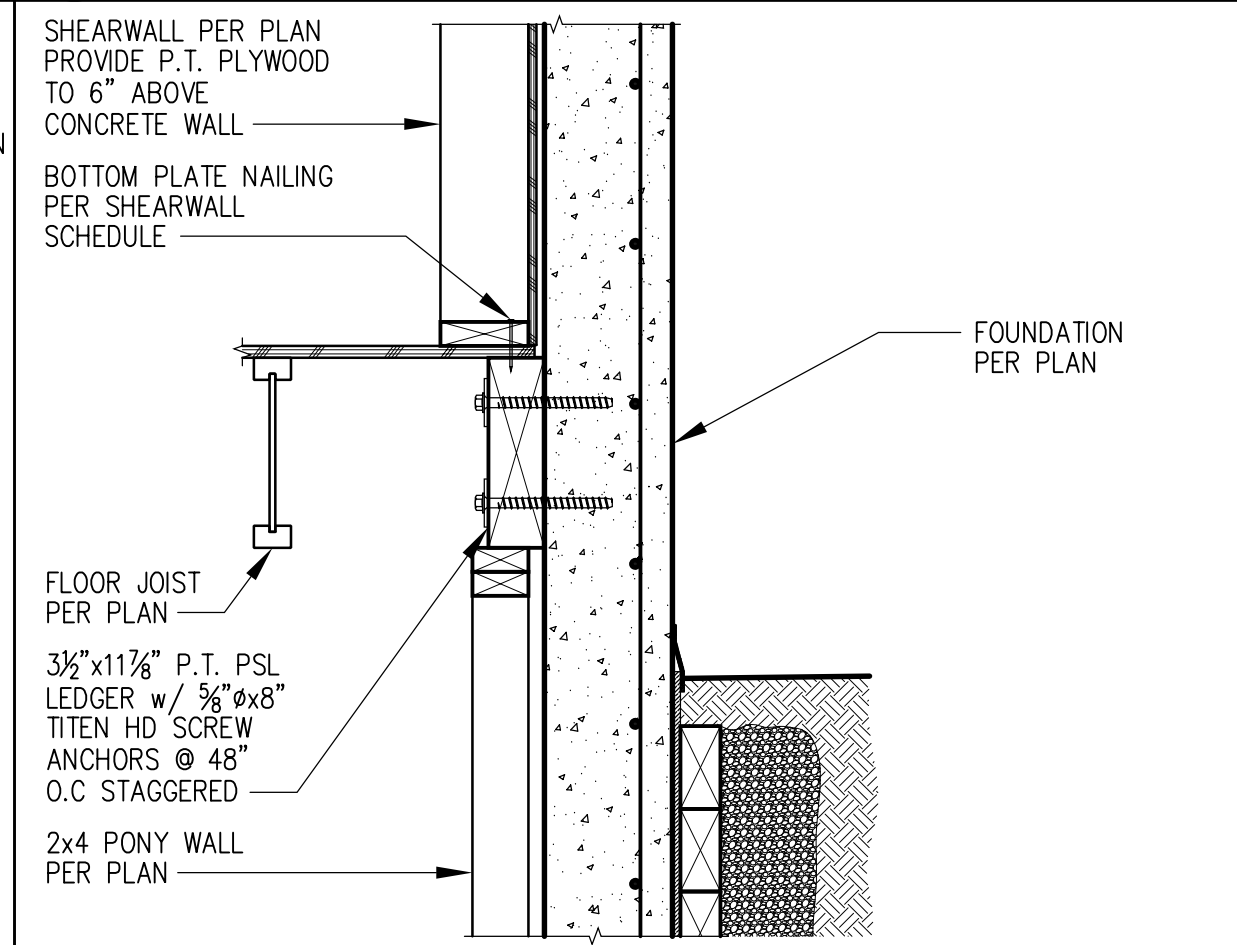
12 CONCRETE STAIR WALL



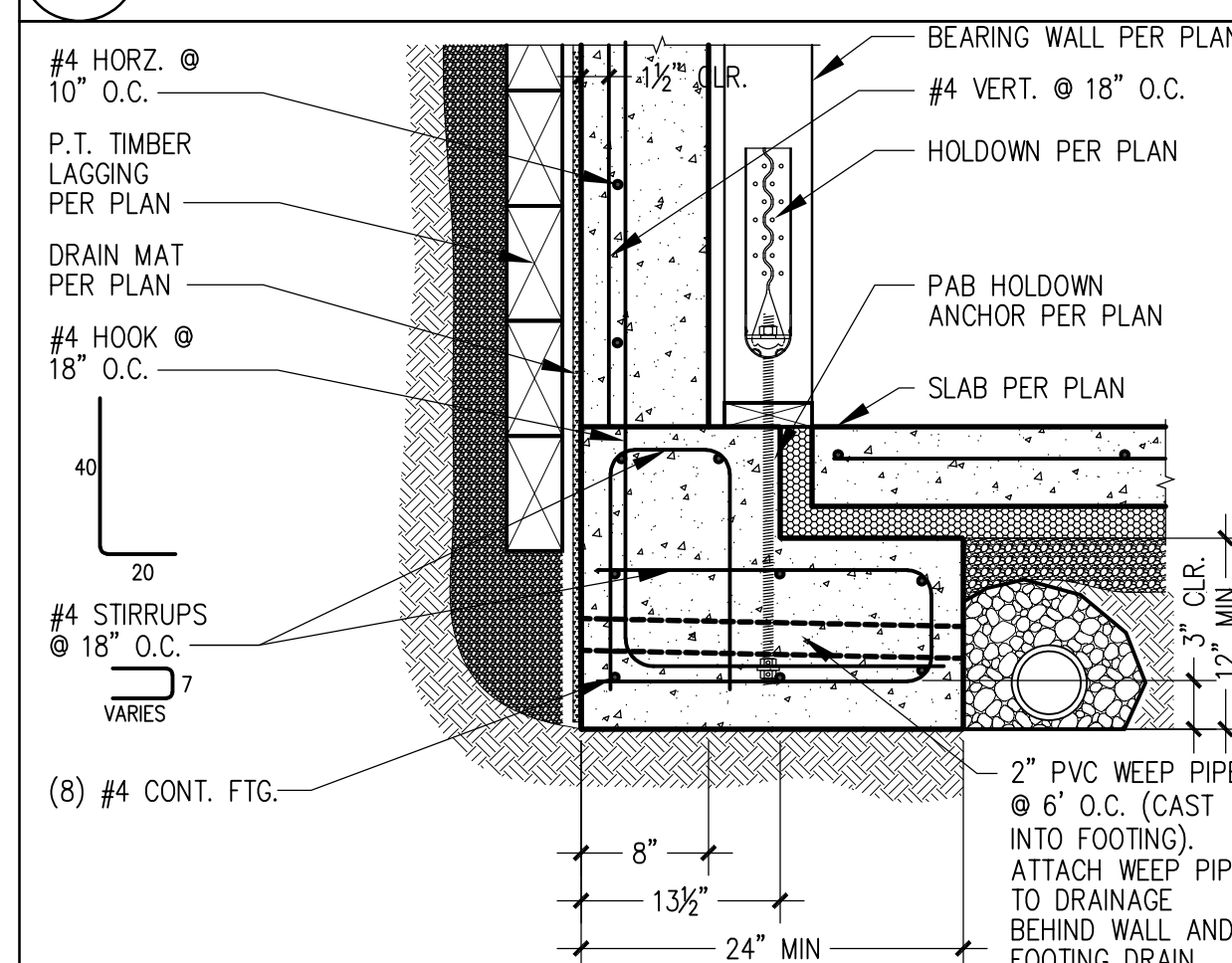
13 TYPICAL CRAWLSPACE FOUNDATION @ PILE (BASE OF WALL)



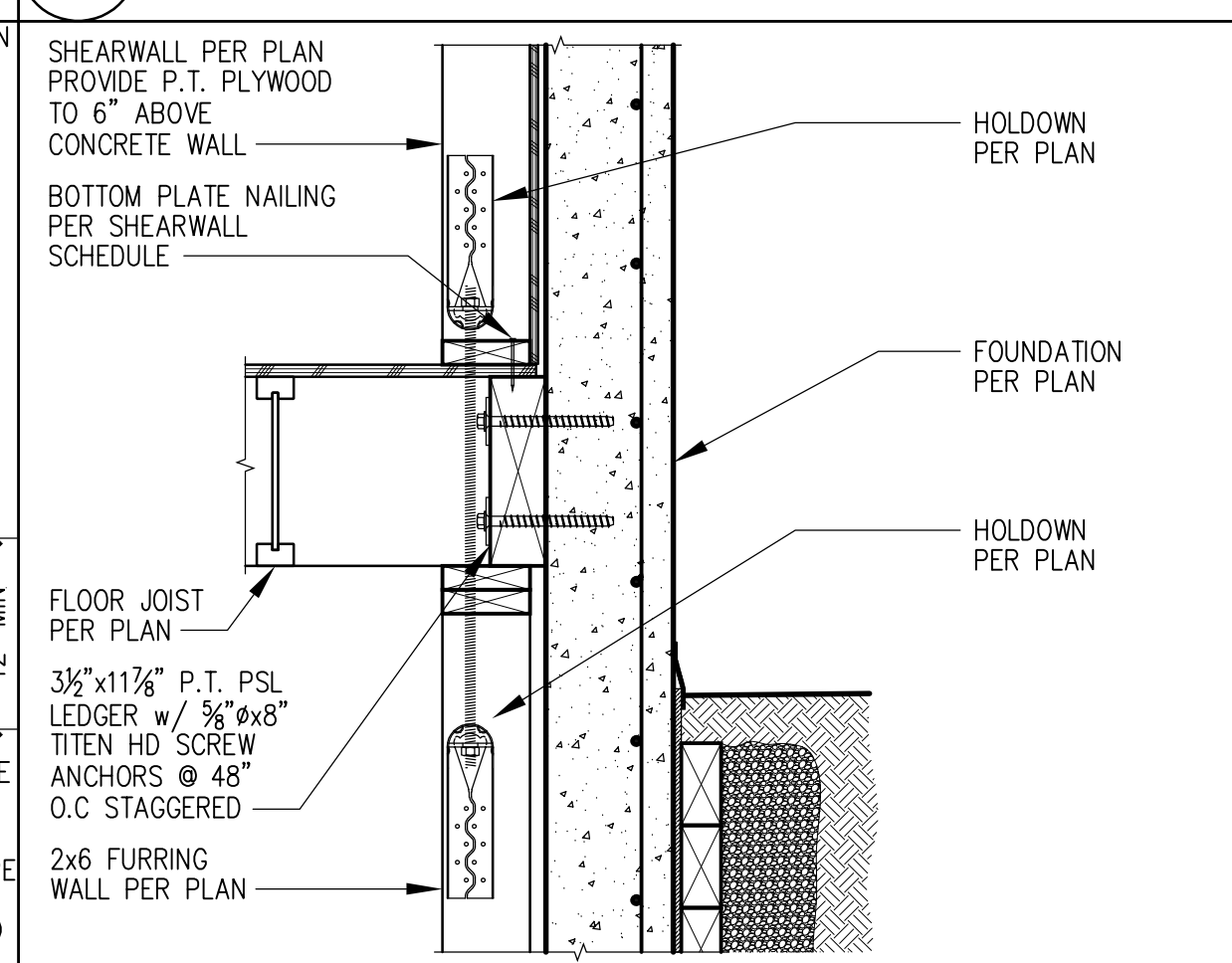
14 TYPICAL FOUNDATION @ PILE (TOP OF GRADE)



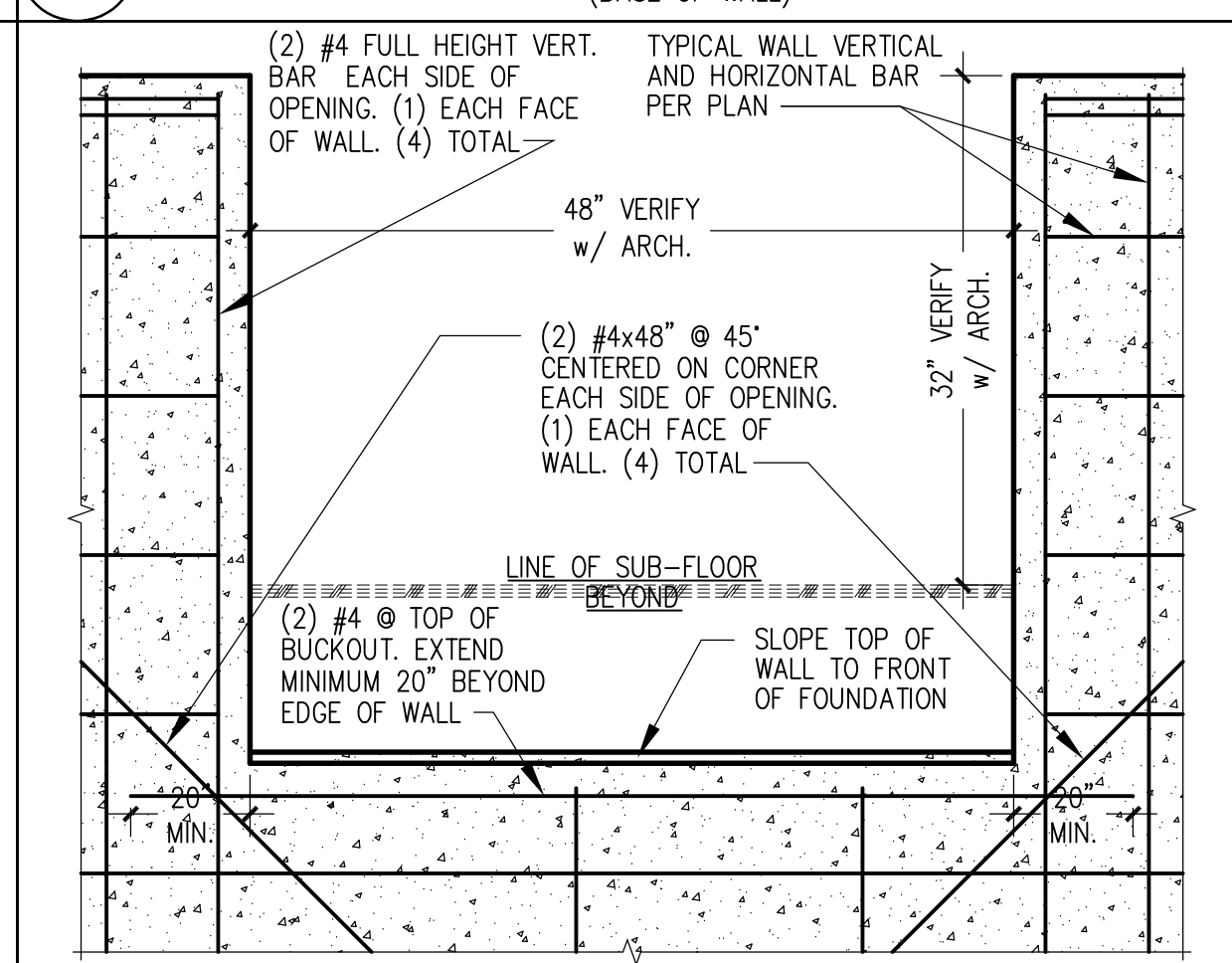
15 TYPICAL SHEAR TRANSFER @ FNDN. WALL (CRAWLSPACE FLOOR FRAMING)



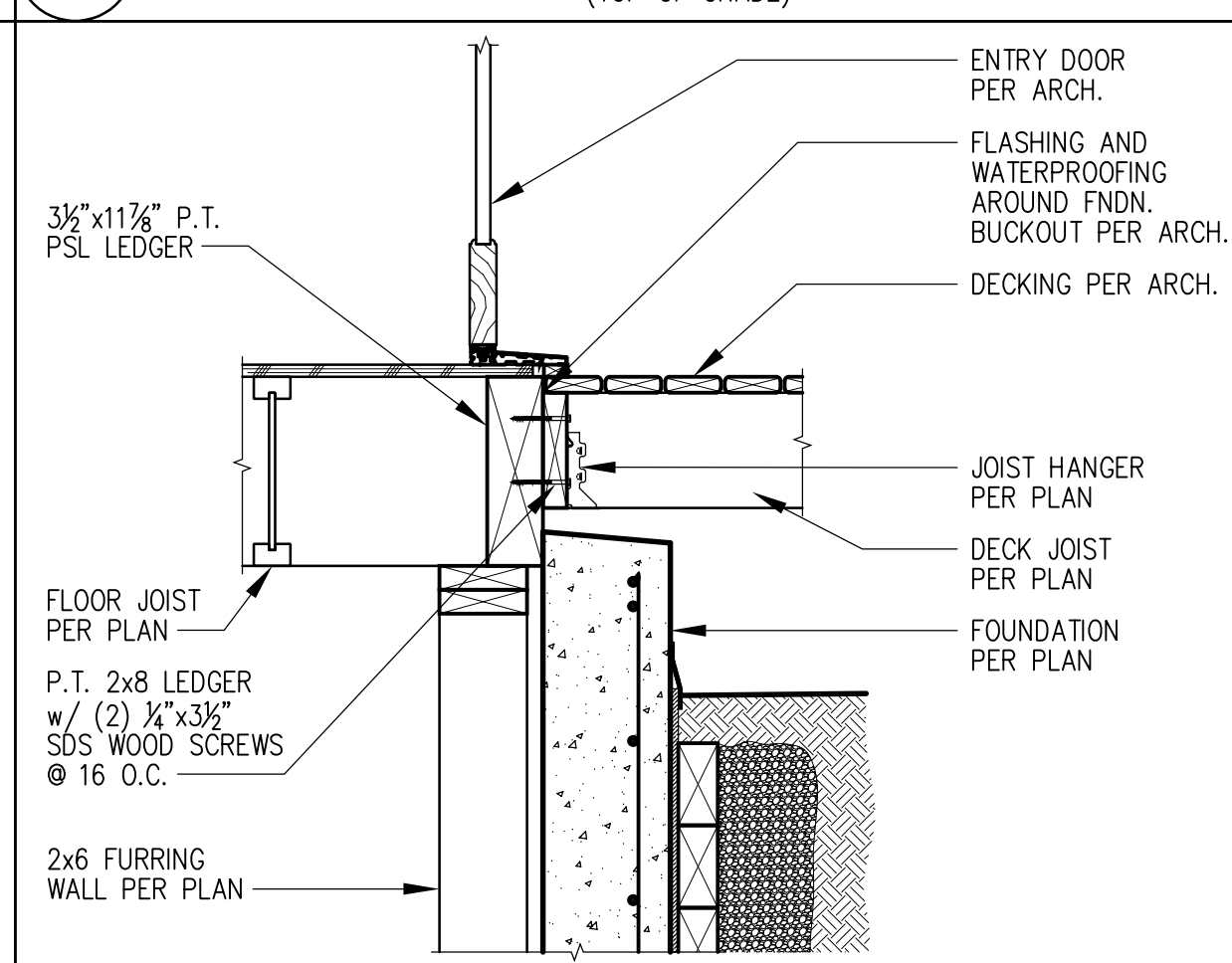
16 HOLDOWN @ BASEMENT FOUNDATION



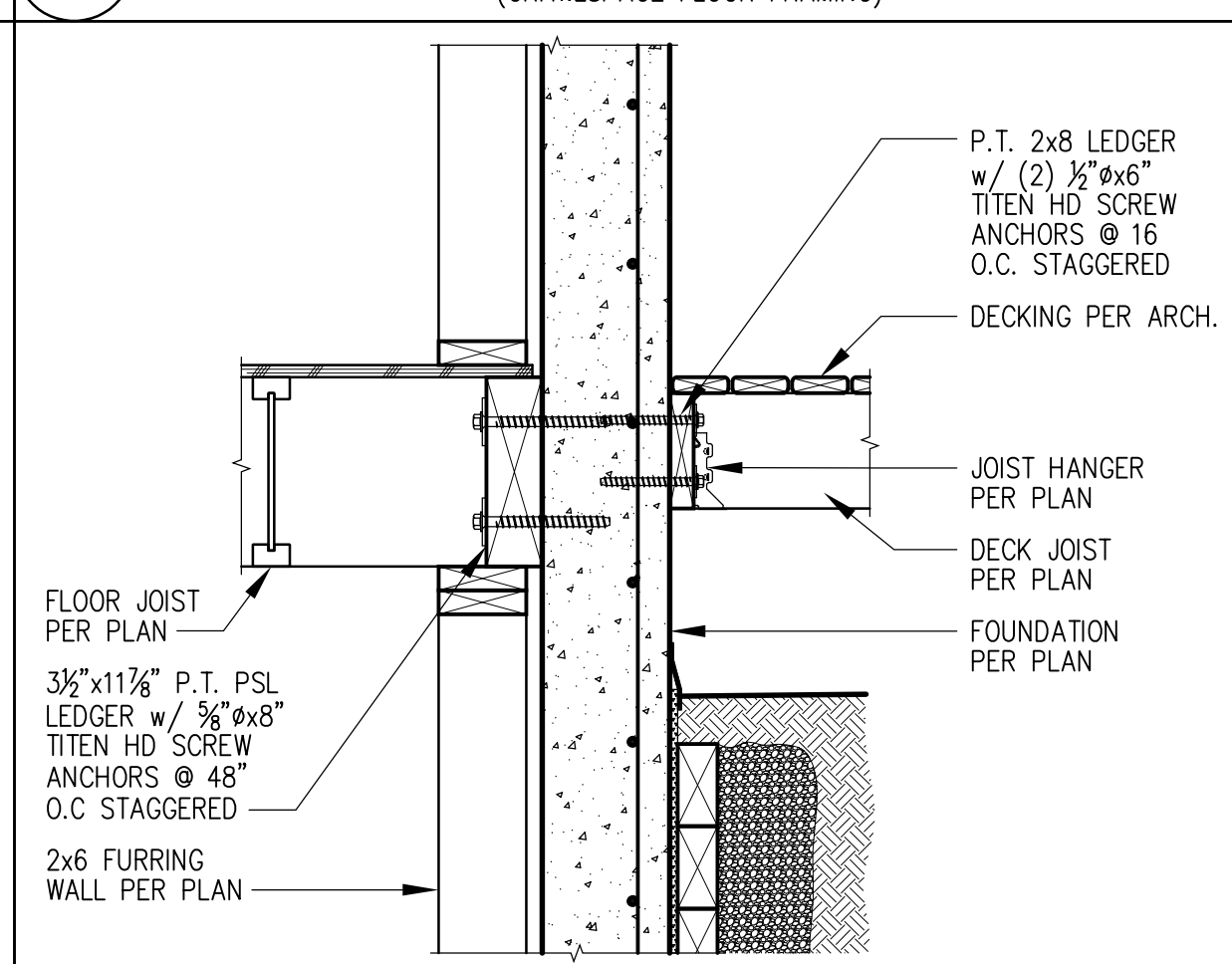
17 SHEAR TRANSFER @ FNDN. WALL (BASEMENT FLOOR FRAMING/ HOLDOWN TO HOLDOWN)



18 TYPICAL CONCRETE BUCKOUT (ELEVATION)



19 ENTRY DECK FRAMING



20 ENTRY DECK @ BALLOON FRAME WALL

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 425-644-9500

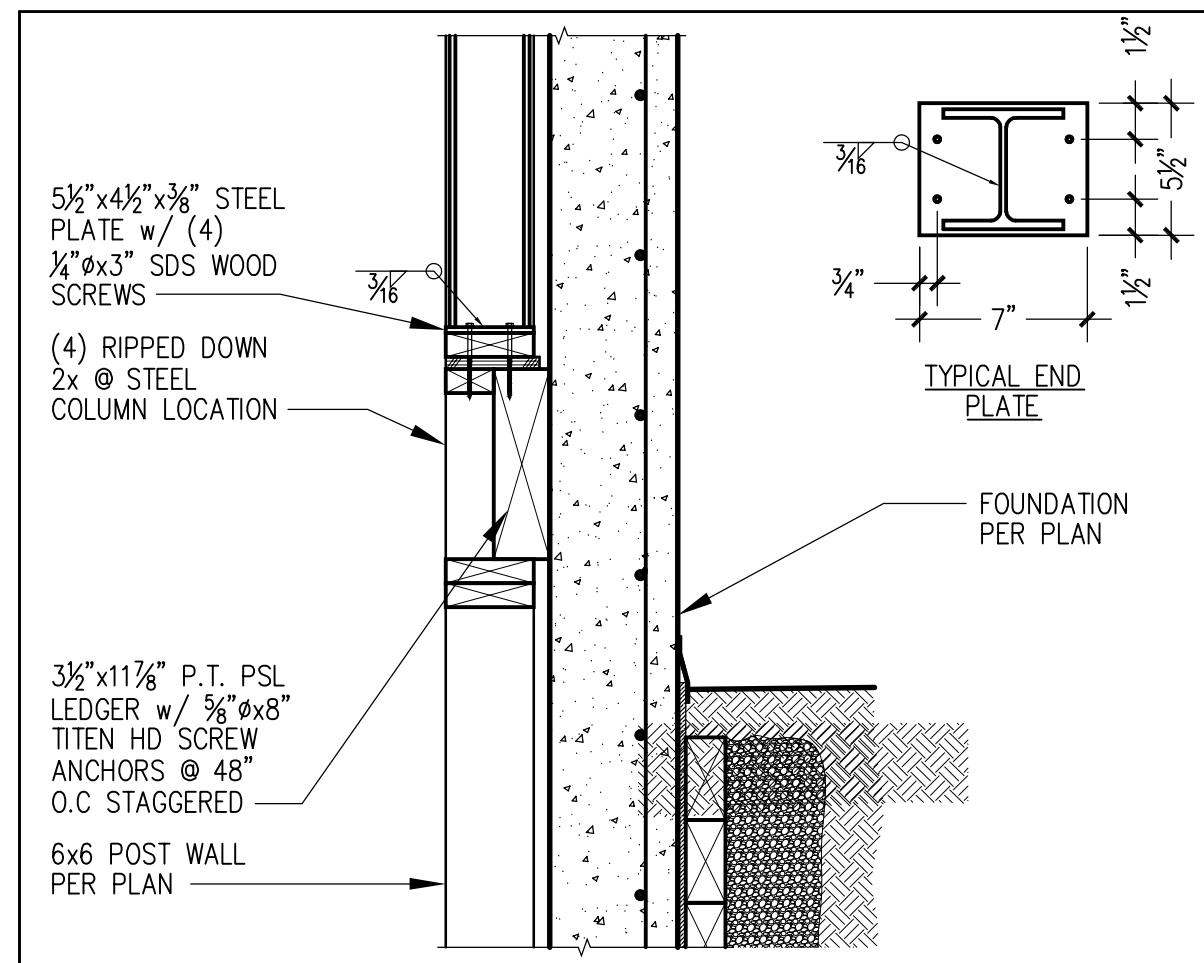


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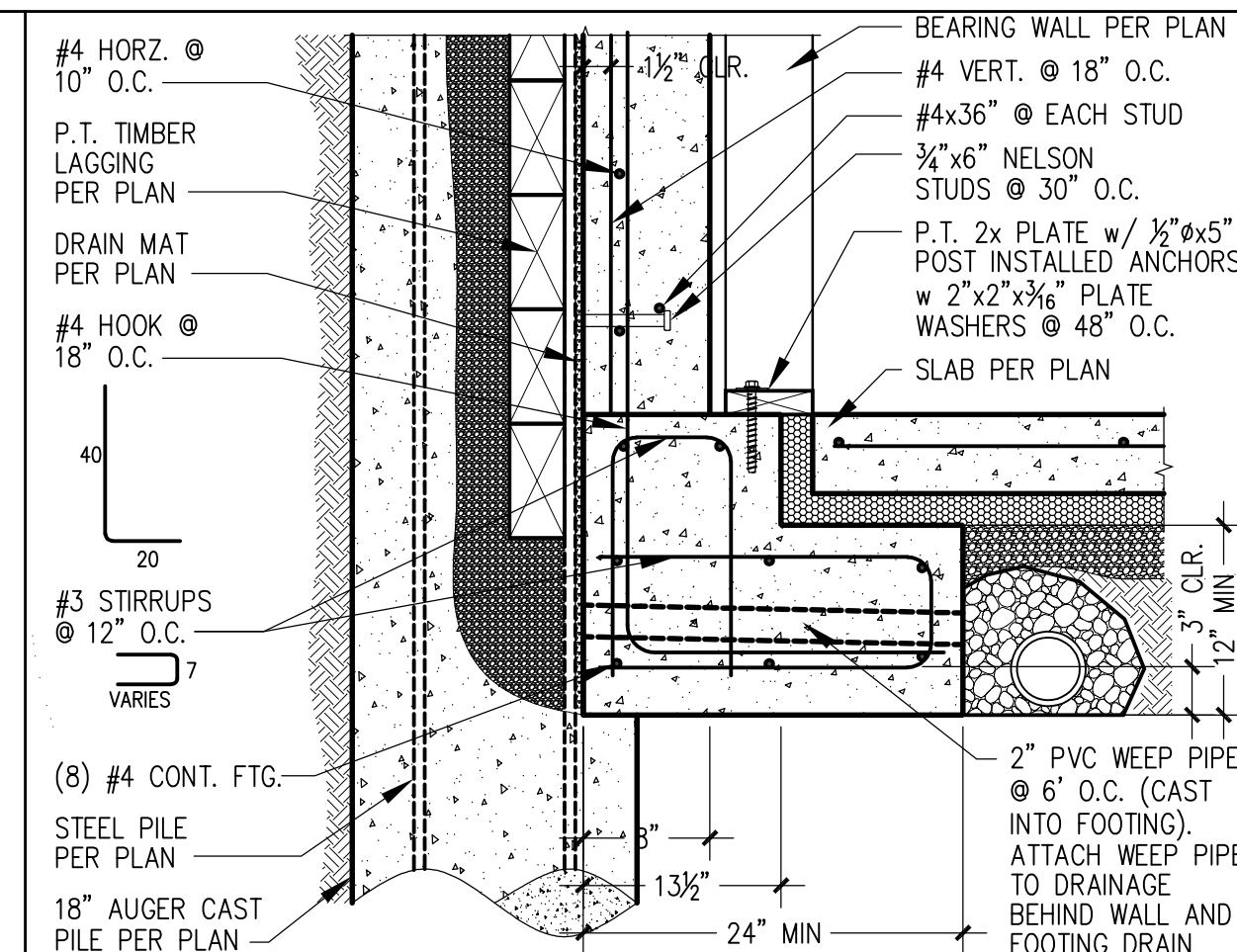
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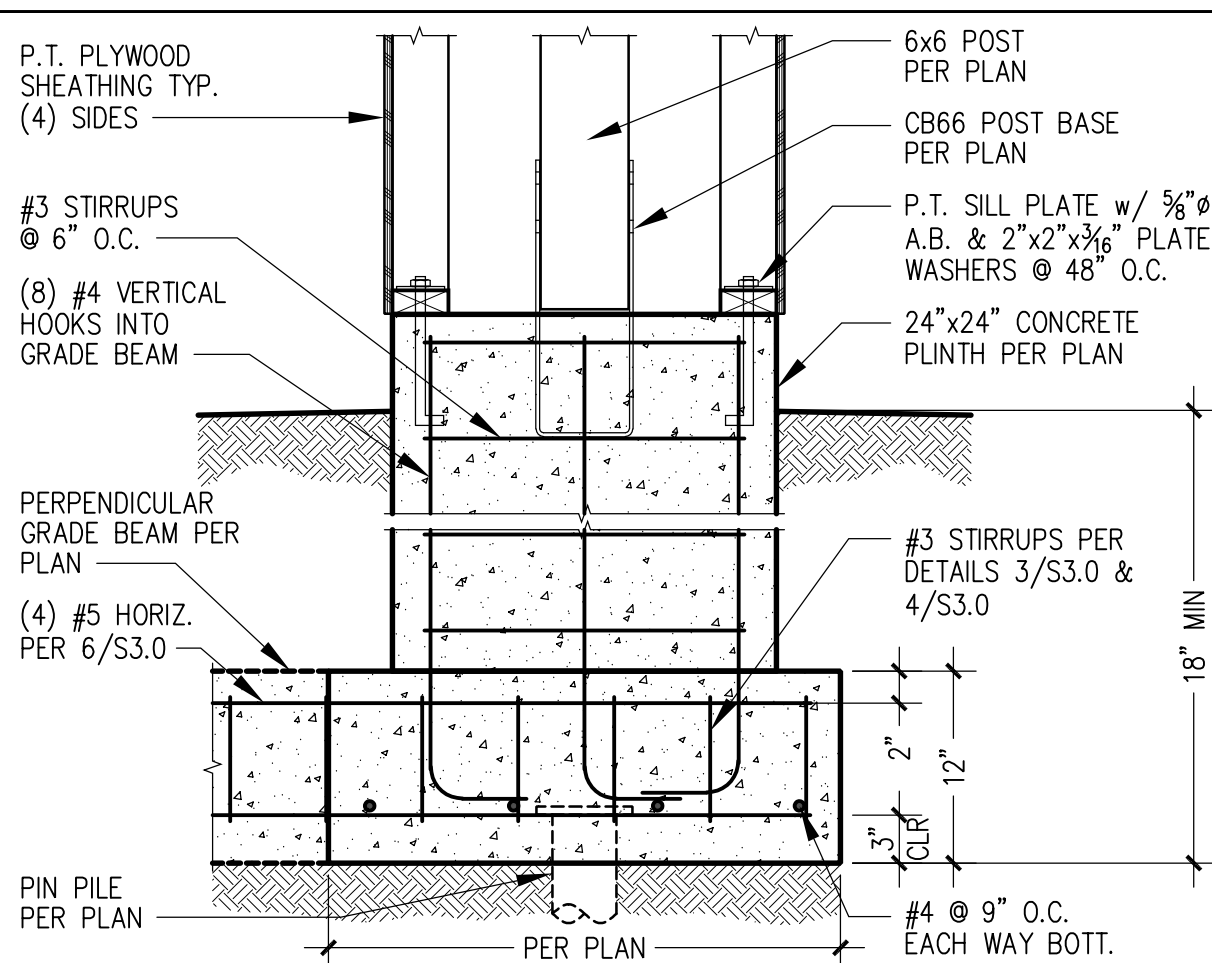
18-025
S3.1
 FOUNDATION DETAILS



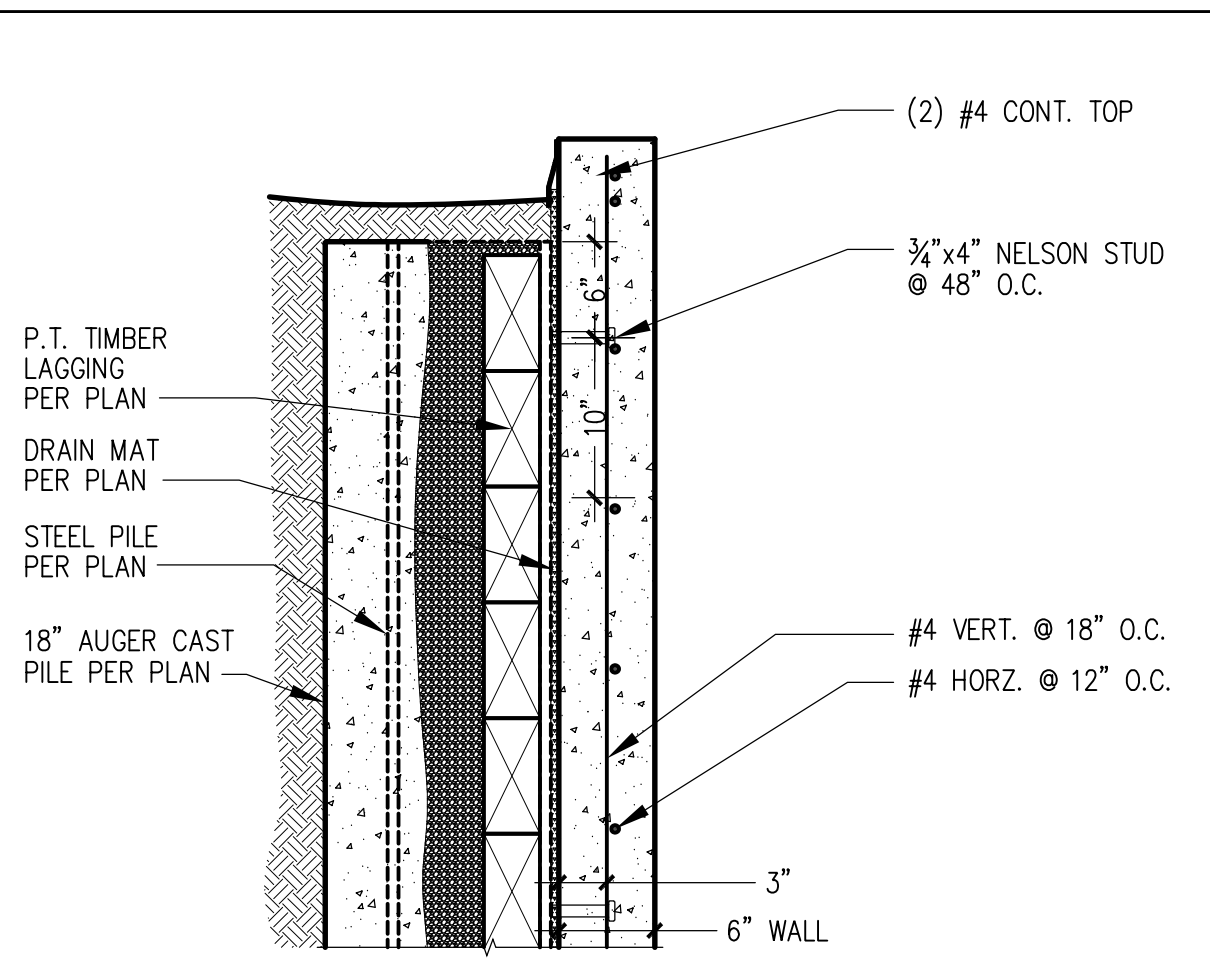
1 W5x16 STEEL COLUMN TO BOTTOM PLATE
(FLOOR FRAMING)



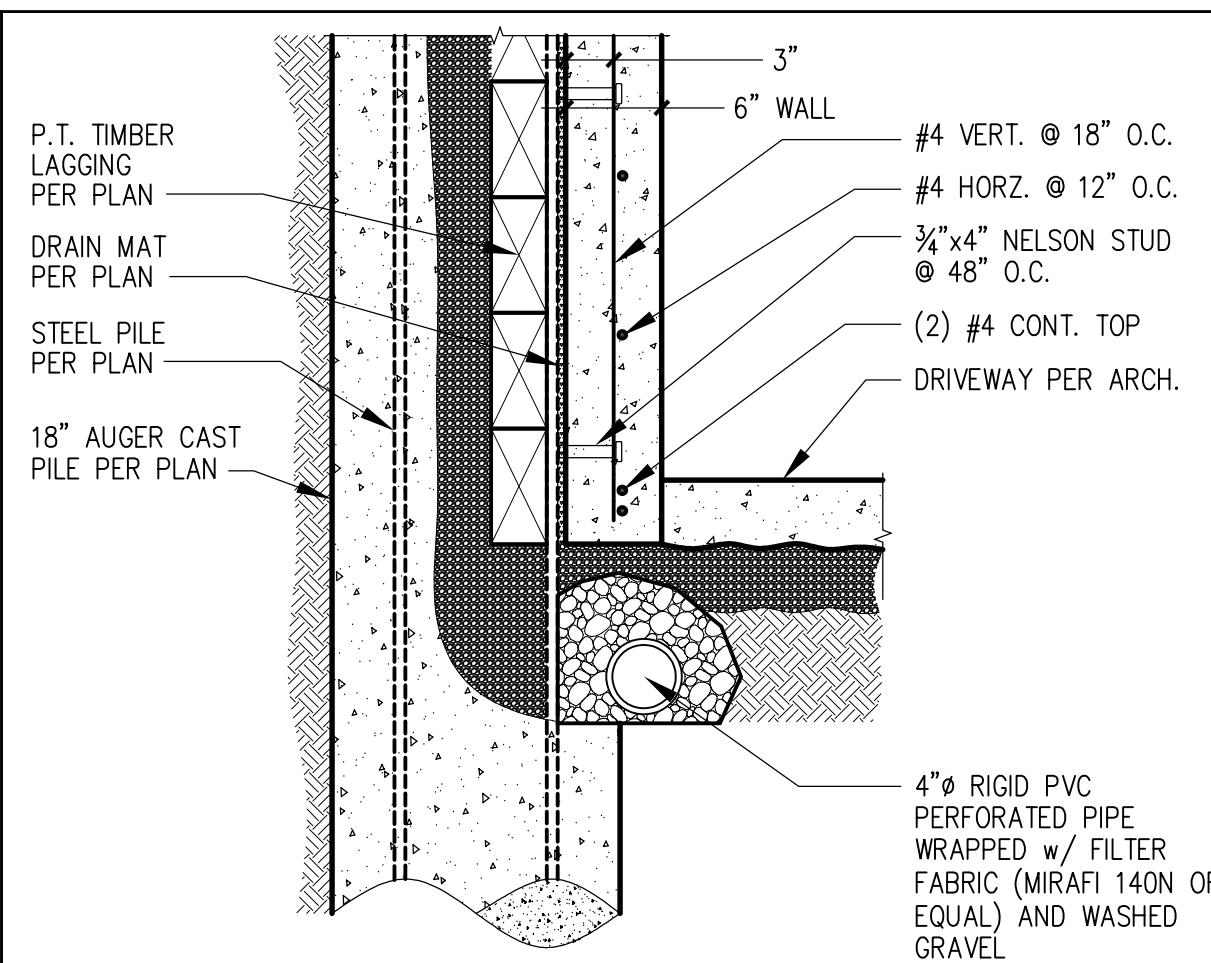
2 TYPICAL BASEMENT FOUNDATION @ PILE
(BASE OF WALL)



3 CONCRETE POST PLINTH @ ENTRY PORCH
(GRADE BEAM TEE OFF FOOTING)



4 DRIVEWAY SITE WALL
(TOP OF GRADE)



5 DRIVEWAY SITE WALL
(BASE OF WALL)

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 423-644-9500



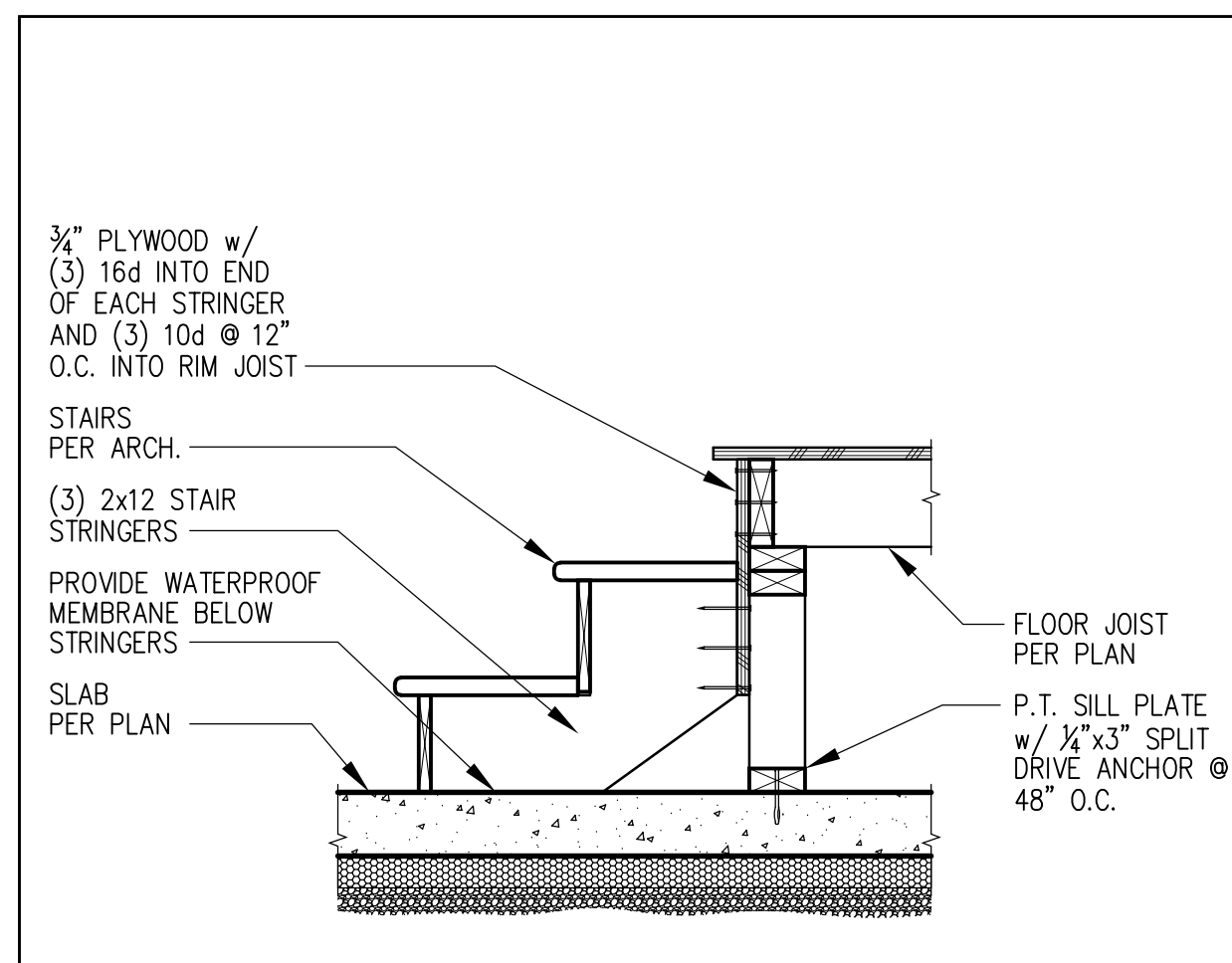
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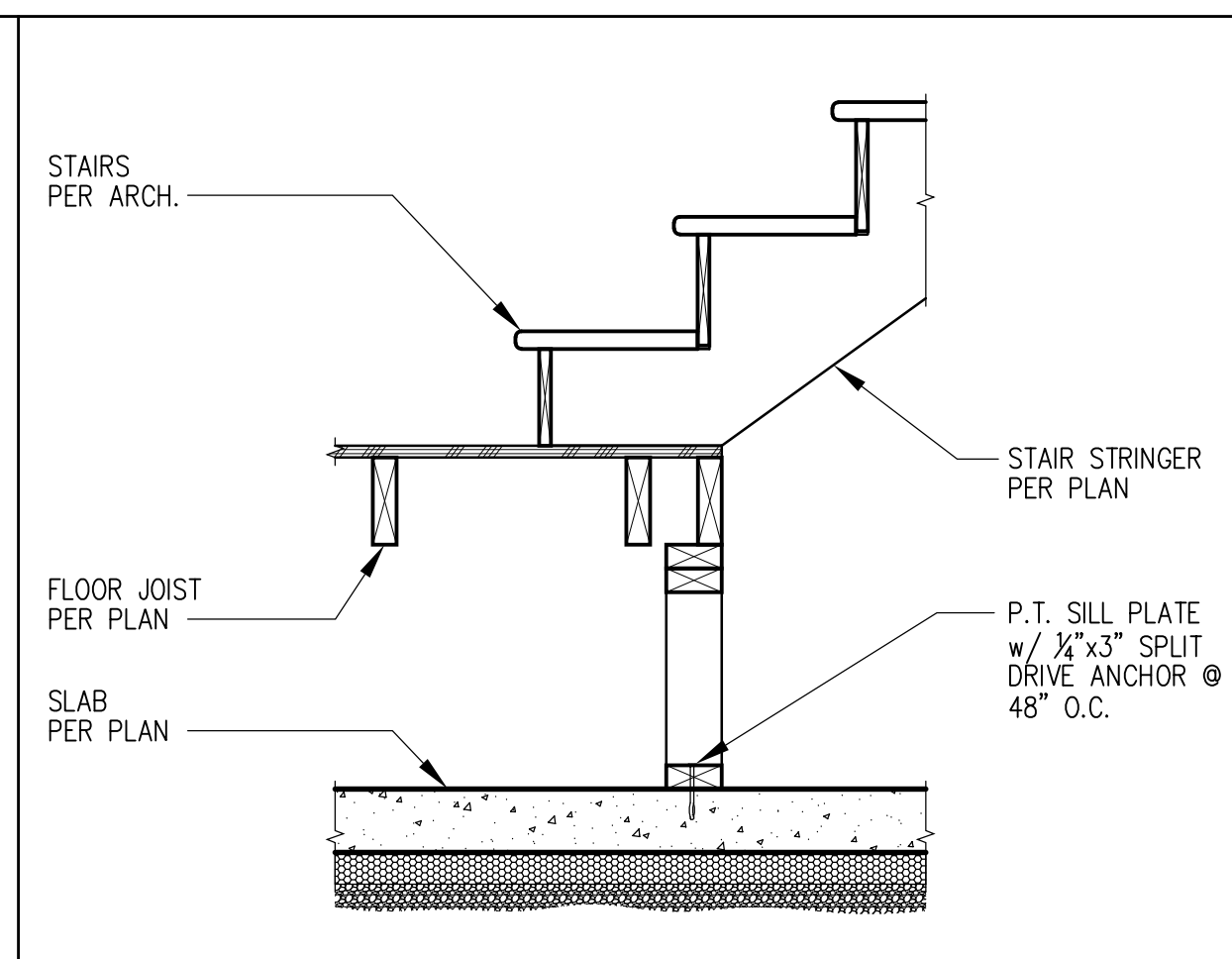
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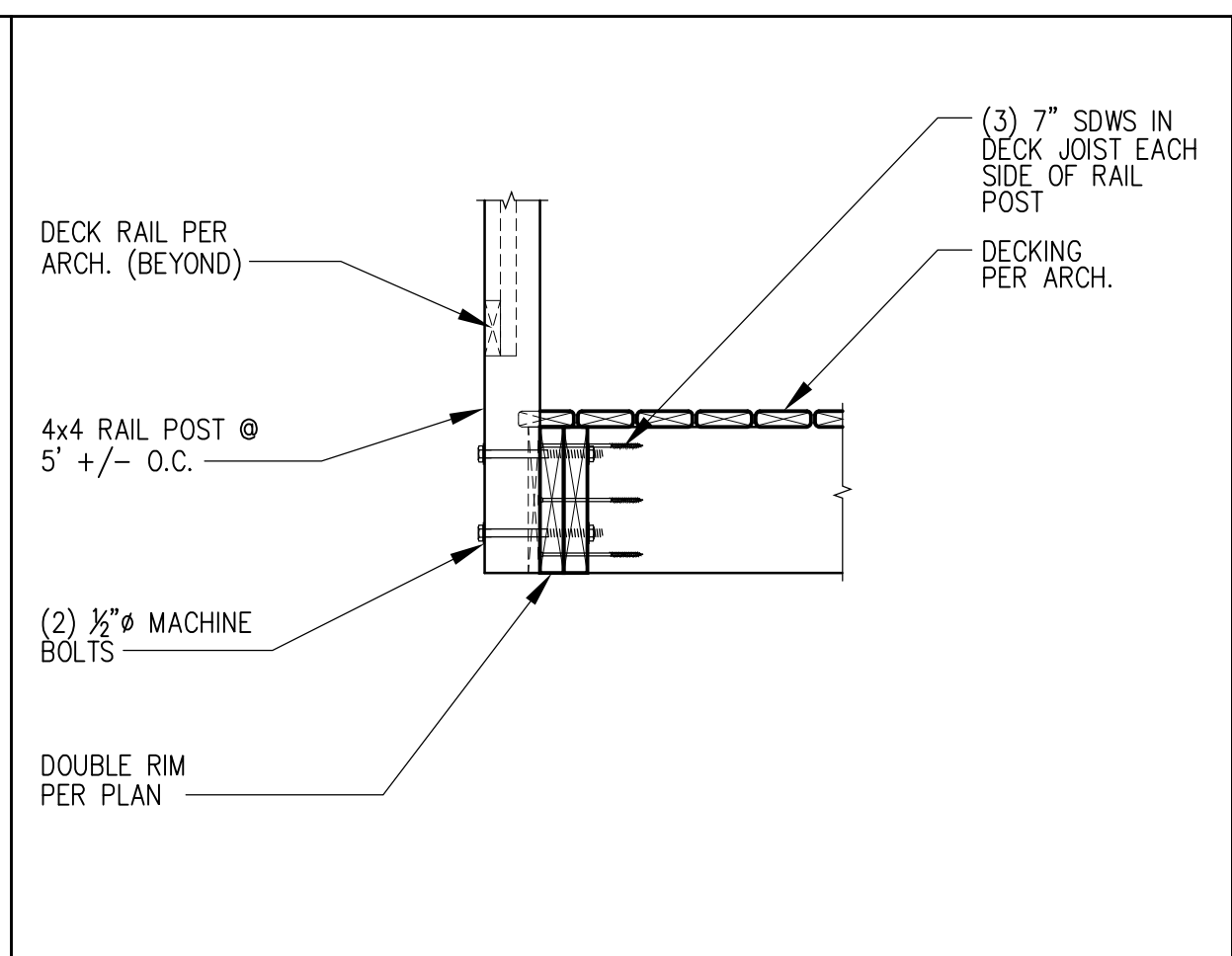
S3.2
 FOUNDATION
 DETAILS



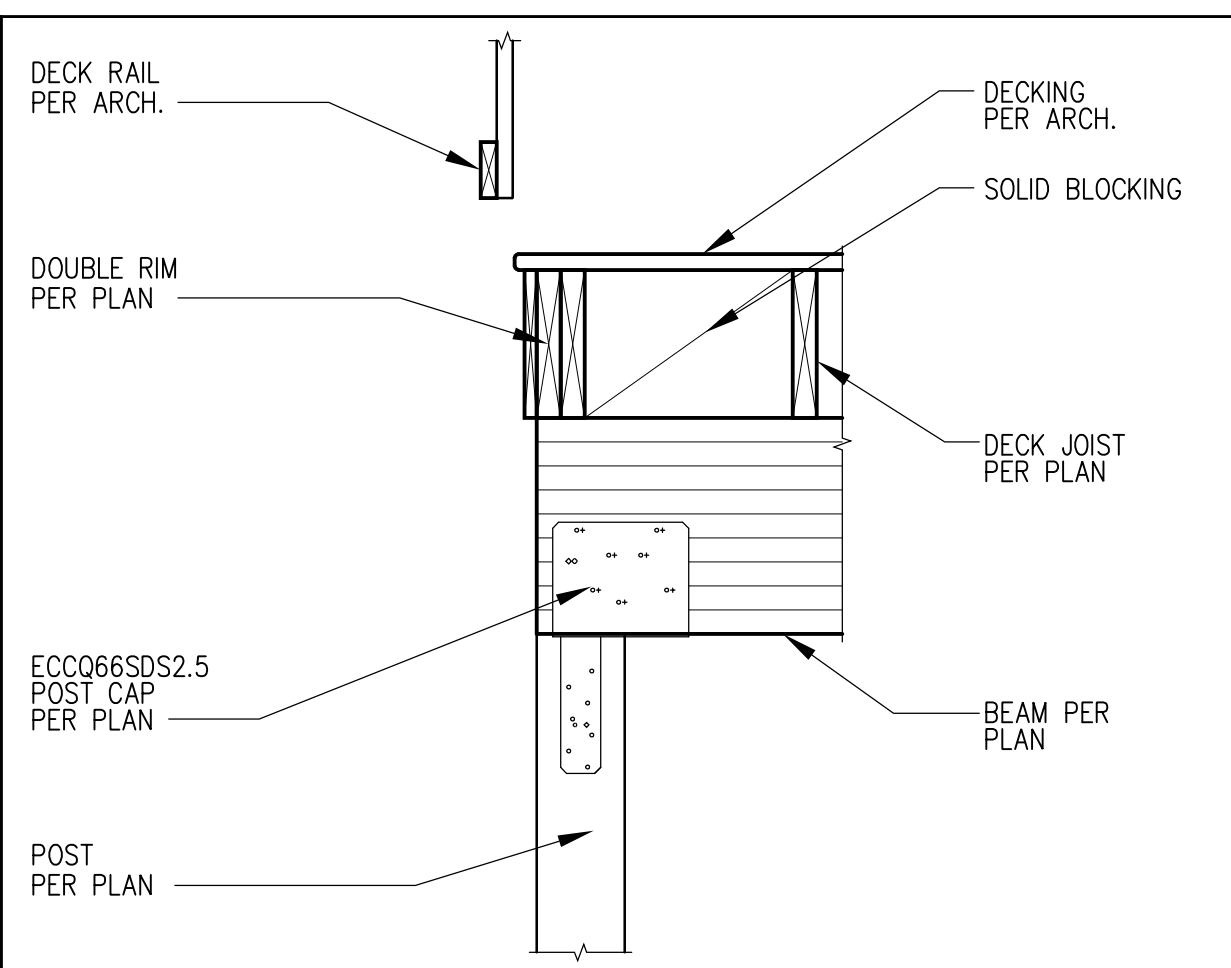
1 STAIR STRINGER FRAMING (BASEMENT STAIRS @ SLAB/LOWER LANDING)



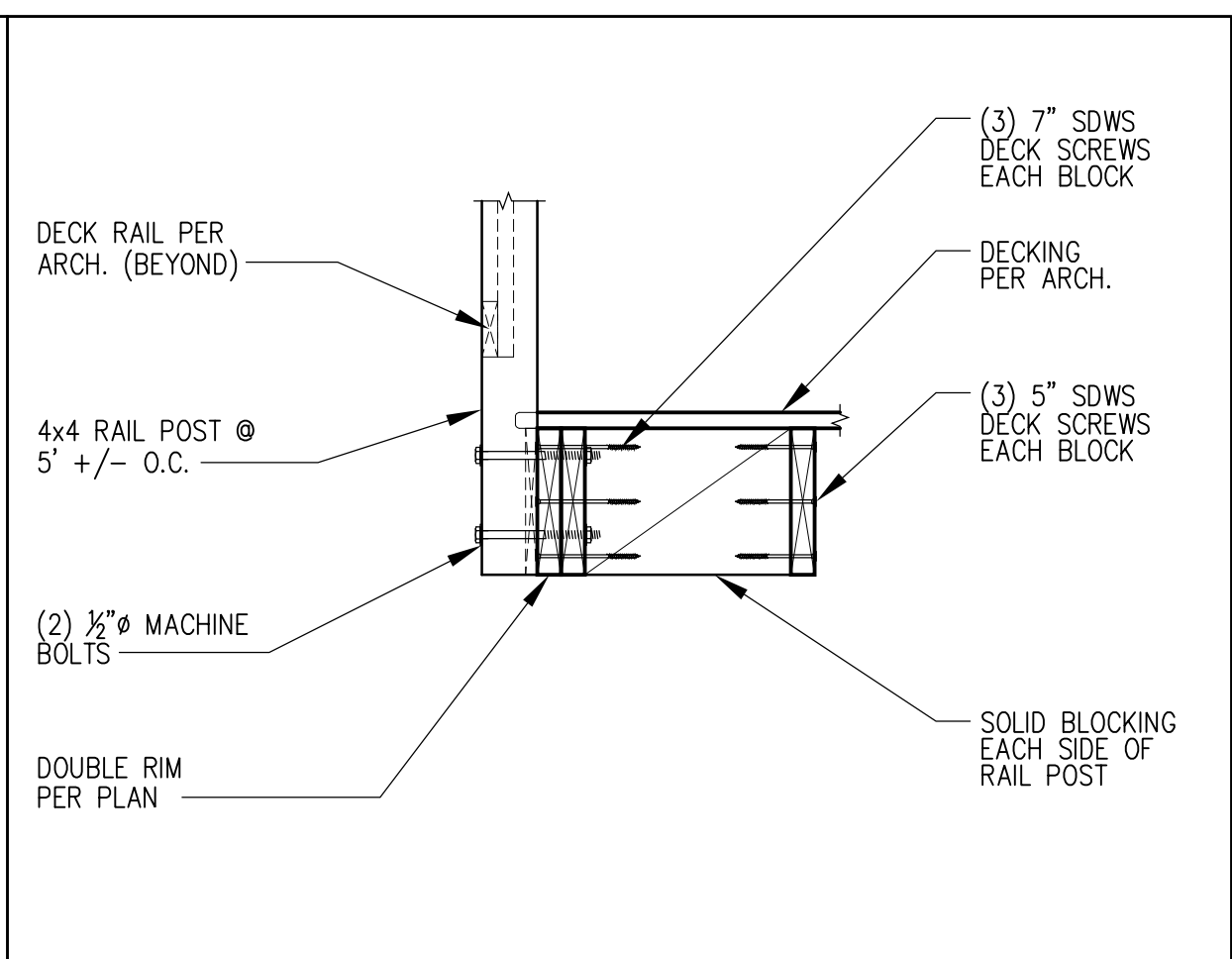
2 STAIR STRINGER FRAMING (BASEMENT STAIRS @ LOWER LANDING)



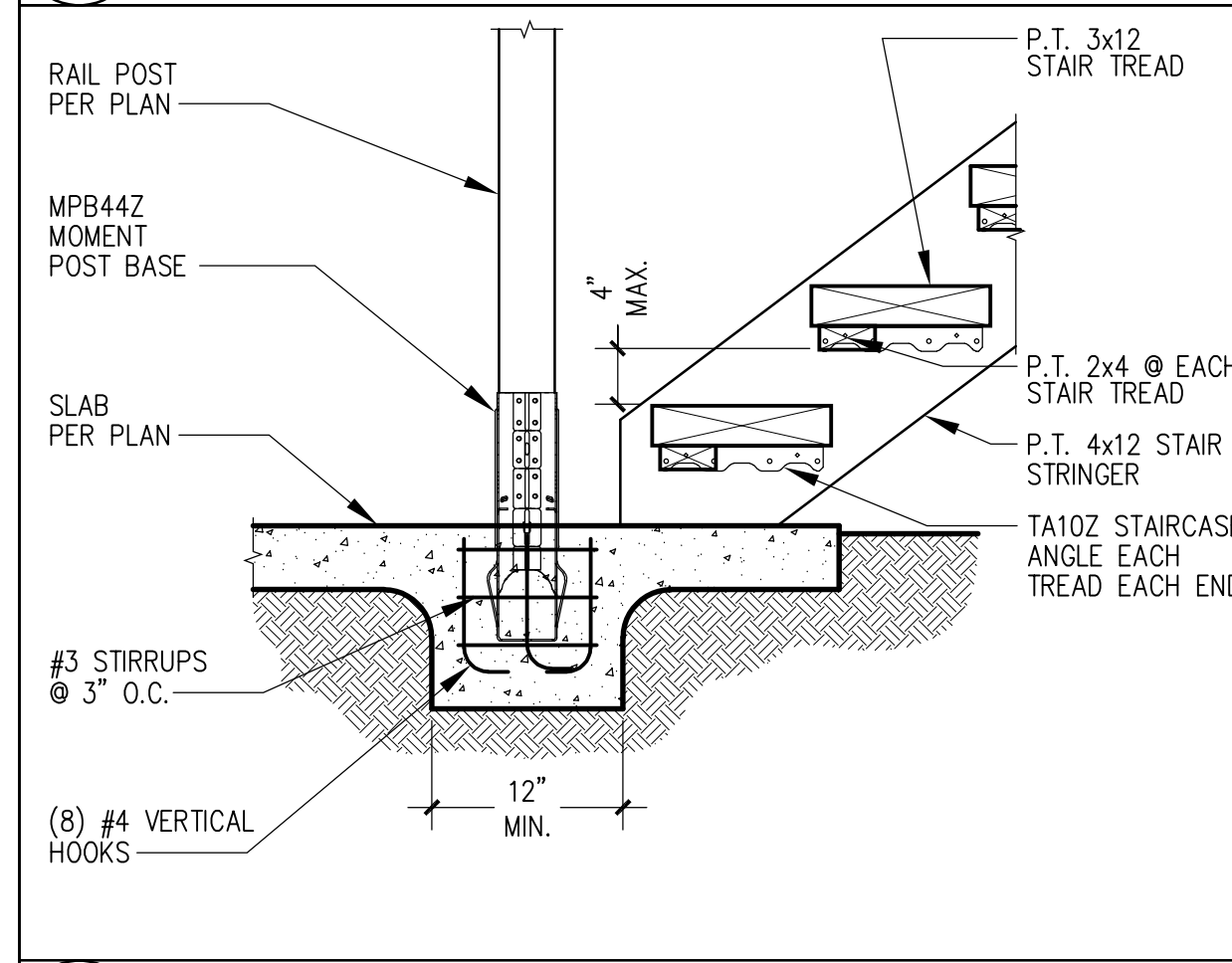
3 TYPICAL DECK POST (PERPENDICULAR JOIST)



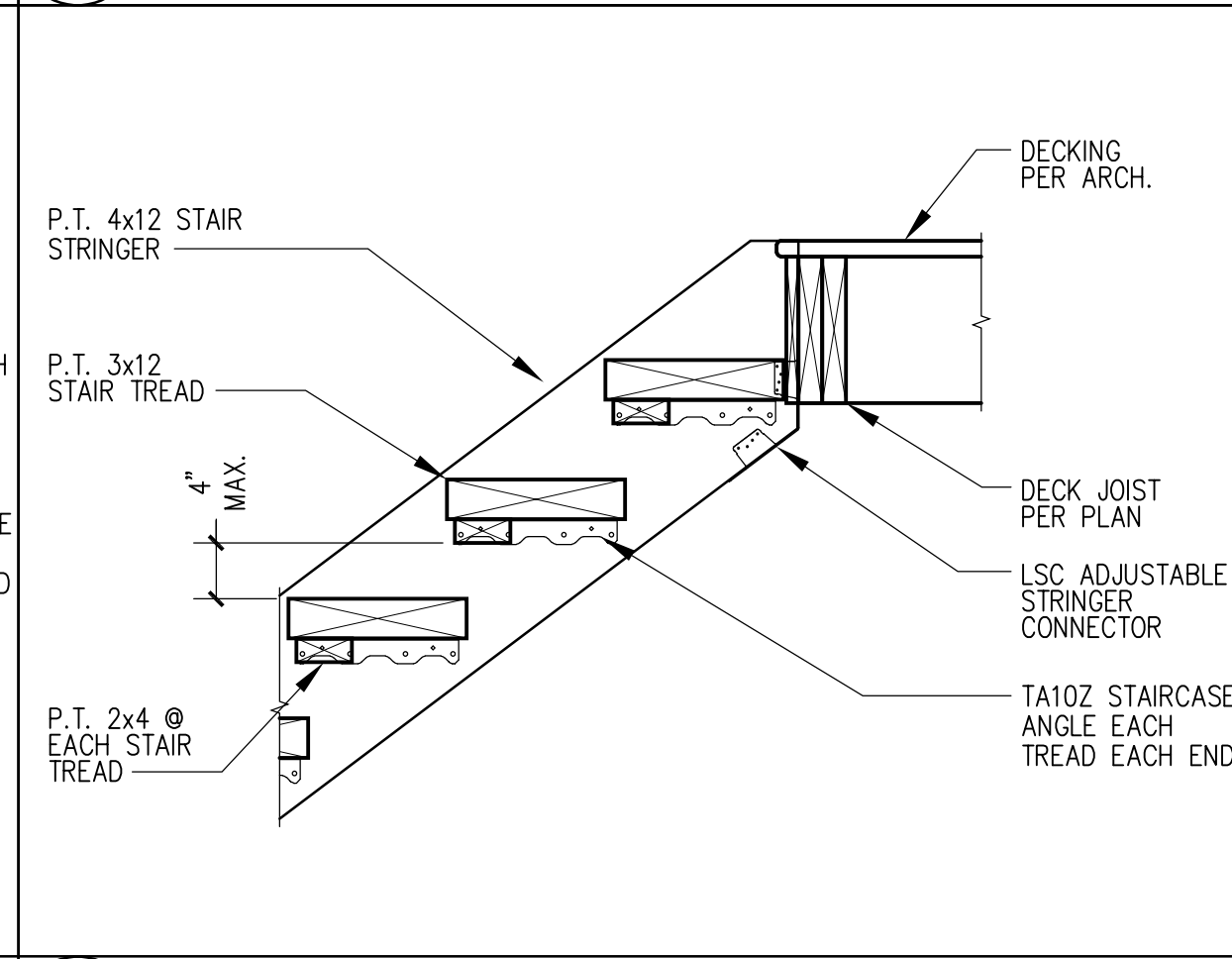
4 TYPICAL DECK POST (PARALLEL JOIST)



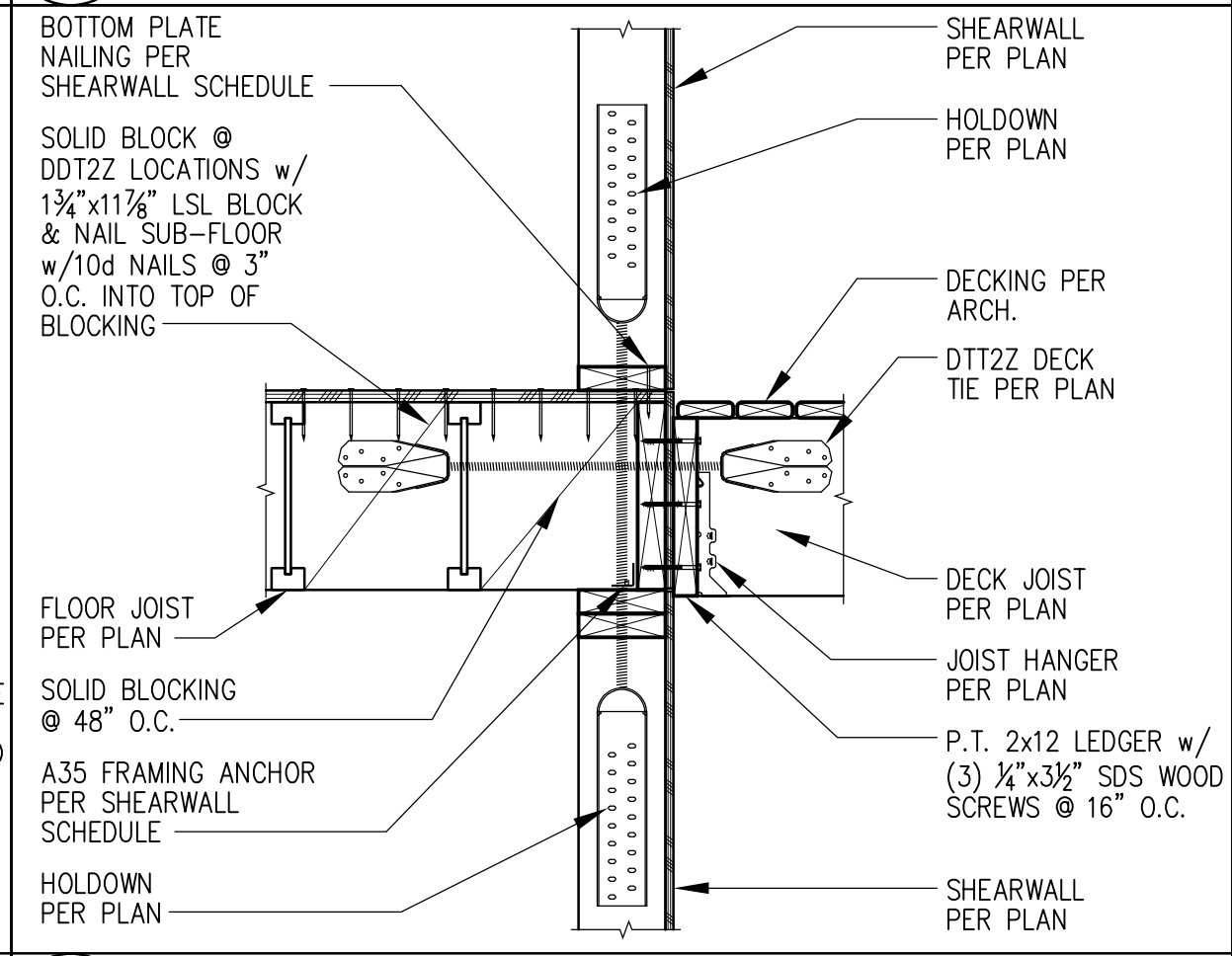
5 TYPICAL DECK POST (PARALLEL JOIST)



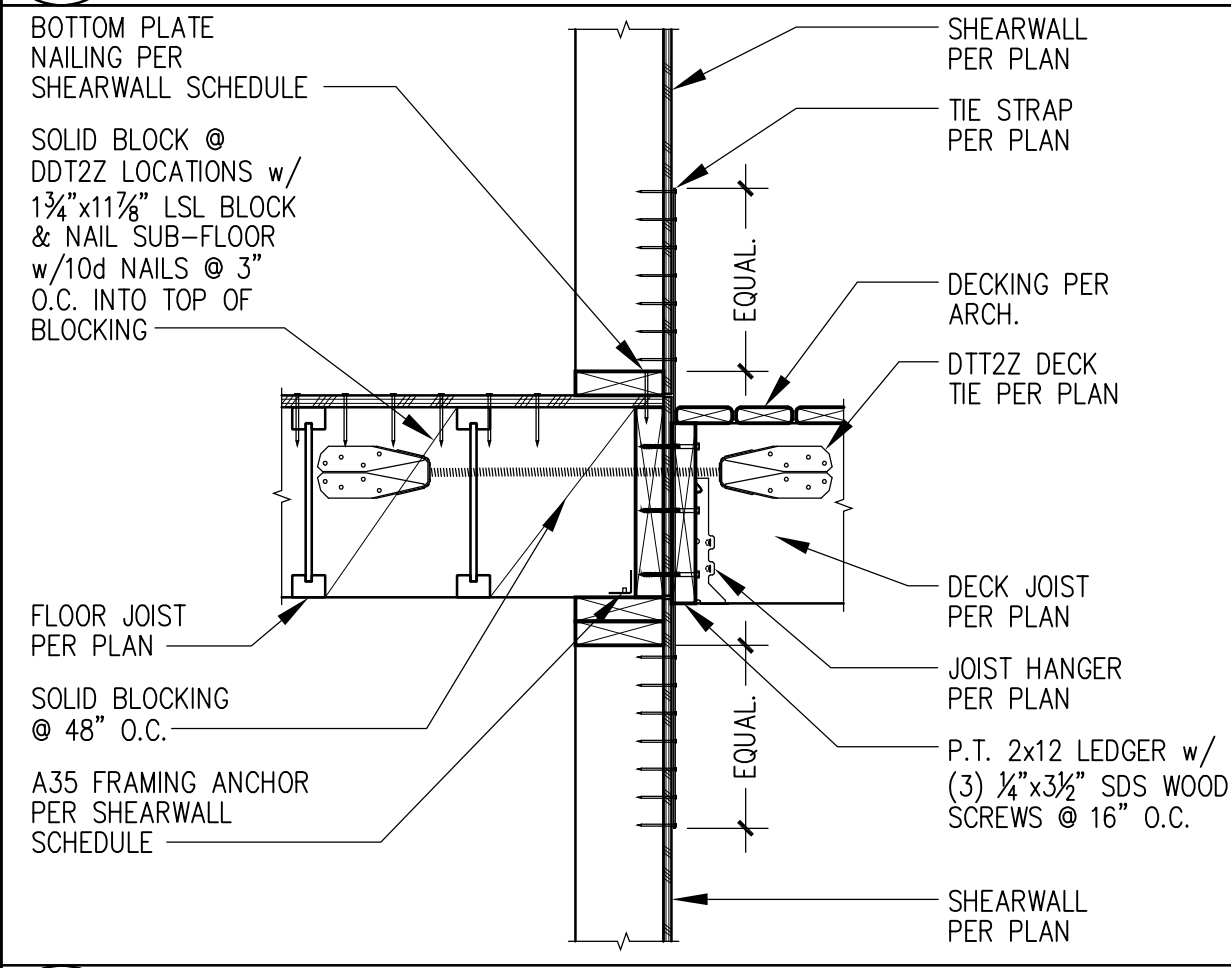
6 TYPICAL DECK STAIRS



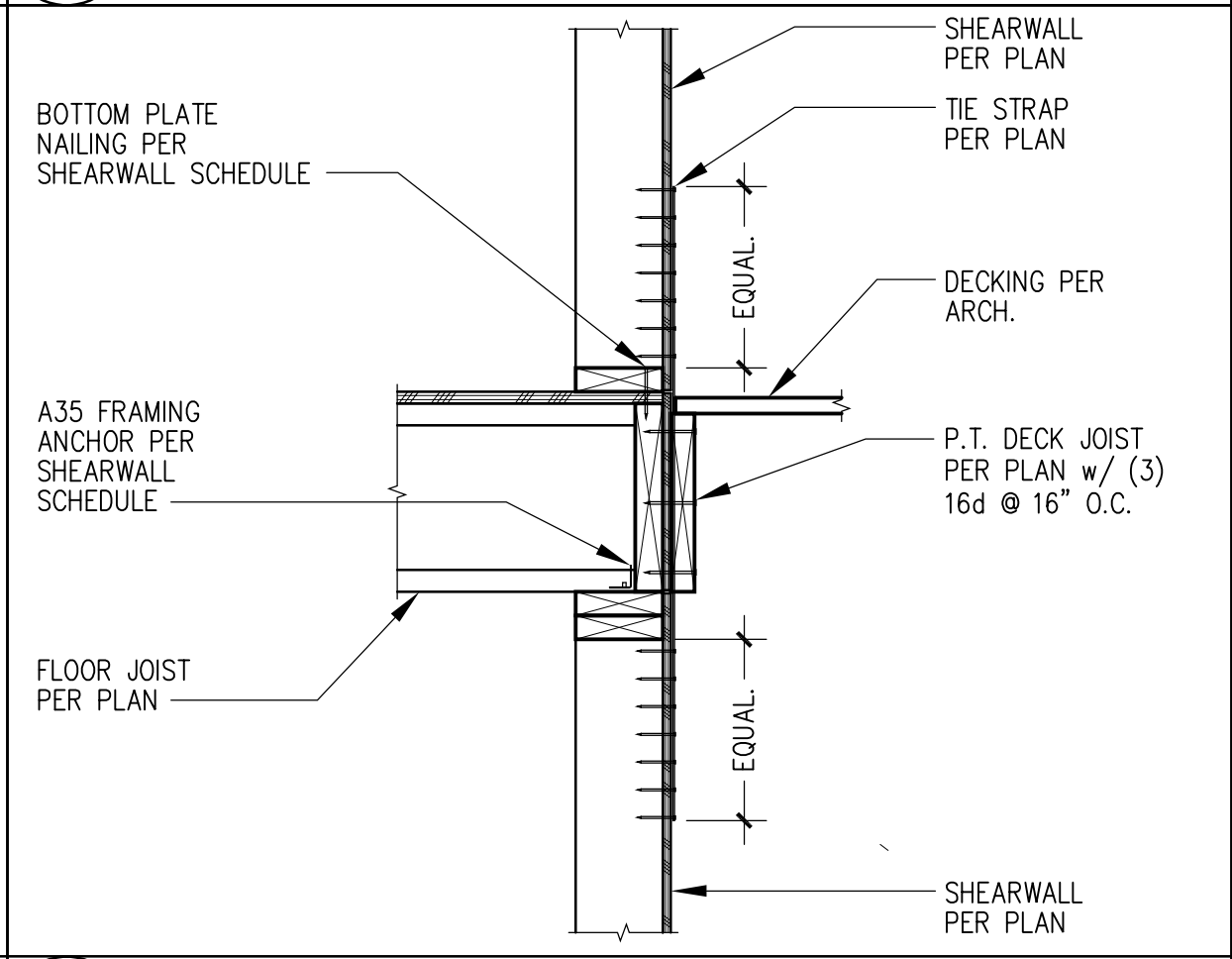
7 TYPICAL DECK STAIRS



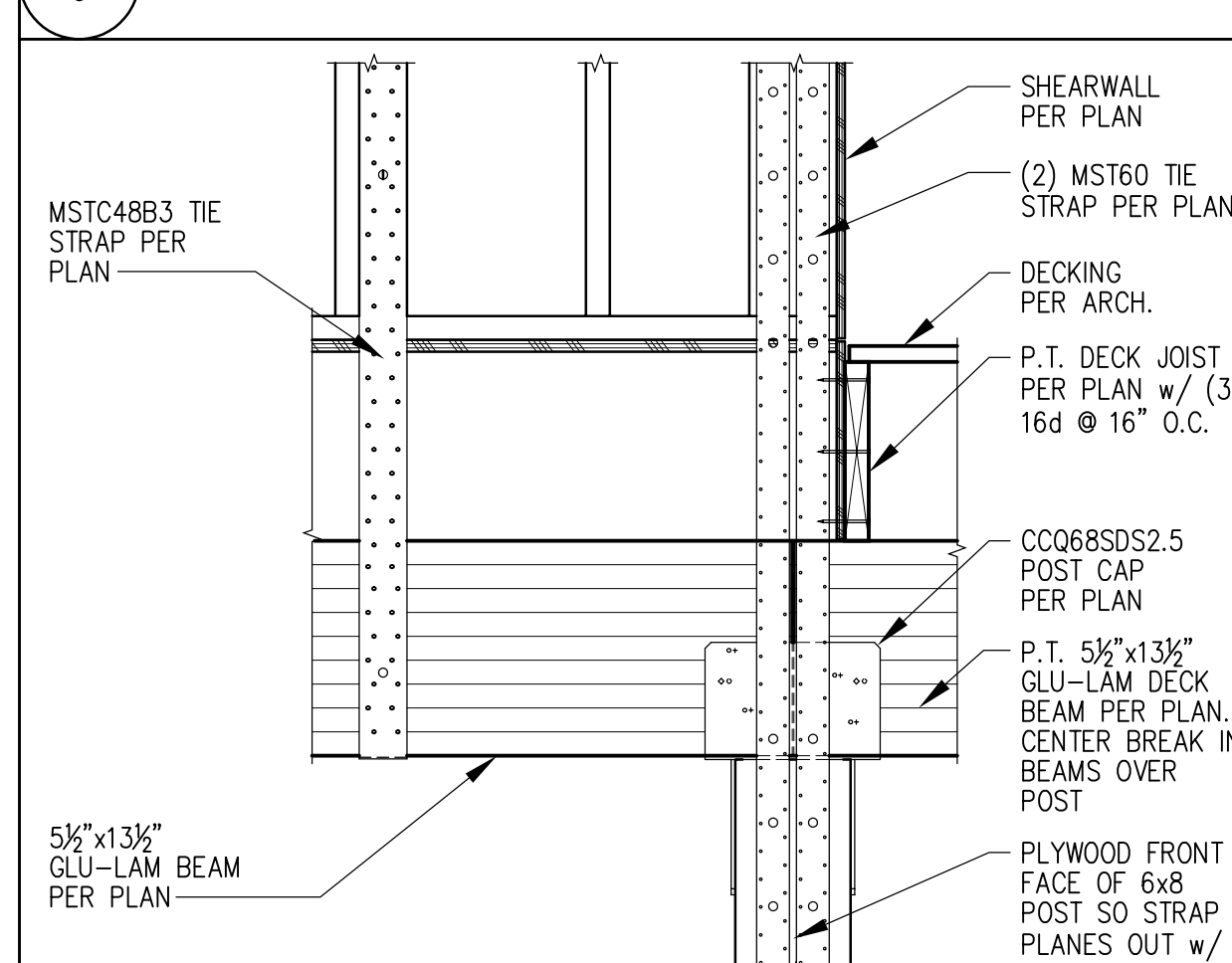
8 SHEAR TRANSFER @ FLOOR FRAMING (PARALLEL JOIST w/HOLDOWN & DECK FRAMING)



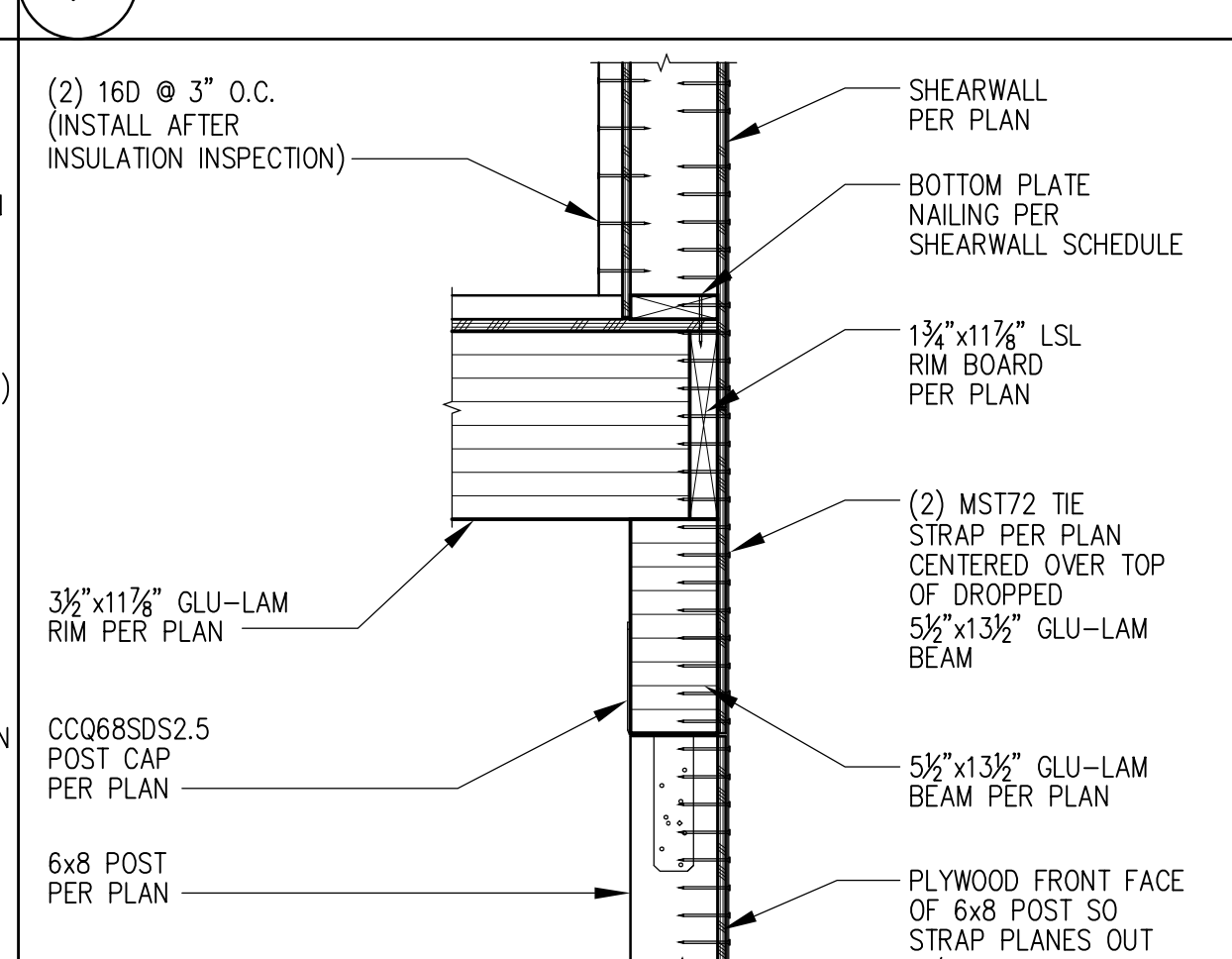
9 SHEAR TRANSFER @ FLOOR FRAMING (PARALLEL JOIST w/TIE STRAP & DECK FRAMING)



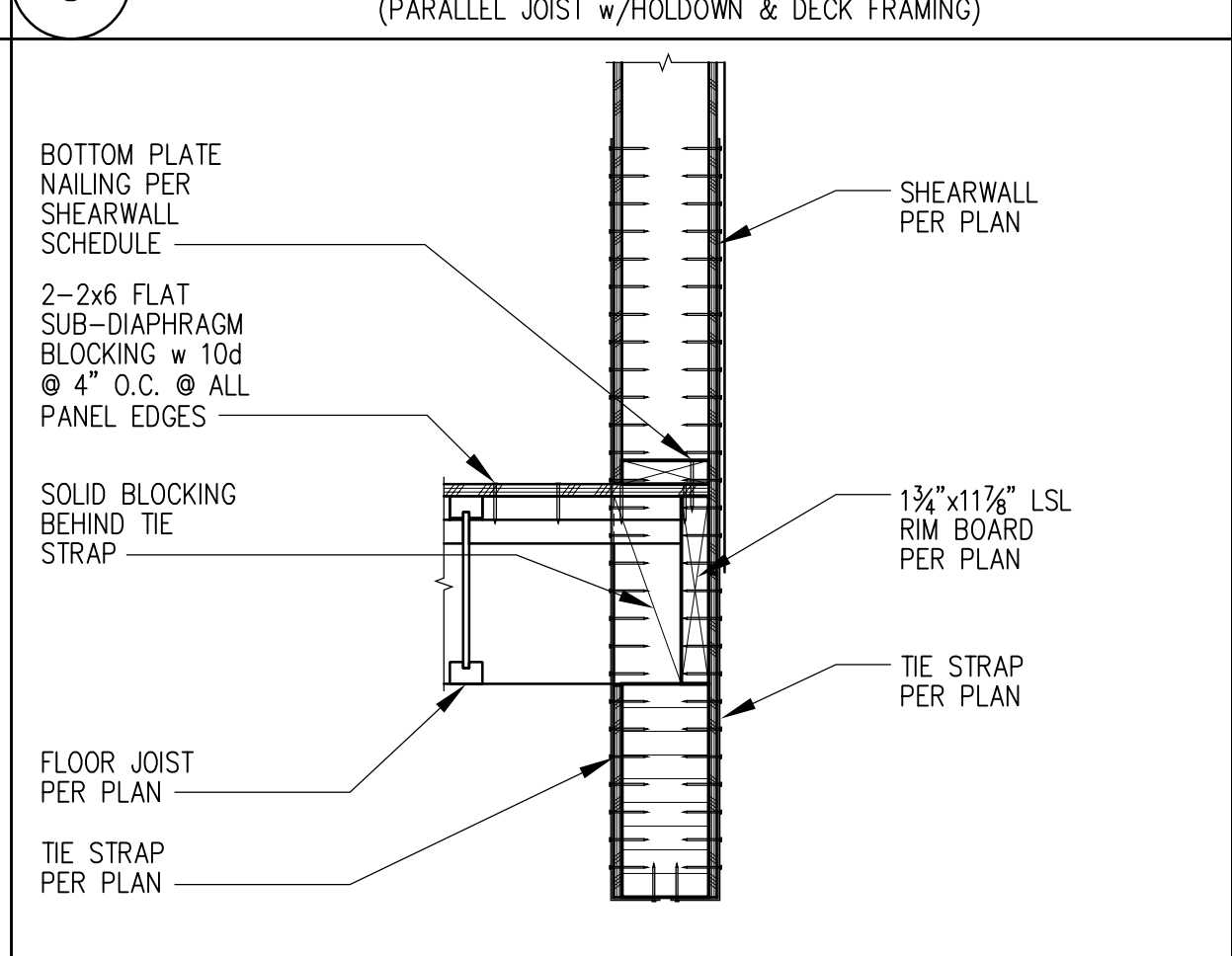
10 SHEAR TRANSFER @ FLOOR FRAMING (PERPENDICULAR JOIST w/TIE STRAP & DECK FRAMING)



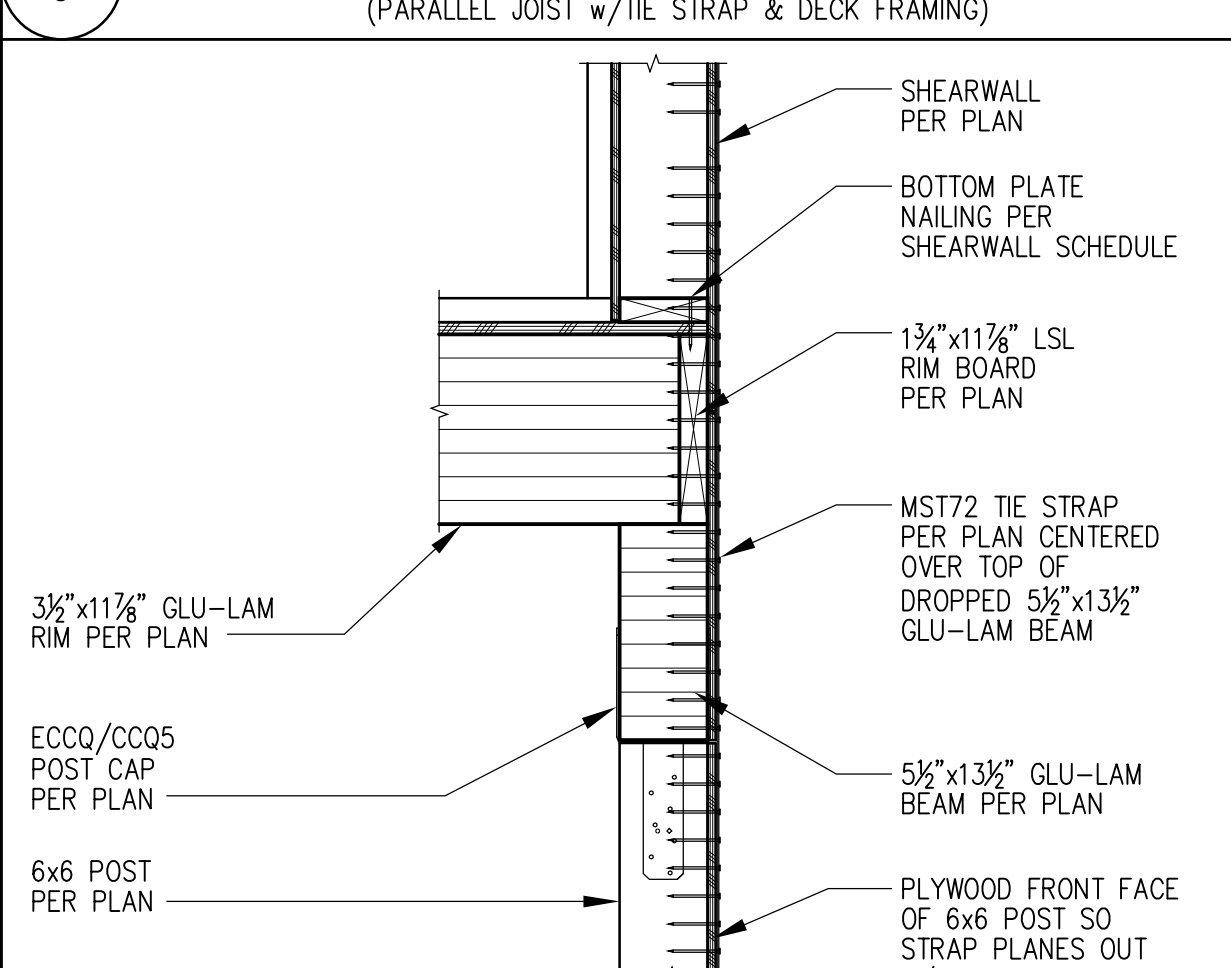
11 (2) MST60 TIE STRAP @ DROPPED BEAM (WEST SECTION VIEW)



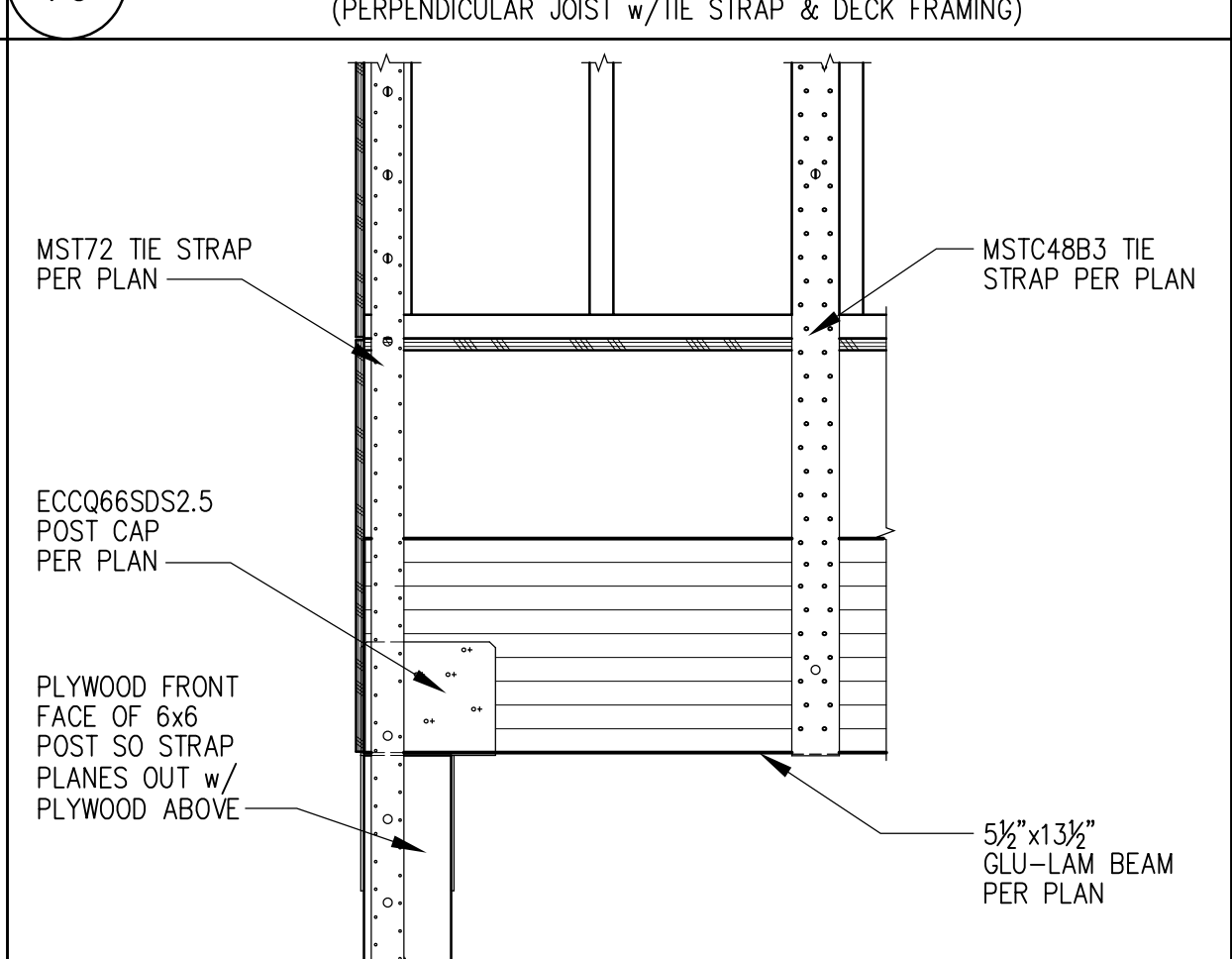
12 MST60 TIE STRAPS @ DROPPED BEAM (ELEVATION VIEW /w PERPENDICULAR P2-3 SHEARWALL)



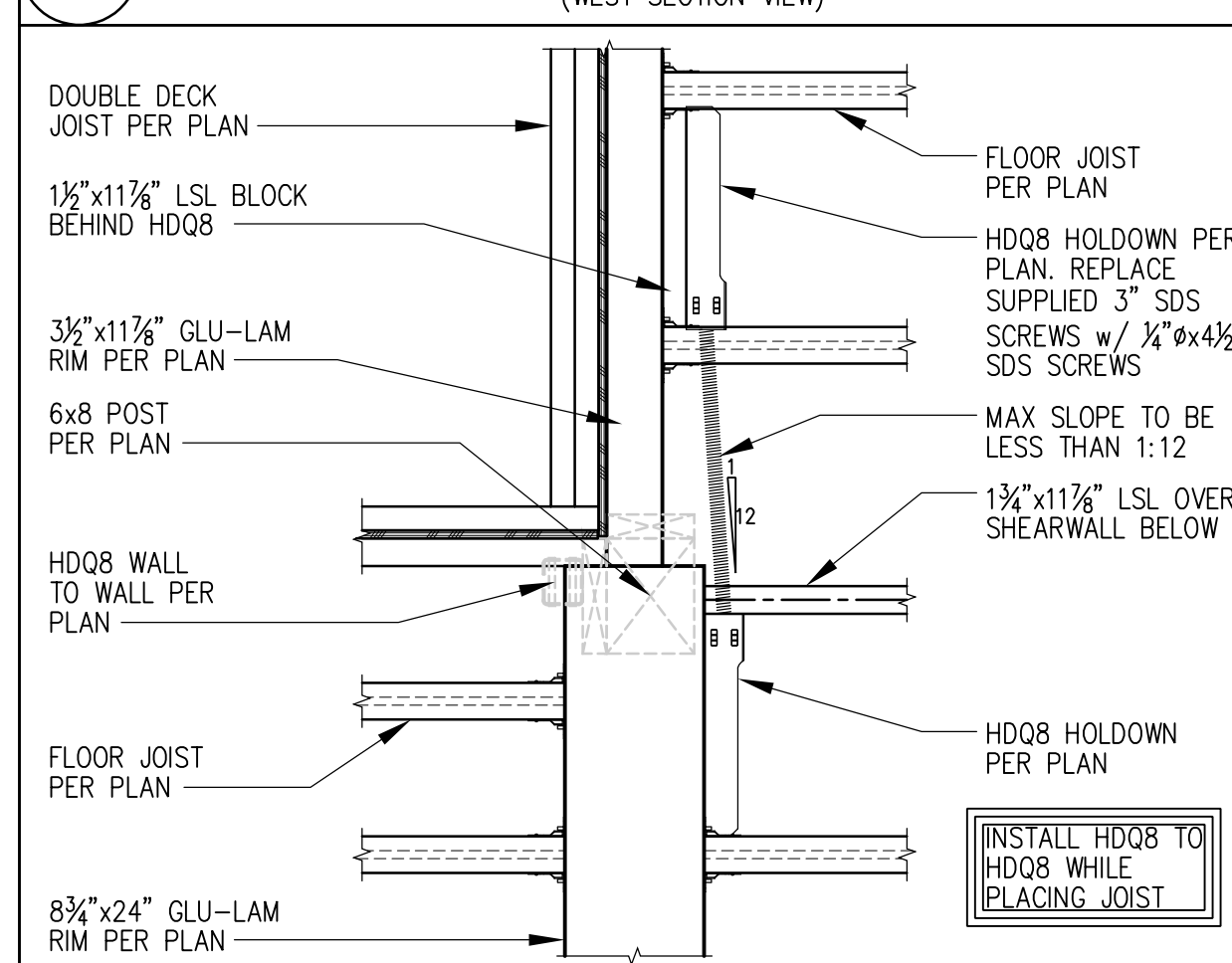
13 SHEAR TRANSFER @ FLOOR FRAMING (STRAP @ DROPPED BEAM)



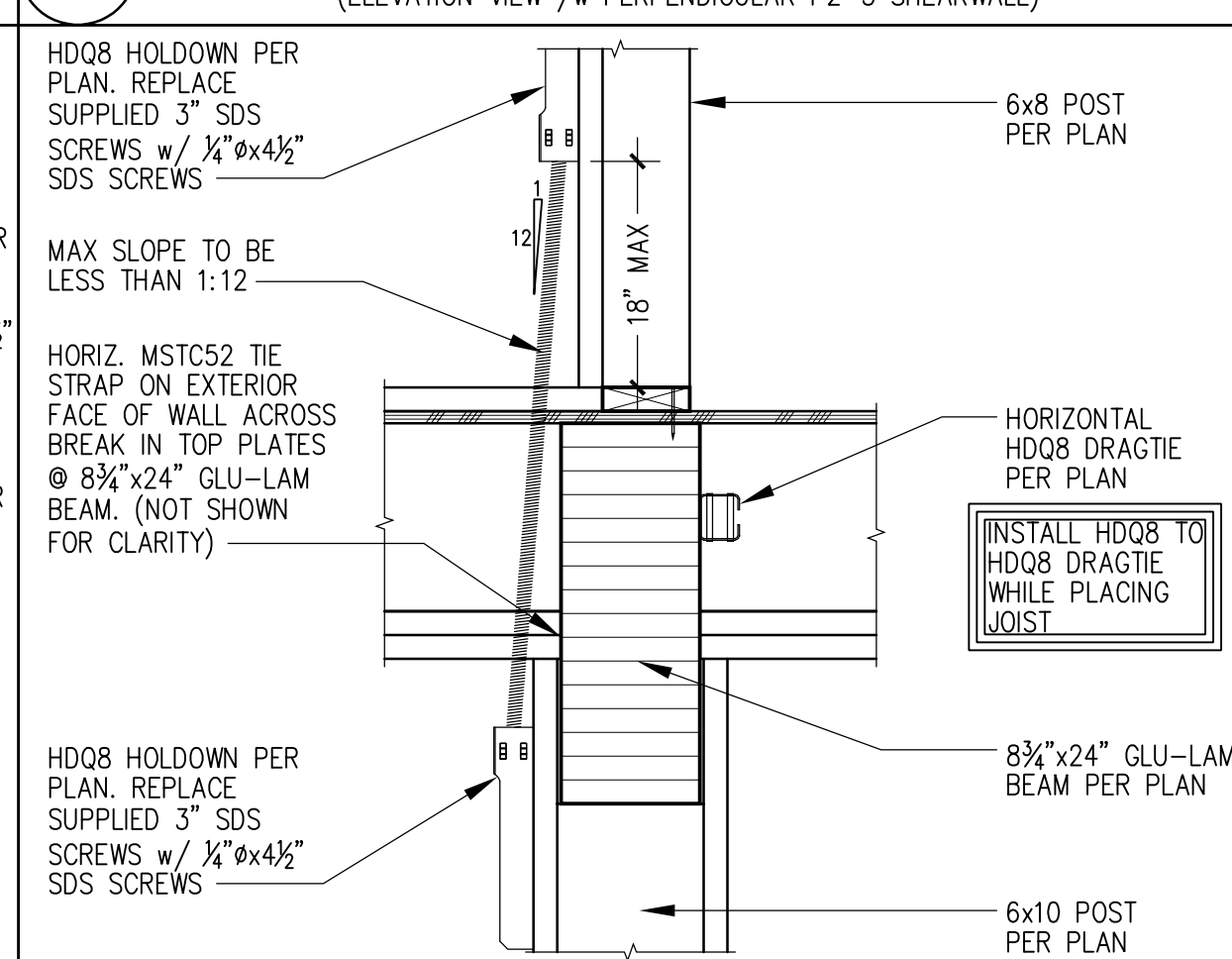
14 MSTC78 TIE STRAP @ DROPPED BEAM (ELEVATION VIEW)



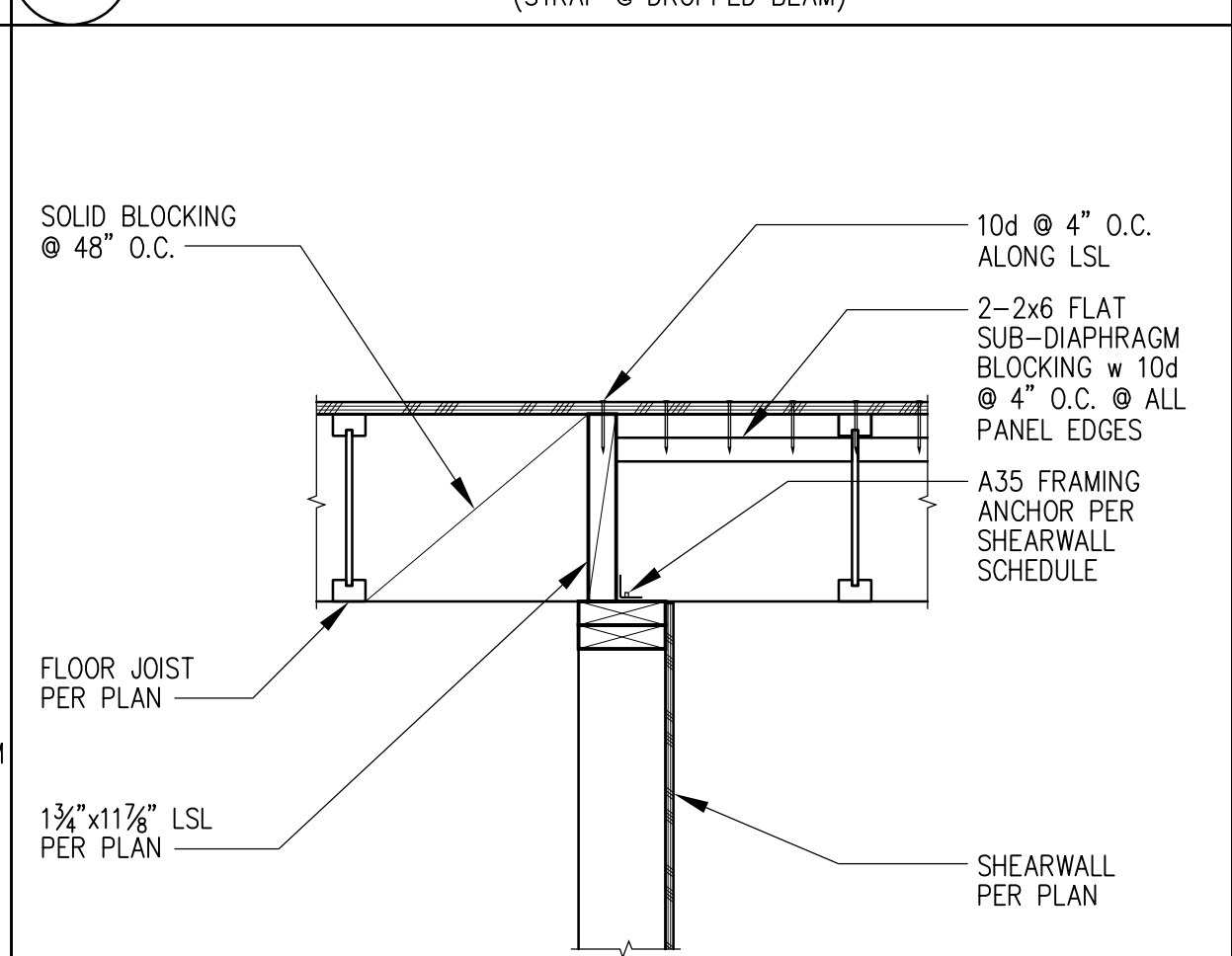
15 MST72 TIE STRAP @ DROPPED BEAM (EAST SECTION VIEW)



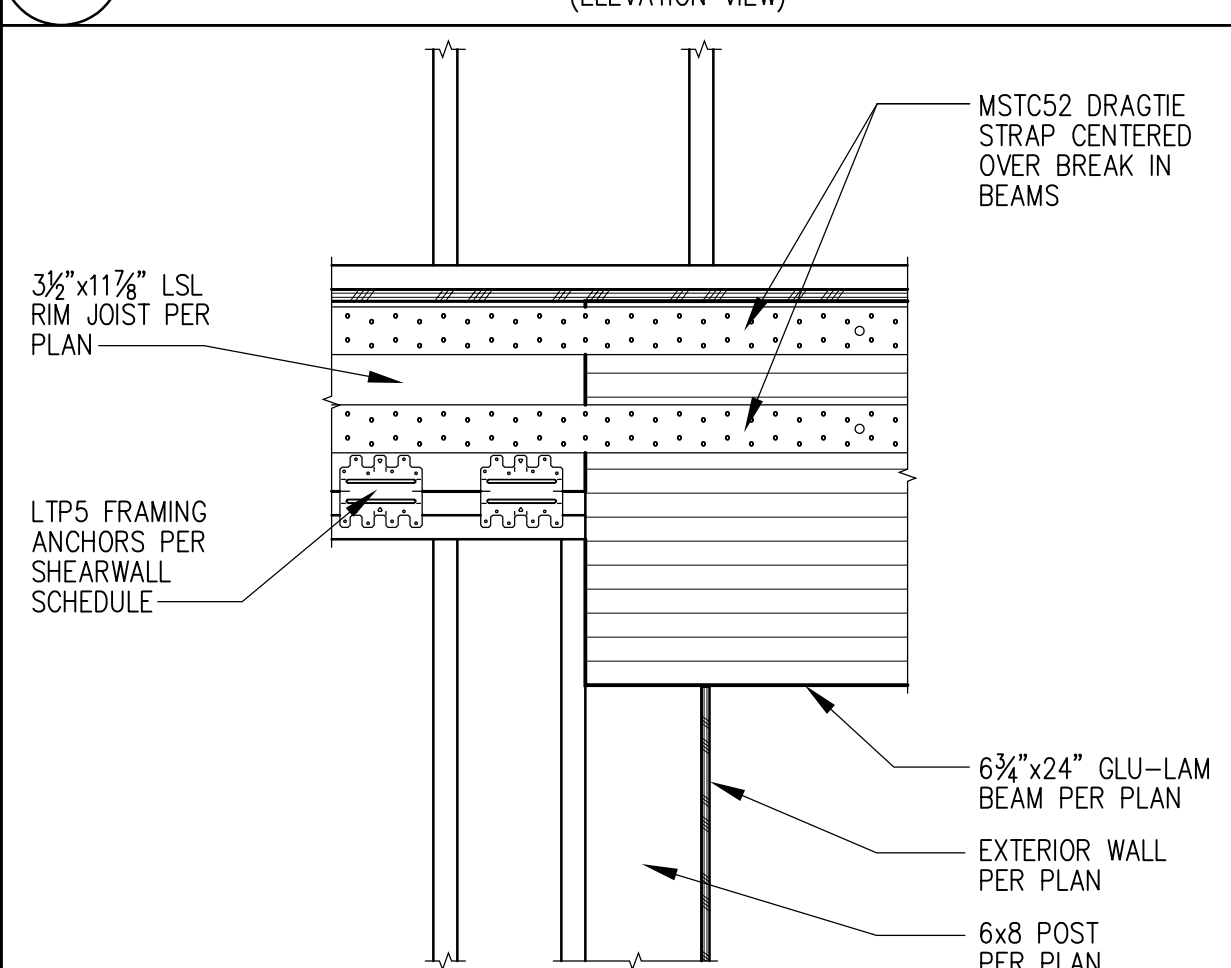
16 HDQ8 TO HDQ8 DRAGTIE (PLAN VIEW)



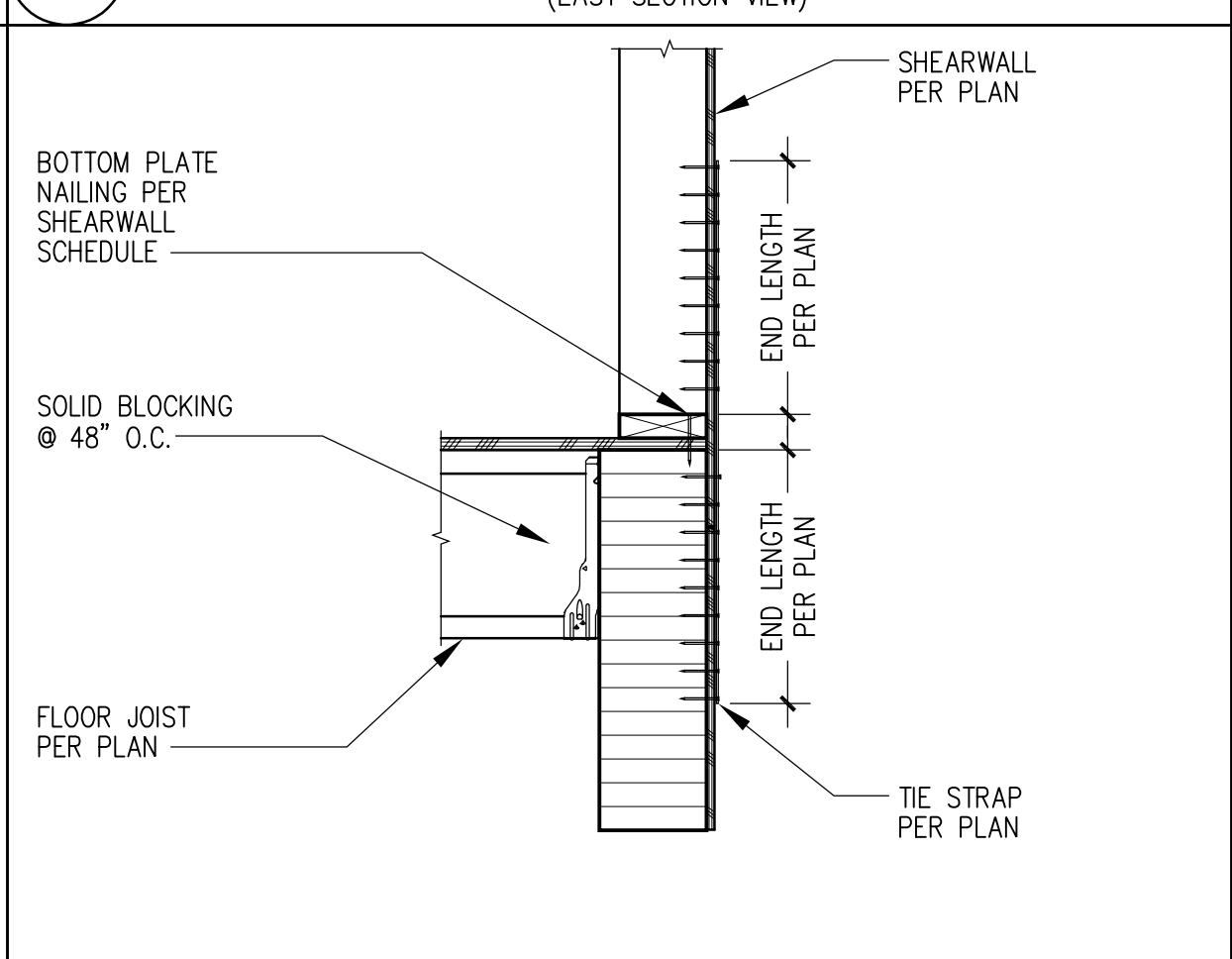
17 HOLDDOWN TO HOLDDOWN (8 3/4\"/>



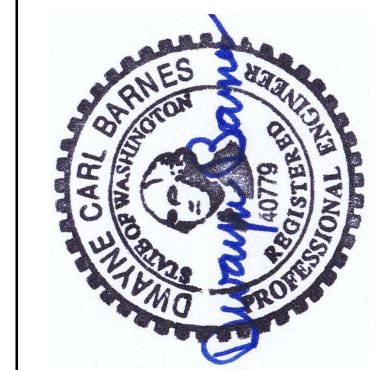
18 SHEAR TRANSFER @ FLOOR FRAMING (INTERIOR PARALLEL JOIST)



19 DRAGTIE @ FLOOR FRAMING



20 SHEAR TRANSFER @ FLOOR FRAMING (STRAP @ FLUSH BEAM)



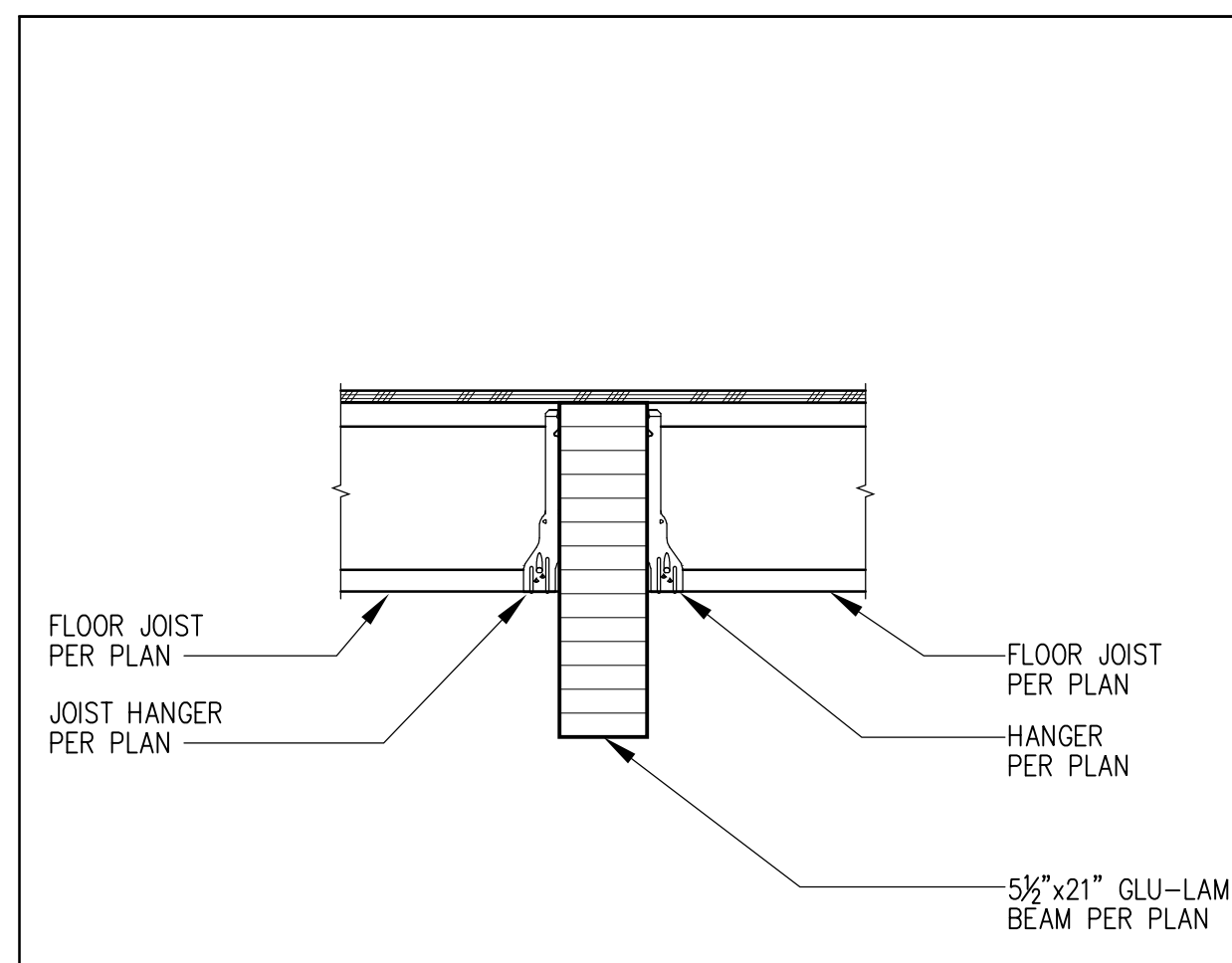
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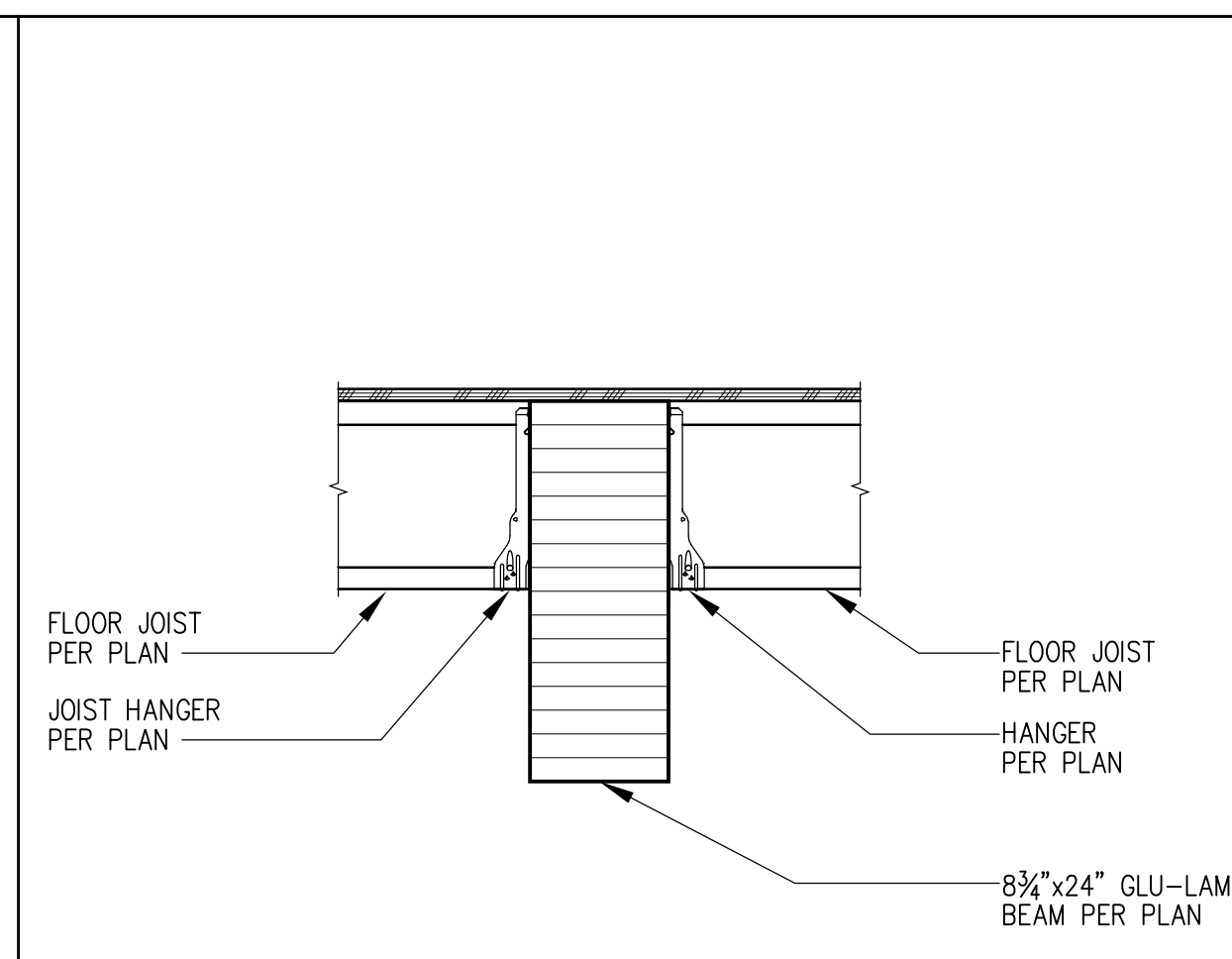
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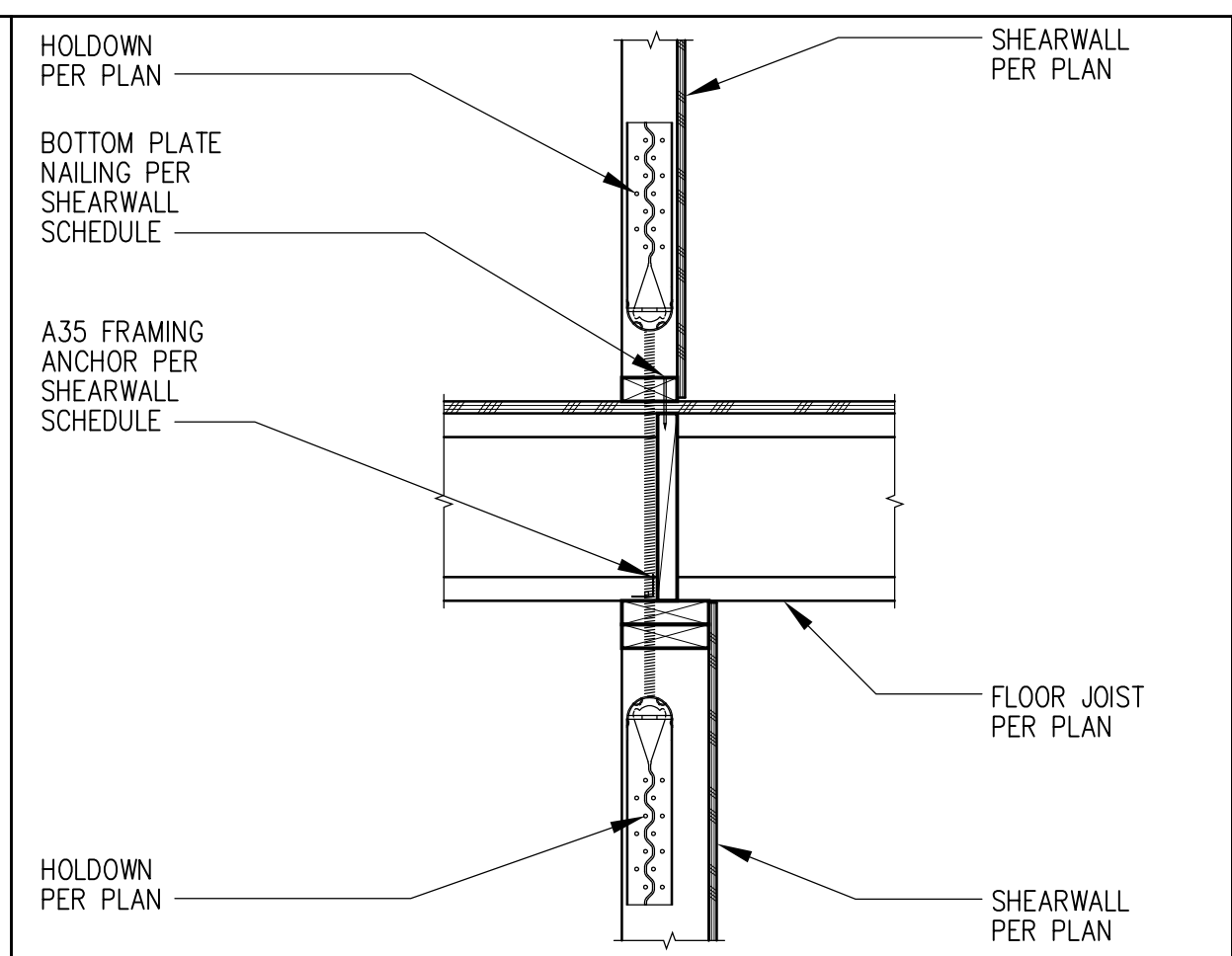
S4.0
FRAMING
DETAILS



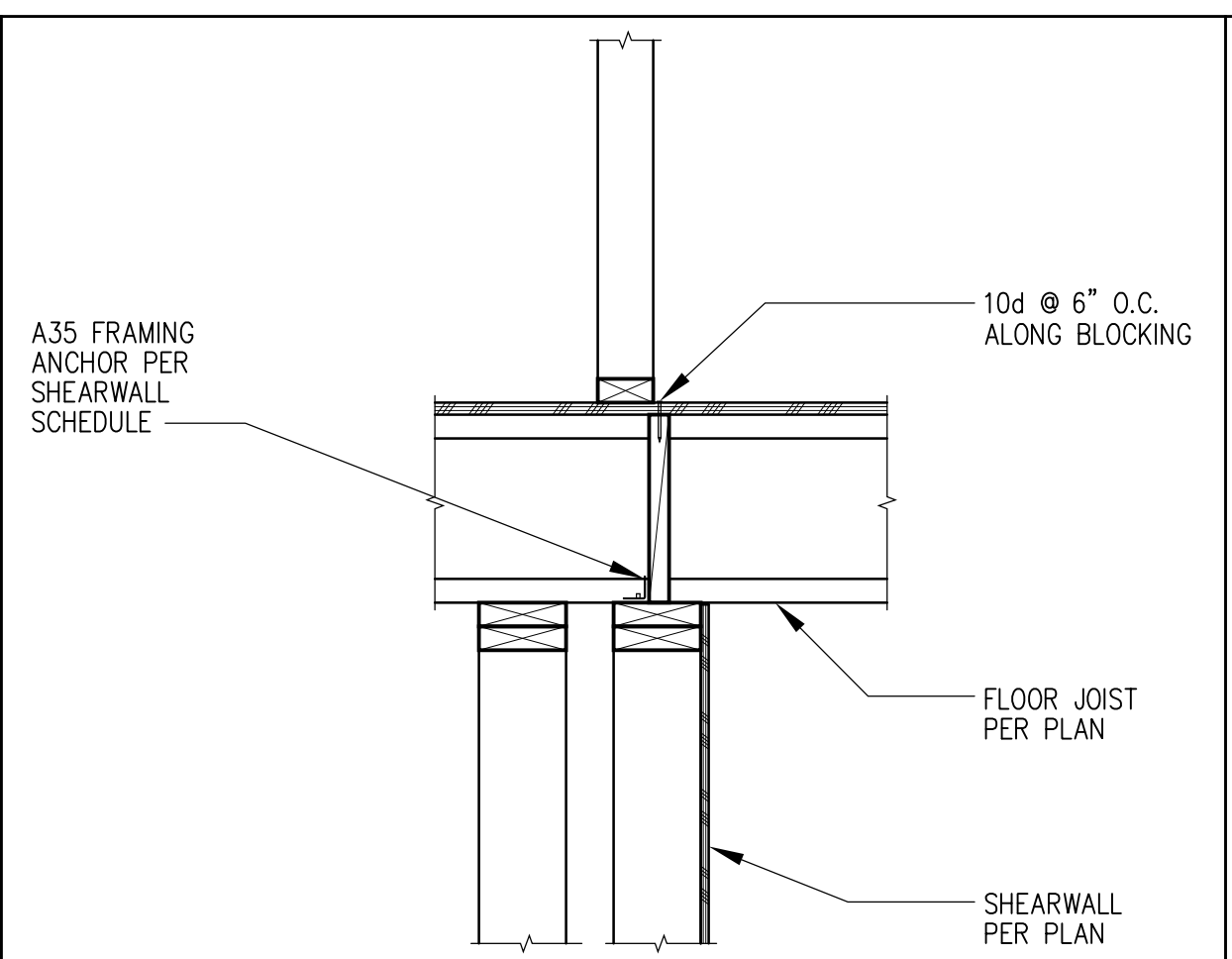
1 FLOOR FRAMING @ GARAGE BEAM
(5 1/2"x21" GLU-LAM)



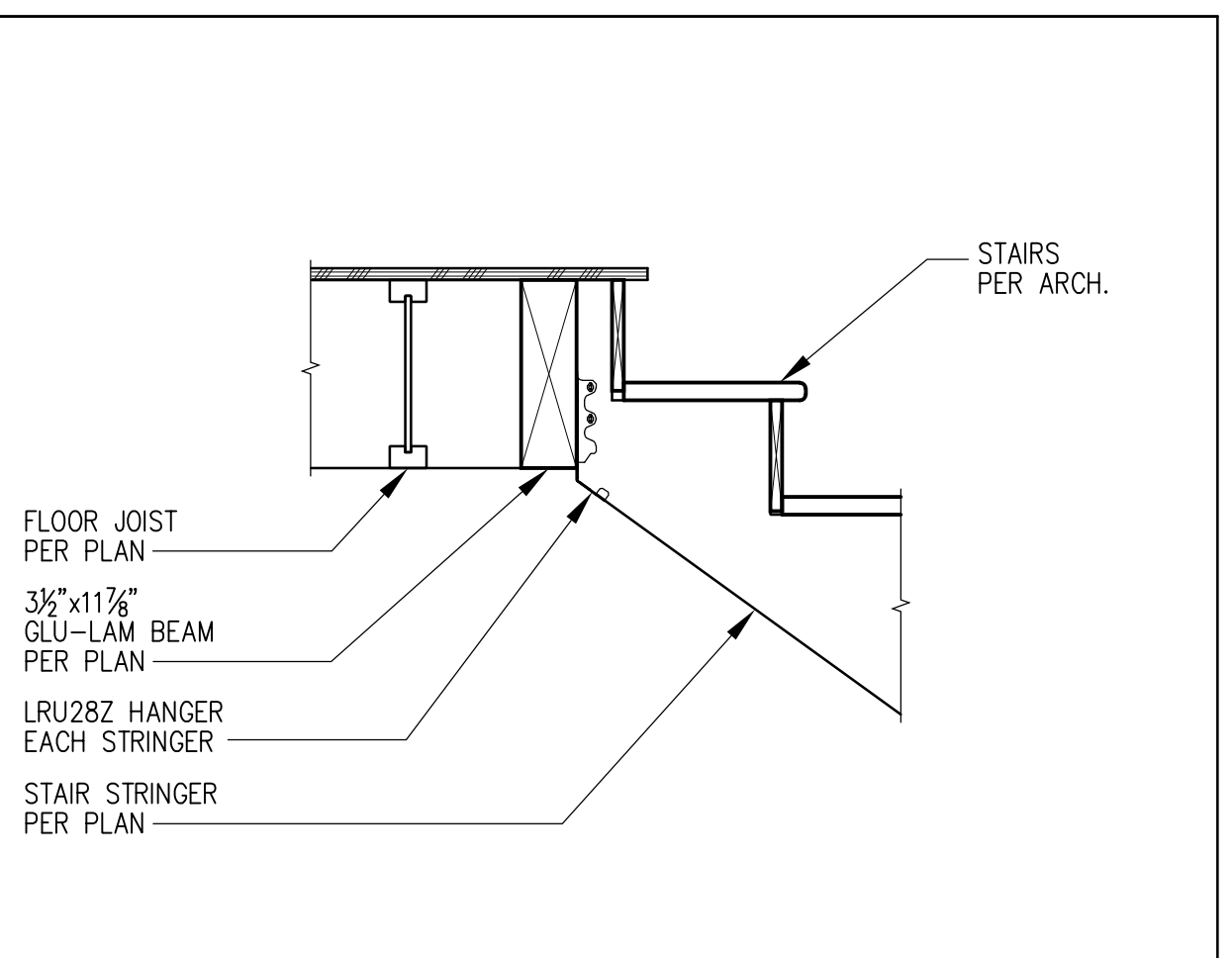
2 FLOOR FRAMING @ GARAGE BEAM
(8 3/4"x24" GLU-LAM)



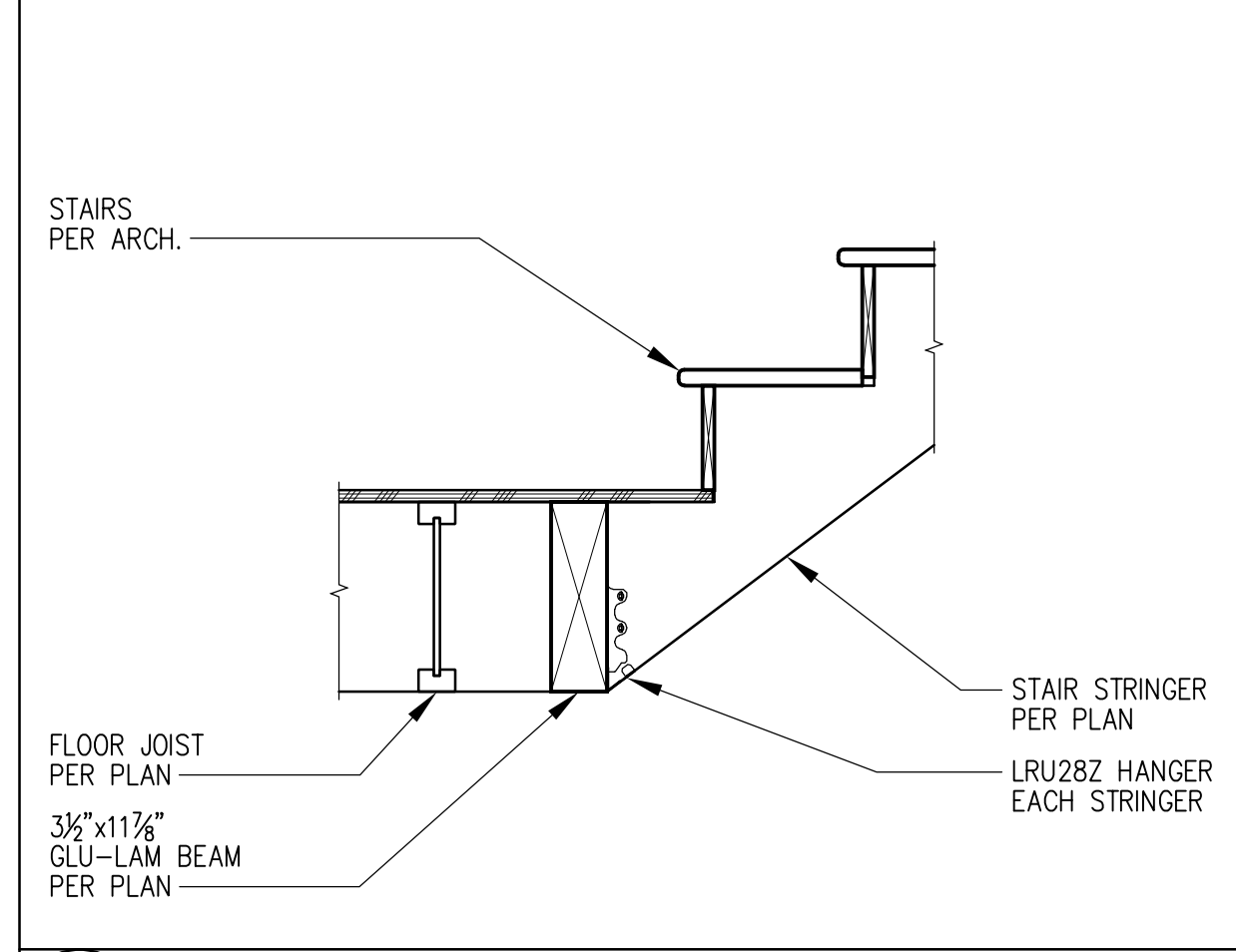
3 SHEAR TRANSFER @ FLOOR FRAMING
(HOLDOWN @ INTERIOR PERPENDICULAR JOIST)



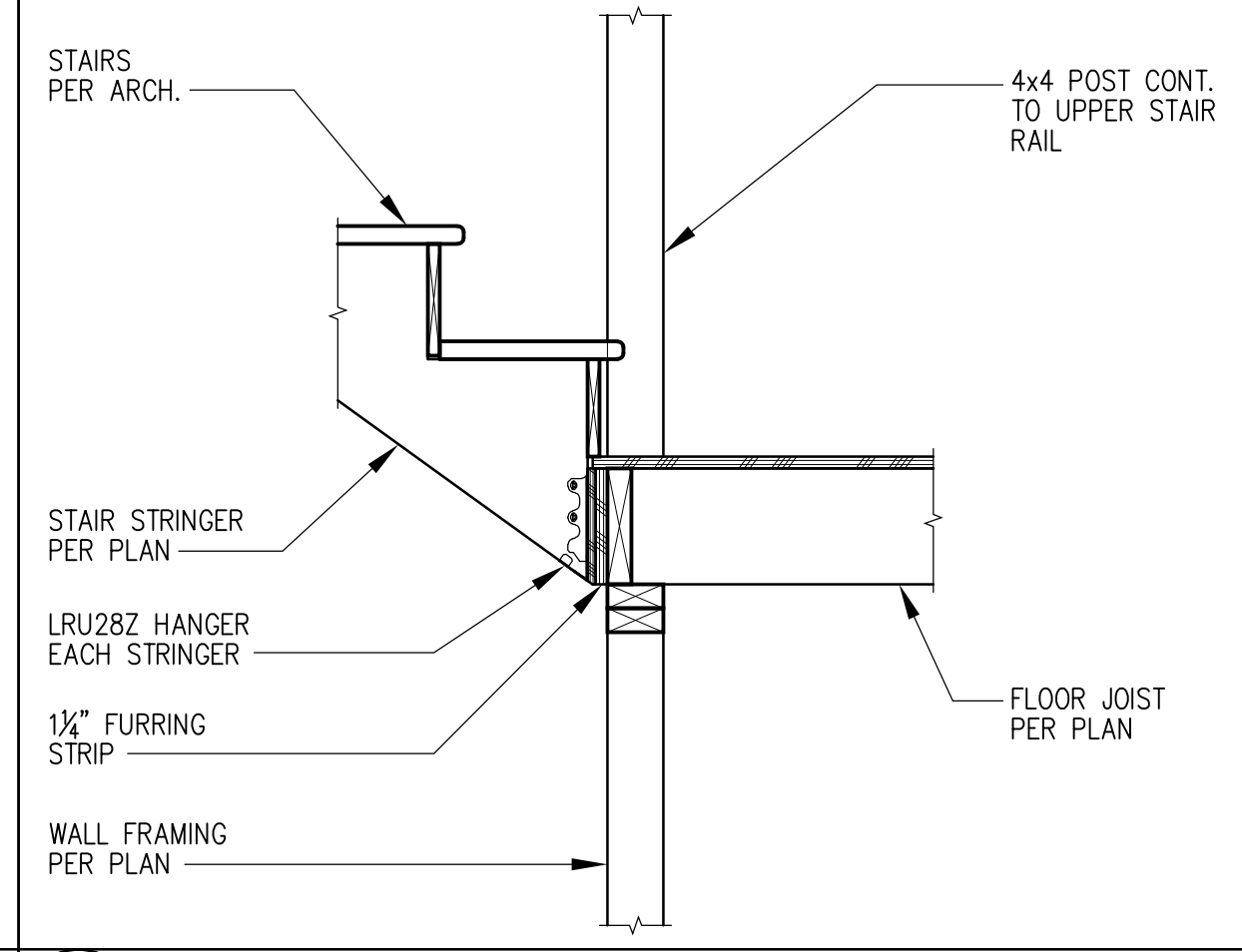
4 SHEAR TRANSFER @ FLOOR FRAMING
(INTERIOR PERPENDICULAR JOIST)



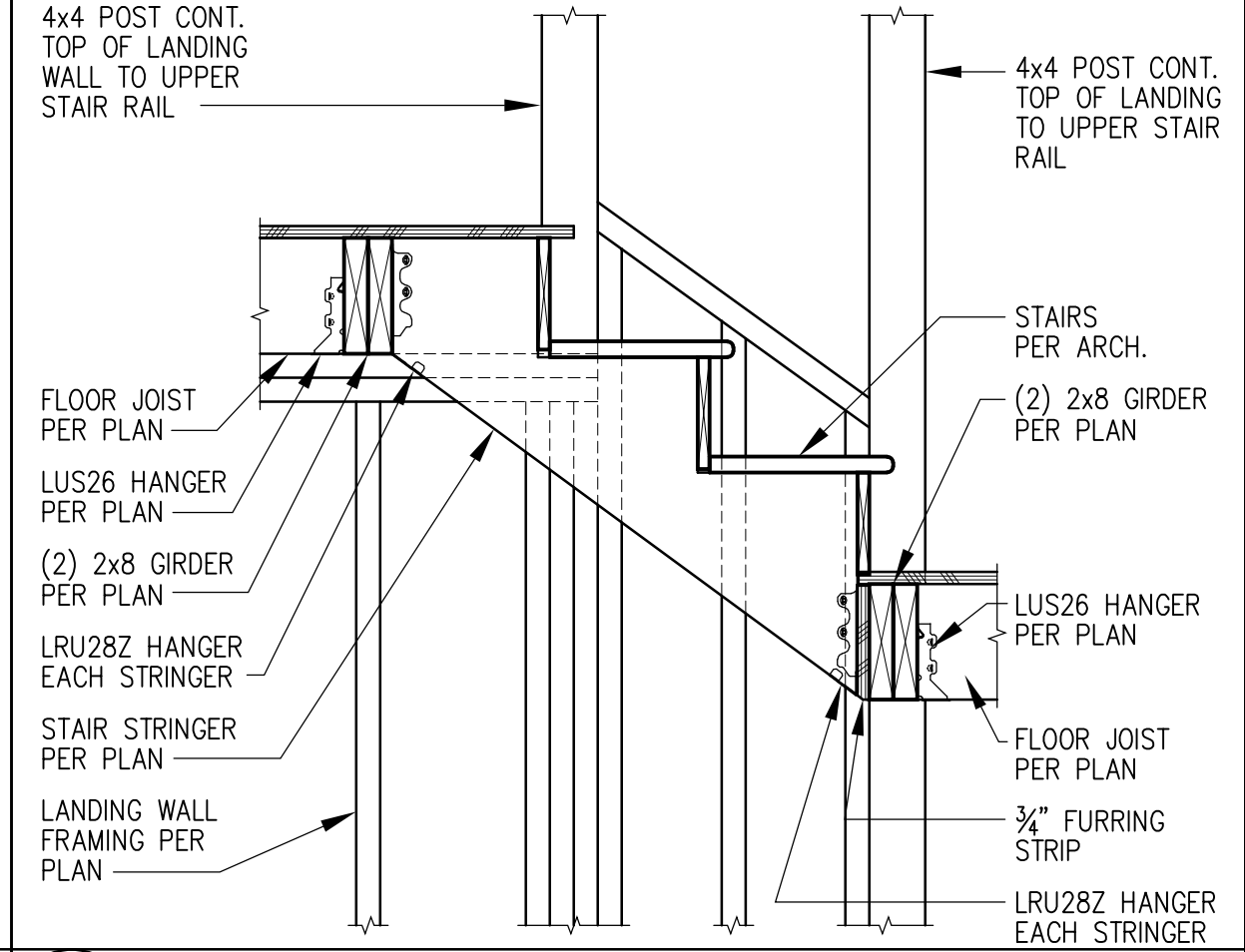
5 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ MAIN FLOOR FRAMING)



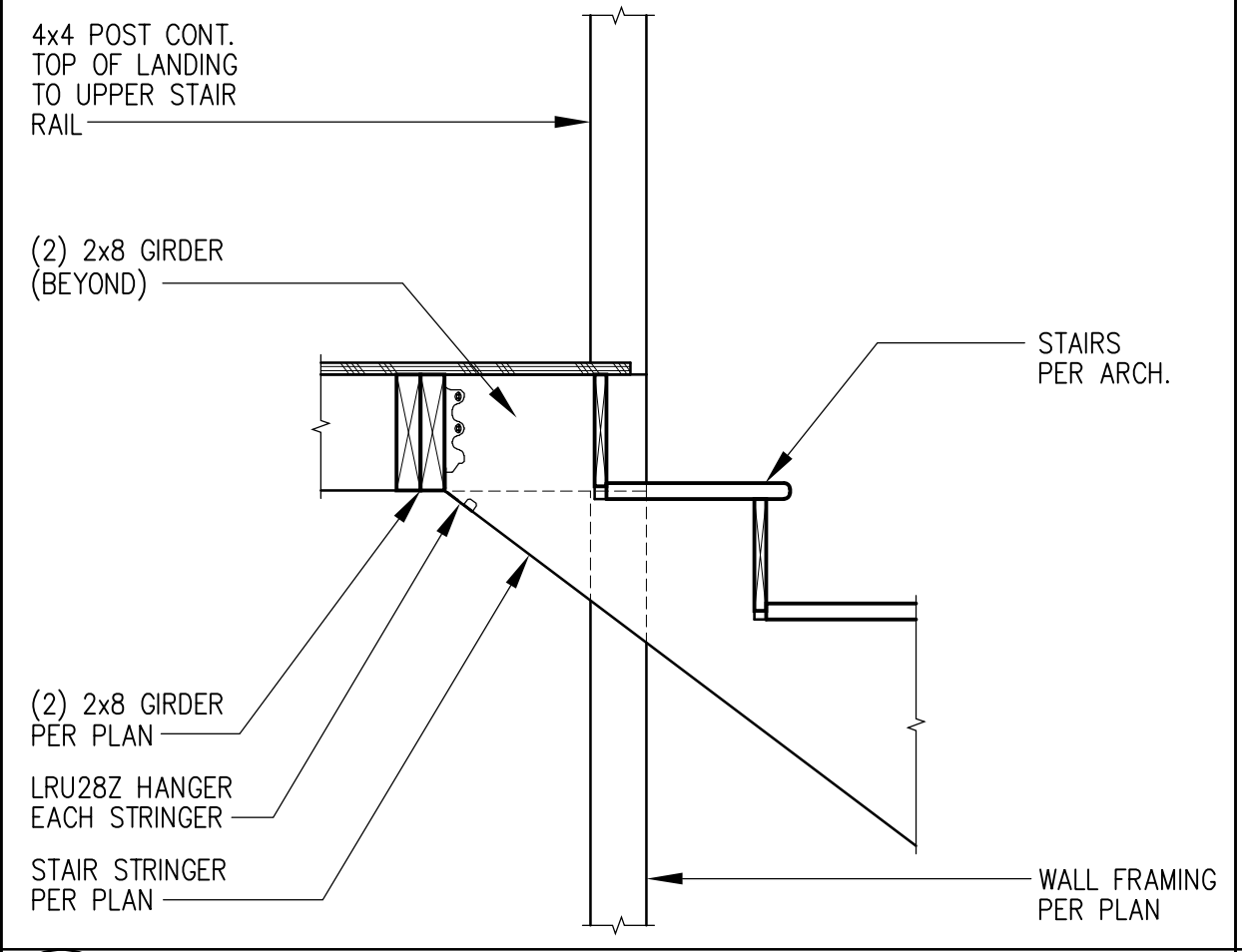
6 STAIR STRINGER FRAMING
(UPPER FLOOR STAIRS @ MAIN FLOOR FRAMING)



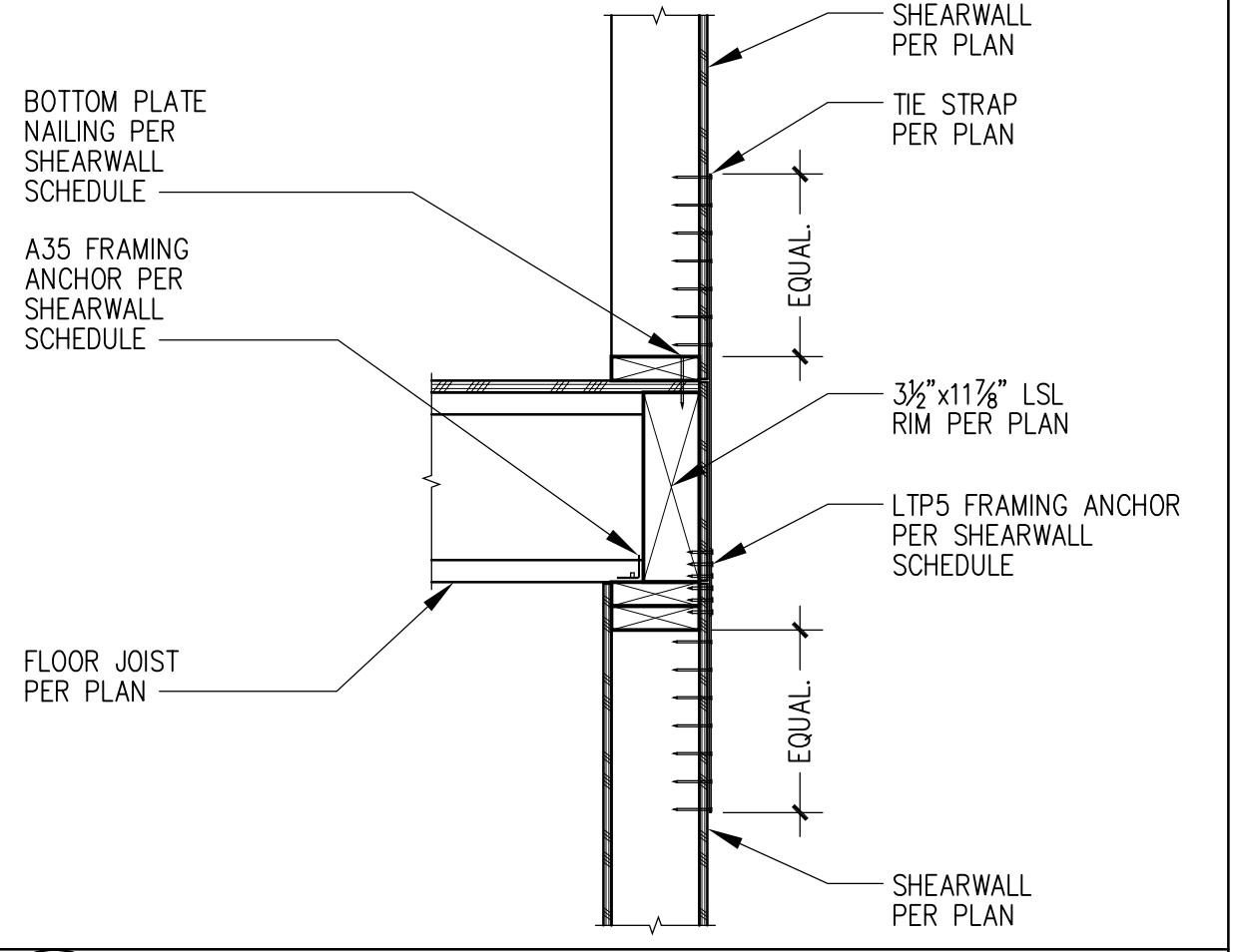
7 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ UPPER MID LANDING)



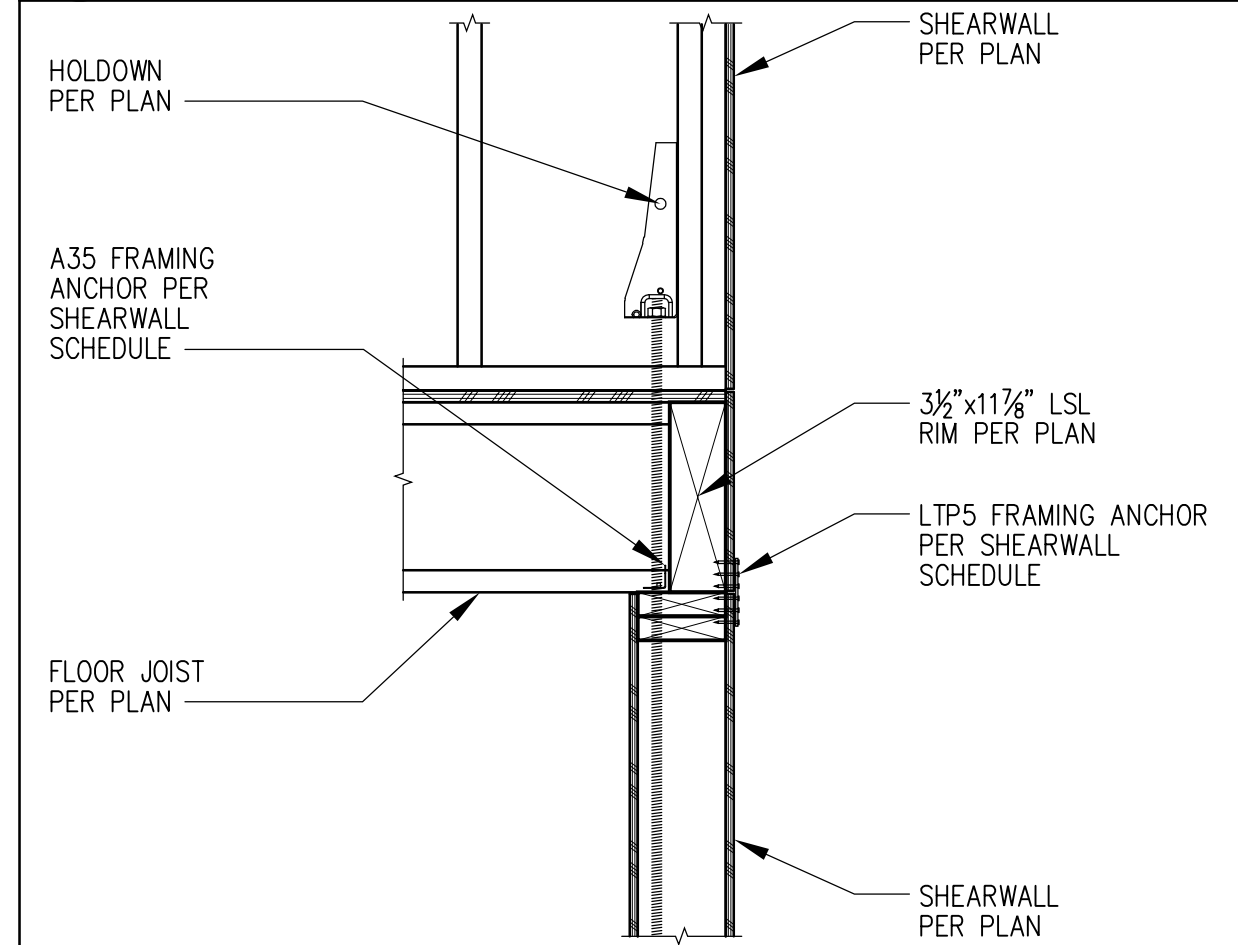
8 STAIR STRINGER FRAMING
(BASEMENT STAIRS BETWEEN MID LANDINGS)



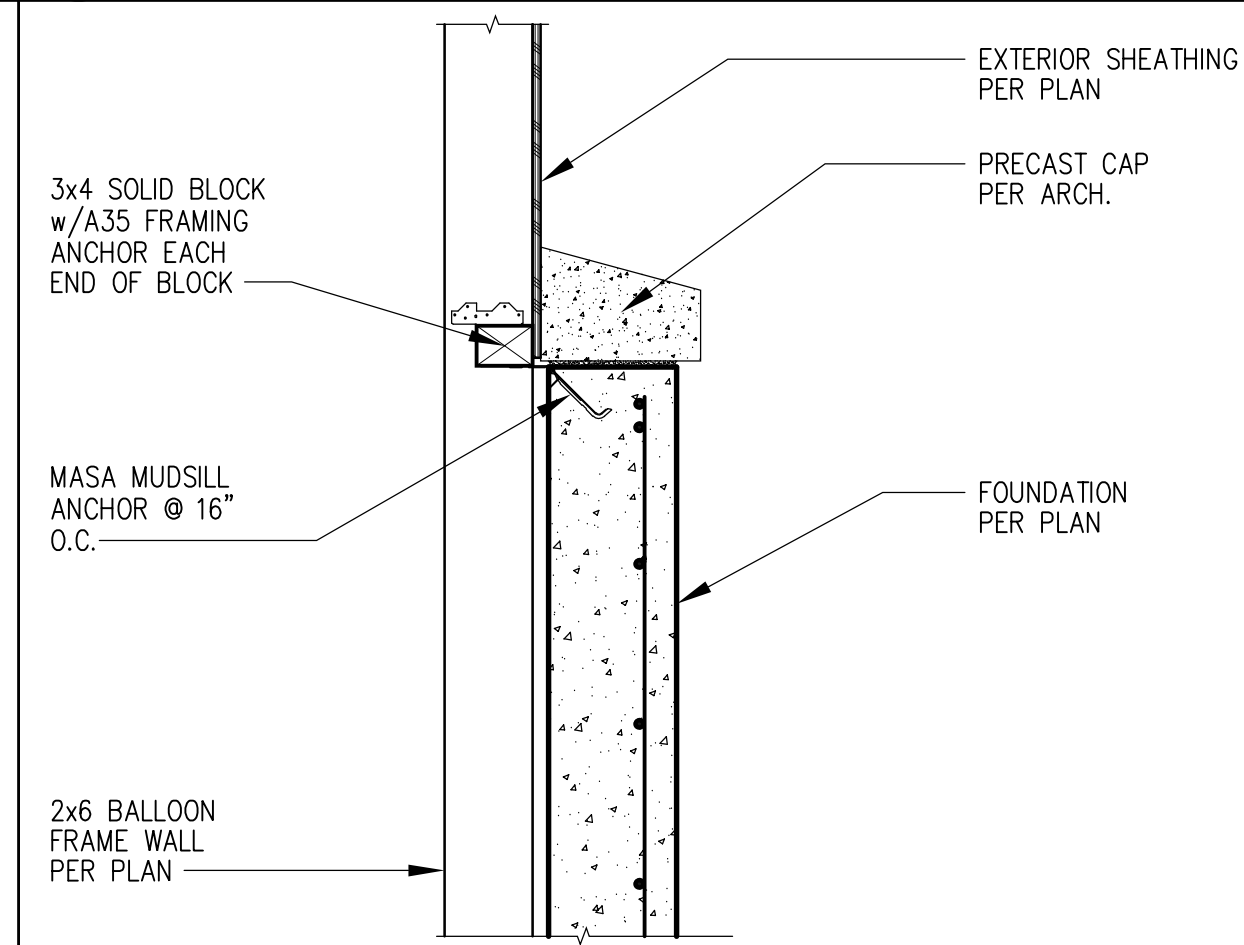
9 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ LOWER MID LANDING)



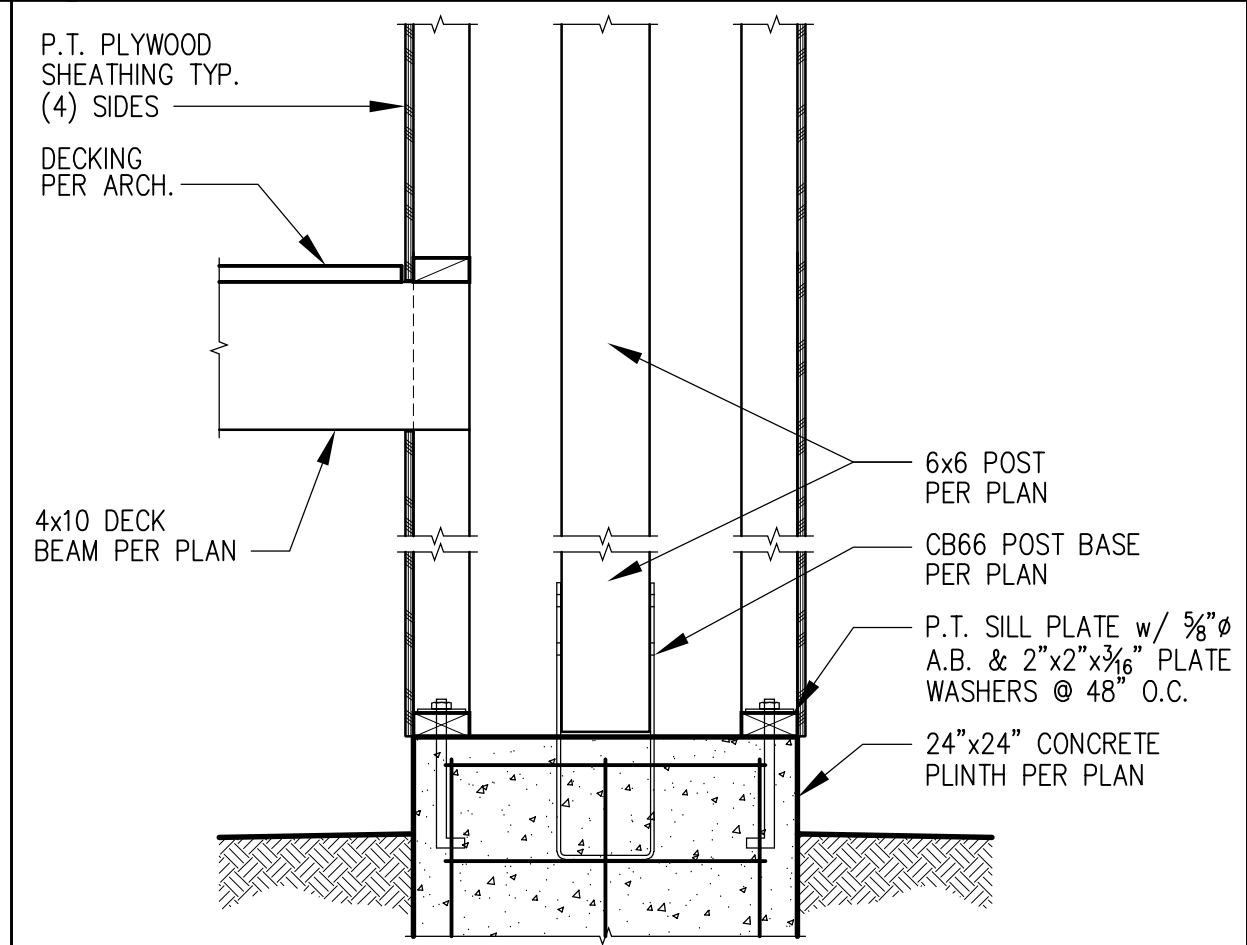
10 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST w/ TIE STRAP)



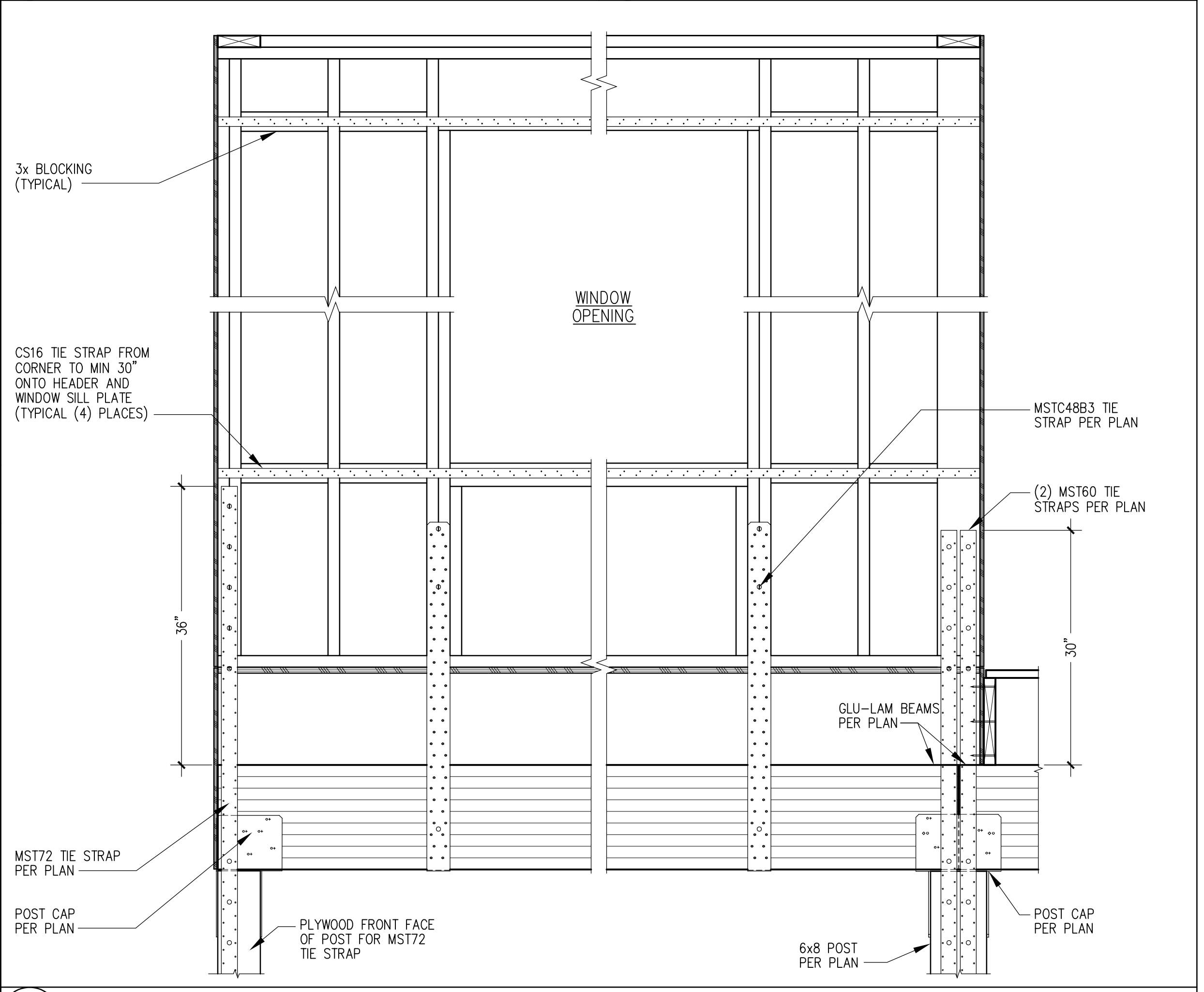
11 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST w/ TIE STRAP)



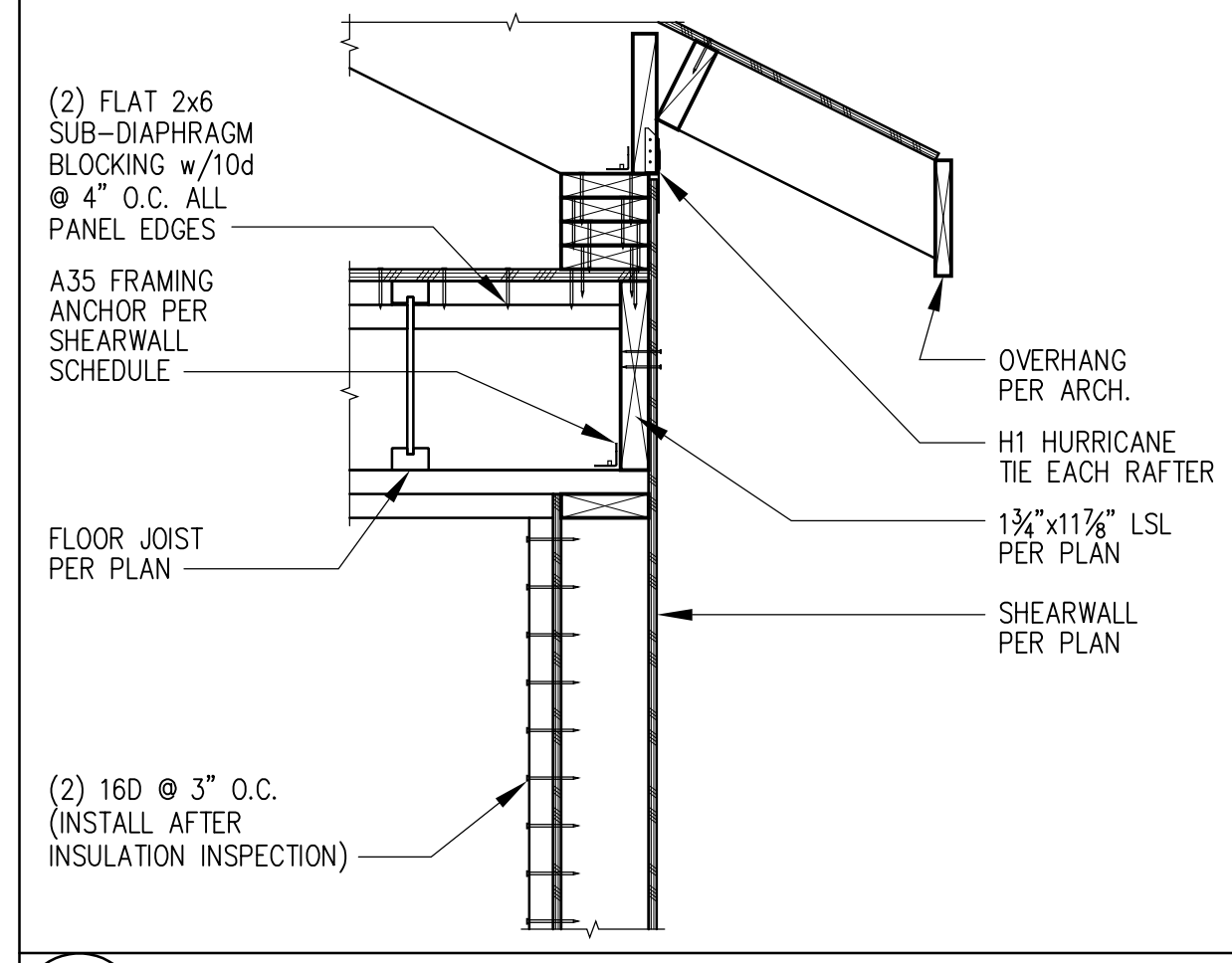
12 TWO-STORY BALLOON FRAME WALL
(NON-SHEARWALL @ ENTRY & STAIRS)



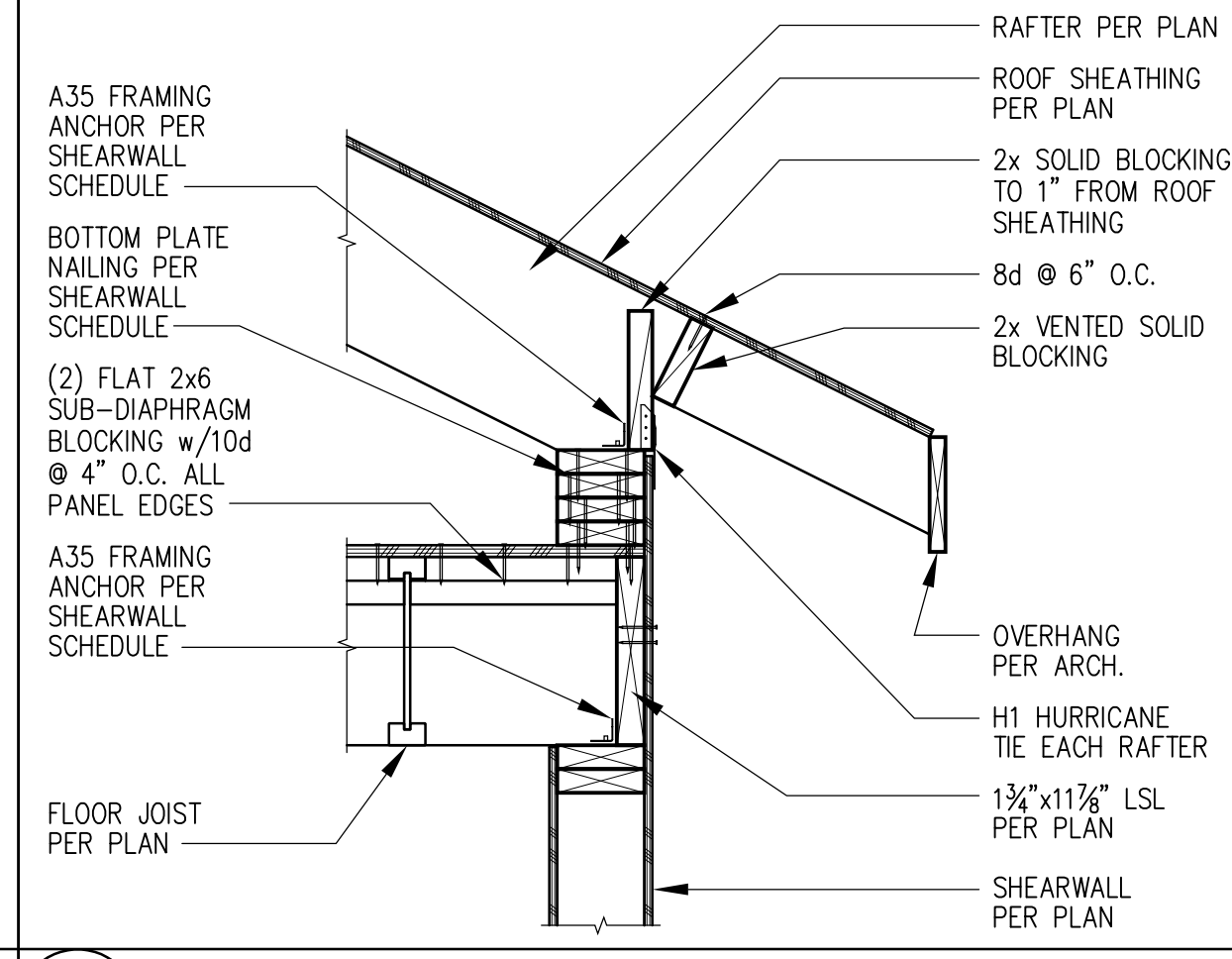
13 DECK BEAM @ ENTRY COLUMN



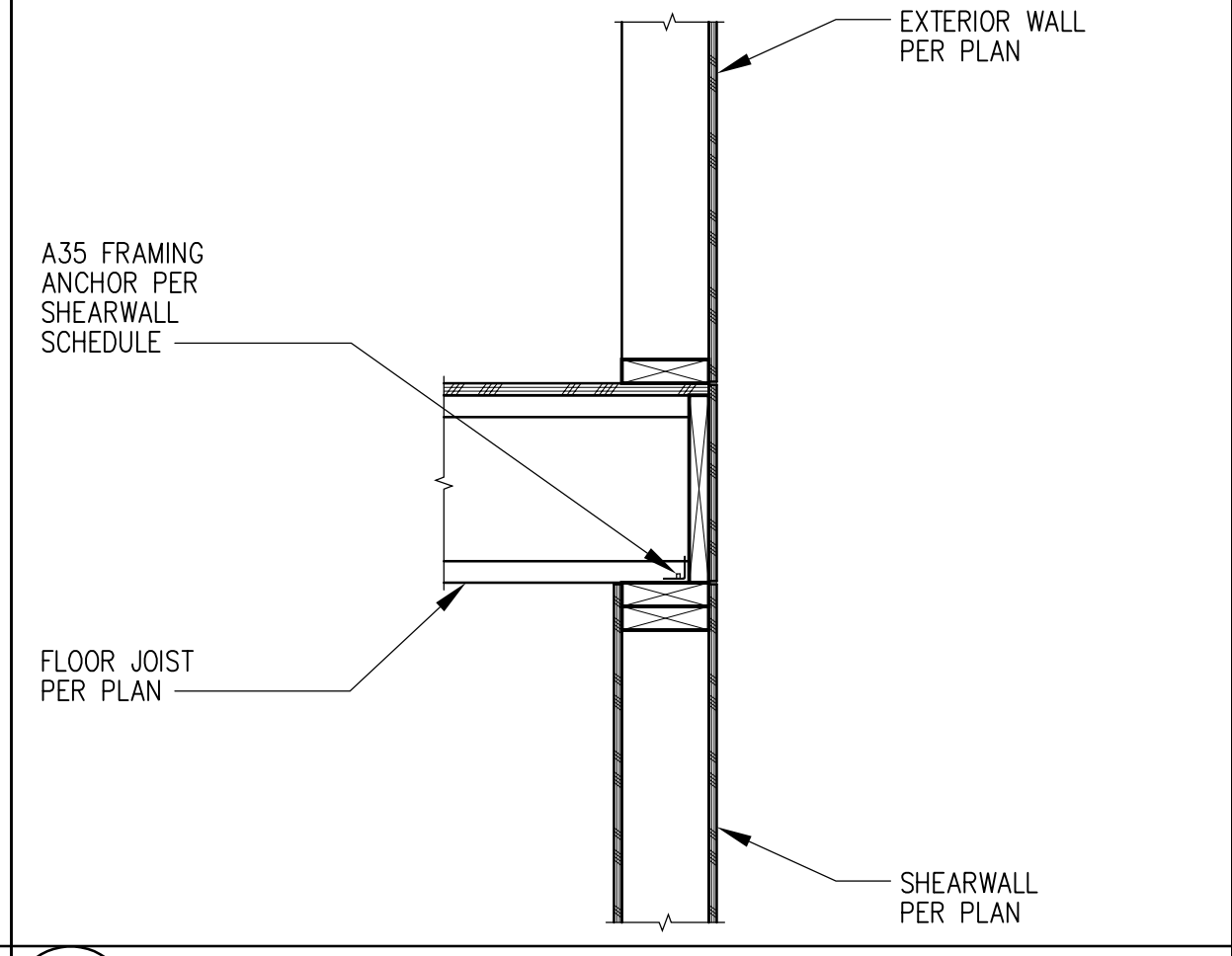
17 SHEARWALL WITH OPENINGS



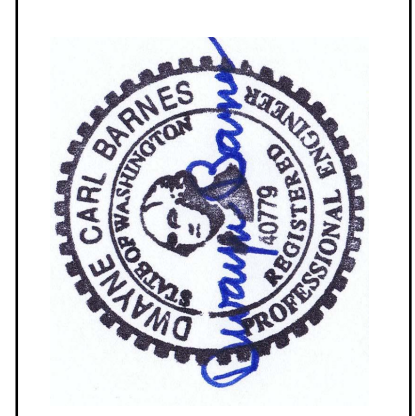
14 SHEAR TRANSFER @ P2-3 SHEARWALL
(PERPENDICULAR WALL)



15 SHEAR TRANSFER @ EAVE
(ATTIC EAVE)



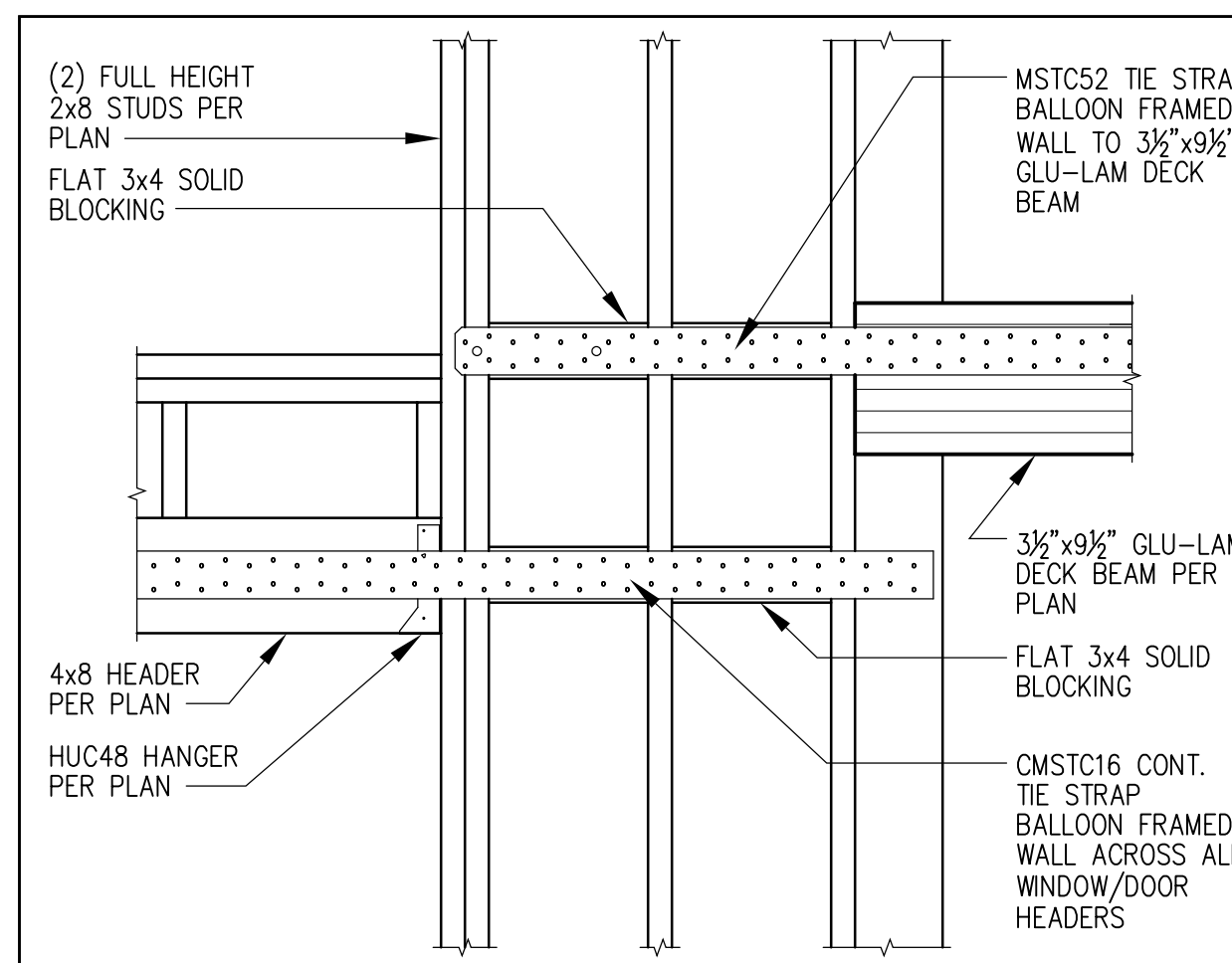
16 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST)



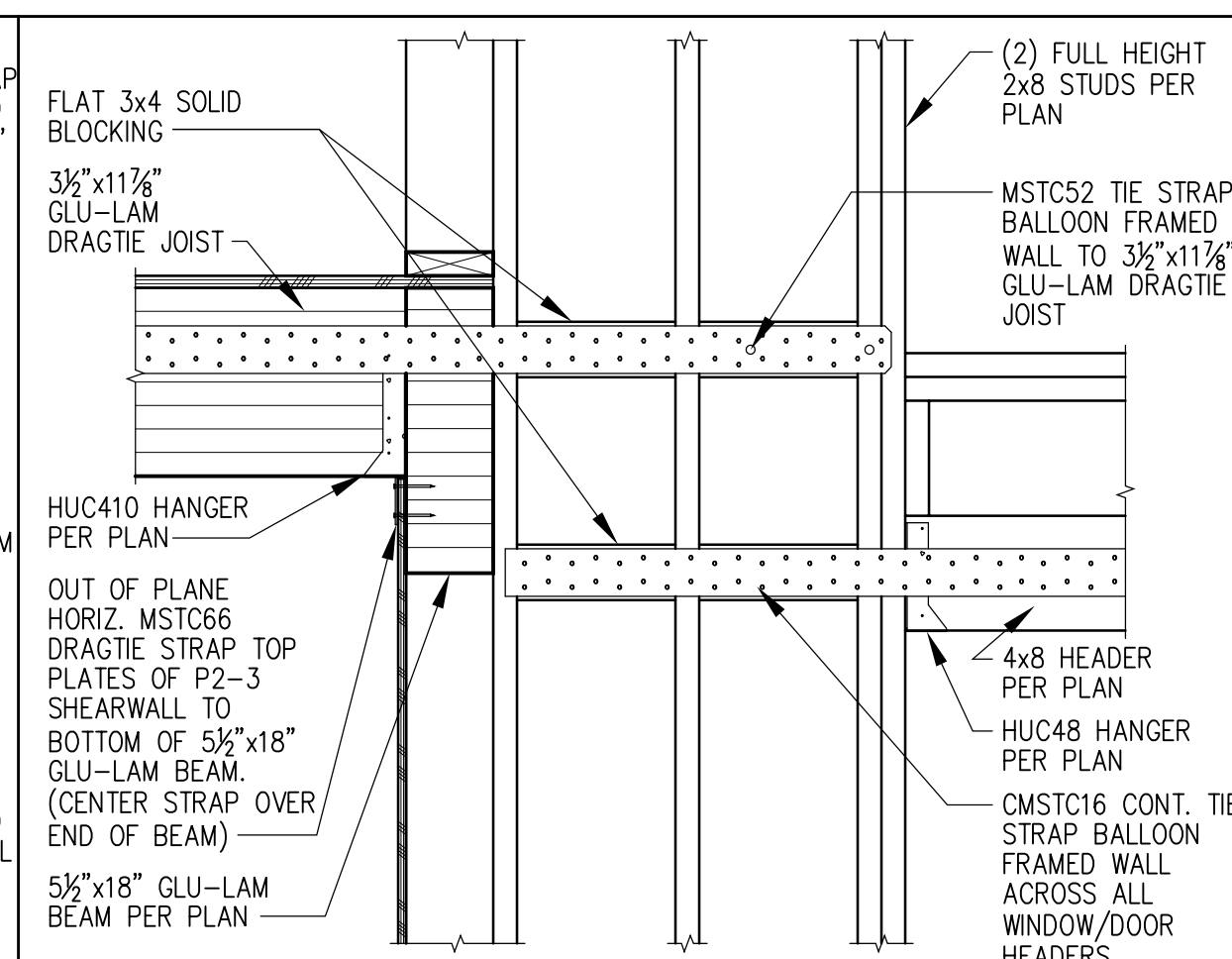
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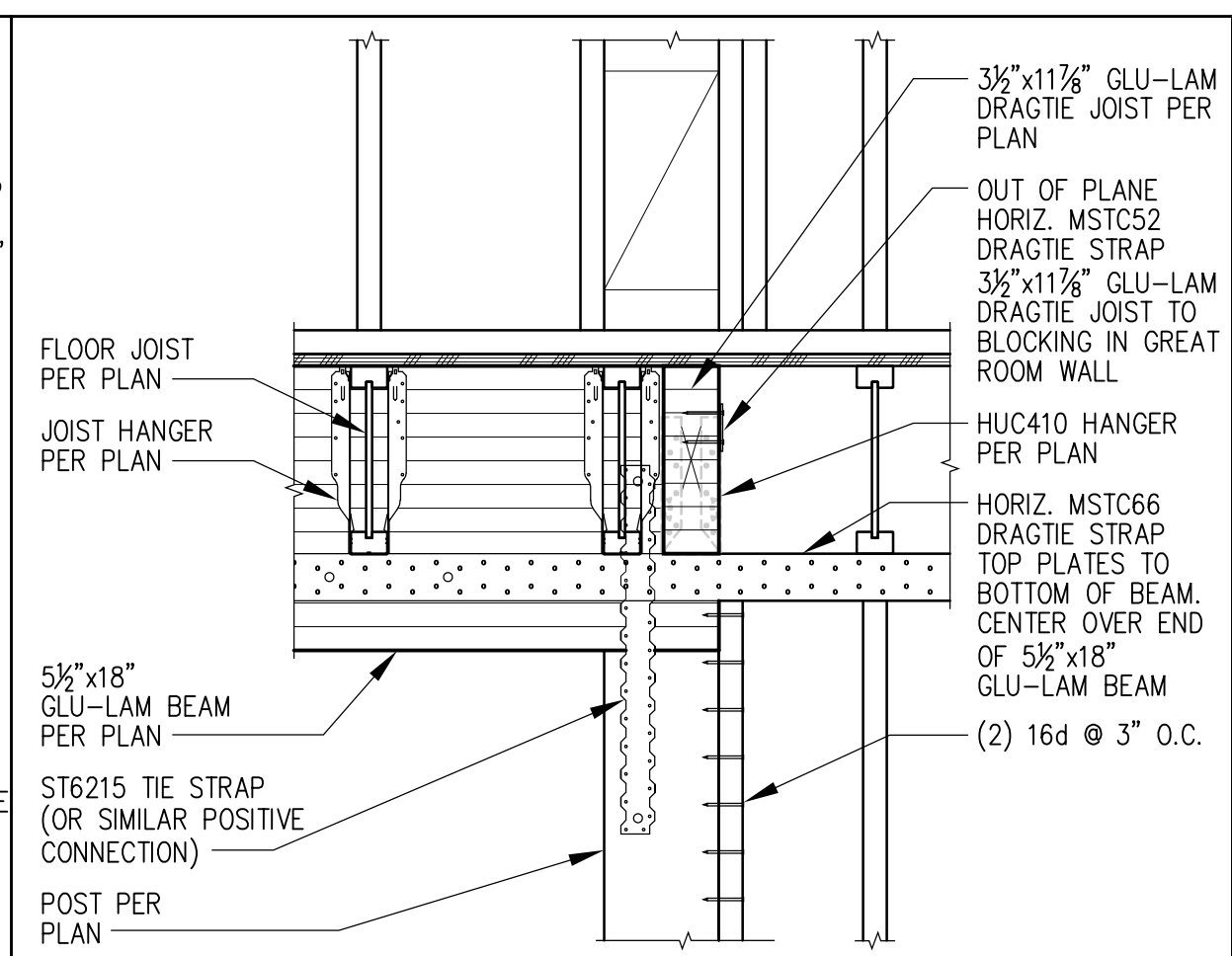
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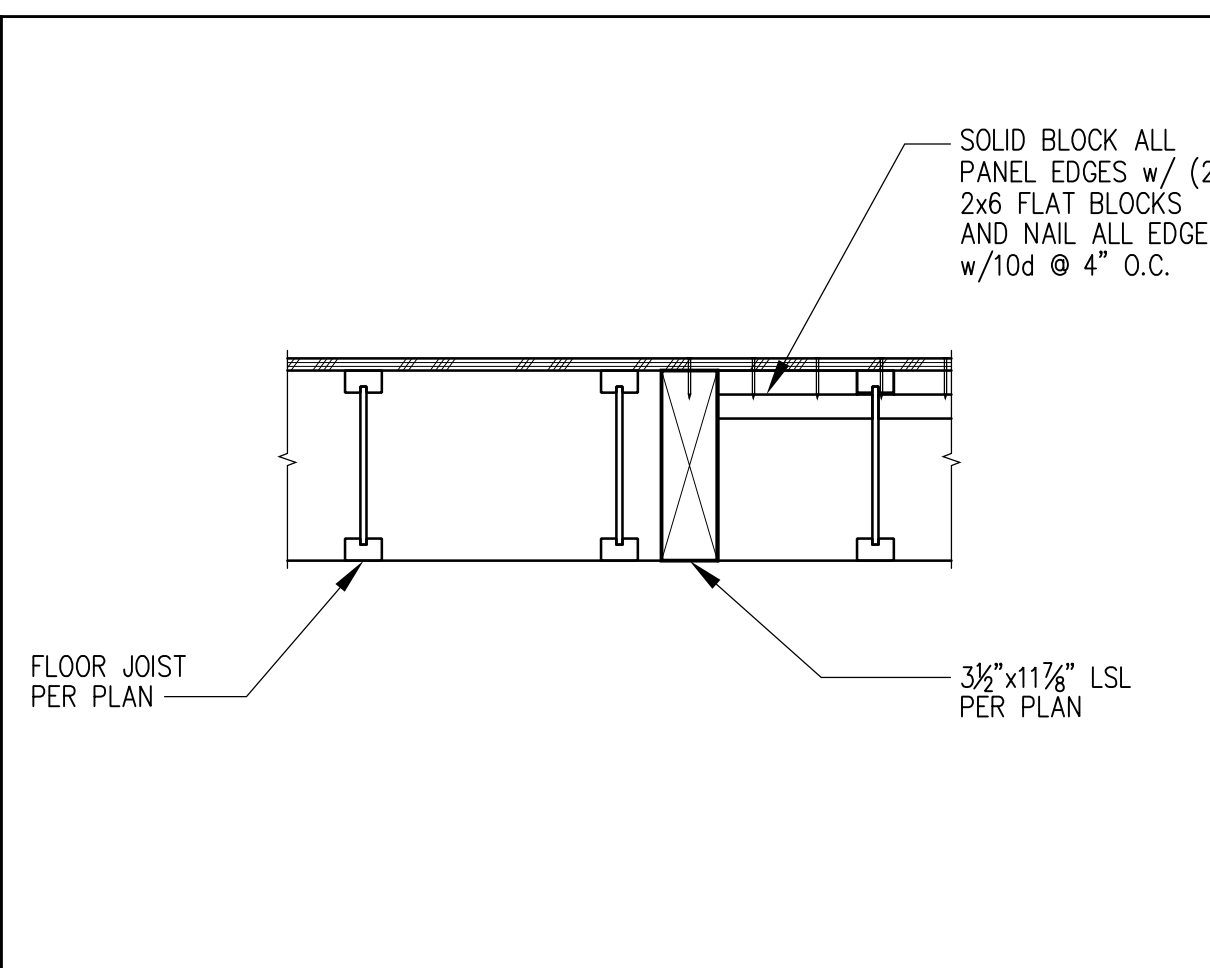
1 TIE STRAP GREAT ROOM TO DECK BEAM



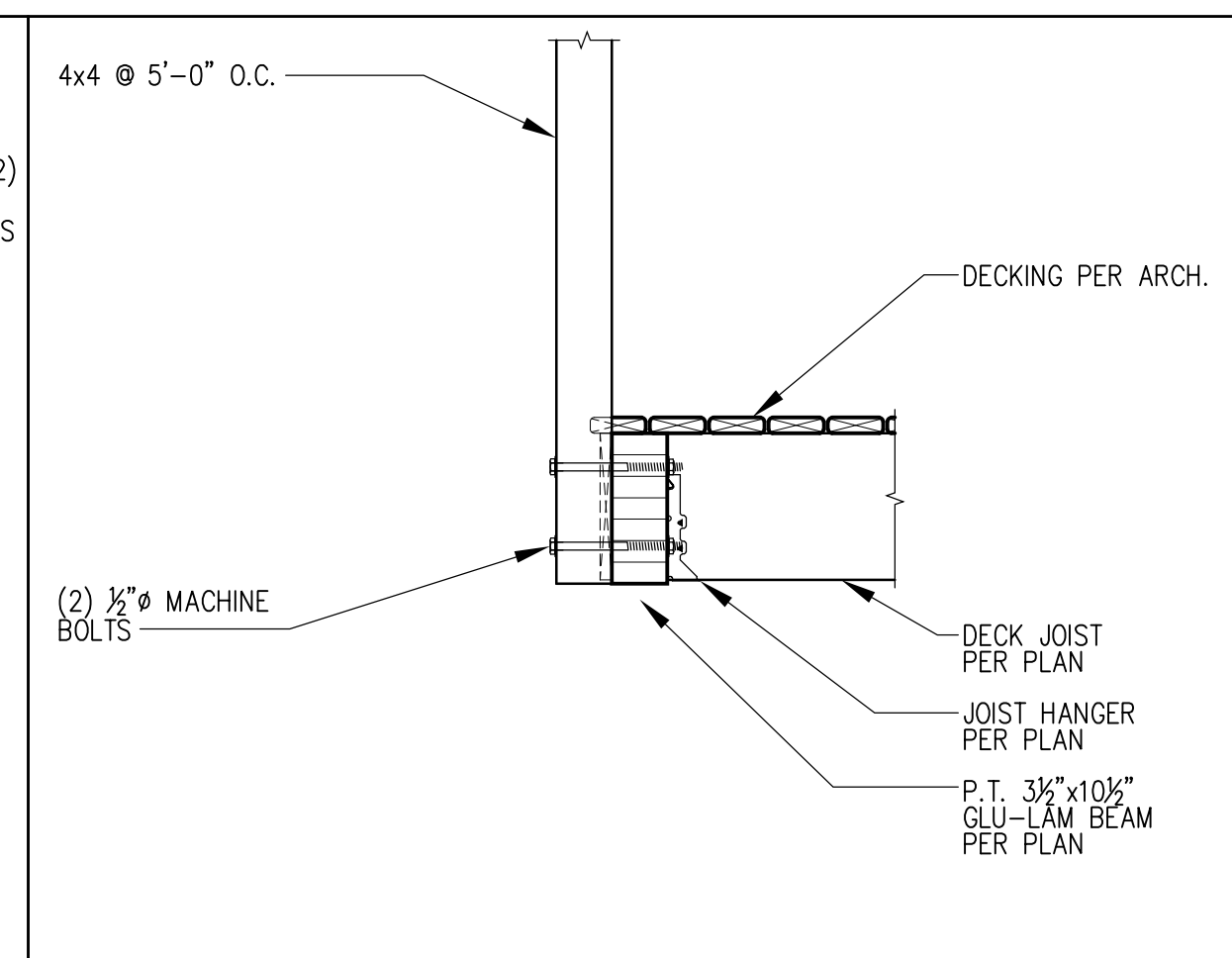
2 TIE STRAP GREAT ROOM TO FLOOR FRAMING



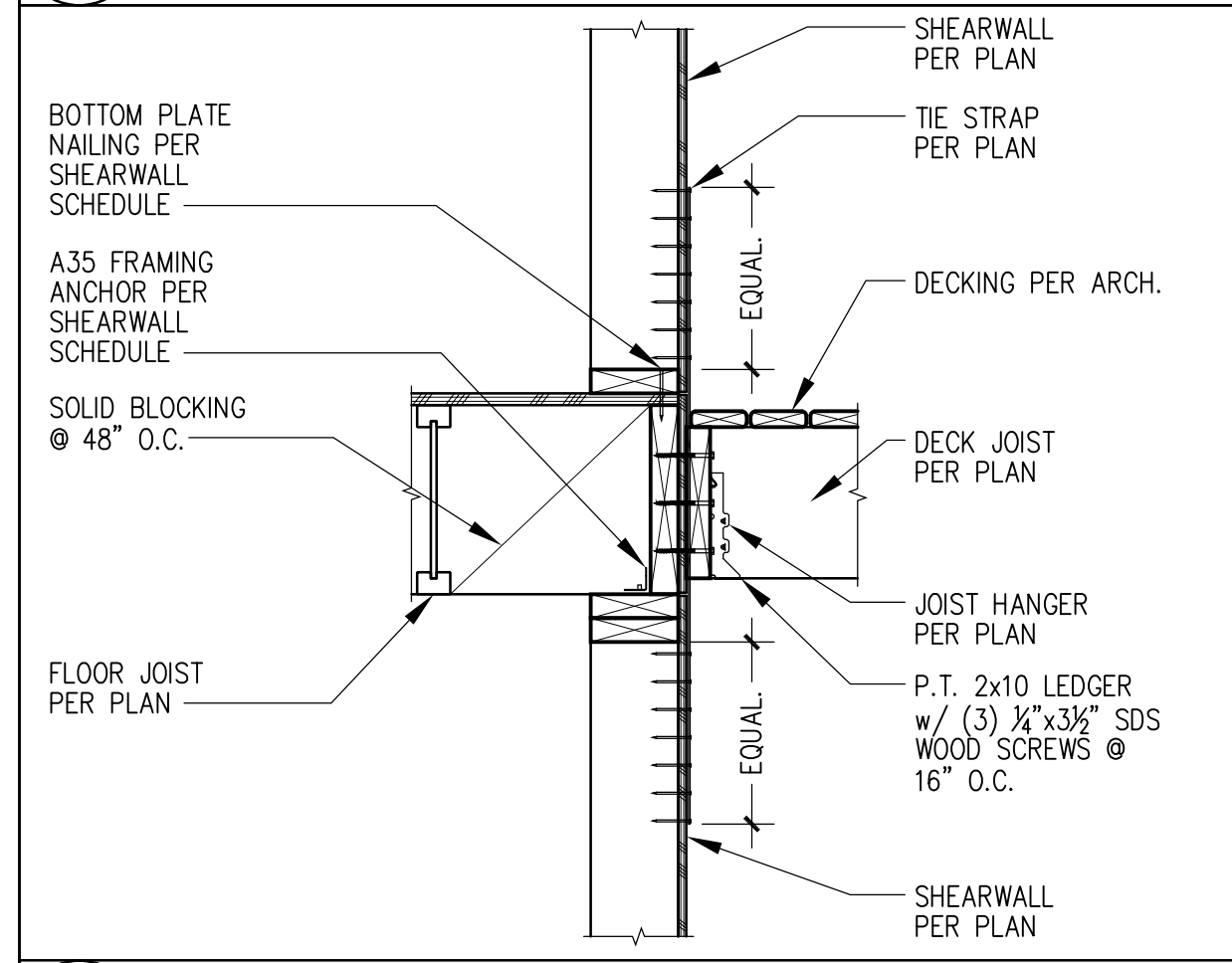
3 DRAGTIE STRAPS @ GLU-LAM FLOOR BEAM



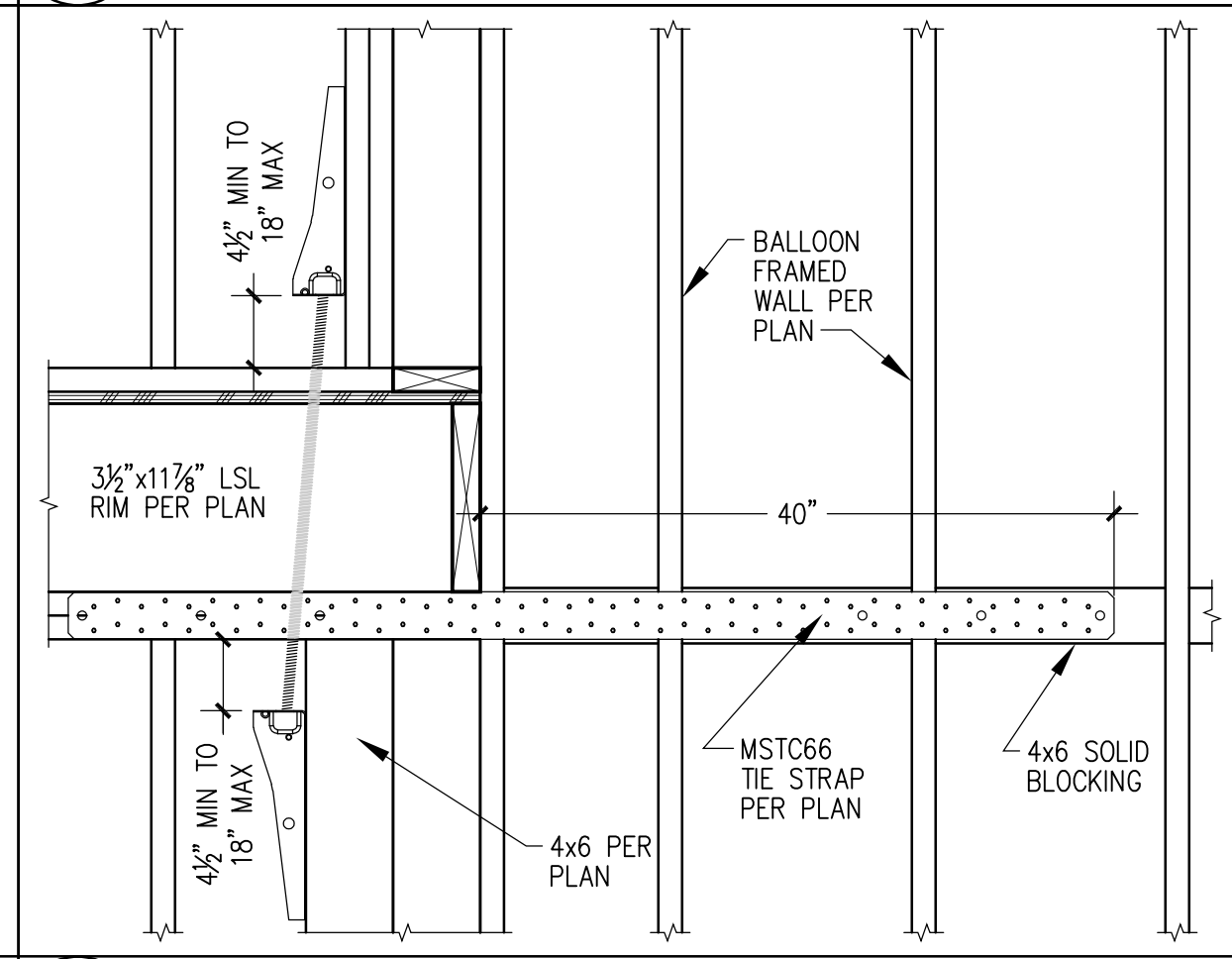
4 SUB-DIAPHRAGM BLOCKING



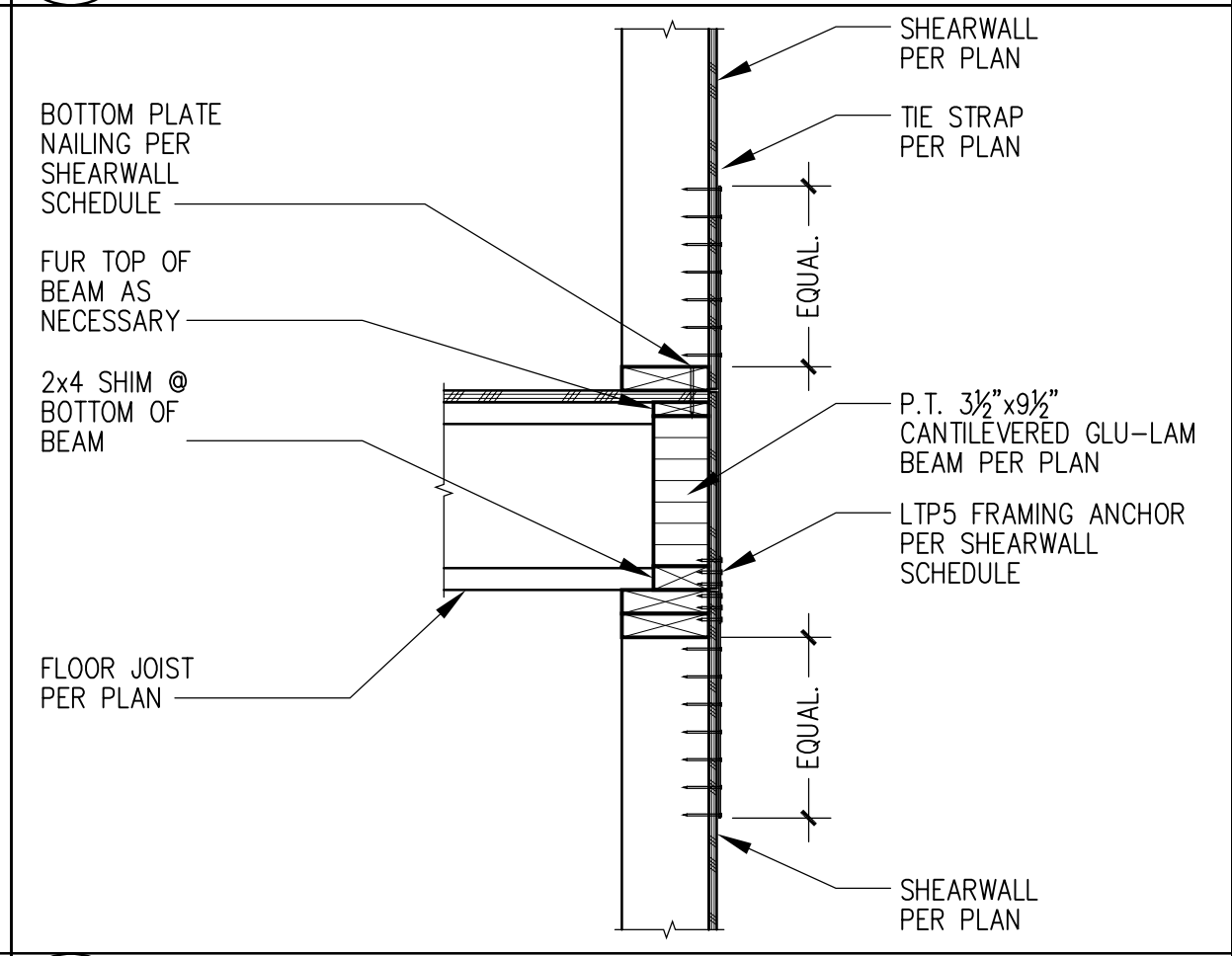
5 TYPICAL UPPER DECK BEAM (FLUSH)



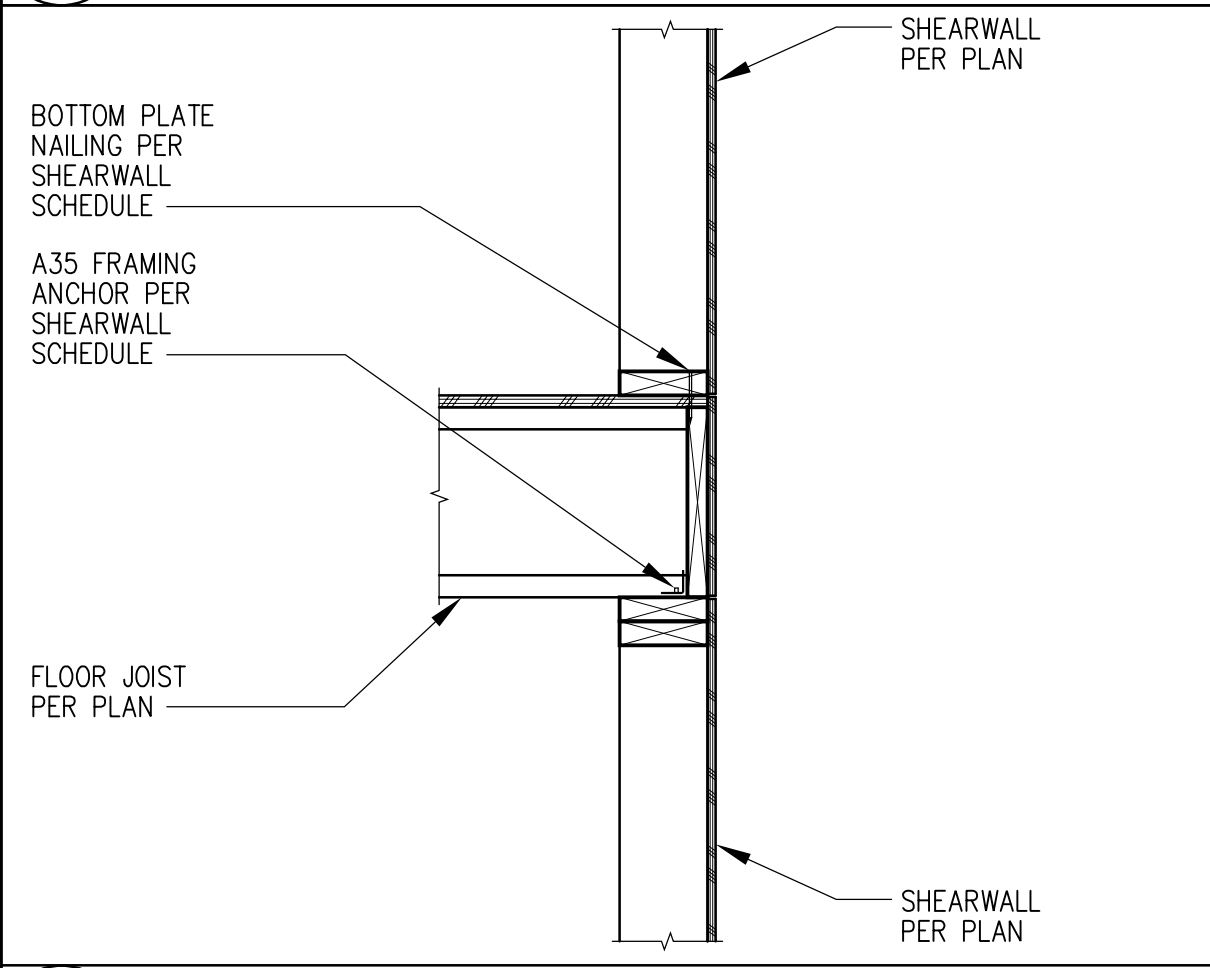
6 SHEAR TRANSFER @ FLOOR FRAMING (PARALLEL JOIST w/ TIE STRAP)



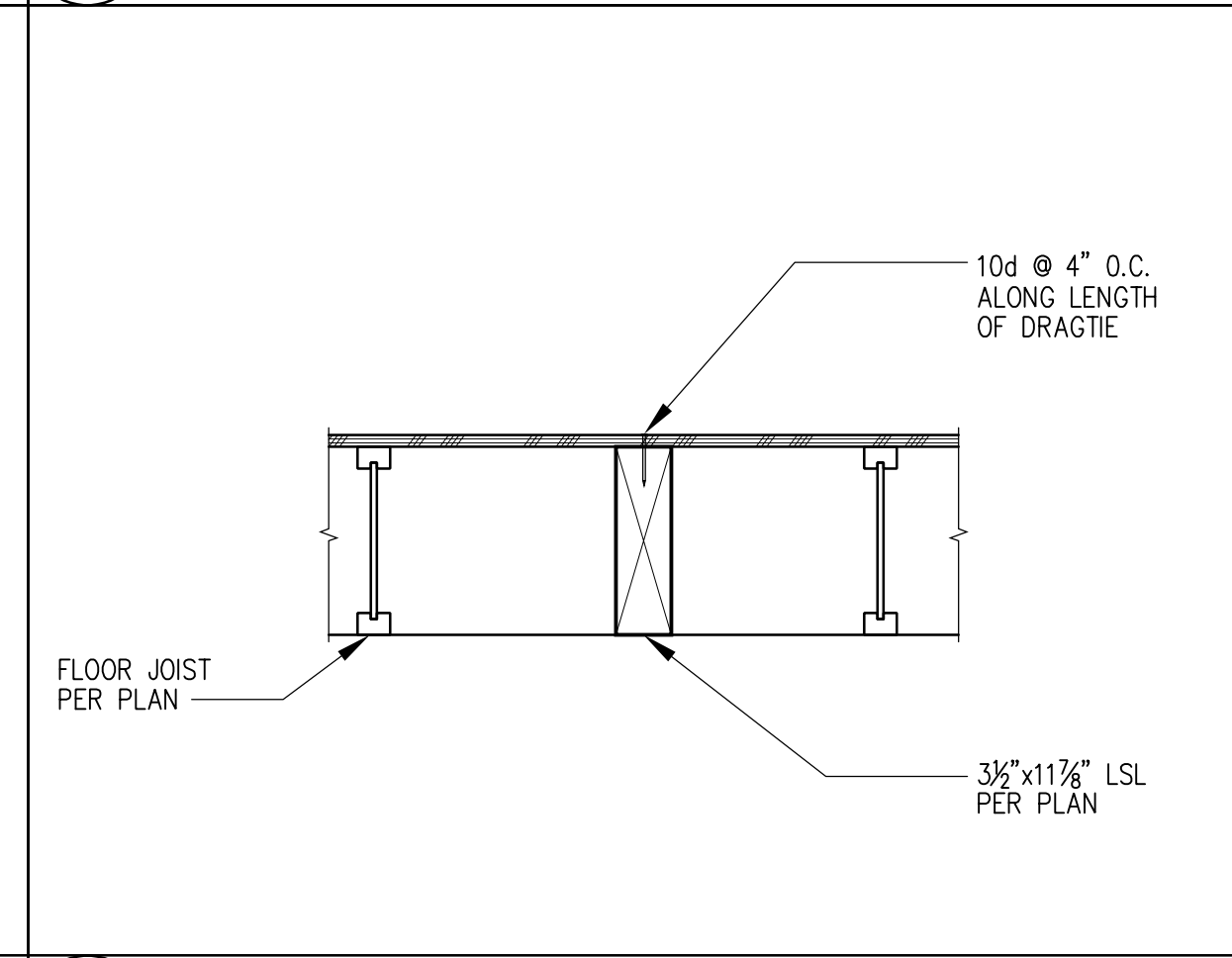
7 TIE STRAP @ GREAT ROOM BALLOON WALL



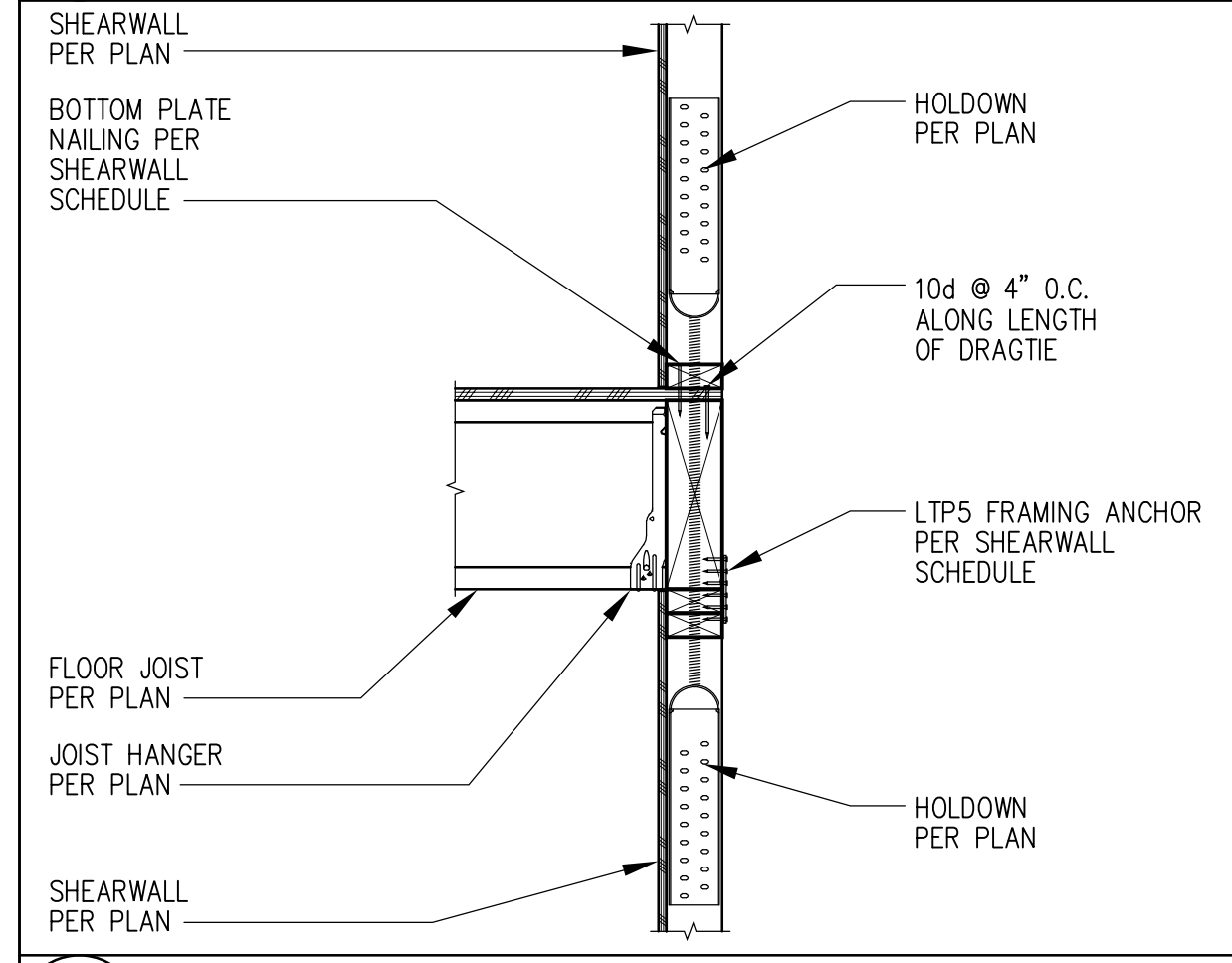
8 SHEAR TRANSFER @ CANT. DECK BEAM (PERPENDICULAR JOIST w/ TIE STRAP)



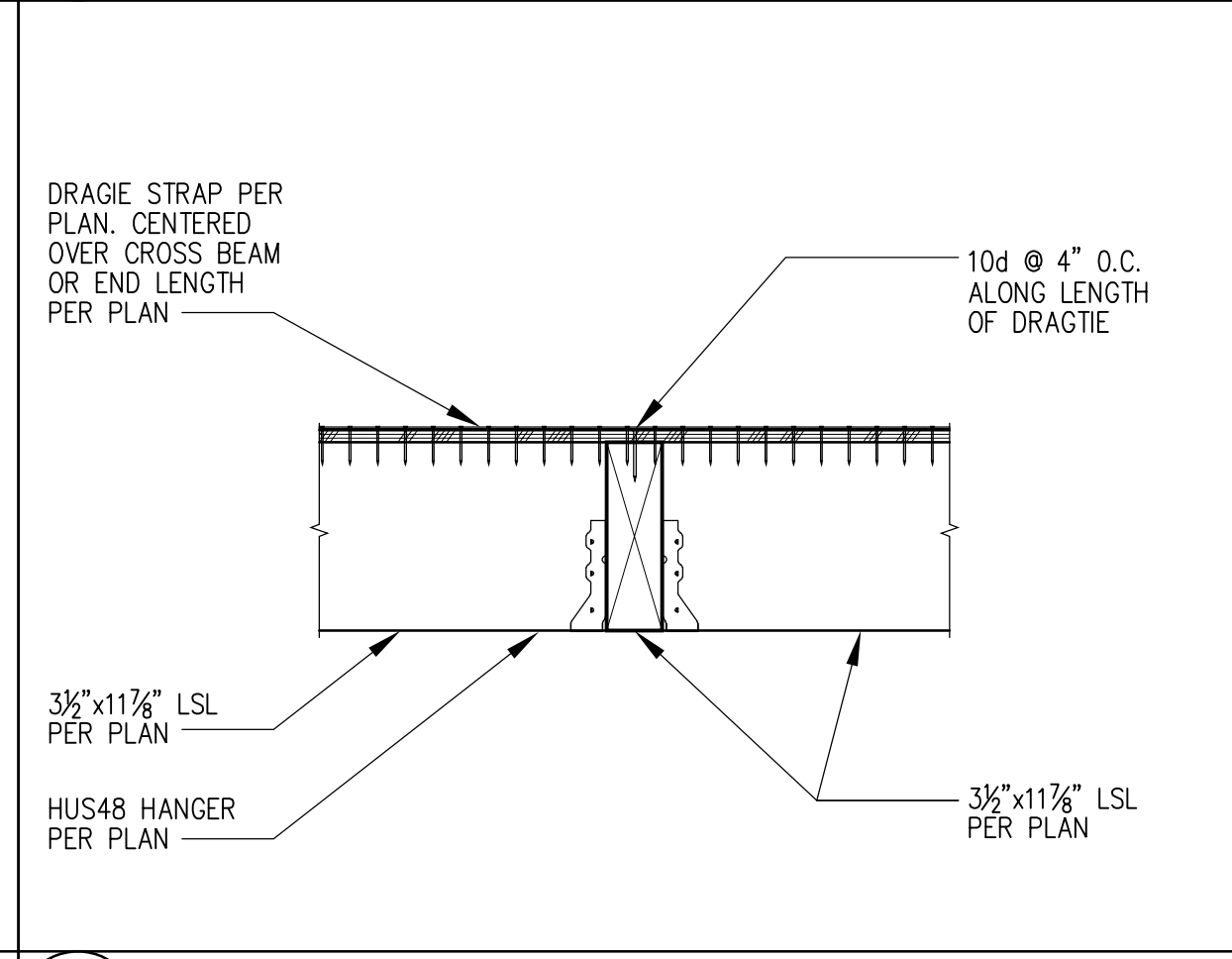
9 SHEAR TRANSFER @ FLOOR FRAMING (PERPENDICULAR JOIST)



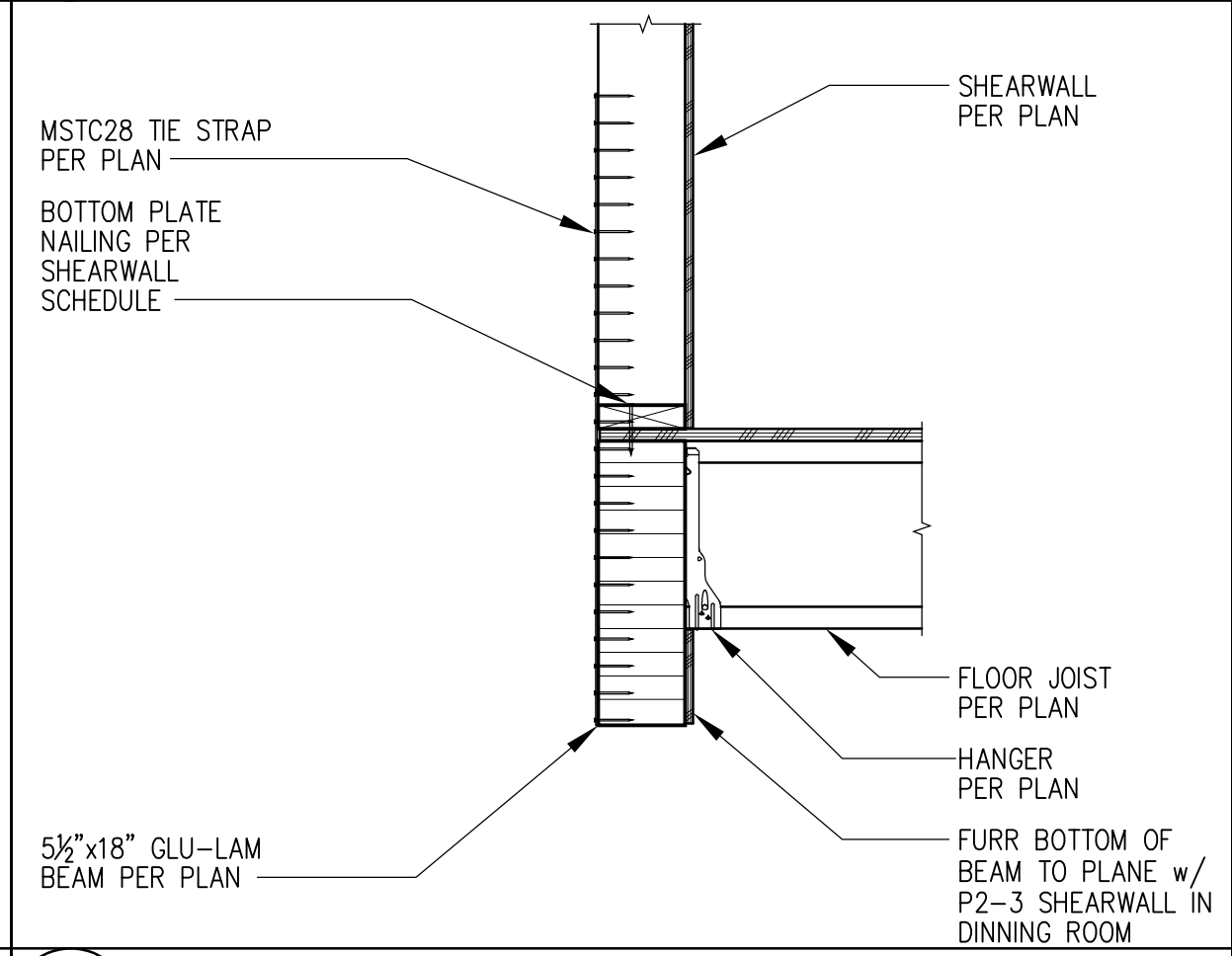
10 DRAGTIE @ PARALLEL JOIST



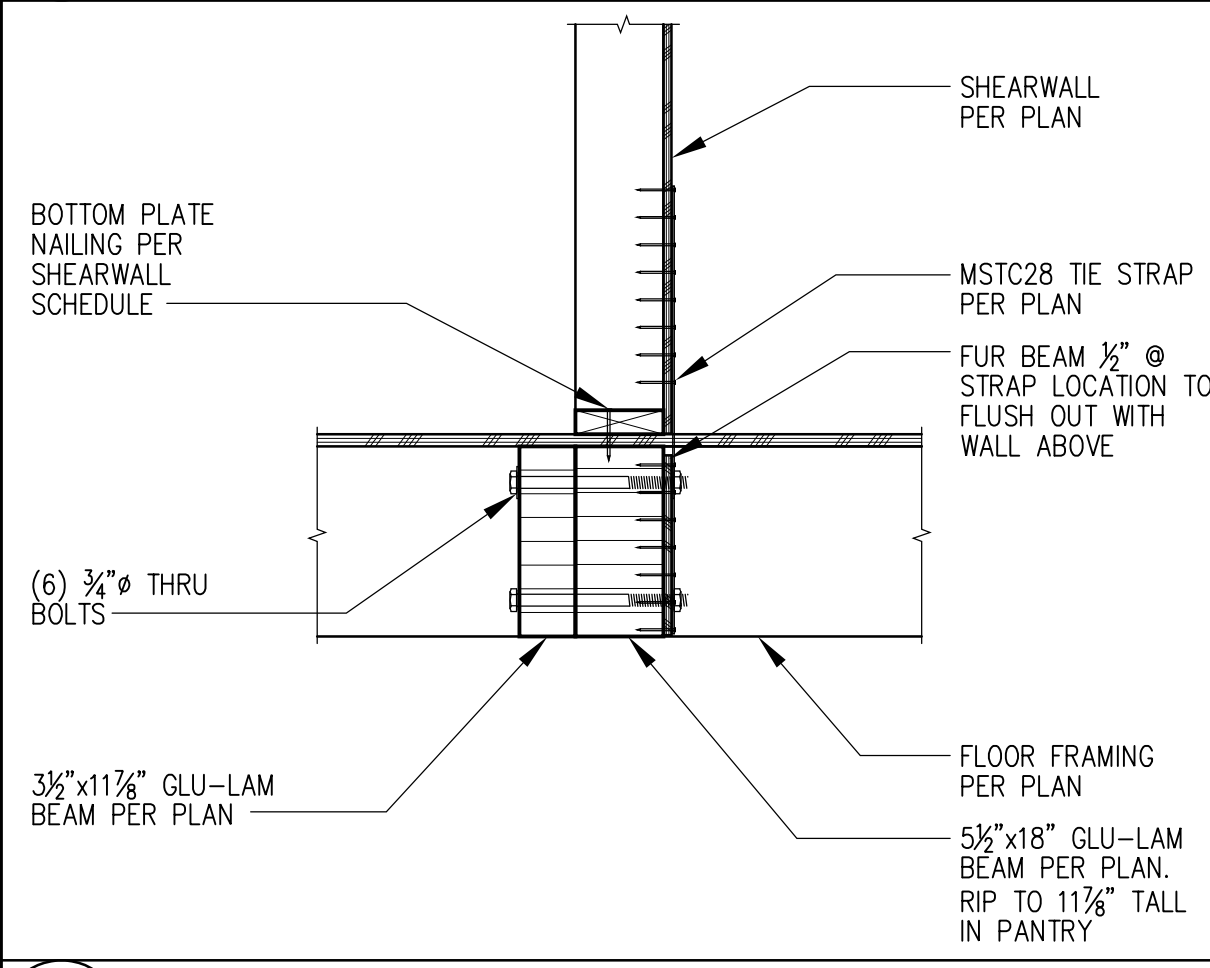
11 SHEAR TRANSFER @ FLOOR FRAMING (HOLDOWN TO HOLDOWN @ PERPENDICULAR JOIST)



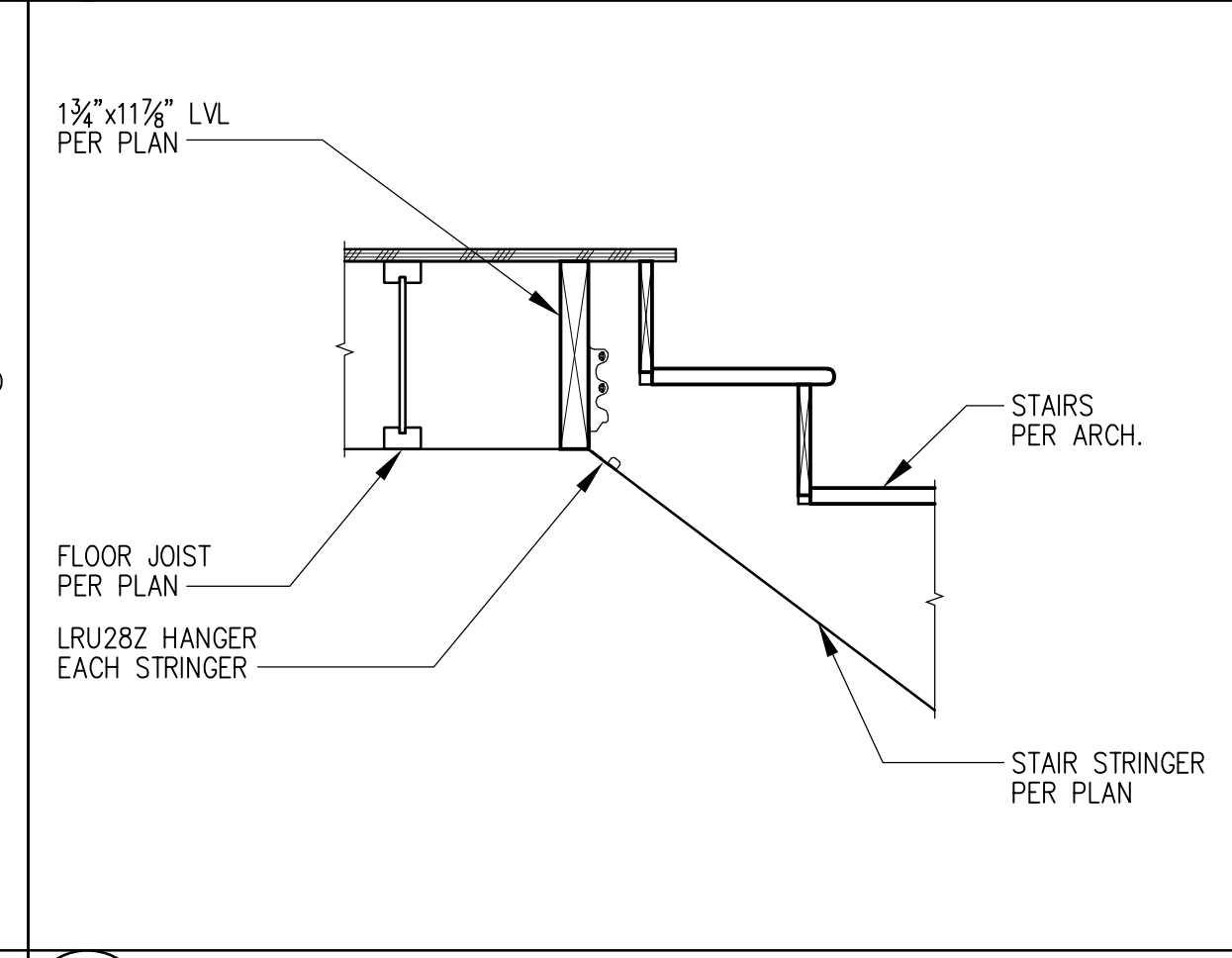
12 DRAGTIE STRAP @ BEAM INTERSECTIONS



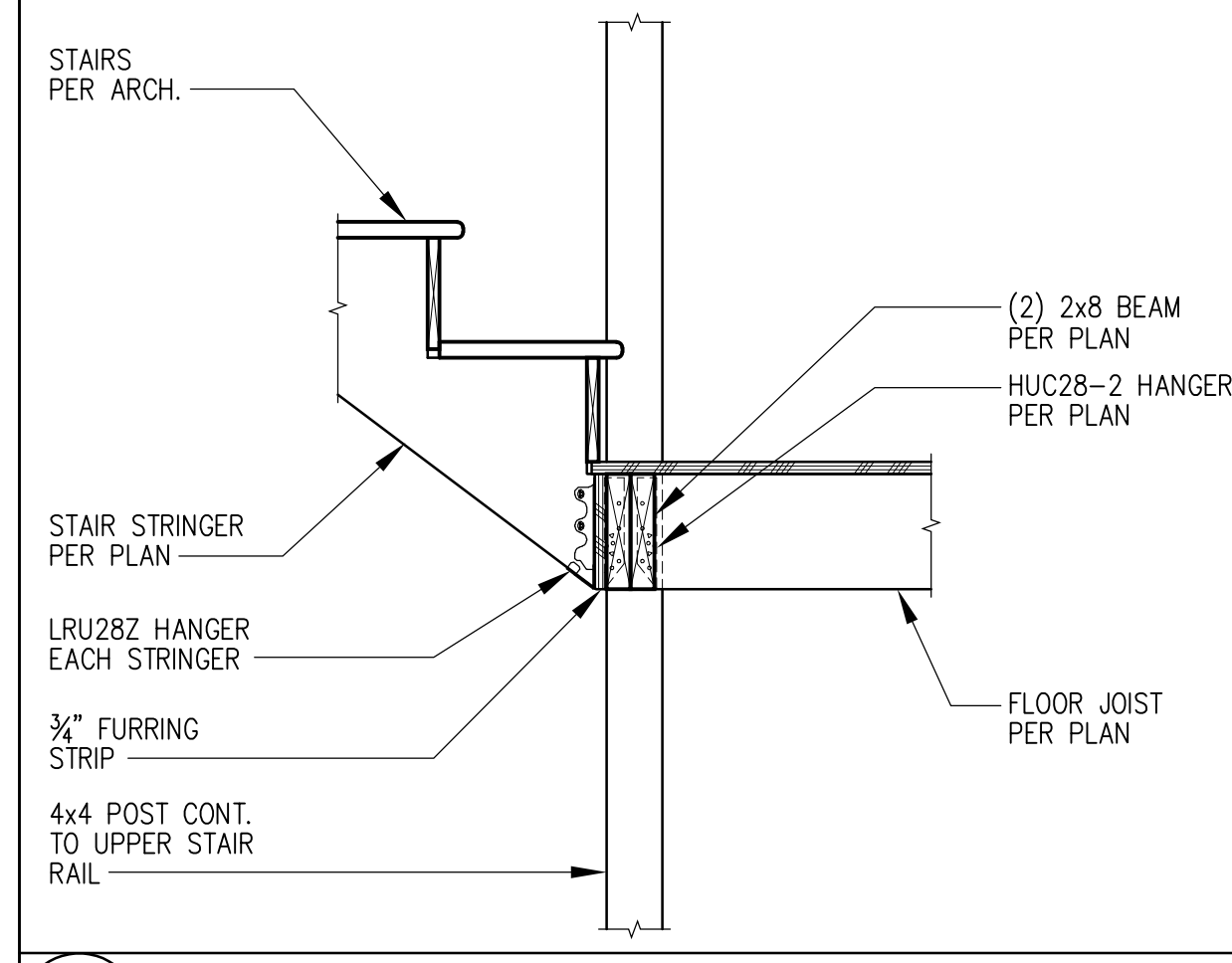
13 TIE STRAP TO BEAM (@ PERPENDICULAR JOIST)



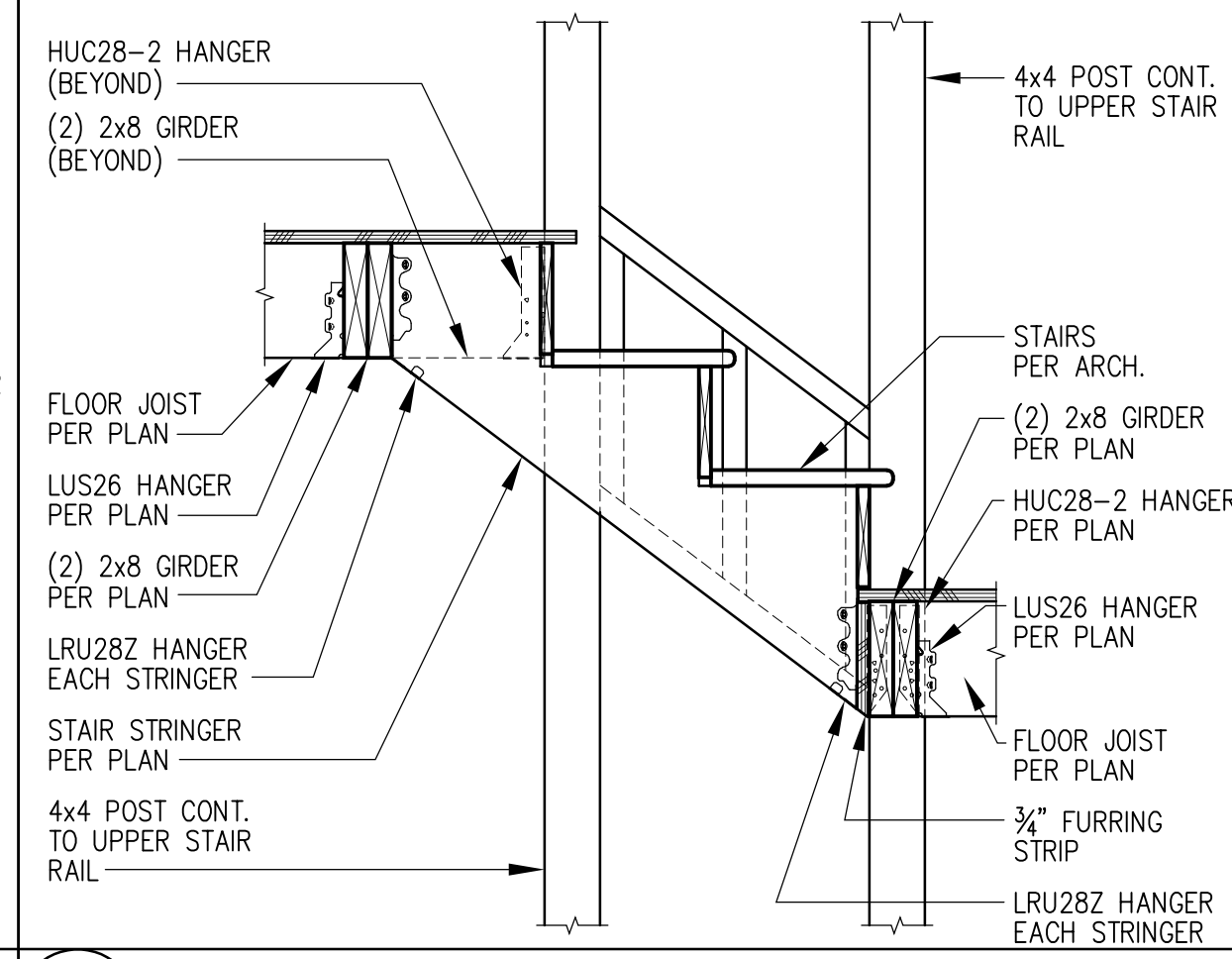
14 TIE STRAP TO BEAM (@ PERPENDICULAR JOIST)



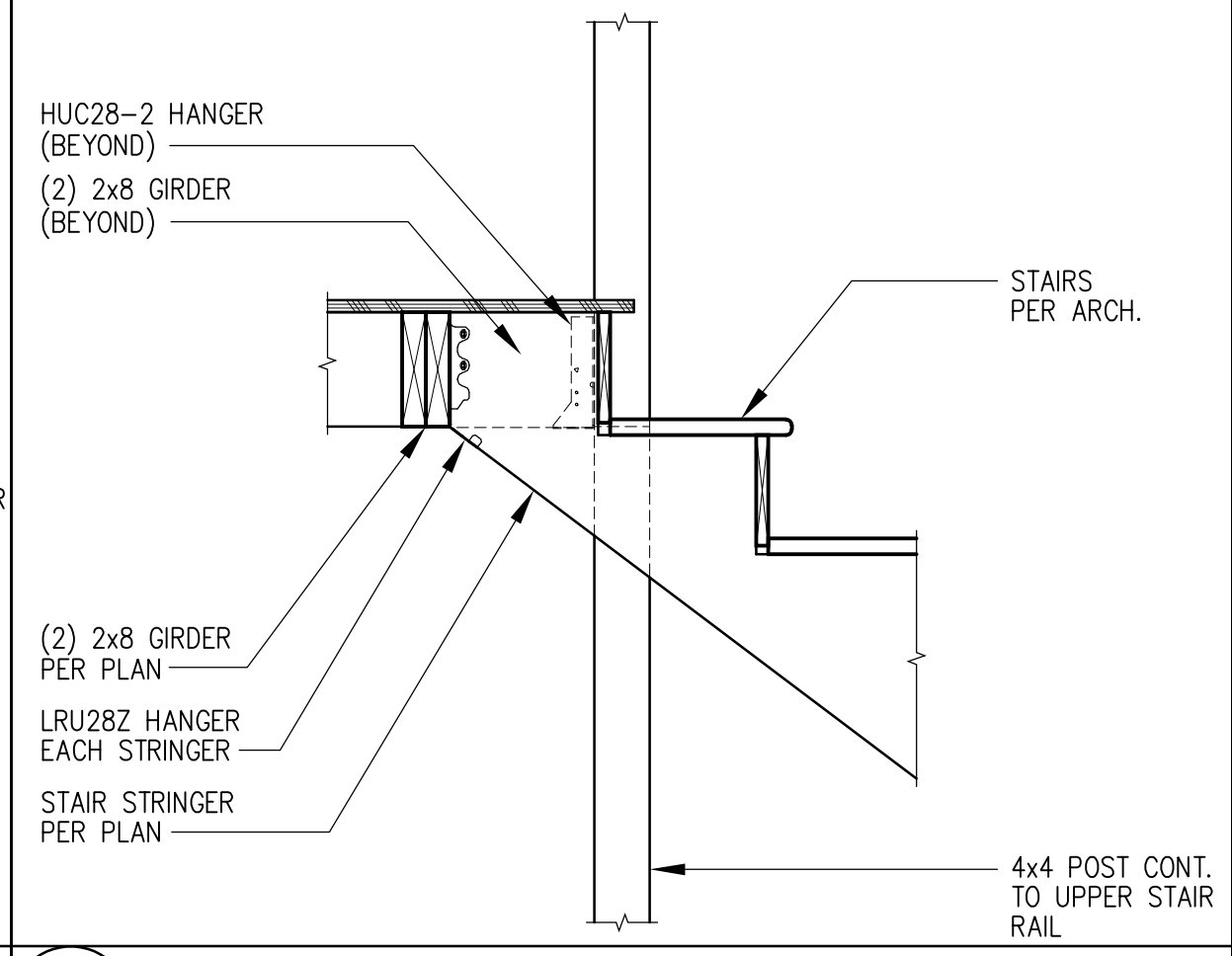
15 STAIR STRINGER FRAMING (UPPER FLOOR STAIRS @ UPPER FLOOR FRAMING)



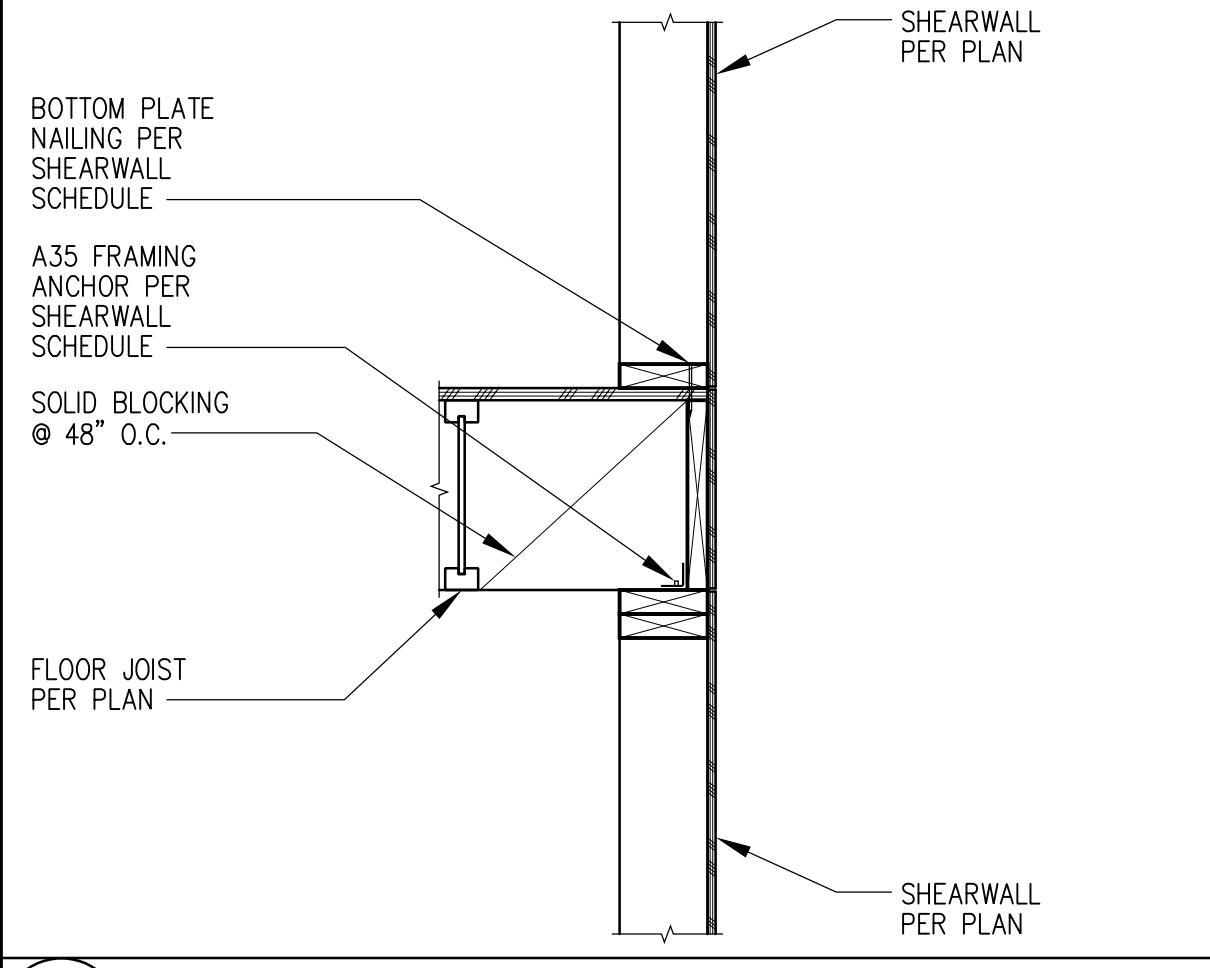
16 STAIR STRINGER FRAMING (UPPER FLOOR STAIRS @ UPPER MID LANDING)



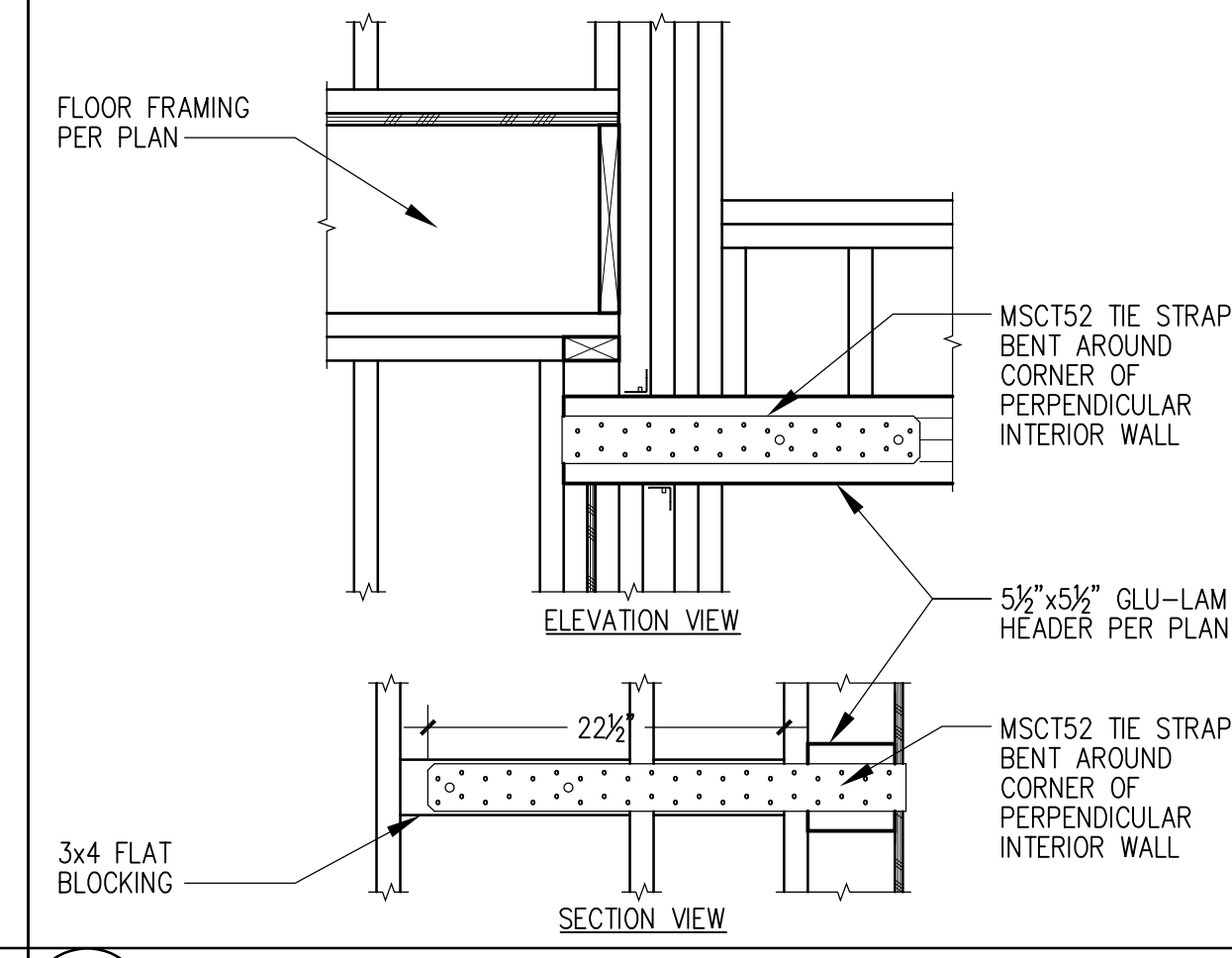
17 STAIR STRINGER FRAMING (UPPER FLOOR STAIRS BETWEEN MID LANDINGS)



18 STAIR STRINGER FRAMING (UPPER FLOOR STAIRS @ LOWER MID LANDING)



19 SHEAR TRANSFER @ FLOOR FRAMING (PARALLEL JOIST)



20 TIE STRAP @ DOOR HEADER (BALLOON FRAMING w/ TIE STRAP & ENTRY WALL FRAMING)

Stoney Point Engineering
 Dwayne Barnes P.E.
 dwayne@stonepointengineering.com
 Office: 425-644-9500



MI Treehouse, LLC
 5637 East Mercer Way
 Mercer Island, WA 98084

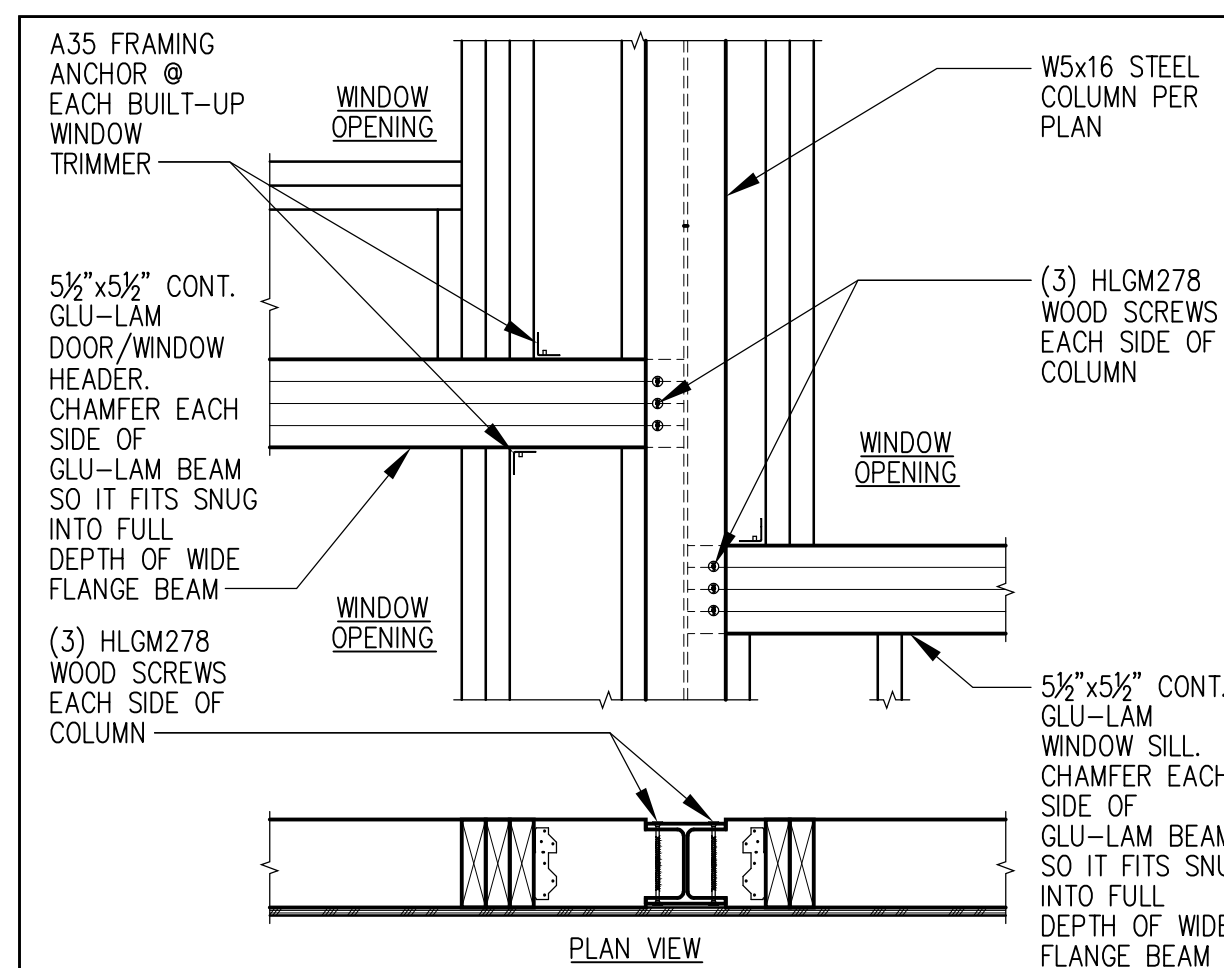
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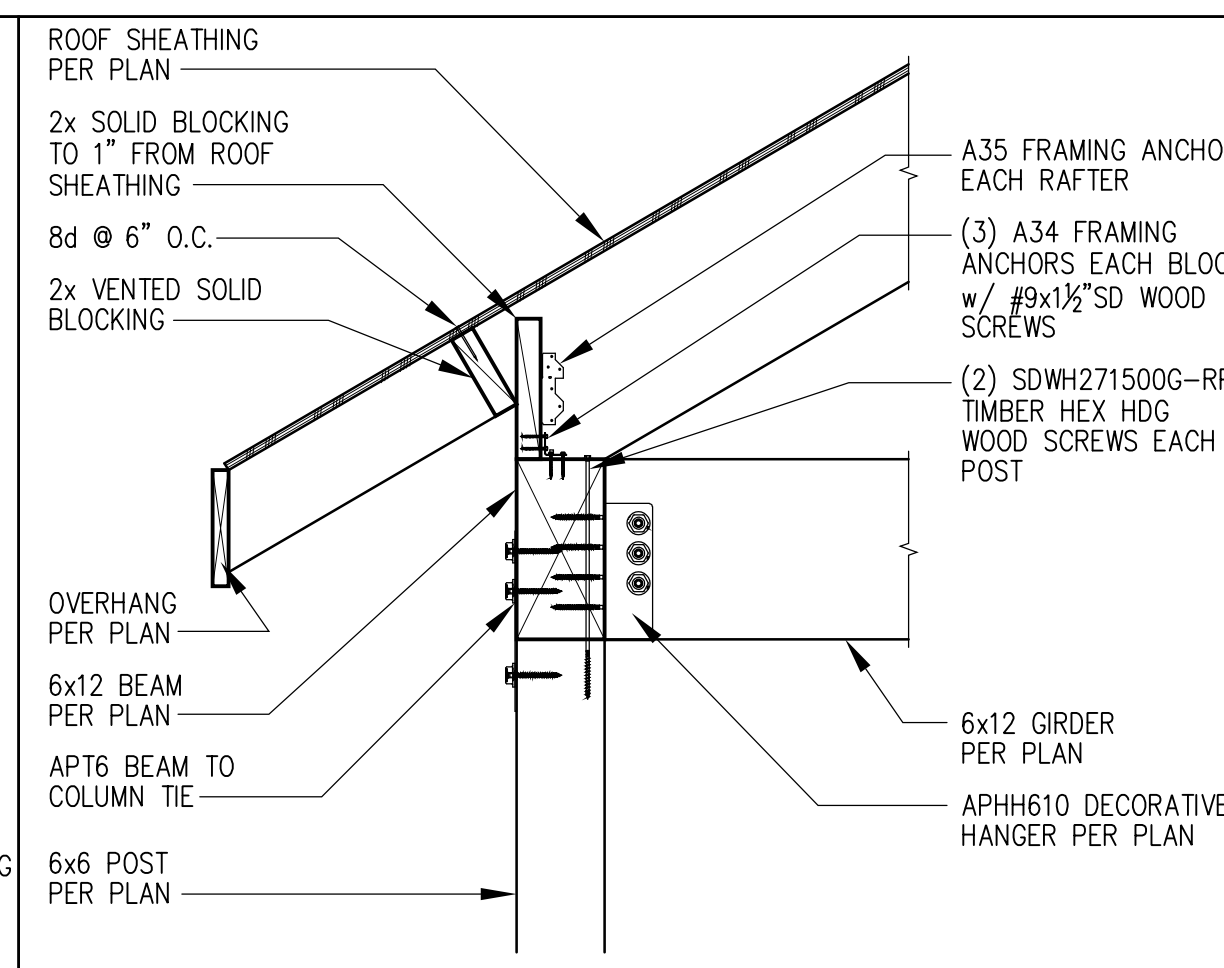
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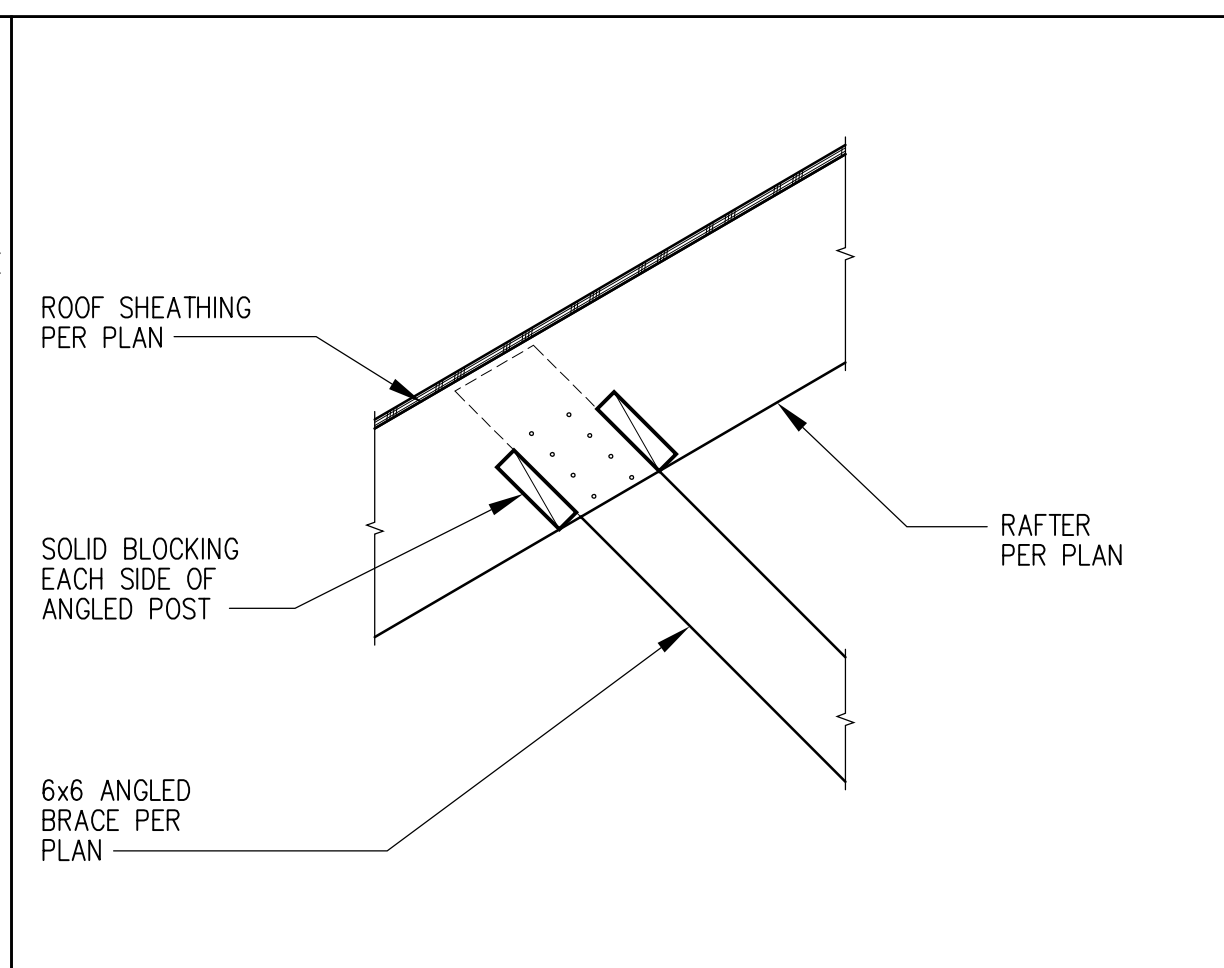
S4.2
 FRAMING DETAILS



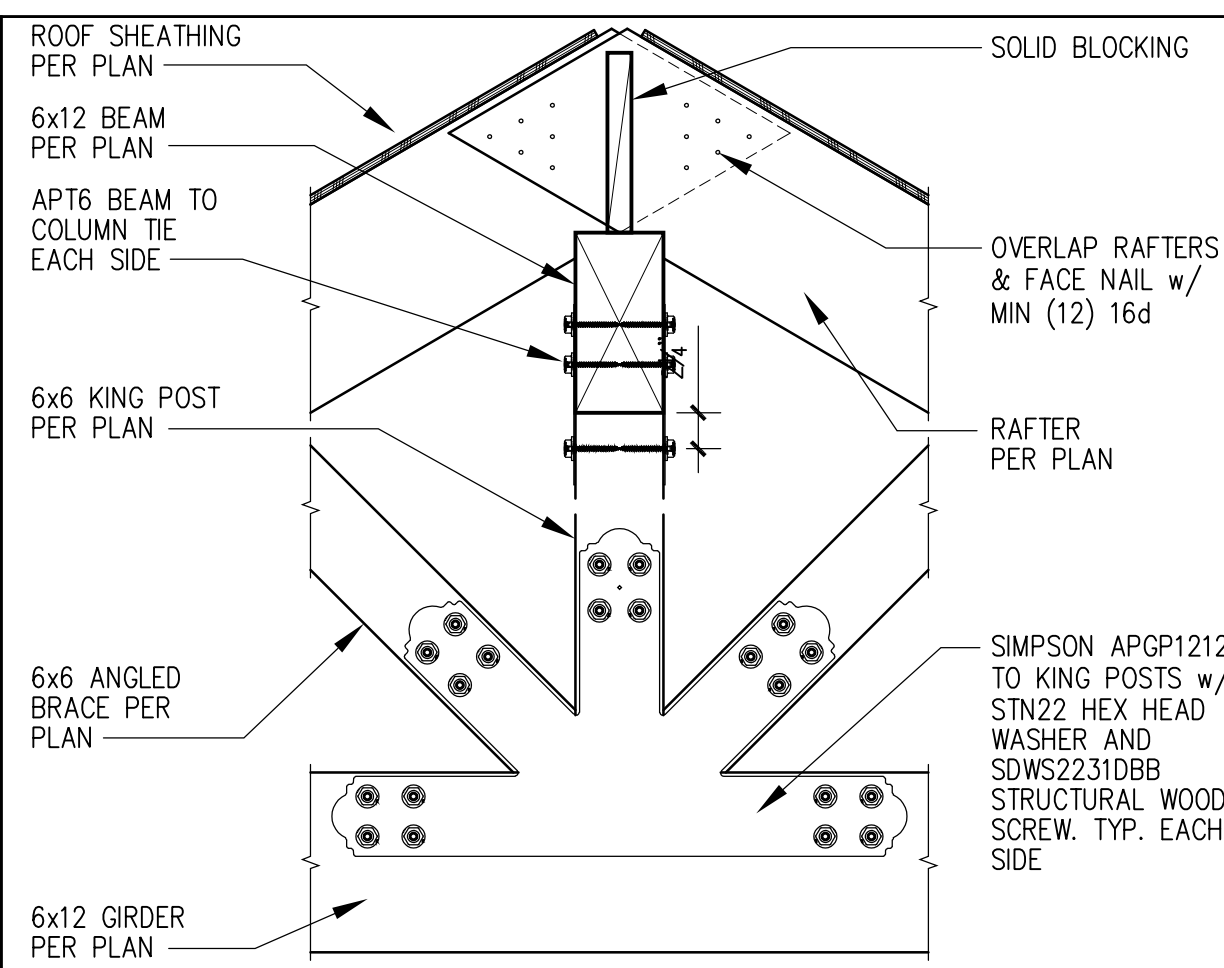
1 W5x16 STEEL COLUMN HEADERS (TYPICAL RAFTER)



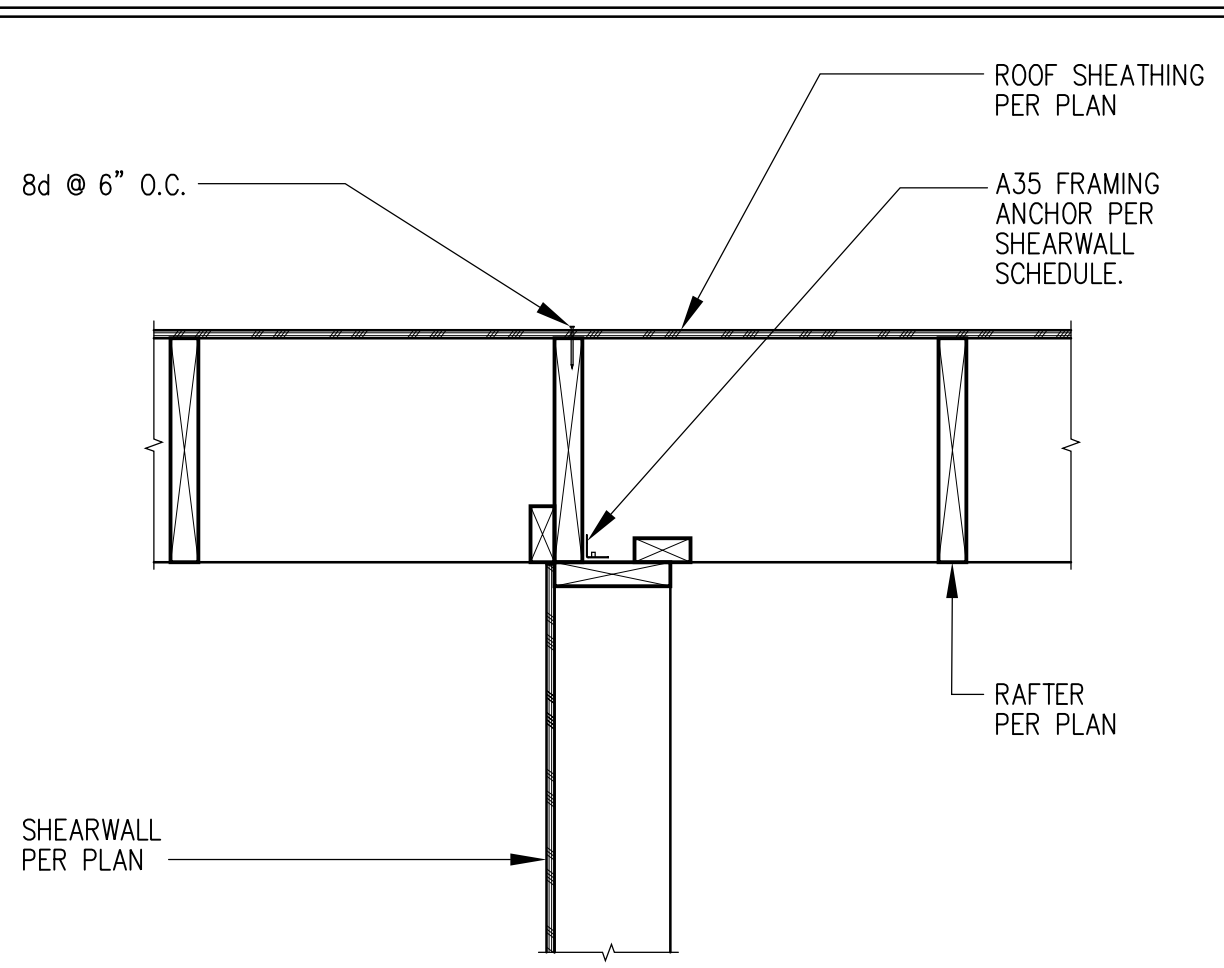
2 TYP. PORCH POST TO BEAM CONNECTION



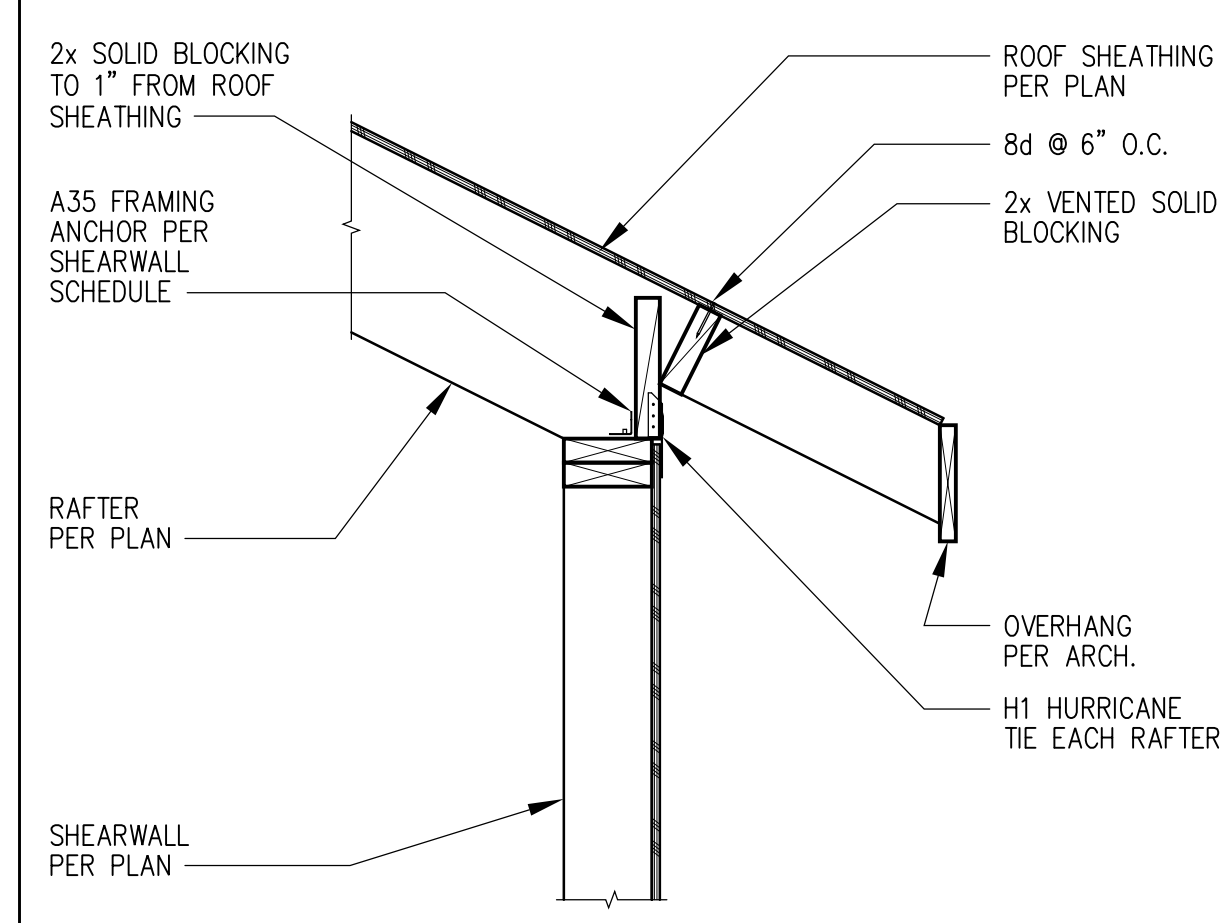
3 ANGLED POST TO RAFTER CONNECTION



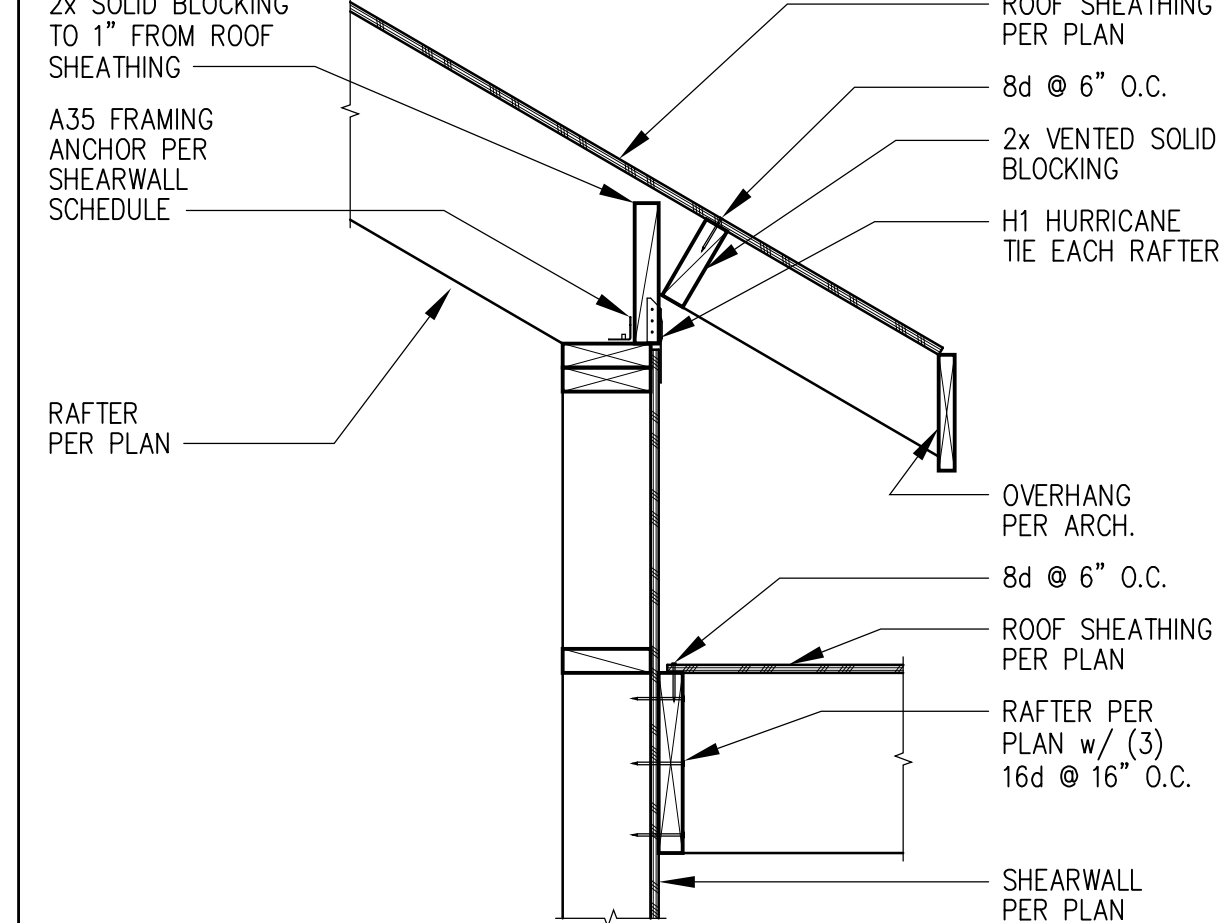
4 KING POST TO BEAM CONNECTION



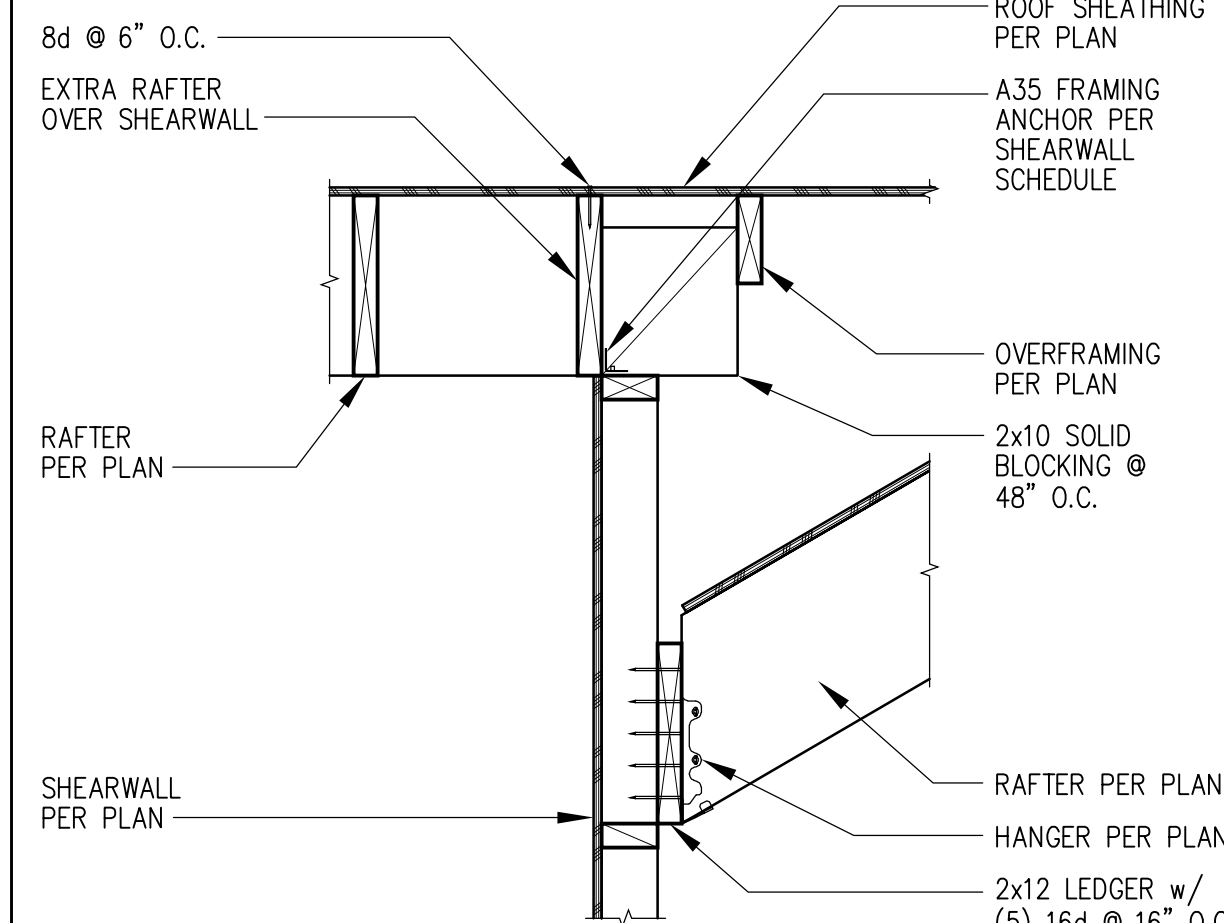
5 SHEAR TRANSFER @ GREAT ROOM GABLE



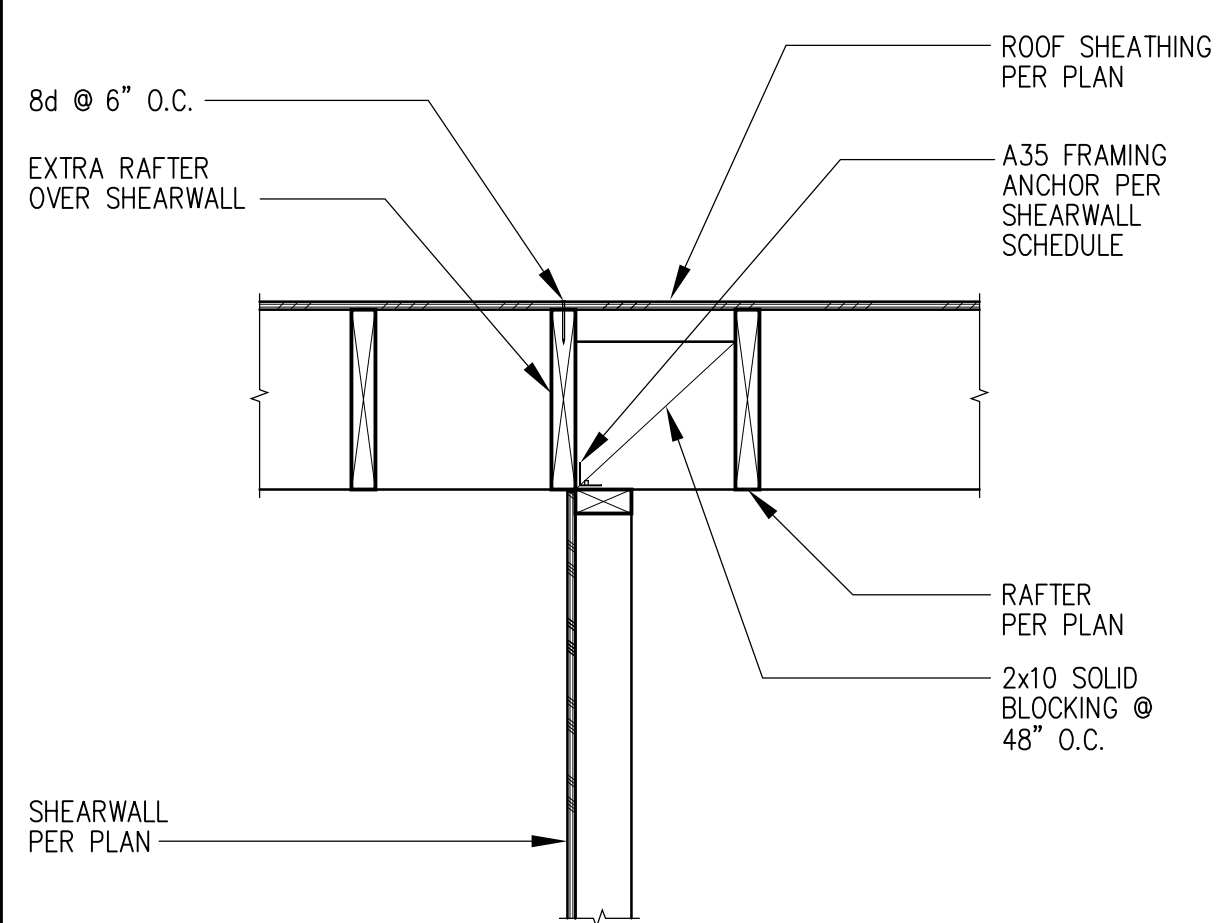
6 SHEAR TRANSFER @ EAVE (TYPICAL RAFTER)



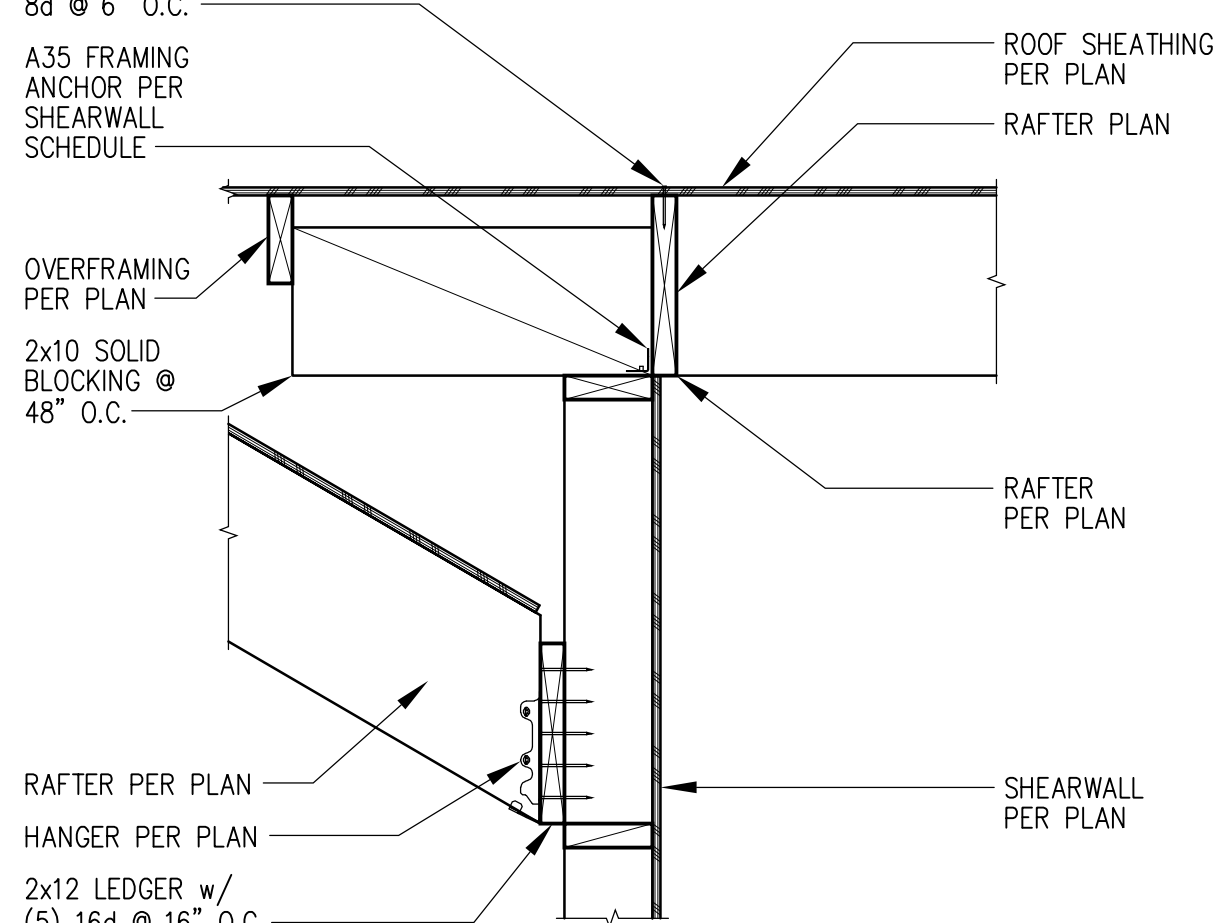
7 SHEAR TRANSFER @ EAVE (TYPICAL RAFTER w/ LOWER ROOF)



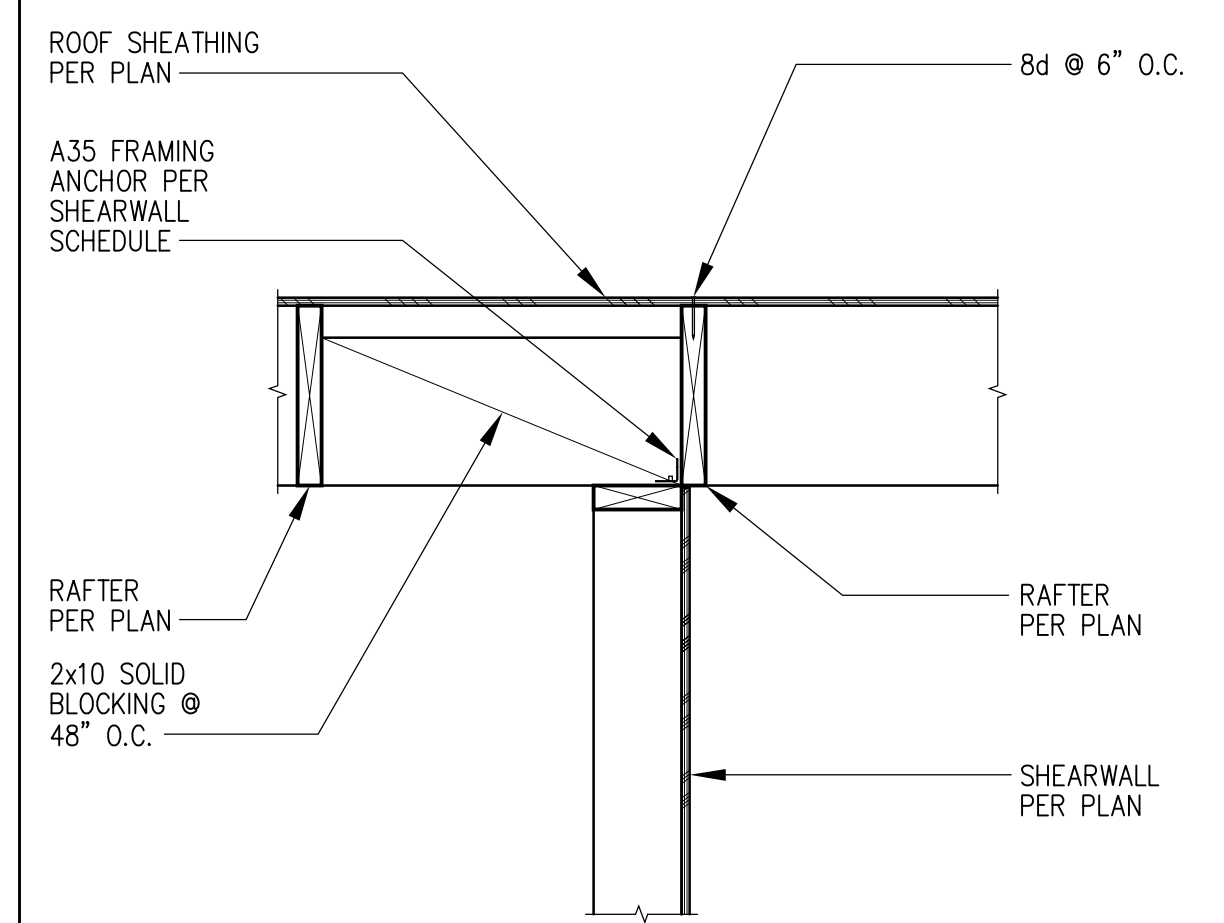
8 SHEAR TRANSFER @ PARALLEL RAFTER (SHEARWALL OFF TYPICAL RAFTER LAYOUT w/OVERFRAMING)



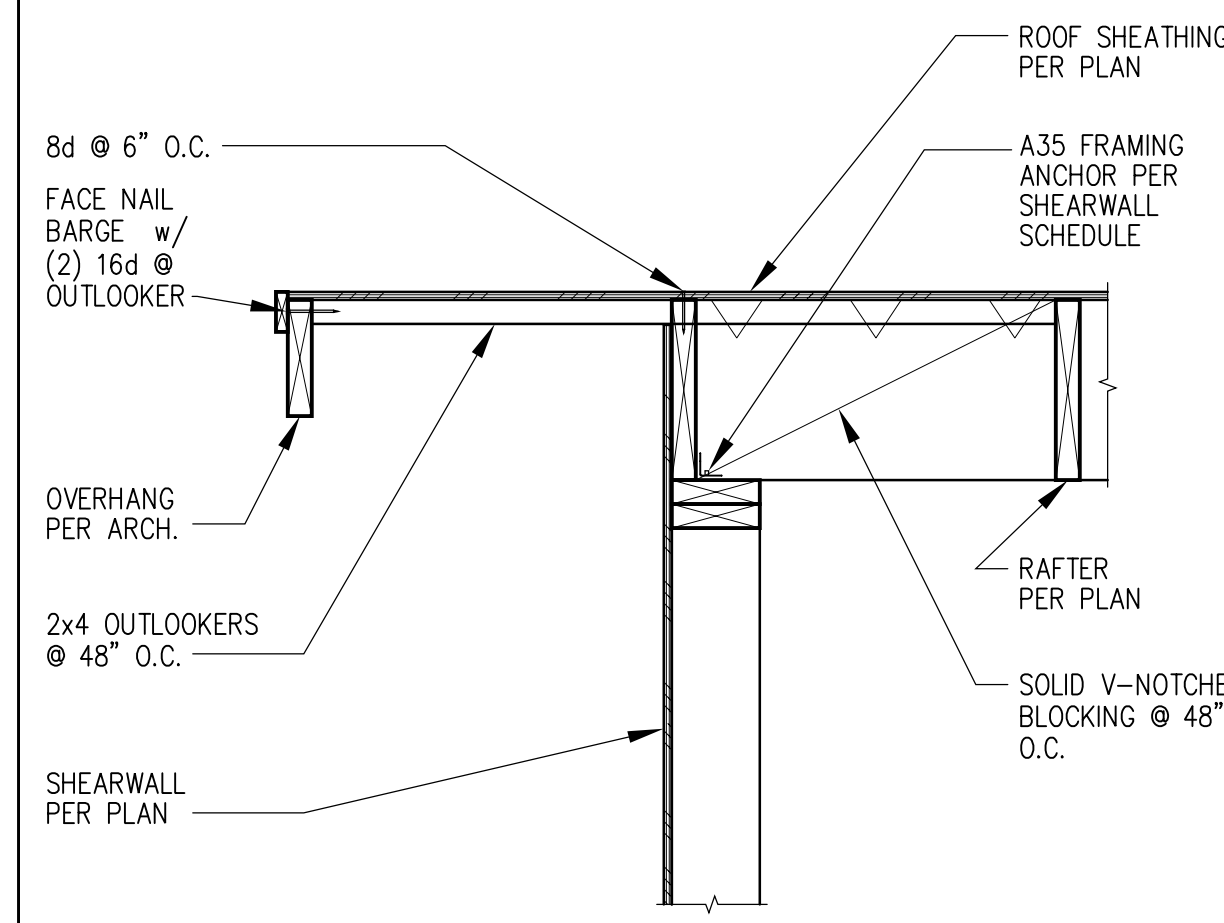
9 SHEAR TRANSFER @ PARALLEL RAFTER (SHEARWALL ON TYPICAL RAFTER LAYOUT)



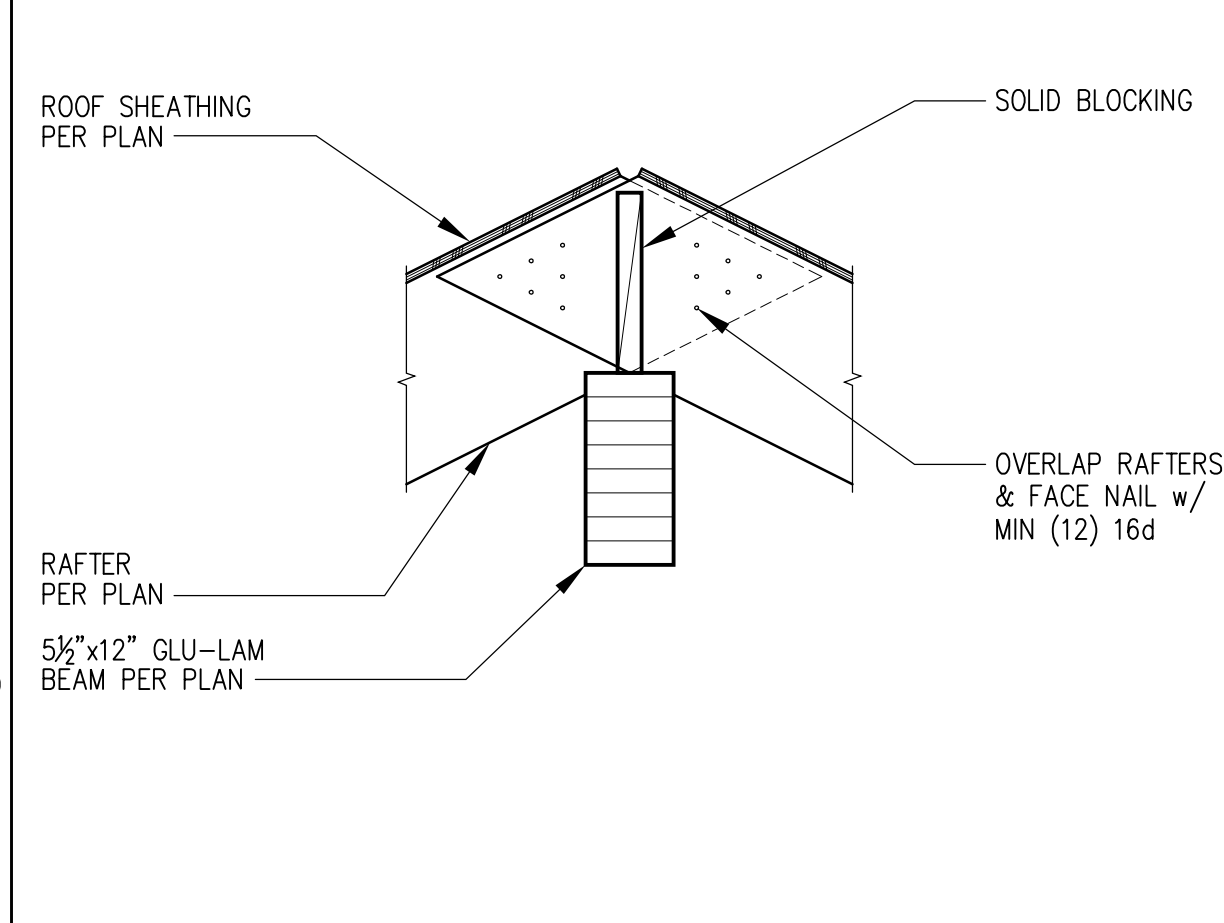
10 SHEAR TRANSFER @ PARALLEL RAFTER (SHEARWALL ON TYPICAL RAFTER LAYOUT w/OVERFRAMING)



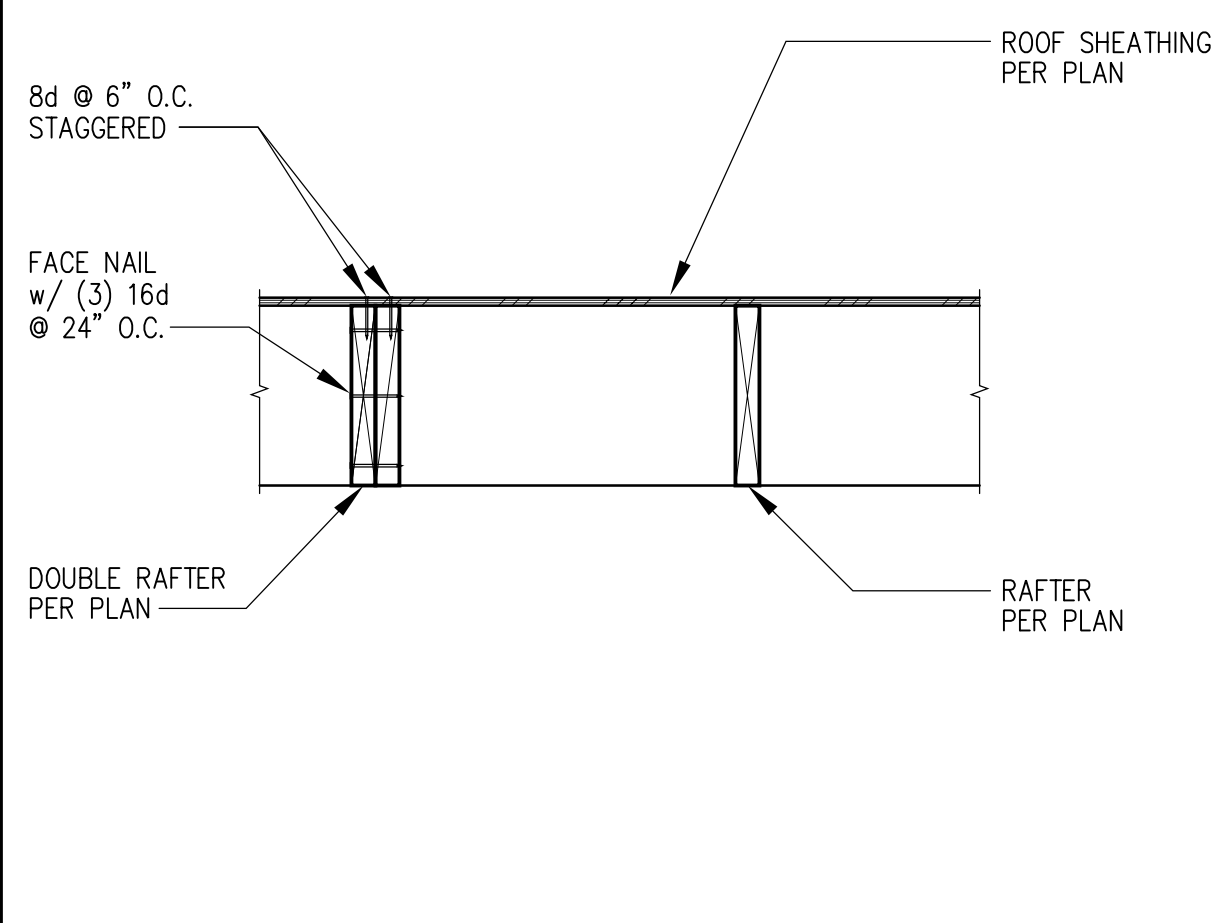
11 SHEAR TRANSFER @ PARALLEL RAFTER (SHEARWALL ON TYPICAL RAFTER LAYOUT)



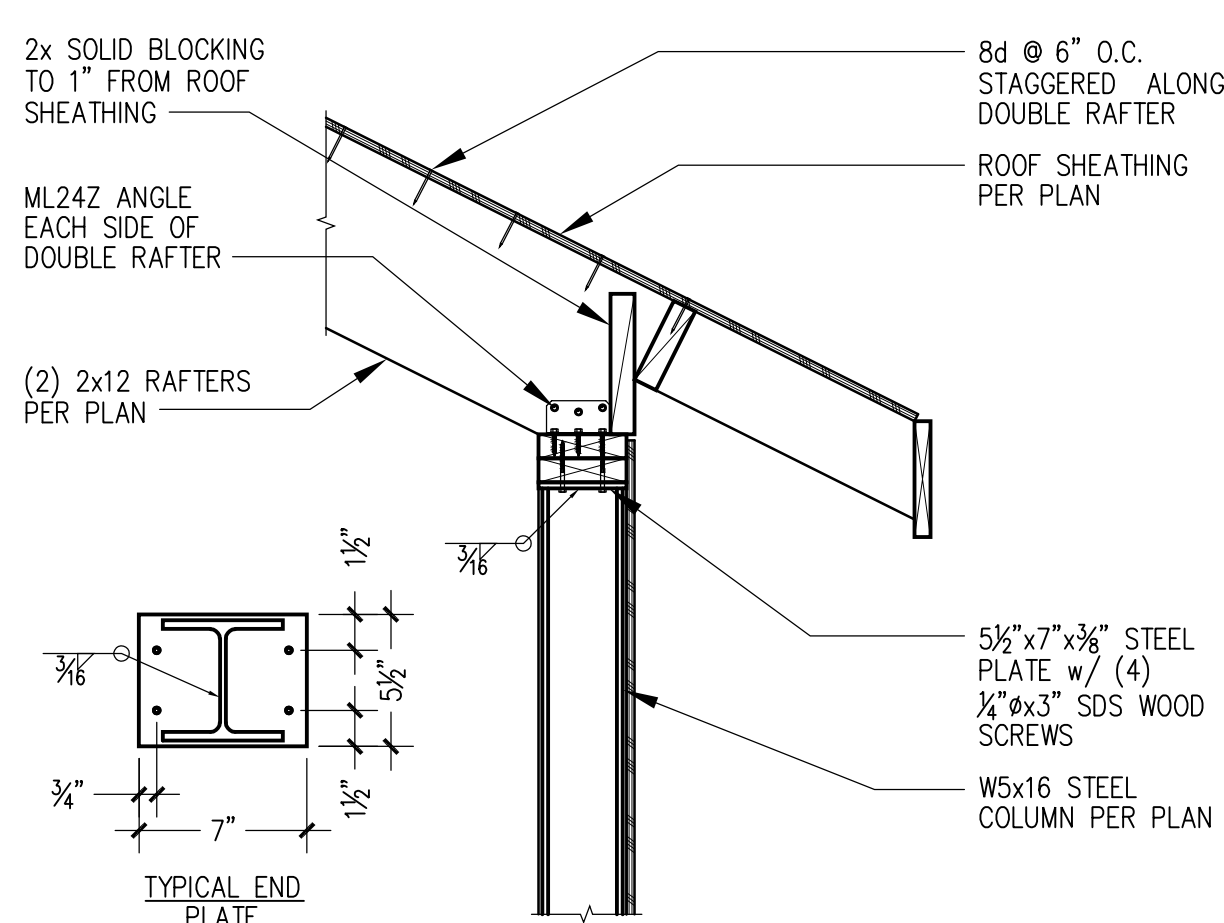
12 SHEAR TRANSFER @ GABLE



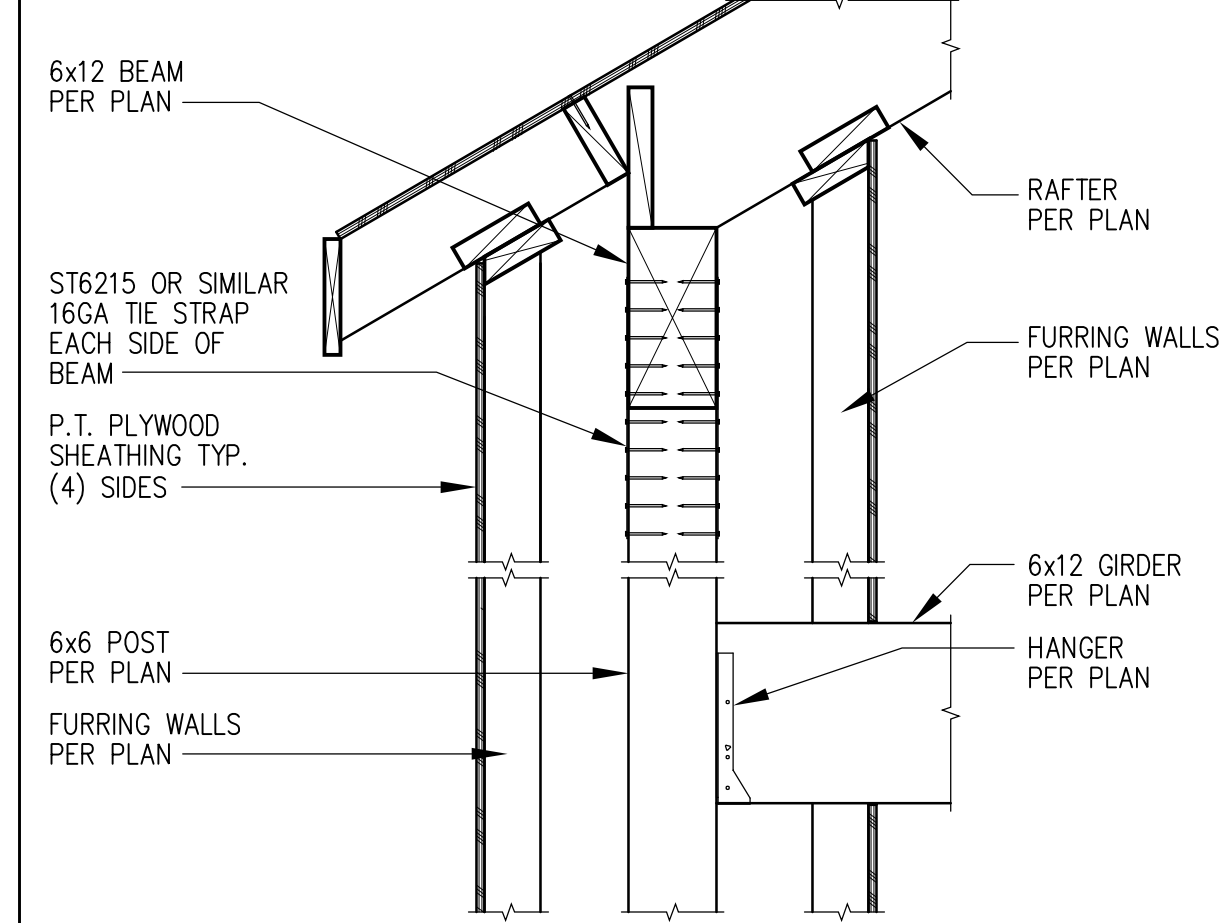
13 ROOF FRAMING @ RIDGE



14 ROOF NAILING @ DOUBLE RAFTER



15 W5x16 STEEL COLUMN TO TOP PLATE (TYPICAL RAFTER)



16 PORCH POST TO BEAM CONNECTION (@ STONE FACADE)

MARK	EDGE	FIELD	SILL PLATE ANCHORS	BOTTOM PLATE NAILING	TOP PLATE CONNECTION			BASE SHEAR (PLF)	
					JOIST (R)	RAFTER OR TRUSS	W/O H1	WIND	SEISMIC
P1-6	8d @ 6"	8d @ 12"	3/8" @ 48"	(1) 16d @ 4"	A35 @ 29"	RBC @ 18"	RBC @ 18"	339	241
P1-4	8d @ 4"	8d @ 12"	3/8" @ 33"	(1) 16d @ 3"	A35 @ 20"	RBC @ 31"	RBC @ 12"	495	353
P1-3 (R)	8d @ 3"	8d @ 12"	3/8" @ 25"	(1) 16d @ 3"	A35 @ 15"	RBC @ 18"	RBC @ 10"	637	455
P1-2 (R)	8d @ 2"	8d @ 12"	3/8" @ 19"	(2) 16d @ 4"	A35 @ 12"	RBC @ 11"	RBC @ 7"	832	595
P2-4 (R, 7)	8d @ 4"	8d @ 12"	3/8" @ 16"	(2) 16d @ 3 1/2"	A35 @ 10"	RBC @ 9"	RBC @ 6"	990	706
P2-3 (R, 7)	8d @ 3"	8d @ 12"	3/8" @ 12"	(2) 16d @ 3"	A35 @ 7"	RBC @ 6"	(2) RBC @ 10"	1274	911
P2-2 (R, 7)	8d @ 2"	8d @ 12"	3/8" @ 8"	(3) 16d @ 3"	A35 @ 6"	RBC @ 5"	(2) RBC @ 6"	1662	1190
P1-2-10d (R)	10d @ 2"	10d @ 12"	3/8" @ 16"	(2) 16d @ 3 1/2"	A35 @ 10"	RBC @ 9"	RBC @ 6"	1002	716

NOTES:
 1. ALL EXTERIOR WALLS TO BE "P1-6" SHEARWALL UNLESS NOTED OTHERWISE.
 2. NAILS TO HAVE A MINIMUM DIAMETER OF 0.131" FOR 8d, 0.148" FOR 10d and 16d.
 3. ALL PANEL EDGES TO BE BACKED WITH 2" NOMINAL OR WIDER FRAMING.
 4. "P1" INDICATES PLYWOOD ON ONE SIDE OF SHEARWALL ONLY, "P2" INDICATES PLYWOOD ON BOTH SIDES.
 5. ANCHOR BOLTS SHALL HAVE A 3"x3"x24" STEEL PLATE WASHER THAT EXTENDS TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE. WHERE 2x6 SHEARWALLS ARE SHEATHED ON BOTH SIDES, LARGER PLATE WASHERS WILL BE REQUIRED IN ORDER TO MEET THE 1/2" EDGE DISTANCE REQUIREMENT.
 6. FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3" NOMINAL MEMBER OR A BUILT-UP MEMBER STITCH NAILED TOGETHER PER THE BOTTOM PLATE NAILING PATTERN IN THE SHEARWALL SCHEDULE.
 7. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER. NAILS ON EACH SIDE SHALL BE STAGGERED.
 8. AT CONTRACTORS DISCRETION LTP FRAMING ANCHORS MAY BE USED IN LIEU OF THE A35.

17 PLYWOOD/OSB SHEARWALL SCHEDULE (HEM FIR FRAMING) (1, 2, 3, 4, 5)

Stoney Point Engineering
 Dwayne Barnes P.E.
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S4.3
 FRAMING DETAILS