

STRUCTURAL GENERAL NOTES

A. GENERAL

- The contractor shall verify all dimensions prior to starting construction. The architect shall be notified of any discrepancies or inconsistencies.
- Dimensions shall take precedence over scale shown on drawings.
- Notes and details on drawings shall take precedence over general notes and typical notes.
- All work shall conform to the minimum standards of the following code: The 2012 edition of the International Building Code, and any other regulating agencies which have authority over any portion of the work, and those codes and standards listed in these notes and specifications.
- See architectural drawings for the following:
 - Size and location of all door and window openings, except as noted.
 - Size and location of all interior and exterior nonbearing partitions.
 - Size and location of all concrete curbs, floor drains, slopes, depressed areas, changes in level, chamfers, grooves, inserts, etc.
 - Size and location of floor and roof openings except as shown
 - Floor and roof finishes
 - Stair framing and details (except as shown)
- See mechanical, plumbing, and electrical drawings for the following:
 - Pipe runs, sleeves, hangers, trenches, wall and slab openings, etc. Except as shown or noted.
 - Electrical conduit runs, boxes, outlets in walls and slabs.
 - Concrete inserts for electrical, mechanical or plumbing fixtures.
 - Size and location of machine or equipment bases, anchor bolts for mounts.
- The contract structural drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measure shall include, but not be limited to, bracing, shoring for loads due to construction equipment, etc. Observation visits to the site by the structural engineer shall not include inspection of the above structural members.
- Openings, pockets, etc. larger than 6 inches shall not be placed in slabs, decks, beams, joists, columns, walls, etc. unless specifically detailed on the structural drawings. Notify the structural engineer when drawings by others show openings, pockets, etc. not shown on the structural drawings, but which are located on structural members.
- ASTM specifications noted shall be the latest revision.
- Contractor shall investigate site during clearing and earthwork operations for filled excavations or buried structures such as cesspools, cisterns, foundations, etc. If any such structures are found, the structural engineer shall be notified immediately.
- Construction materials shall be spread out if placed on floors or roof. Load shall not exceed the design live load per square foot. Provide adequate shoring and/or bracing where structure has not attained design strength.
- Design Loads:
 - Roof:
 - DEAD: 15 psf
 - LIVE: 20 psf
 - SNOW: 50 psf (Pg = 71 psf) $I_s = 1.00$
 - Mezzanine:
 - DEAD: 12 psf
 - LIVE: 50 psf
 - Wind:
 - Velocity: V-ult = 115 mph
 - Exposure "C"
 - Internal Coefficient: 0.18
 - Components and Cladding: 25.0 psf (ASD) in any direction
 - Seismic:
 - $S_s = 0.943$ $S_1 = 0.322$ $I_e = 1.00$
 - $S_{DS} = 0.706$ $S_{D1} = 0.377$ $C_s = 0.109$
 - Seismic Design Category "D"
 - Risk Category: "II"
 - Site Class: "D"
 - Base Shear: V = 11.1 kips
 - System: Wood Structural Shear Walls (R=6.5)
 - Method: Equivalent Static Force
 - Flood Loads: Not Applicable
 - Special Loads: Not Applicable

B. SHOP DRAWINGS

- Shop drawings shall be submitted for all structural items in addition to items required by architectural specifications.
- The contractor shall review all shop drawings prior to submittal. Items not in accordance with contract drawings shall be flagged for review.
- Verify all dimensions with architect.
- Any changes, substitutions, or deviations from original contract drawings shall be re-lined or flagged by submitting parties, shall be considered approved after engineers review, unless noted otherwise.
- The engineer has the right to approve or disapprove any changes to the original drawings at anytime before or after shop drawings review.
- The shop drawings do not replace the original contract drawings. Items omitted or shown incorrectly and are not flagged by the structural engineer or architect are not to be considered changes to the original contract drawings.
- The adequacy of engineering designs and layout performed by the others rests with the designing or submitting authority.
- Reviewing is intended only as an aid to the contractor in obtaining correct shop drawings. Responsibility for corrections shall rest with the contractor.

C. FOUNDATION

- Footings are designed based on presumptive bearing capacity of 1500 psf, per IBC Table 1806.2. Vector Structural Engineers strongly recommends independent soils testing be performed by a licensed Geotechnical Engineer to verify soil bearing capacity, slope stability, and any other related soil parameters, as required.
- Contractor shall provide for proper de-watering of excavations from surface water, ground water, seepage, etc.
- Footings shall be placed according to depths shown on the drawings.
- Footings back fill and utility trench back fill within building area shall be mechanically compacted in layers. Flooding will not be permitted.
- All abandoned footings, utilities, etc. that interfere with new construction shall be removed.
- The soil under perimeter beams and slabs shall be above optimum moisture prior to concrete placement.
- Sill plate anchorage shall be as shown on the Foundation Plan and Sill Anchorage Schedule, Detail 1/S002.
- Holdown anchors shall meet the requirements of Detail 2/S002.

D. CONCRETE

- All phases of work pertaining to the concrete construction shall conform to the "Building Code Requirements for Reinforced Concrete" (ACI 318-latest approved edition) with modifications as noted in the drawings and specifications.
- Reinforced concrete design is by the "ultimate strength design method", ACI 318-(latest edition)
- Schedule of structural concrete 28-day strengths and types:

Location in structure	Strength f_c , psi	Type
Slabs on Grade	3500	Hard rock
Footings & Walls	3500	Hard rock
Exterior Flatwork	4000	Hard rock

Design based on 2500 psi 28-day strength. Therefore, special inspection and testing of concrete strength is not required.
- Concrete mix design shall be submitted to the engineer for approval with the following requirements:
 - Compressive strength at age 28 days as specified above.
 - Large aggregate-hardrock, 3/4" maximum size conforming to ASTM C-33
 - Type I or II Portland Cement per ASTM C-150
 - Maximum slump 5-inches, max water cement ratio: 0.50
 - No admixtures, except for entrained air, and as approved by the engineer.
- Concrete mixing operations, etc. shall conform to ASTM C-94
- Placement of concrete shall conform to ACI standard 514 and project specifications.
- Clear coverage of concrete over outer reinforcing bars shall be as follows:
 - Concrete poured directly against earth: 3 inches clear
 - Structural slabs: 3/4 inches clear (top and bottom)
 - Formed concrete with earth back fill: 2 inches clear
- All reinforcing bars, anchor bolts and other concrete inserts shall be well secured in position prior to placing concrete.
- Provide sleeves for plumbing and electrical openings in concrete before placing. Do not cut any reinforcing that may conflict. Coring in concrete is not permitted except as shown. Notify the structural engineer in advance of conditions not shown on the drawings.
- Conduit or pipe size (O.D.) shall not exceed 30% of slab thickness and shall be placed between the top and bottom reinforcing, unless specifically detailed otherwise. Concentrations of conduits or pipes shall be avoided except where detailed openings are provided.
- Modulus of elasticity of concrete, when tested in accordance with ASTM C-460, shall be at least the value given by the equations in section 8.5.1 of ACI 318 for the specified 28-day strength.
- Shrinkage of concrete, when tested in accordance with ASTM C-157, shall not exceed 0.00040 inches/inch.

E. REINFORCING STEEL

- Reinforcing bars shall conform to the requirements of ASTM A-615 grade 60.
- All reinforcing bar bends shall be made cold.
- Minimum lap of welded wire fabric shall be 6 inches or one full mesh and one half, which ever is greater.
- All bars shall be marked so their identification can be made when the final in-place inspection is made.
- Rebar splices are to be Class "B". Lap length to be minimum 40 bar diameters, U.N.O. on drawings.
- Reinforcing splices shall be made only where indicated on the drawings.
- Dowels between footings and walls or columns shall be the same grade, size and spacing or number as the vertical reinforcing, respectively, U.N.O. on the drawings.

F. WOOD

- Framing Lumber
 - Douglas Fir-Larch No. 2 grade for 2x and 4x framing (2x4 and 2x6 studs may be Douglas Fir-Larch stud grade), U.N.O.
 - Douglas Fir-Larch No. 1 grade for 6x framing
- Bolt holes shall be 1/16" maximum larger than the bolt size. Re-tighten all nuts prior to closing in.
- Square plate washers, 2x2x3/16, shall be used under all sill plate anchor bolts, except at shear walls. See shear wall schedule on sheet S002 for anchor bolt spacing and washer requirements at shear walls.
- All sills or plates resting on concrete or masonry shall be pressure or preservative treated Douglas Fir. Bolts shall be placed 9 inches maximum from the end of a plate, or from a notch greater than 1/2 the width of the plate, and spaced at intervals noted.
- Do not notch joists, rafters or beams except where shown in details. Obtain engineer's approval for any holes or notches not detailed. Holes through sills, plates, studs and double plates in interior, bearing and shear walls shall conform with construction standards.
- Connection hardware shall be by USP or Simpson strong-tie, or ICC approved equal.
- Fastening schedule per 2012 International Building Code, Table 2304.9.1. U.N.O.
- All nails, bolts, holdowns, straps or other steel fasteners in contact with treated timber shall be hot-dipped galvanized, stainless steel or otherwise treated or isolated to prevent chemical attack. Contractor shall verify treatment method and confirm appropriate corrosion resistance be provided in accordance with hardware supplier recommendations.

G. PREFABRICATED WOOD TRUSSES

- Prefabricated wood roof trusses shall be as designed by the truss manufacturer. Bridging size and spacing by truss manufacturer unless noted otherwise. Contractor shall submit shop drawings, erection drawings and design calculations sealed by an engineer, registered in the appropriate state for this project, for review prior to manufacture. Calculations and shop drawings shall show any special details required at bearing points. All connectors shall be USP, Simpson or ICC-approved equivalent.
- Truss manufacturer to design trusses for lateral load (LAT. = xxxx) in pounds, as shown on plans.
- Additional trusses shall be supplied as required to support mechanical equipment.
- All truss-to-truss connectors per truss manufacturer. Truss-to-beam connectors to be coordinated between truss manufacturer and Engineer-of-Record.

H. GLUE LAMINATED BEAMS (GLB)

- Glue laminated beams shall be 24F-V4 (cantilevers and continuous beams shall be 24F-V8) and have the following minimum properties: $F_b=2400$ psi, $F_v=190$ psi, F_c (perpendicular)=650 psi, $E=1,800,000$ psi. All beams shall be fabricated using waterproof glue. Fabrication and handling per latest AITC and WCCA standards. Beams to bear grade stamp and AITC stamp and certificate. Moisture content shall be limited to 12% or less.

I. LAMINATED VENEER LUMBER (LVL)

- Laminated veneer lumber to have: $F_b=2600$ psi, $F_v=285$ psi, $E=1,900,000$ psi
- Double & triple LVL beams shall be nailed together as follows:
 - Provide (2) rows of 16d sinkers at 12" O.C. for beams < 11 7/8" deep
 - Provide (3) rows of 16d sinkers at 12" O.C. for beams > 11 7/8" deep
- Beams w/ (4) or more plies shall be bolted together as indicated in the manufacturer's written specifications.
- See manufacturer's recommendations for allowable hole and notch sizes and locations.

J. SHEATHING

- All wood structural panels shall be plywood or APA rated oriented strand board. Panels shall bear the stamp of an approved agency. Panels shall be of the span/index rating shown on the plans. Fastening shall be indicated on the plans.
- All plywood shall be C-D interior sheathing with exterior glue. Plywood shall be 4-ply, minimum.
- Roof sheathing:
 - 19/32" wood structural panel: plywood or oriented strand board (O.S.B.) panel index = 40/20, unblocked, nail with 10d common nails at 6" O.C. at all boundaries and supported edges, 12" O.C. field. Staples may be used in lieu of common nails, use 16 gage at 4" O.C. at all boundaries and supported edges, 8" O.C. field. Minimum penetration 1" in supporting member (NER 272).
- Floor sheathing:
 - 3/4" wood structural panel: plywood or oriented strand board (O.S.B.) T & G, panel index = 48/24, unblocked, nail with 10d common nails at 6" O.C. at all boundaries and supported edges, 12" O.C. field.
- Shear wall sheathing:
 - Sheathing for shear walls shall be as indicated on the shear wall plans and schedules. Sheathing at shear walls may be installed with panels horizontal or vertical.

K. STRUCTURAL STEEL

- Hot-rolled structural steel shapes & plates shall be per ASTM A36, except:
 - All W-Flange shapes shall be per ASTM A992.
- Structural steel pipe shall be per ASTM A53 grade B, Tube steel per ASTM A500 Grade B.
- Nuts & bolts in structural steel connections shall be per ASTM 325N, with hardened washers. Design is based upon bearing type connections with thread not excluded, therefore, no special inspection required.
- Anchor bolts shall be per ASTM A307, U.N.O.
- Welds shall be by E70XX, low hydrogen electrodes, all welding shall be performed in a shop approved by the building official.
- Grout material for base plates shall be non-metallic, non-shrink, pre-packaged grout conforming to ASTM C 1107.

L. STATEMENT OF SPECIAL INSPECTIONS

- Special inspections shall be required for the following:
 - All epoxy anchors (continuous special inspection).
 - All Titen-HD anchors (periodic)
 - The owners shall employ special inspectors who shall provide additional inspections during construction in accordance with IBC Chapter 17.
 - All special inspections shall be performed by an independent certified inspector from an established testing agency, licensed and approved by the building department.
 - The testing agency shall send copies of all structural testing and inspection reports directly to Vector Structural Engineers and all interested parties.
- Additional Special Inspections for wind resistance, per IBC 1705.10, are not required.
- Additional Special Inspections for seismic resistance, per IBC 1705.11, shall be required for the following:
 - Wood structural diaphragms, wood structural shearwalls, shear transfer and drag connections, anchor bolts and holdowns (where diaphragm and/or shearwall fastener spacing is not more than 4" o.c.). These inspections may be performed by the building department, at their discretion, rather than by a special inspection agency.
- Structural testing and qualification for seismic resistance, per IBC 1705.12, is not required.
- Structural observations, per IBC 1704.5, are not required. However, the engineer of record reserves the right to make field observations during construction approximately once per week.

SHEET INDEX

SHT #	SHEET NAME	ORIGINAL	MM-DD-YY	MM-DD-YY	MM-DD-YY	MM-DD-YY	MM-DD-YY	MM-DD-YY	MM-DD-YY
		●	▲	▲	▲	▲	▲	▲	▲
S001	STRUCTURAL GENERAL NOTES	●							
S002	STANDARD DETAILS & SCHEDULES	●							
S101	FOUNDATION PLAN	●							
S201	MEZZANINE FRAMING PLAN	●							
S202	ROOF FRAMING PLAN	●							
S301	SHEARWALL PLAN	●							
S501	STRUCTURAL DETAILS	●							

ABBREVIATIONS

AB.	ANCHOR BOLT	LVL	LAMINATED VENEER LUMBER
ARCH'L	ARCHITECTURAL DRAWINGS	MFR	MANUFACTURED
BLDG	BUILDING	N.T.S.	NOT TO SCALE
BLK	BLOCK	o/	OVER
BLK'G	BLOCKING	O.C.	ON CENTER
BM	BEAM	OPTL	OPTIONAL
CANTL	CANTILEVERED	O.S.B.	ORIENTED STRAND BOARD
CL	CENTER LINE	P&L	PARALLEL STRAND LUMBER
CLG	CEILING	E	PLATE
C'WL	CONCRETE MASONRY UNIT	REQ'D	REQUIRED
COL	COLUMN	SHT'G	SHEATHING
CONT.	CONTINUOUS	SHT.	SHEET
DBL	DOUBLE	SIM.	SIMILAR
DTL	DETAIL	STL	STEEL
EL	ELEVATION	SW	STRONG-WALL
E.O.R	ENGINEER OF RECORD	T.O.F.	TOP OF FOOTING
FDN	FOUNDATION	T.O.W.	TOP OF WALL
FTG	FOOTING	T.B	TOP AND BOTTOM
GL	GLUE LAMINATED (BEAM)	TYP.	TYPICAL
HDR	HEADER	UNO.	UNLESS NOTED OTHERWISE
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HD.	HOLD DOWN	w/	WITH
L&L	LAMINATED STRAND LUMBER		

RELEASE DATE NOVEMBER 13, 2015
BUILDING DEPARTMENT SUBMITTAL

DESIGNED BY: DHF	CHECKED BY:
DATE: 11-13-15	
REV. #	DESCRIPTION

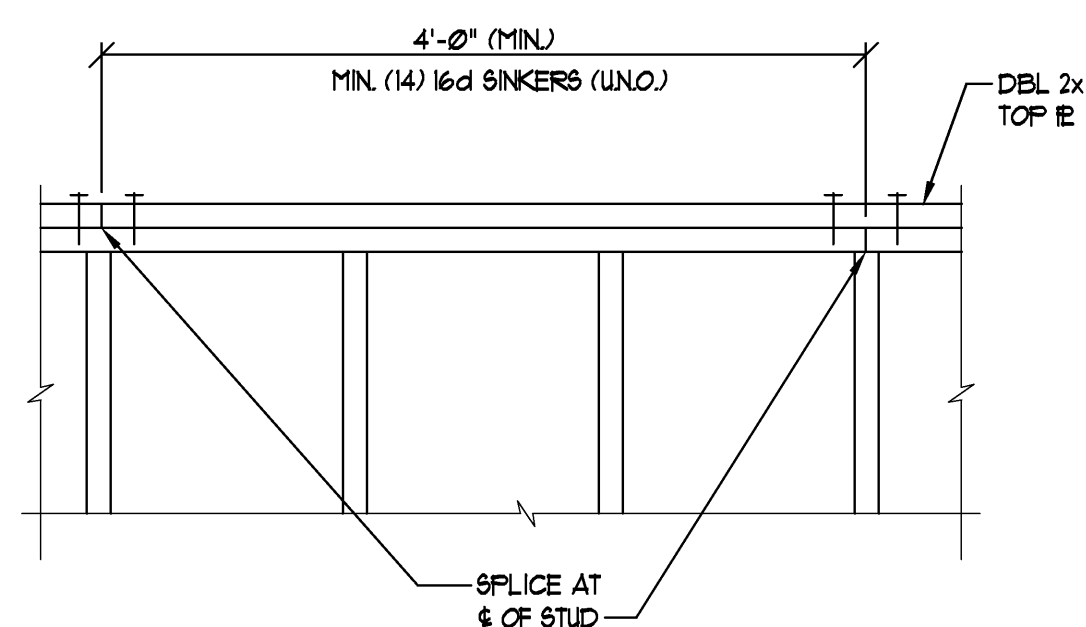
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STRUCTURAL GENERAL NOTES



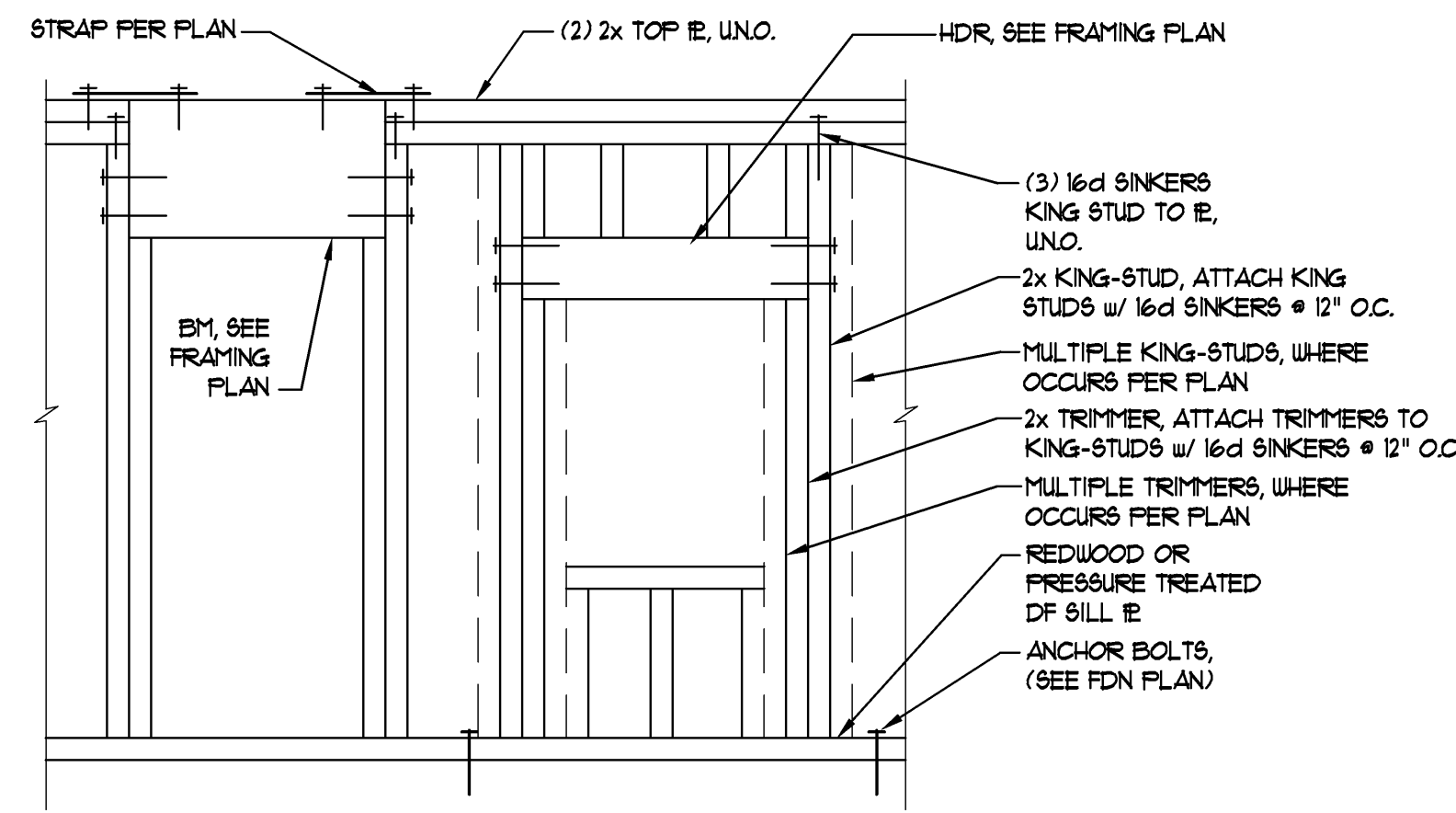
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S001



NOTE: WHERE SPLICE LENGTH IS LESS THAN 4'-0" INSTALL ST6224 STRAP AT RE SPLICES. STRAPS ARE NOT REQUIRED WHERE ONE OF THE PLATES IS CONTINUOUS FOR AT LEAST 4'-0" IN EACH DIRECTION.

TOP RE SPLICE



TYPICAL WALL FRAMING

N.T.S.

5

FOOTING SCHEDULE		
MARK	SIZE	REBAR
FC10	1'-0" WIDE x 12" THICK CONT.	(2) * 4 CONT.
FC13	1'-4" WIDE x 12" THICK CONT.	(2) * 4 CONT.
FC15	1'-6" WIDE x 10" THICK CONT.	(2) * 4 CONT.
FC17	1'-8" WIDE x 10" THICK CONT.	(2) * 4 CONT.
FC20	2'-0" WIDE x 10" THICK CONT.	(3) * 4 CONT.
FB5	1'-6" SQ. x 12" DEEP	(2) * 4 EACH WAY
F20	2'-0" SQ. x 12" DEEP	(3) * 4 EACH WAY
F25	2'-6" SQ. x 12" DEEP	(4) * 4 EACH WAY
F30	3'-0" SQ. x 12" DEEP	(4) * 4 EACH WAY
F35	3'-6" SQ. x 12" DEEP	(5) * 4 EACH WAY
F40	4'-0" SQ. x 12" DEEP	(6) * 4 EACH WAY
F45	4'-6" SQ. x 12" DEEP	(7) * 4 EACH WAY
F50	5'-0" SQ. x 12" DEEP	(8) * 4 EACH WAY
F55	5'-6" SQ. x 12" DEEP	(9) * 4 EACH WAY
F60	6'-0" SQ. x 15" DEEP	(10) * 4 EACH WAY

NOTE: LAP LENGTH FOR * 4 BAR TO BE 1'-0" MIN.

STANDARD FOOTING SCHEDULE

N.T.S.

3

SILL ANCHORAGE SCHEDULE

MARK	NOMINAL SILL RE THICKNESS	1/2" A.B. SPACING	3/4" A.B. SPACING	CAPACITY
SA1	2x	48" O.C.	48" O.C.	260 plf
SA2	2x	32" O.C.	48" O.C.	350 plf
SA3	3x	24" O.C.	32" O.C.	600 plf
SA4	2x	12" O.C.	16" O.C.	1040 plf

SHEAR WALL LENGTH TOLERANCES

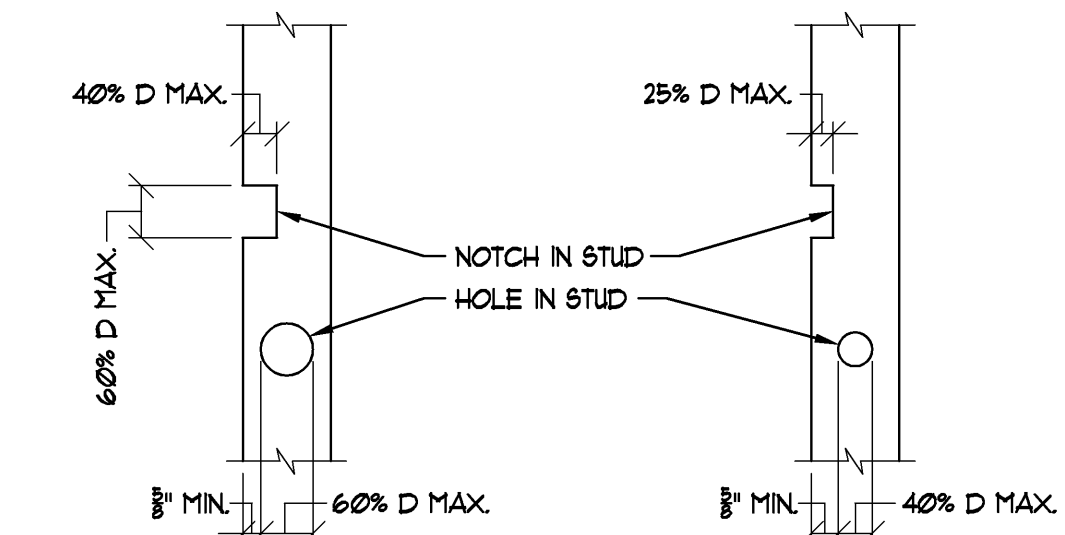
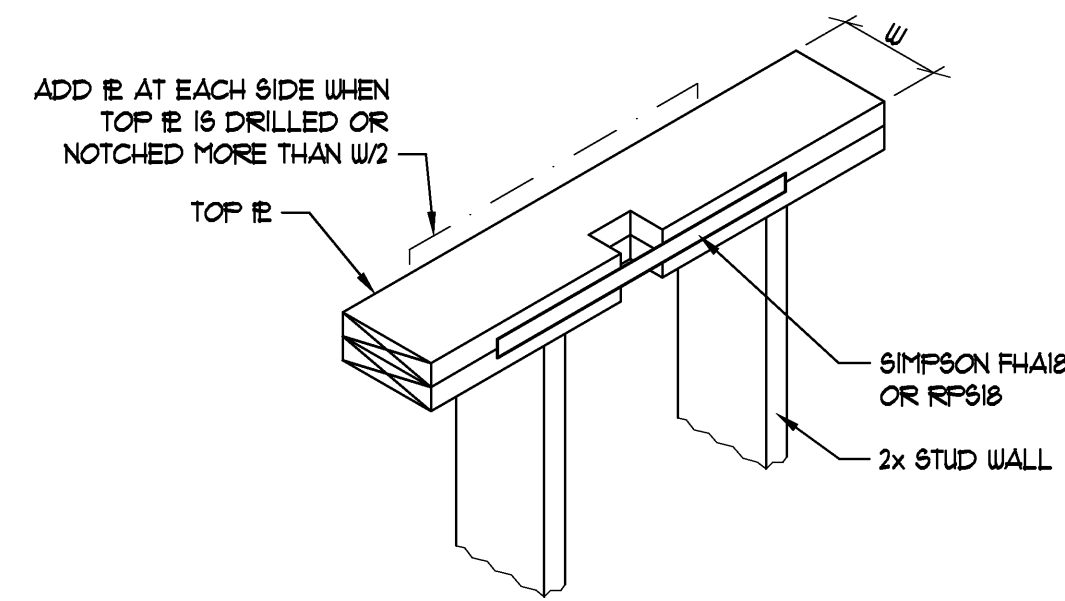
SPECIFIED SHEAR WALL LENGTH	ACCEPTABLE SHEAR WALL TOLERANCE
UP TO 3'-0"	± 2"
OVER 3'-0" AND UP TO 5'-0"	± 3"
OVER 5'-0" AND UP TO 1'-0"	± 4"
OVER 1'-0" AND UP TO 10'-0"	± 6"
OVER 10'-0"	± 8"

- ALL SHEAR WALLS SHALL BE FRAMED TO THE MINIMUM LENGTHS SHOWN ON THE PLANS WITH THE TOLERANCES INDICATED ON THE TABLE BELOW.
- ALL SHEAR WALLS SHALL TERMINATE ON AT LEAST (1) FULL HEIGHT STUD. ADDITIONAL STUDS OR SOLID POSTS SHALL BE INSTALLED AS REQUIRED FOR HOLDINGS WHERE THEY OCCUR.
- 8d COMMON NAIL SHANK DIAMETER = 13/16" 16d SINKER SHANK DIAMETER = 1/4"
- FOR "F3" AND "F4" SHEAR WALLS, ALL FRAMING RECEIVING EDGE NAILING FROM ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- FOR "F2", "F3" AND "F4" DOUBLE-SIDED SHEAR WALLS, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL BE 3-INCH NOMINAL OR WIDER AT ADJOINING PANEL EDGES AND NAILS ON EACH SIDE SHALL BE STAGGERED.
- WHERE 3x SILL PLATES ARE APPLIED, EACH STUD SHALL BE FASTENED w/ (2) 20d BOX END NAILS.
- ALL EMBED, ANCHOR BOLTS SHALL HAVE 1" MINIMUM EMBEDMENT. RETROFIT ANCHOR BOLTS MAY BE SIMPSON TITEN-UD (1/2" w/ 4" MIN. EMBED, OR 3/4" w/ 5" MIN. EMBED) AT 54" EMBEDMENT INDICATED.
- ALL SHEAR WALL ANCHOR BOLTS SHALL INCLUDE A STEEL 3"x3"x0.23" PLATE WASHER BETWEEN THE SILL & NUT. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/8" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1/2" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.

STANDARD SHEARWALL SCHEDULE

N.T.S.

1



NON-BEARING INTERIOR PARTITION BEARING & EXTERIOR PARTITION

NOTE: HOLES & NOTCHES SHALL NOT OCCUR IN THE SAME STUD.

NOTCH / HOLE SCHEDULE

NOTCH / HOLE % OF STUD	2x4 STUD	2x6 STUD
25%	1/8"	1 3/8"
40%	1 3/8"	2 1/8"
60%	2"	3 1/4"

TYPICAL DRILLING & NOTCHING

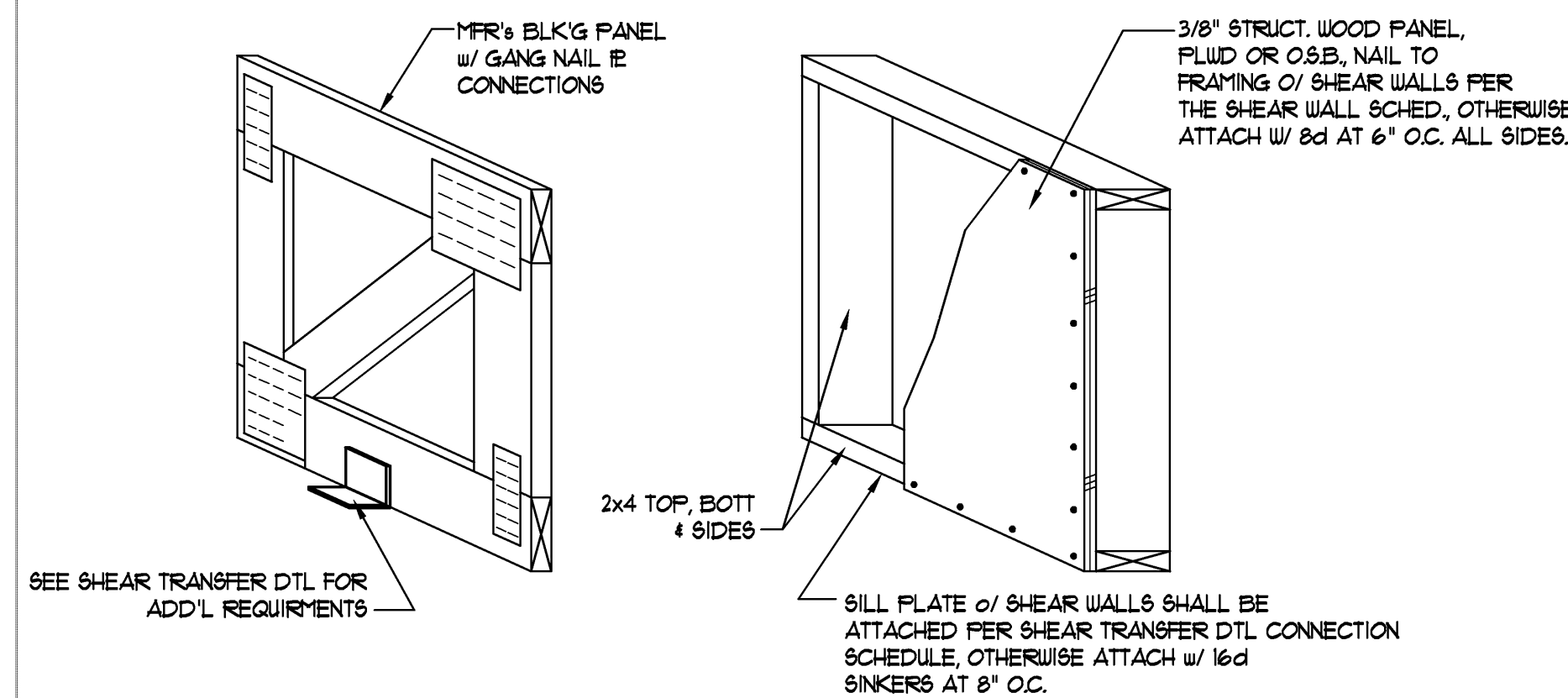
N.T.S.

8

NOT USED

N.T.S.

6



TYPICAL BLOCKING PANEL

N.T.S.

7

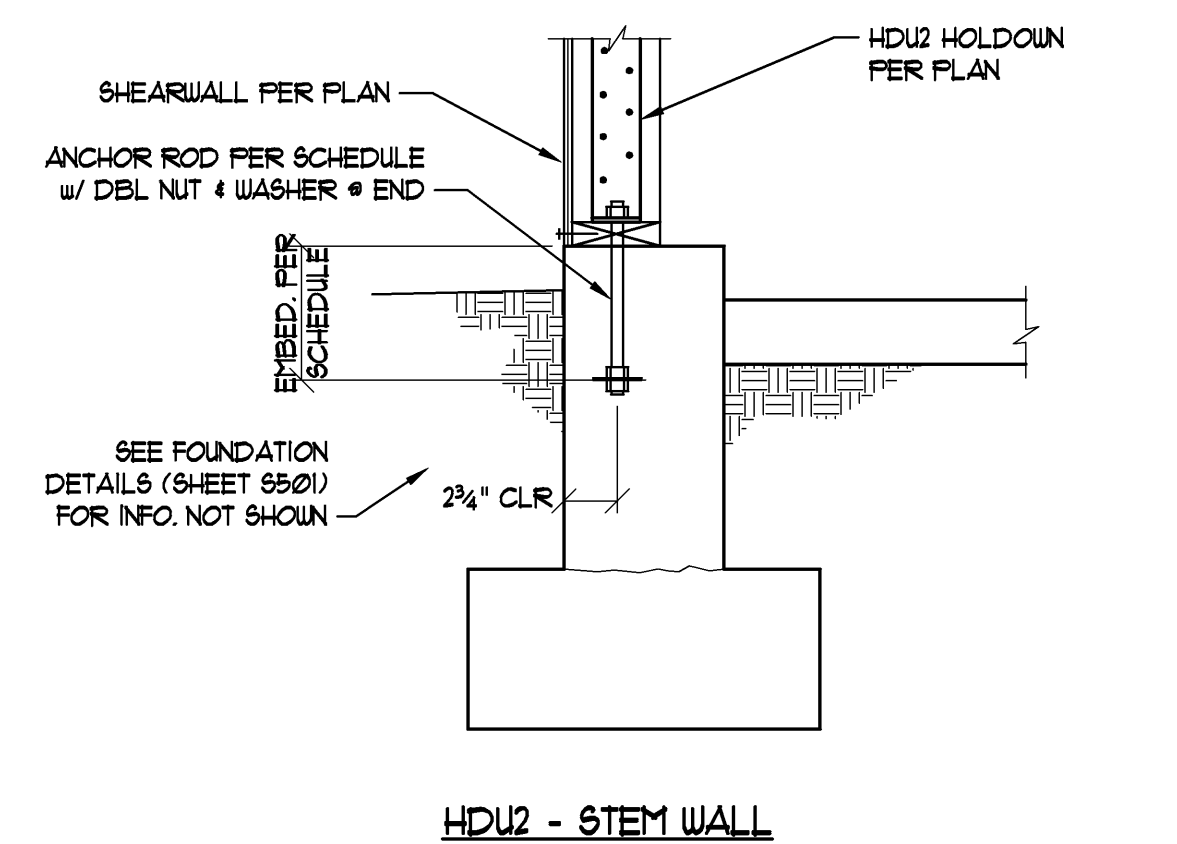
STUD HEIGHT TABLE	
STUD WALL TYPE	MAX. HEIGHT
2x4 STUD @ 16" O.C.	9'-0"
2x4 STUD @ 12" O.C.	9'-0"
(2) 2x4 STUD @ 16" O.C.	11'-6"
2x4 DFL * 2 @ 16" O.C.	9'-0"
2x4 DFL * 2 @ 12" O.C.	10'-6"
(2) 2x4 DFL * 2 @ 16" O.C.	12'-0"
2x6 STUD @ 16" O.C.	14'-0"
2x6 STUD @ 12" O.C.	16'-0"
(2) 2x6 STUD @ 16" O.C.	20'-0"
2x6 DFL * 2 @ 16" O.C.	15'-6"
2x6 DFL * 2 @ 12" O.C.	17'-6"
(2) 2x6 DFL * 2 @ 16" O.C.	22'-0"
2x8 DFL * 2 @ 16" O.C.	21'-0"
2x8 DFL * 2 @ 12" O.C.	24'-6"
(2) 2x8 DFL * 2 @ 16" O.C.	30'-0"
1-3/4 x 1-1/4 LVL STUDS @ 16" O.C.	26'-0"

NOTES:
1. THIS TABLE ASSUMES IBC WIND LOADS, Vult 15 mph, EXP. C
2. THIS TABLE ASSUMES AXIAL DL = 5000 lb/ft, LL = 5000 lb/ft.

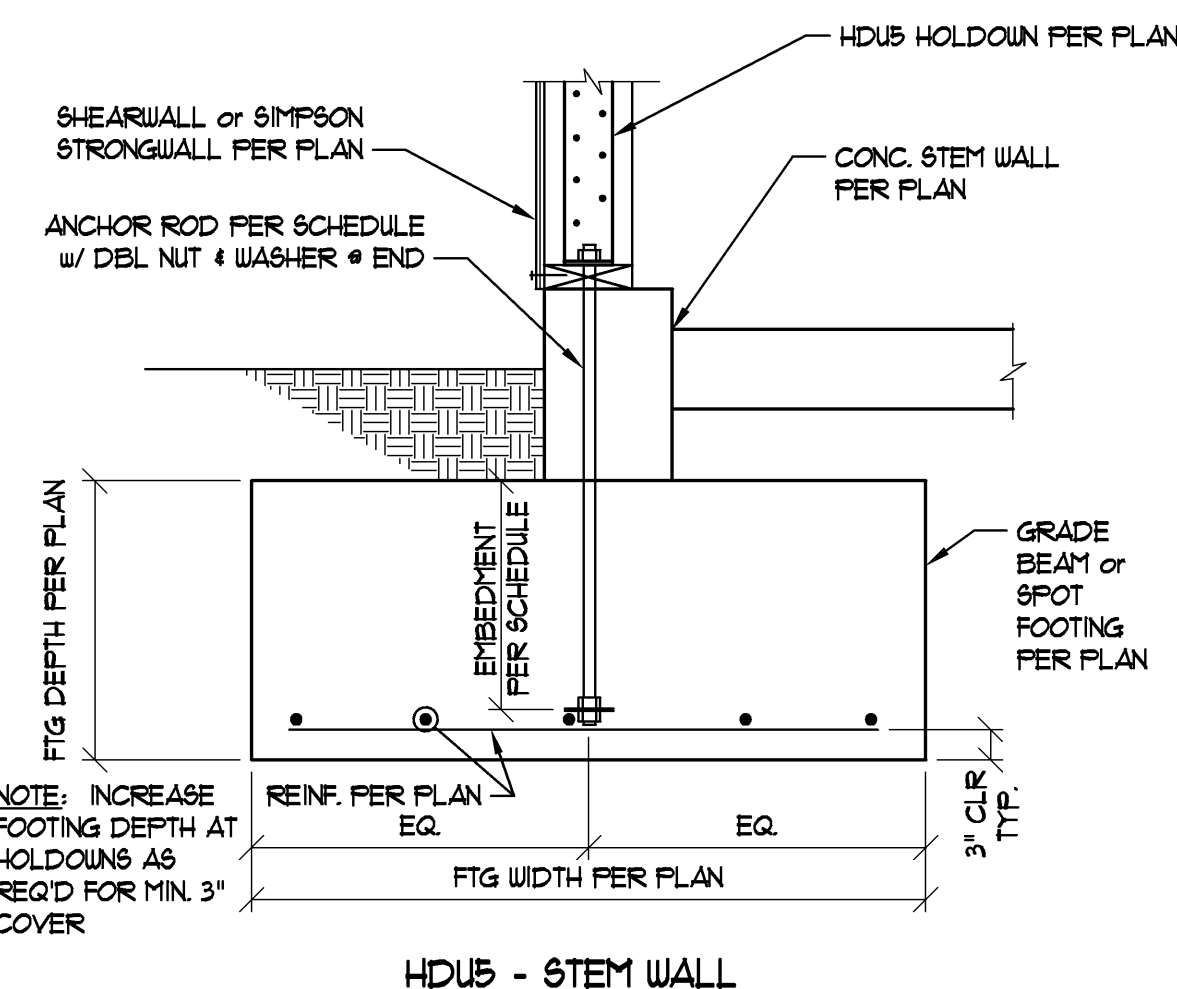
STANDARD STUD TABLE

N.T.S.

4



HDU2 - STEM WALL

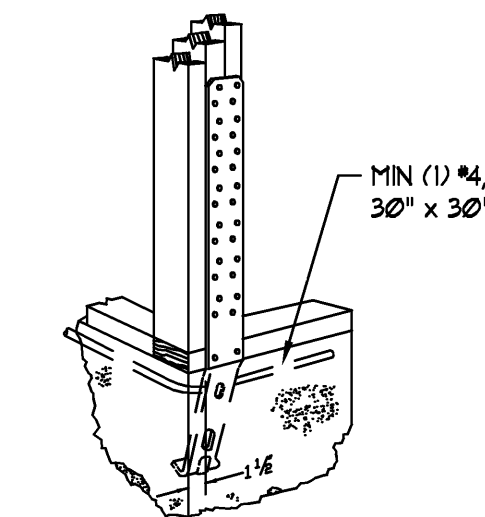


HDU5 - STEM WALL

NOTE: INCREASE FOOTING DEPTH AT HOLDOWNS AS REQ'D FOR MIN. 3" COVER

HOLDOWN ANCHORAGE SCHEDULE						
HOLDOWN	CAST-IN-PLACE ANCHOR	RETROFIT ANCHOR (SIMPSON SET-XP EPOXY)	EMBEDMENT (>2.5" EDGE)	EMBEDMENT (>12" EDGE)	POST FASTENERS	WOOD POST REQ'D
STHD10 / STHD10R	HOLDOWN PER MFR'S SPECIFICATIONS	MAY BE USED AS A SUBSTITUTE FOR HDU2	10"	-	(28) 16d SINKERS	(2) 2x POST
HDU2-SDS2.5	SSTB16 or 5/8" DIA. A307 ANCHOR w/ STD. HOOK or NUT & WASHER	5/8" DIA. A307 ALL THREAD ROD IN 3/4" DIA. DRILLED HOLE	10"	6"	(8) SIMPSON SDS2.5 SCREWS	(2) 2x POST
HDU5-SDS2.5	SSTB24 or 5/8" DIA. A307 ANCHOR w/ STD. HOOK or NUT & WASHER	5/8" DIA. A307 ALL THREAD ROD IN 3/4" DIA. DRILLED HOLE	-	12"	(14) SIMPSON SDS2.5 SCREWS	(2) 2x POST

NOTES:
1) INCREASE FOOTING DEPTH AS REQUIRED FOR 3" MIN. COVER BELOW BOLT & COORDINATE EXACT LOCATIONS WITH THE FRAMING CONTRACTOR.
2) HOLDOWNS MAY BE INSTALLED 4" MAX. FROM SHEAR WALL EDGE. BOUNDARY NAILING MUST BE PROVIDED @ STUDS ALIGNED w/ HOLDOWNS.
3) ALL THREADED ROD USED WITH SET-XP EPOXY TO BE GRADE 'C'.
4) PROVIDE 2" SQ. x 3/16" PLATE WASHERS w/ DBL. NUT AT END OF THREADED ROD ANCHORS.
5) HOLDOWNS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



STHD TYPE HOLDOWN

STANDARD HOLDOWN ANCHORAGE

N.T.S.

2

NOT USED

N.T.S.

9

DATE	REV. #	DESCRIPTION
11-13-15		DESIGNED BY: DHF
		DRAWN BY: DHF
		CHECKED BY:

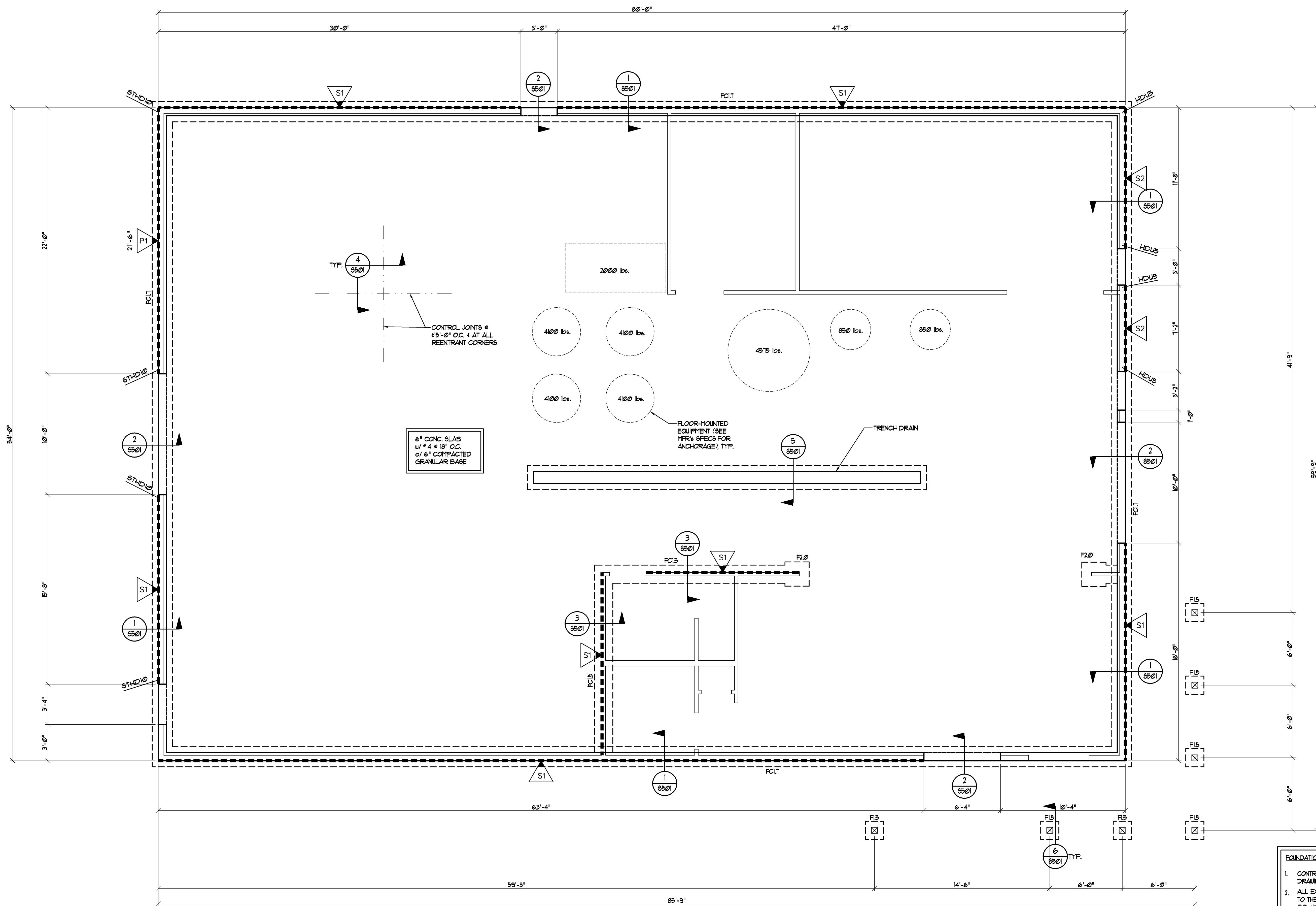
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C.A.D. DESIGN SPECIALISTS
NEW WORLD DISTILLERY, 2600 N. EDEN, UT
STANDARD DETAILS & SCHEDULES



L0087-008-151

S002



FOUNDATION PLAN

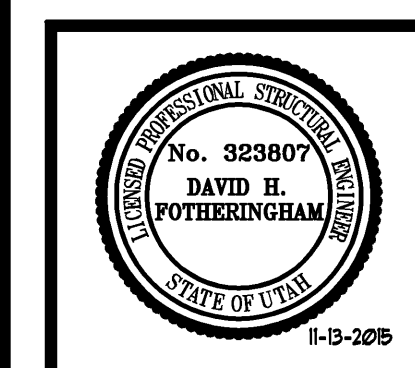
SCALE: 1/4"=1'-0"

DESIGNED BY: DHF	DRAWN BY: DHF	CHECKED BY:
DATE:	DATE:	DATE:
REV. #	DESCRIPTION	

VECTOR
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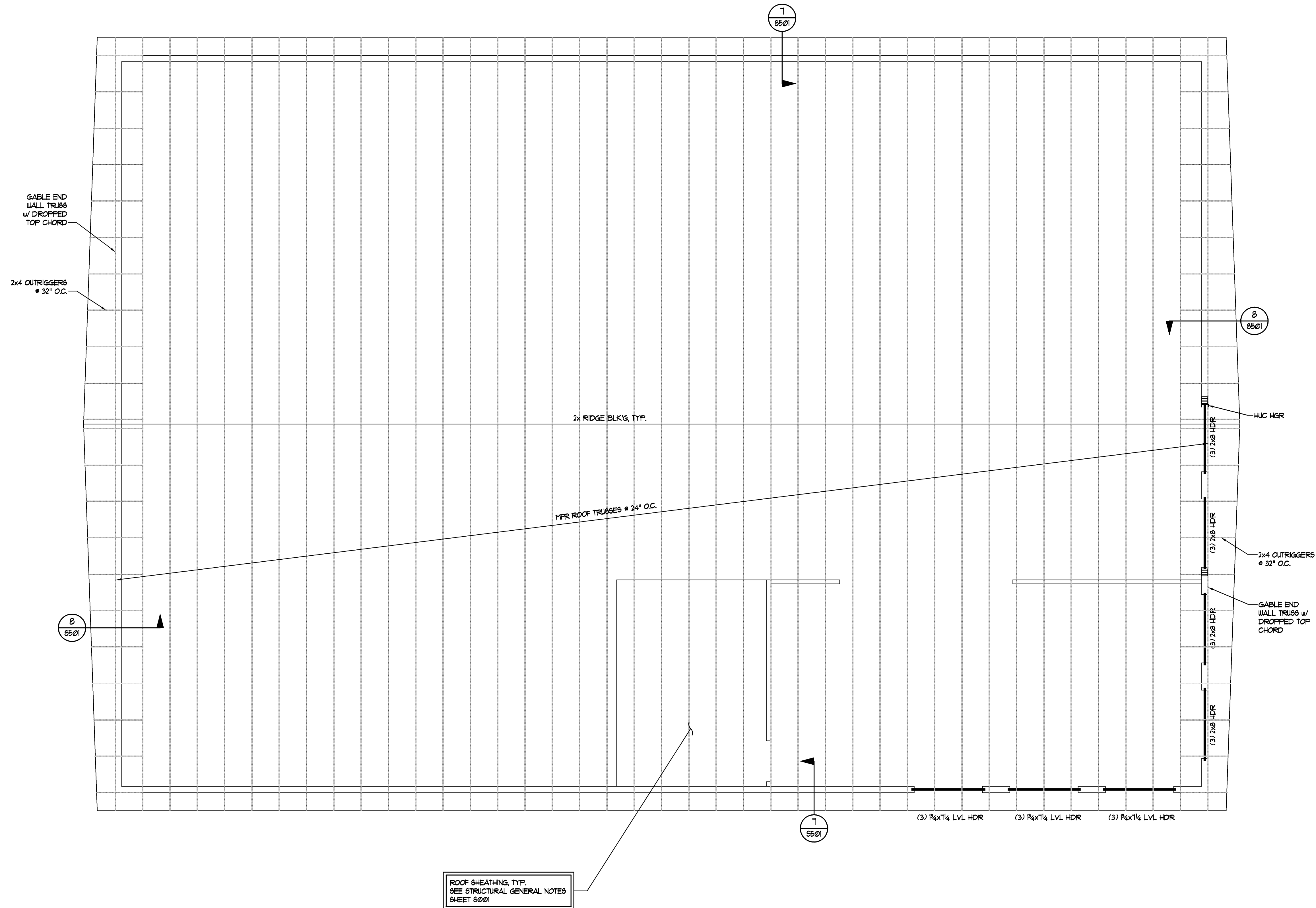
ST. GEORGE, UTAH
(435) 628-5122

C.A.D. DESIGN SPECIALISTS
NEW WORLD DISTILLERY, 2600 N. EDEN, UT
FOUNDATION PLAN



L0087-008-151

S101



- FRAMING NOTES:**
- EXTERIOR BEARING WALLS TO BE 2x6 @ 12" O.C. DF-L #2 GRADE.
EXTERIOR GABLE END WALLS TO BE 2x6 @ 16" O.C. DF-L #2 GRADE.
INTERIOR BEARING / SHEAR WALLS TO BE 2x4 @ 16" O.C. STUD GRADE.
 - FOR 2x4 FRAMED WALLS @ HEADERS (HDR):
 - PROVIDE (1) 2x4 TRIMMER & (1) 2x4 KING STUD AT OPENINGS < 6'-0" UNO.
 - PROVIDE (2) 2x4 TRIMMERS & (2) 2x4 KING STUDS AT OPENINGS ≥ 6'-0" & ≤ 12'-0" UNO.
 - PROVIDE (2) 2x4 TRIMMERS & (3) 2x4 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 18'-0" UNO. (1) KING STUD REQ'D AT BAY WINDOW OPENINGS & AT GARAGE OPENINGS WHERE ADD'L KING STUDS WOULD NOT FIT.
 NOTE: KINGSTUDS NOT REQUIRED AT BEAM'S (BM).
 - FOR 2x6 FRAMED WALLS @ HEADERS (HDR):
 - PROVIDE (1) 2x6 TRIMMER & (1) 2x6 KING STUD AT OPENINGS < 6'-0" UNO.
 - PROVIDE (2) 2x6 TRIMMERS & (2) 2x6 KING STUDS AT OPENINGS ≥ 6'-0" & ≤ 12'-0" UNO.
 - PROVIDE (2) 2x6 TRIMMERS & (3) 2x6 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 20'-0" UNO.
 NOTE: KINGSTUDS NOT REQUIRED AT BEAM'S (BM).
 - FACE NAIL MULTIPLE 2x POSTS WITH 16d SINKERS AT 6" O.C.
 - SHADED AREAS ARE TYPICAL OVERFILL, STICK FRAMED PER TYPICAL OVERBUILD FRAMING DETAIL OR OVERBUILD TRUSSES PER TRUSS MFG.

SHEATH MAIN TRUSSES ENTIRELY BELOW OVERBUILD.

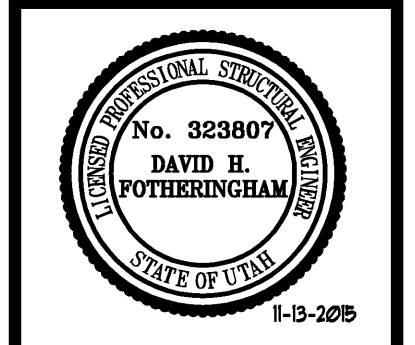
INTERIOR BEARING WALLS
 - ALL GULLIAM BEAMS TO HAVE STANDARD CAMBER (R = 2000') UNO.
 - PROVIDE (2) 2x POST, EACH END OF ALL BEAM'S & GIRDER TRUSSES, UNO.
 - BEAM AND HEADER SIZES INDICATED ON THE PLANS ARE MIN. SIZES. LARGER SIZES MAY BE INSTALLED AT THE CONTRACTOR'S OPTION.
 - CONTINUOUS TOP PLATE MAY BE USED IN LIEU OF S16224 STRAP FROM BEAM TO PLATE.
 - CONTACT ENGINEER OF RECORD IF TRUSS LAYOUT VARIES FROM THAT SHOWN.

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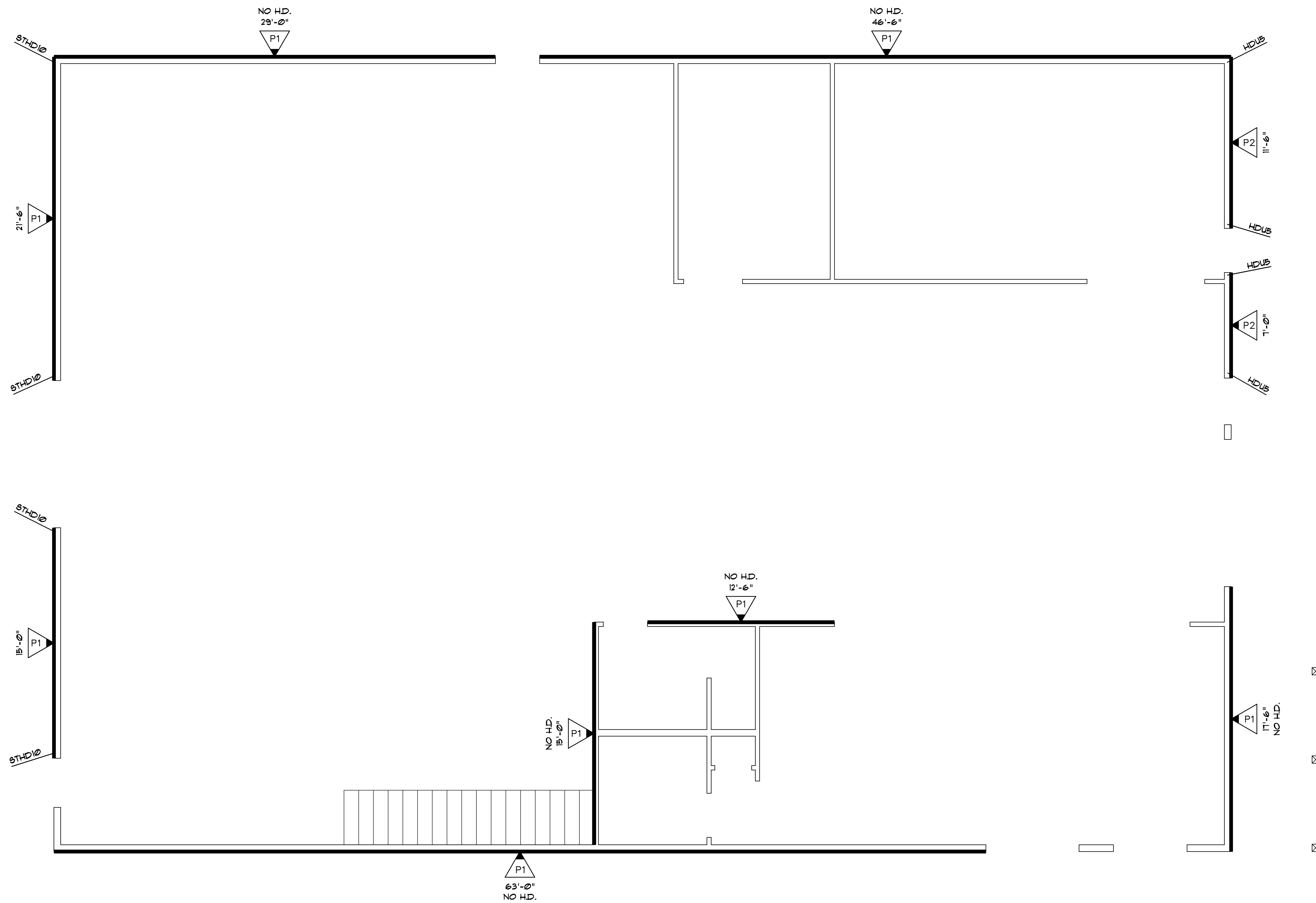
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ROOF FRAMING PLAN



L0087-008-151

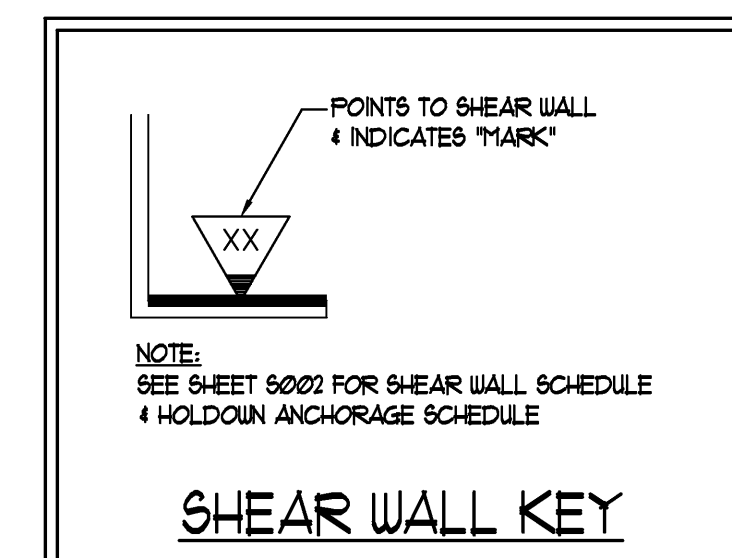
S202

ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"



SHEARWALL PLAN

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



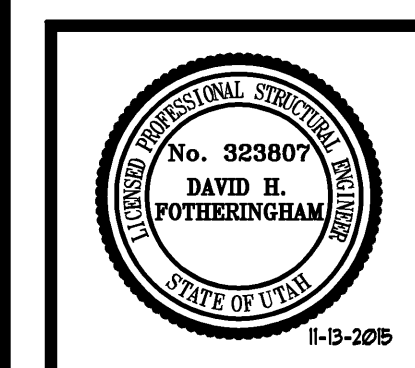
NOTE:
SEE SHEET 6002 FOR SHEAR WALL SCHEDULE
& HOLDOWN ANCHORAGE SCHEDULE

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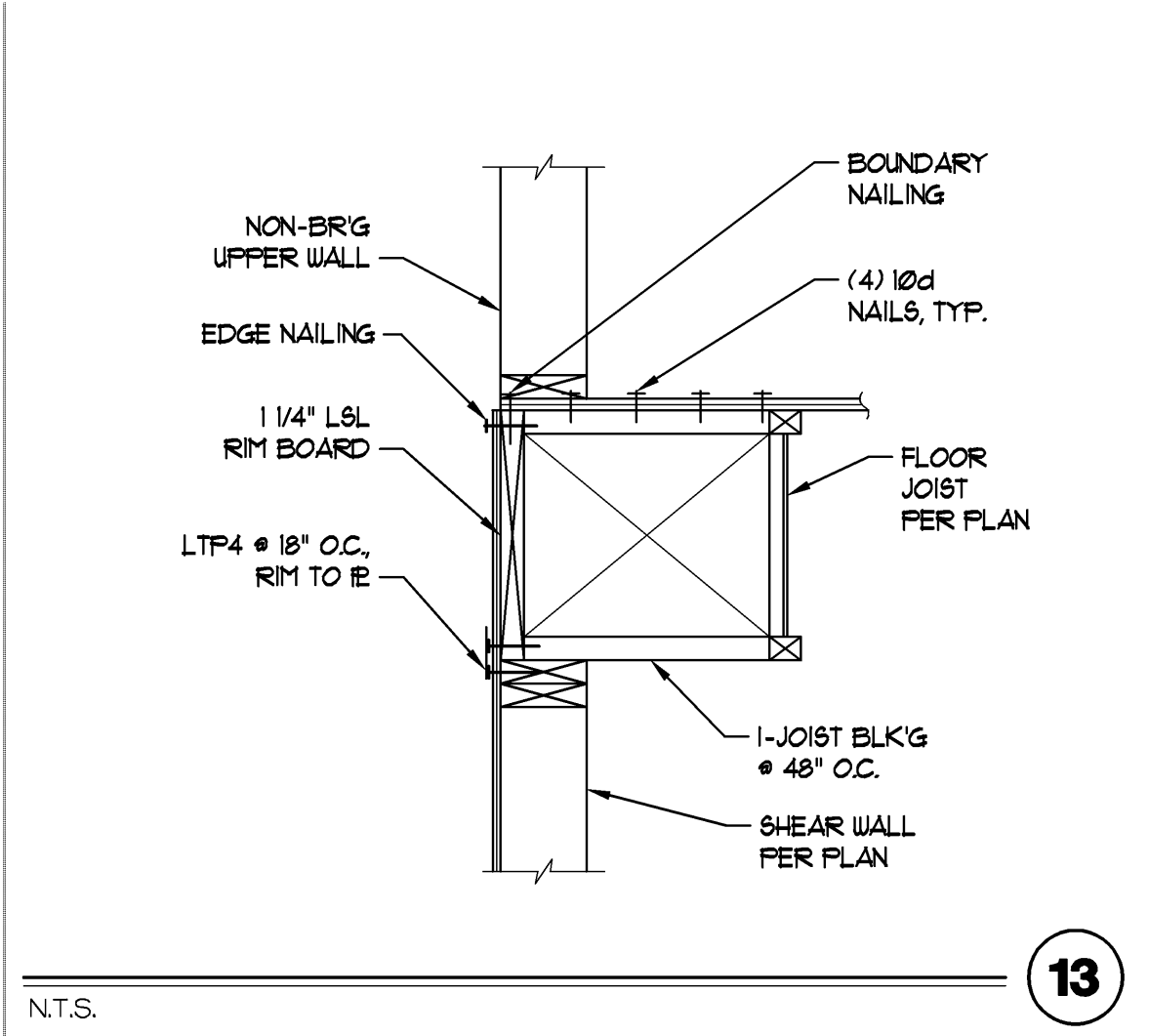
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SHEARWALL PLAN

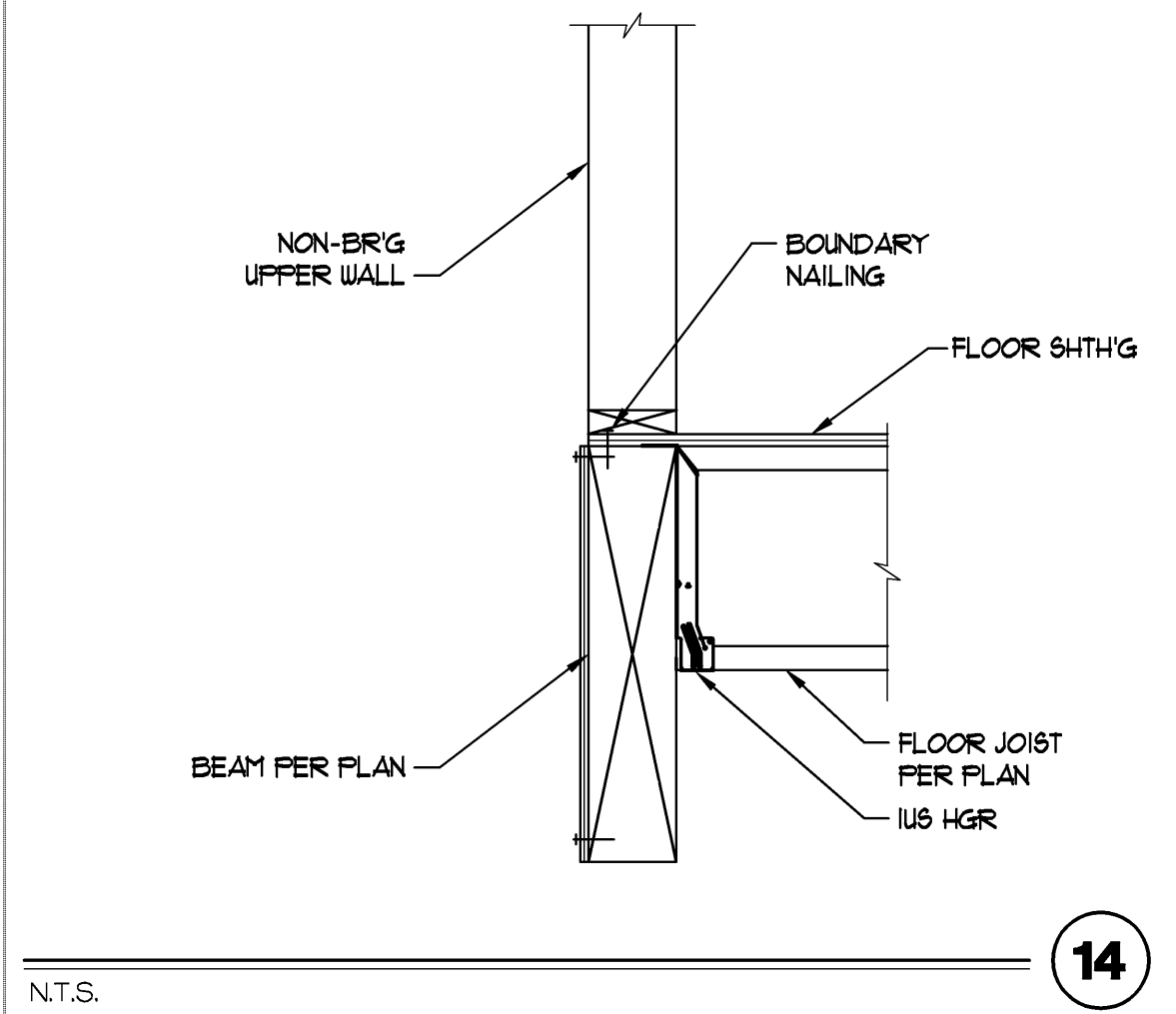


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S301



N.T.S. **13**



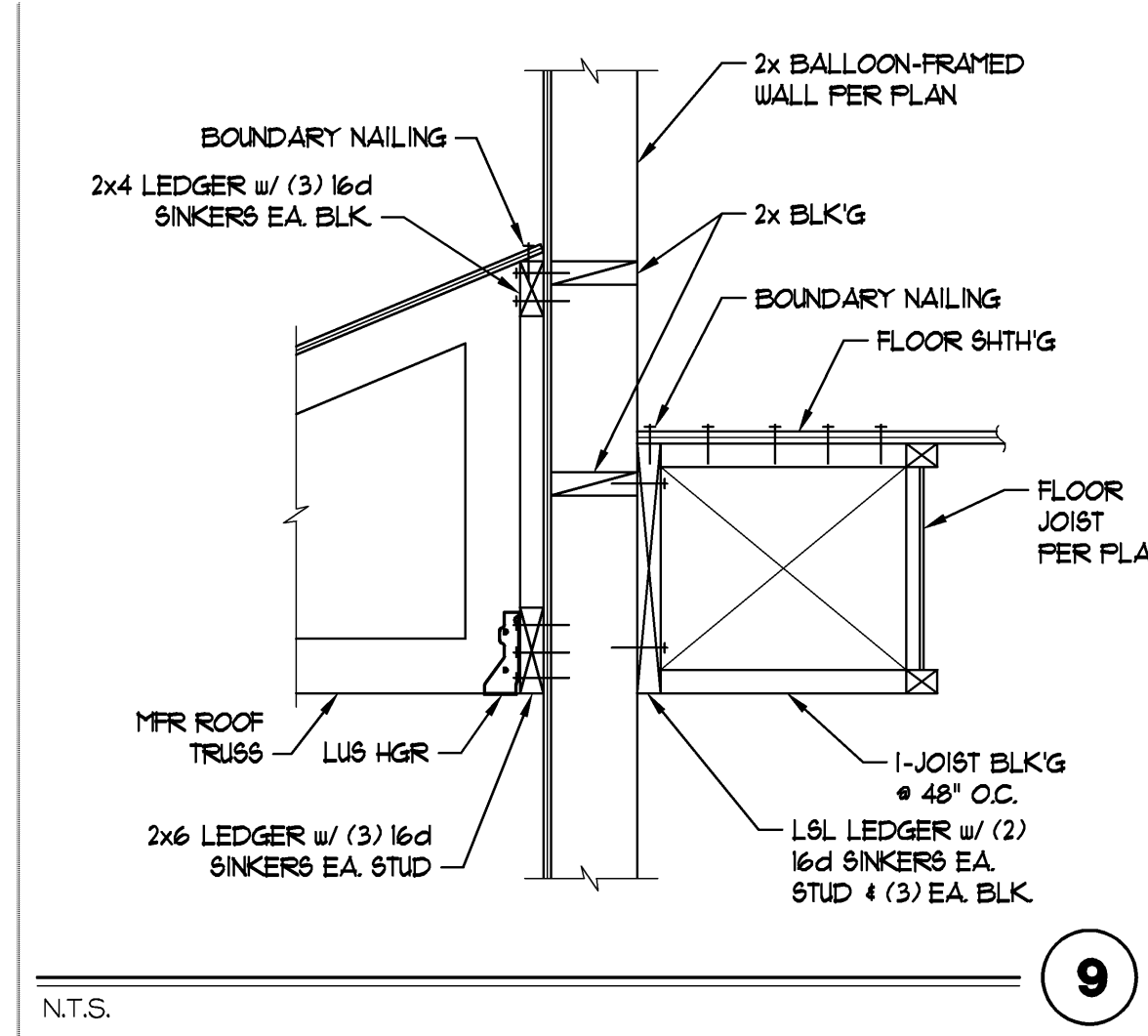
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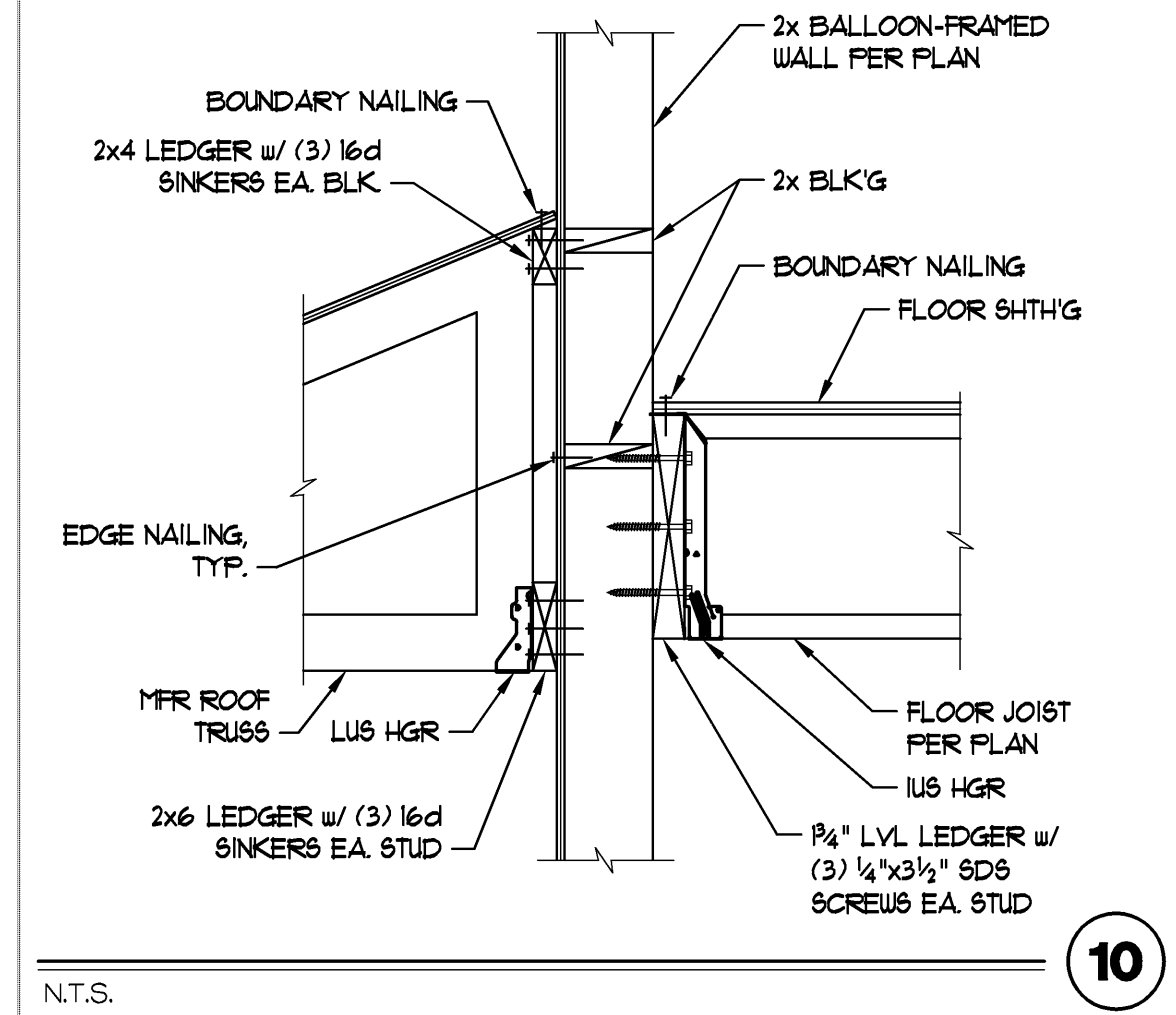
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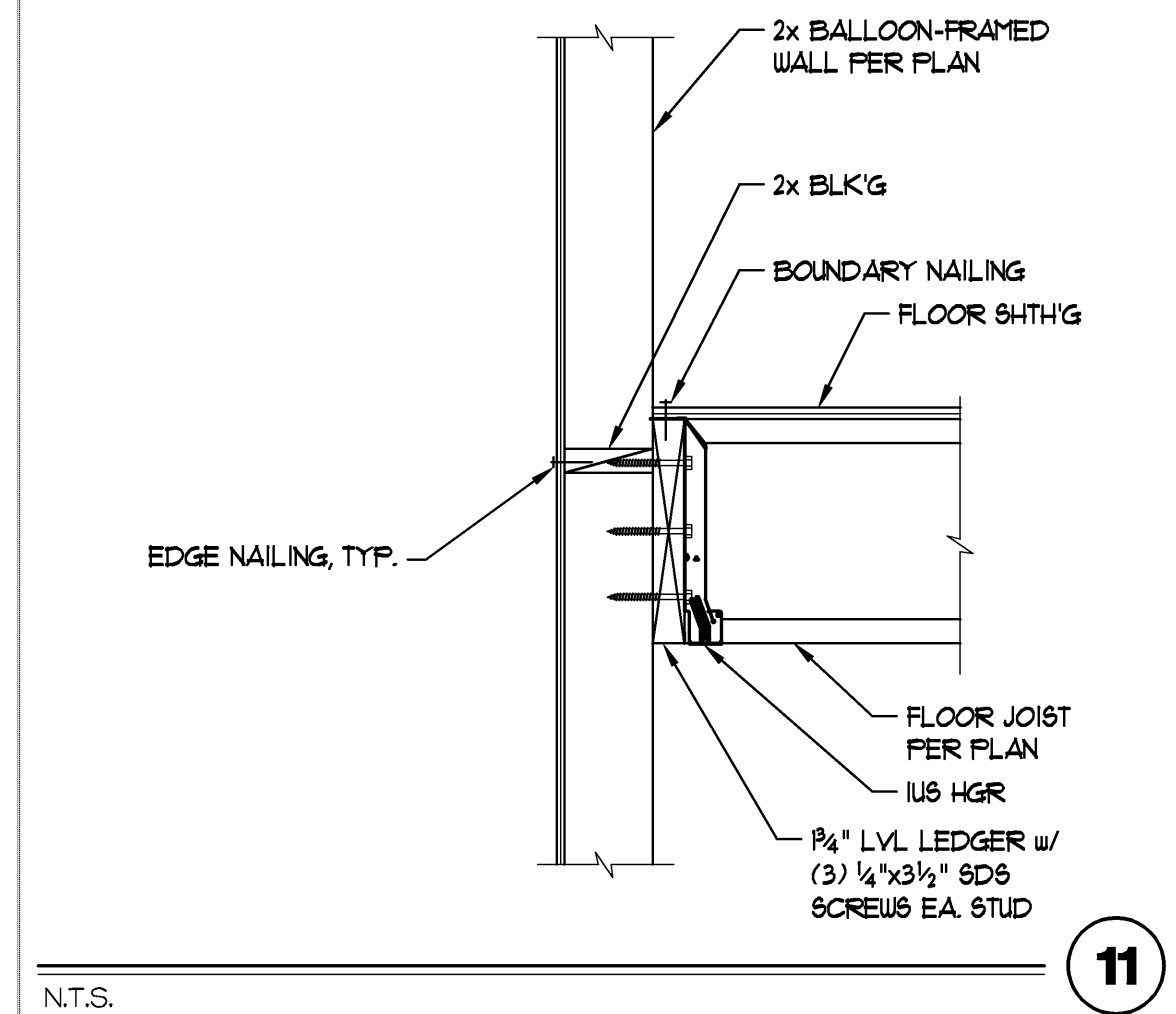
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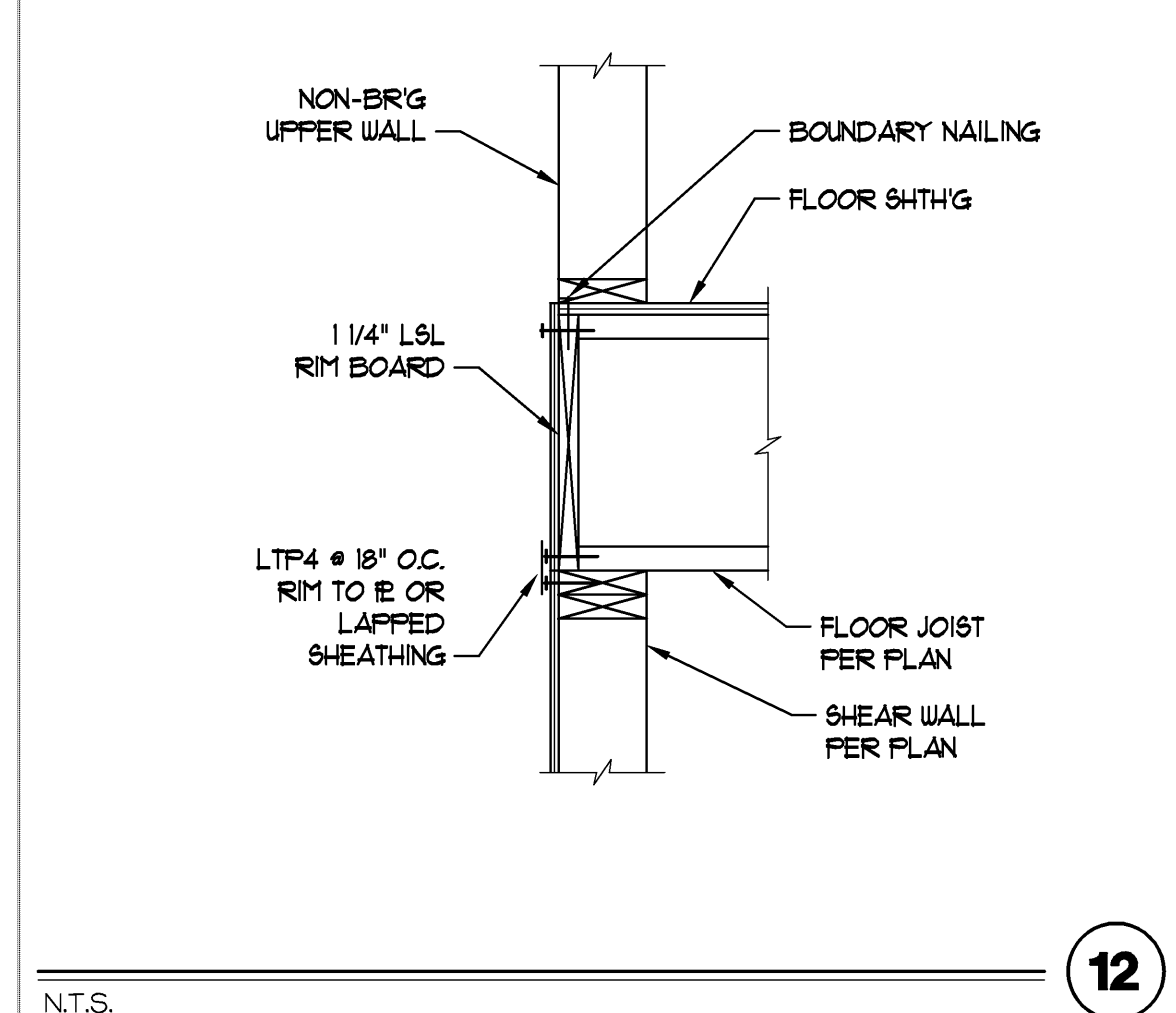
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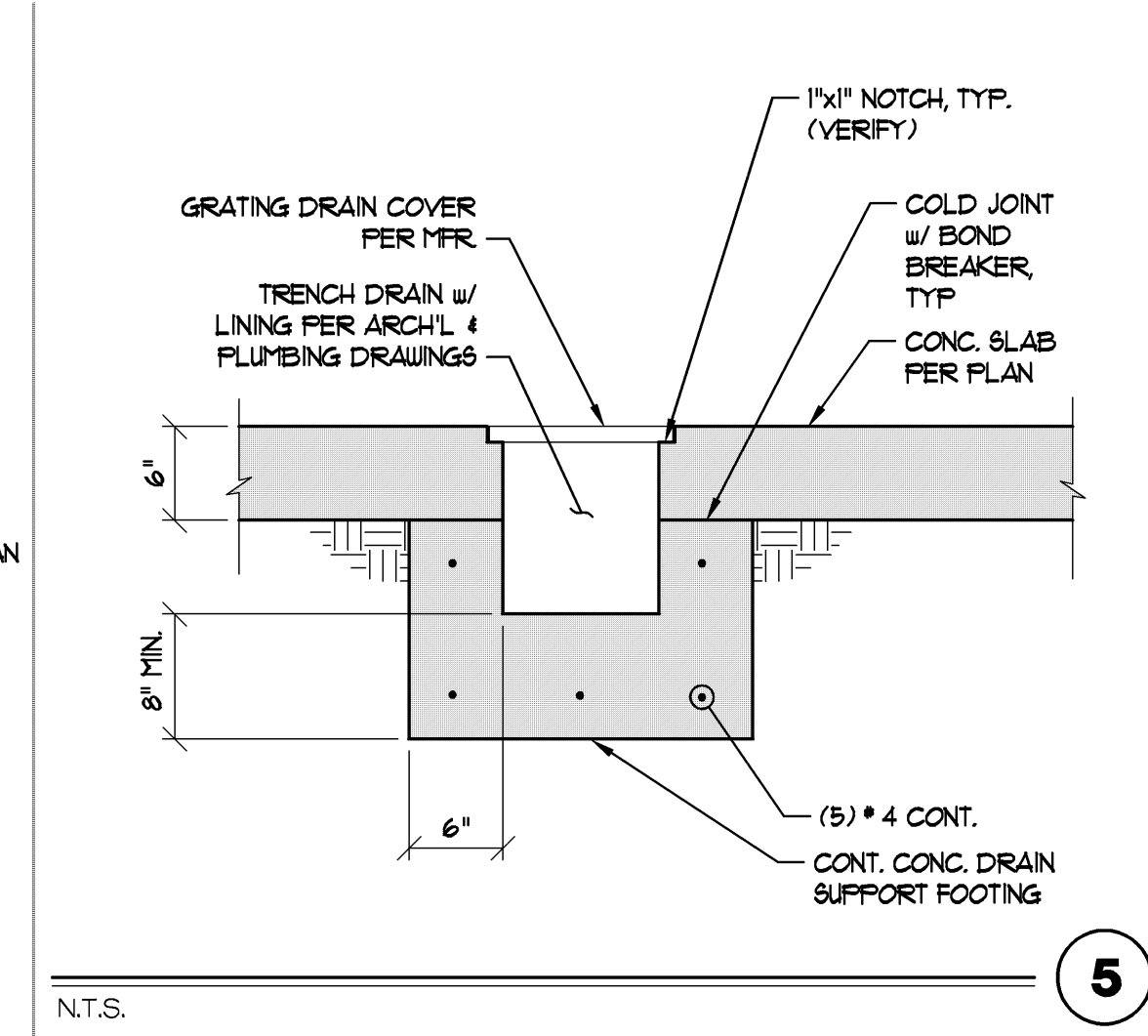
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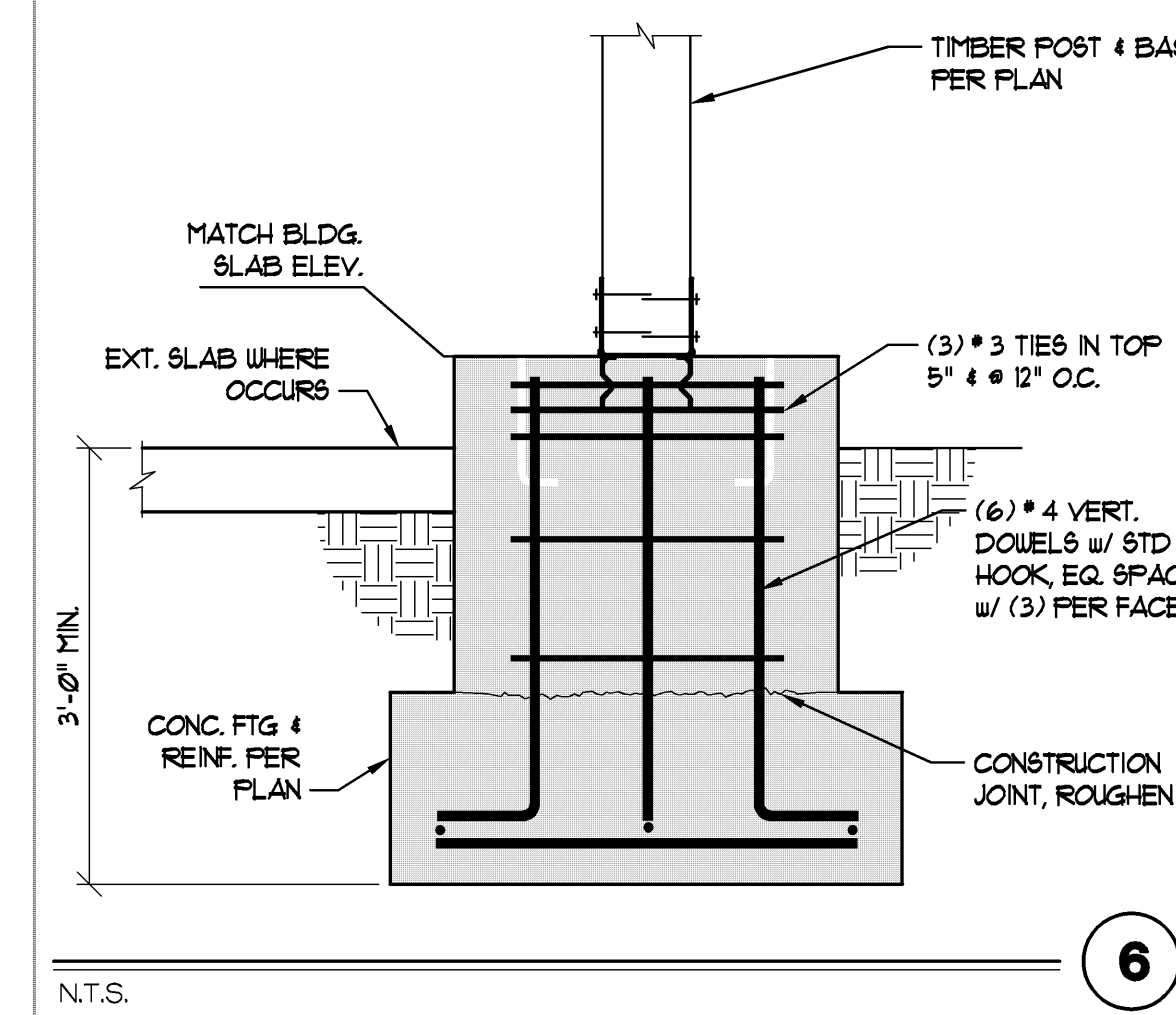
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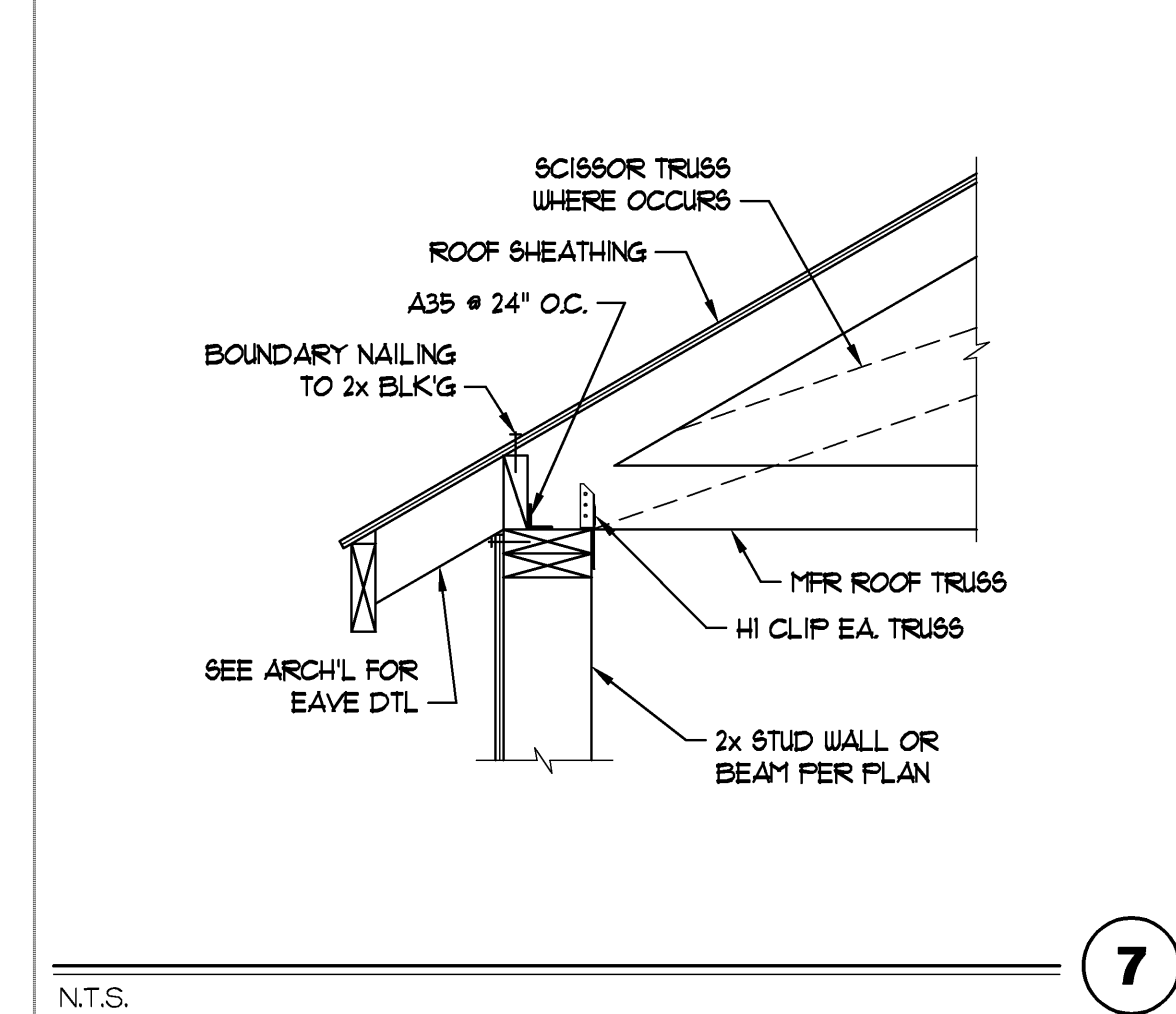
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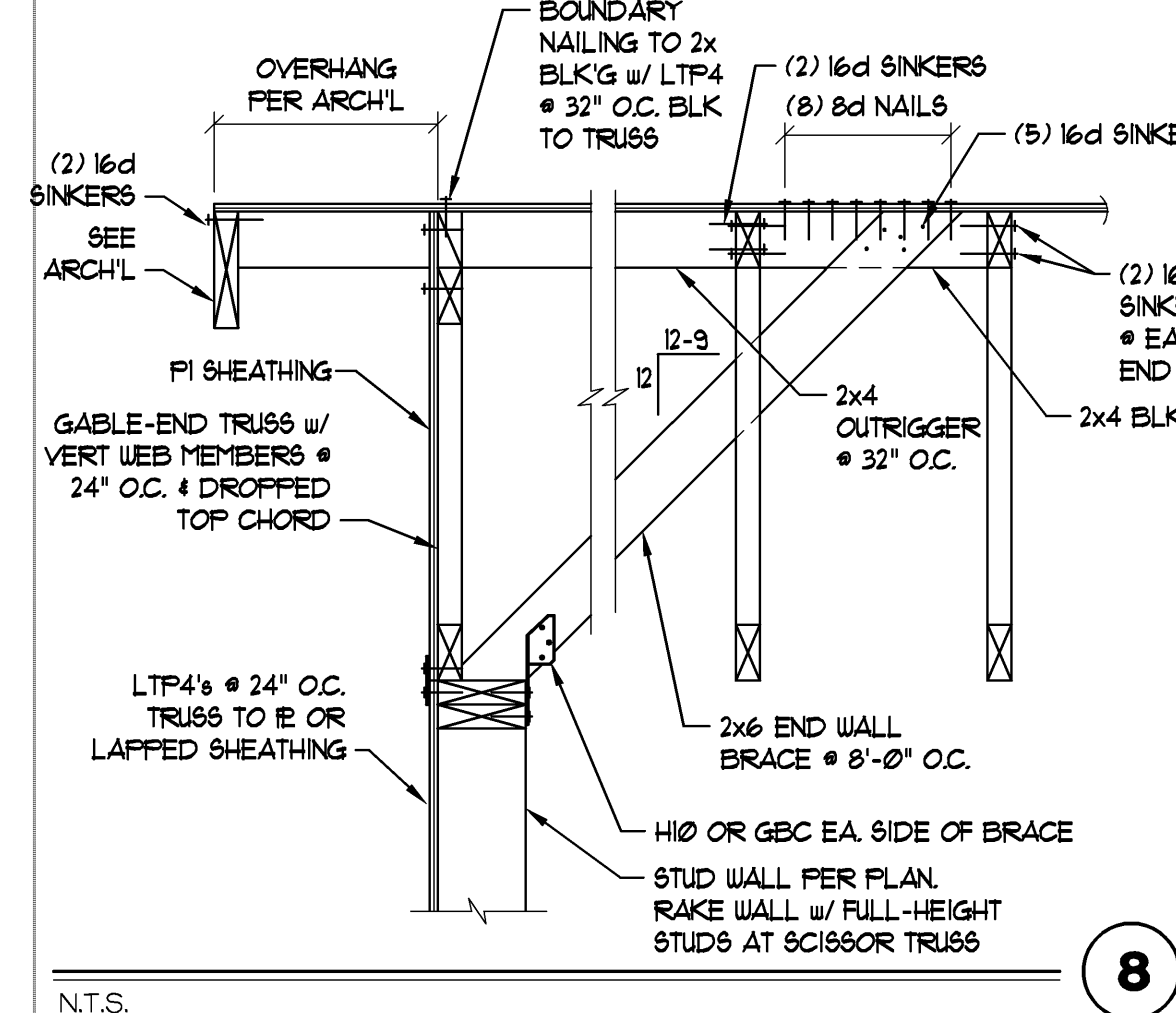
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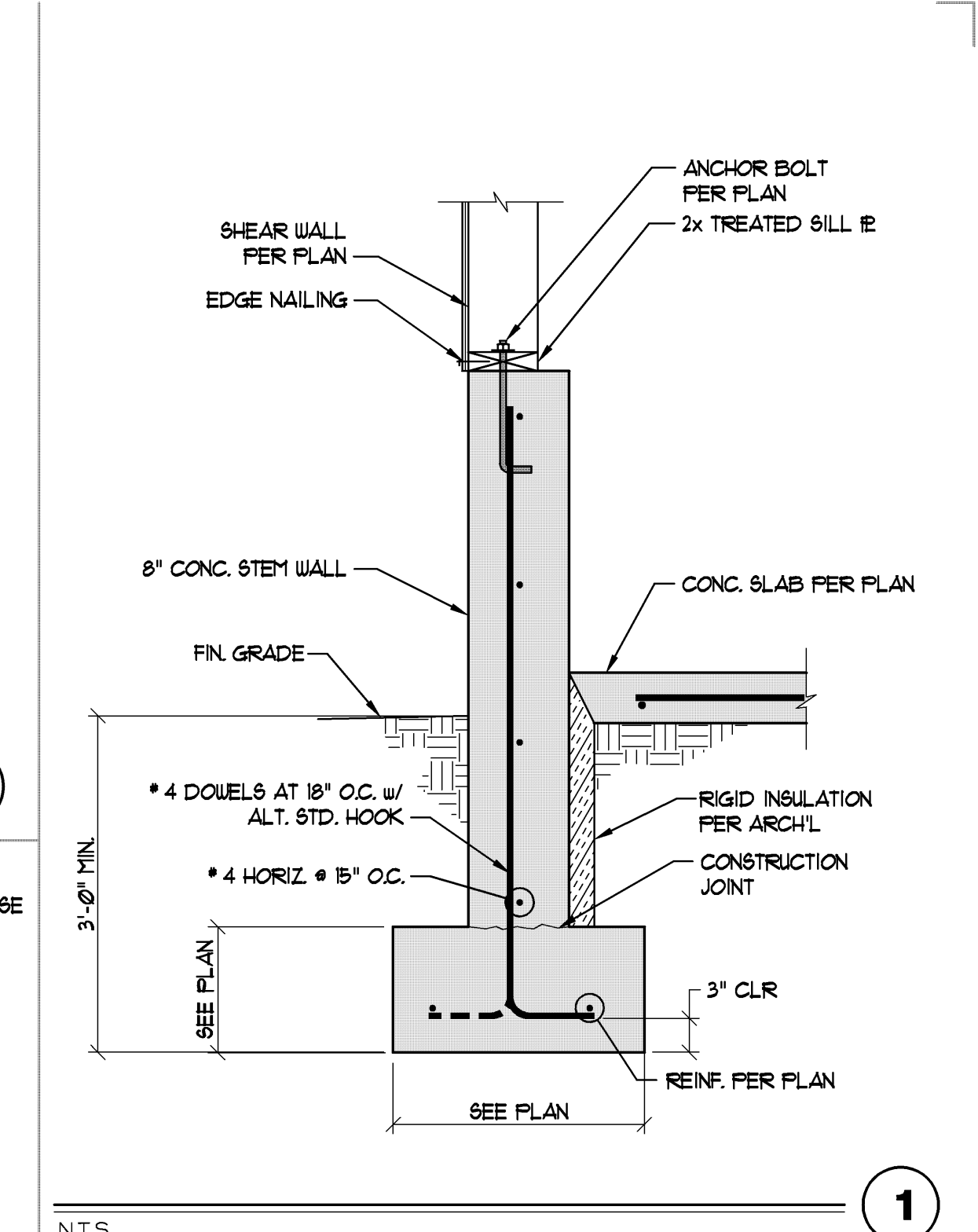
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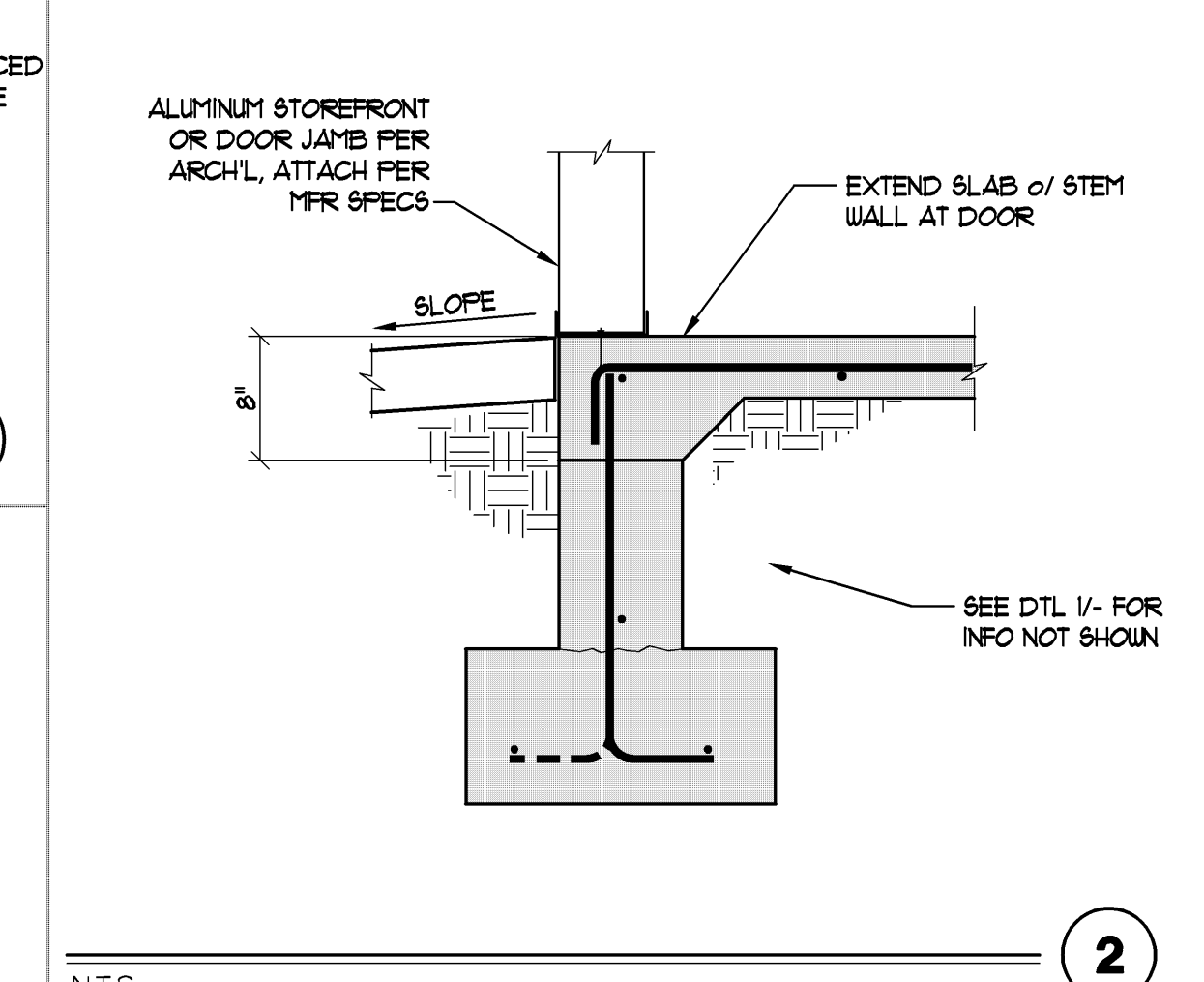
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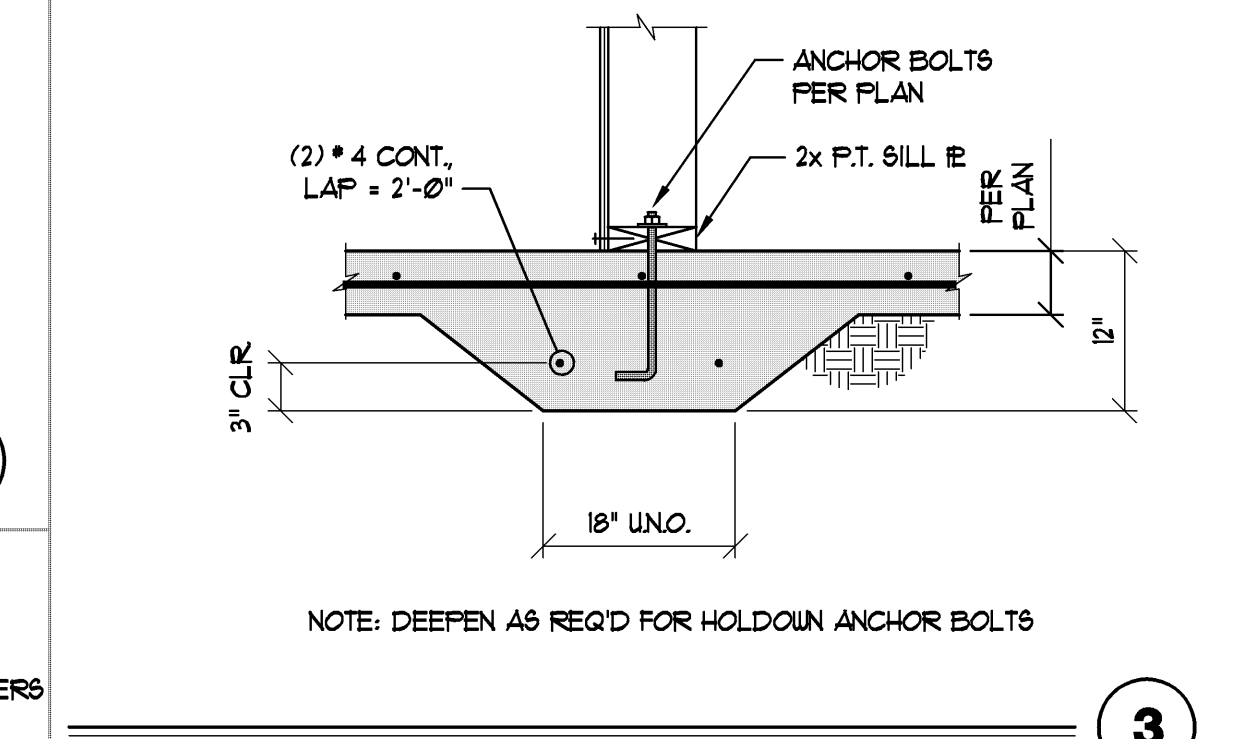
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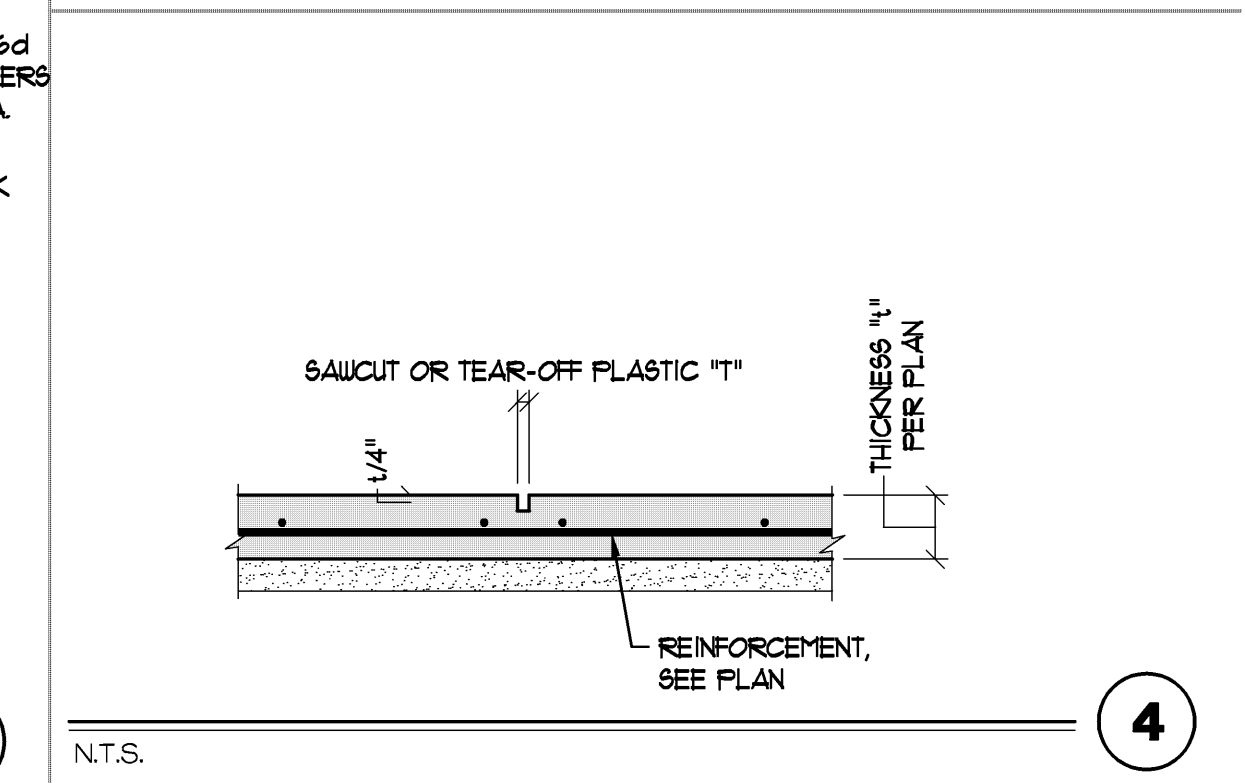
N.T.S. **1**



N.T.S. **2**



N.T.S. **3**



N.T.S. **4**

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STRUCTURAL DETAILS



L0087-008-151

S501