





| DRAWING LEGEND |  |      |  |
|----------------|--|------|--|
| MARK           | DESCRIPTION  | MARK | DESCRIPTION  |
| F2.0           | FOOTING SYMBOL (REFER TO SPREAD FOOTING SCHEDULE)  | I    | INDICATES WIDE FLANGE COLUMN   |
| (PT)           | PILE CAP SYMBOL (REFER TO PILE CAP SCHEDULE)   | □    | INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR TUBE STEEL (TS) COLUMN |
| (A)            | TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)                   | ○    | INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR STEEL PIPE COLUMN      |
| (WB)           | SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)   | ■    | INDICATES WOOD POST  |
| △              | REVISION TRIANGLE  | ■    | INDICATES BUNDLED STUDS  |
| T              | TILT-UP/PRECAST CONCRETE WALL PANEL NUMBER (REFER TO TILT-UP/PRECAST CONCRETE WALL ELEVATIONS) | ■    | INDICATES CONCRETE COLUMN  |
| ◇              | CMU WALL REINFORCING SYMBOL (REFER TO CMU WALL REINFORCING SCHEDULE)                           | ■    | INDICATES PRECAST CONCRETE COLUMN  |
| 8"             | CONTINUITY PLATE LENGTH (REFER TO TYPICAL DETAIL)  | — —  | INDICATES MOMENT FRAME CONNECTION  |
| (DS)           | INDICATES DOUBLE SHEAR CONNECTION (REFER TO THE DOUBLE SHEAR PLATE CONNECTIONS DETAIL)         | — —  | INDICATES DRAG CONNECTION  |
| (SR)           | INDICATES NUMBER OF STUD RAIL REQUIRED AT COLUMN (REFER TO STUD RAIL DETAILS)                  | — —  | INDICATES WOOD OR STEEL STUD WALL  |
| ◇              | ROOF/FLOOR DIAPHRAGM NAILING SYMBOL (REFER TO DIAPHRAGM NAILING SCHEDULE)                      | — —  | INDICATES MASONRY/CMU WALL   |
| (C1)           | STEEL COLUMN SYMBOL (REFER TO STEEL COLUMN SCHEDULE)   | — —  | INDICATES CONCRETE/TILT-UP CONCRETE WALL                                   |
| T/SLAB         | ELEVATION SYMBOL (T/ REFERS TO COMPONENT THAT THE ELEVATION REFERENCES)                        | — —  | INDICATES WOOD OR STEEL STUD SHEAR WALL                                    |
| ○              | STUD BUBBLE (INDICATES NUMBER OF STUDS REQUIRED IF EXCEEDS NUMBER SPECIFIED IN PLAN NOTE)      | — —  | INDICATES BEARING WALL BELOW   |
| ○              | INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)                            | — —  | INDICATES EXISTING WALL  |
| X/SX.X         | DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)  | — —  | POST-TENSION DEAD END (PLAN)   |
| X/SX.X         | DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)                               | — —  | POST-TENSION STRESSING END (PLAN)  |
| X/SX.X         | INDICATES LOCATION OF CONCRETE WALLS, SHEAR WALLS OR BRACED FRAME ELEVATIONS                   | — —  | POST-TENSION PROFILE (PLAN) (IN INCHES)                                    |
| X/SX.X         | SPAN INDICATOR (INDICATES EXTENTS OF FRAMING MEMBERS OR OTHER STRUCTURAL COMPONENTS)           | — —  | INTERMEDIATE STRESSING (PLAN)  |
| →              | INDICATES DIRECTION OF DECK SPAN   |      |  |

| ABBREVIATIONS |                                 |         |                                  |        |                                 |
|---------------|---------------------------------|---------|----------------------------------|--------|---------------------------------|
| A             | Angle                           | FDN     | Foundation                       | PSF    | Pounds per Square Foot          |
| AB            | Anchor Bolt                     | FIN     | Finish                           | PSI    | Pounds Per Square Inch          |
| ADDL          | Additional                      | FLR     | Floor                            |        |                                 |
| ALT           | Alternate                       | FRP     | Fiberglass                       |        |                                 |
| ARCH          | Architectural                   | FRP     | Reinforced Plastic               | PSL    | Parallel Strand Lumber          |
| B or BOT      | Bottom                          | FTG     | Footing                          | P-T    | Post-Tensioned                  |
| B/            | Bottom Of                       | F/      | Face of                          | P      | Pressure Treated                |
| BLDG          | Building                        | GA      | Gage                             | R      | Radius                          |
| BLKG          | Blocking                        | GALV    | Galvanized                       | RD     | Roof Drain                      |
| BMU           | Brick Masonry Unit              | GEOTECH | Geotechnical                     | REF    | Refer/Reference                 |
| BP            | Baseplate                       | GL      | Glue Laminated                   | REIN   | Reinforcing                     |
| BRBF          | Buckling Resisting Braced Frame | GWB     | Gypsum Wall Board                | RET    | Retaining                       |
| BRG           | Bearing                         | HDR     | Header                           | SCBF   | Special Concentric Braced Frame |
| BTWN          | Between                         | HF      | Hem-Fir                          | SCHED  | Schedule                        |
| C             | Centerline                      | HGR     | Hanger                           | SHTNG  | Sheathing                       |
| C             | Camber                          | HD      | Hold-down                        | SIM    | Similar                         |
| CB            | Cast/In Place                   | HORIZ   | Horizontal                       | SM     | Special Moment Frame            |
| CIP           | Cast in Place                   | HP      | High Point                       | SOC    | Slab on Grade                   |
| CJ            | Construction or Control Joint   | HSS     | Hollow Structural Section        | SPEC   | Specification                   |
| CJP           | Complete Joint Penetration      | IBC     | International Building Code      | SO     | Square                          |
| CLG           | Ceiling                         | ID      | Inside Diameter                  | SR     | Studrail                        |
| CLR           | Clear                           | IE      | Invert Elevation                 | SF     | Square Foot                     |
| CMU           | Concrete Masonry Unit           | INT     | Interior                         | SST    | Stainless Steel                 |
| COL           | Column                          | k       | Kips                             | STAGG  | Stagger/Staggered               |
| CONC          | Concrete                        | KSF     | Kips Per Square Foot             | STD    | Standard                        |
| CONN          | Connection                      | LF      | Lineal Foot                      | STIFF  | Stiffener                       |
| CONST         | Construction                    | LL      | Live Load                        | STL    | Steel                           |
| CONT          | Continuous                      | LLH     | Long Leg Horizontal              | STRUCT | Structural                      |
| C/SINK        | Countersink                     | LLV     | Long Leg Vertical                | SWJ    | Solid Web Wood Joist            |
| CTRD          | Centered                        | LP      | Low Point                        |        |                                 |
| ∅             | Diameter                        | LONGIT  | Longitudinal                     | SYM    | Symmetrical                     |
| DB            | Drop Beam                       | LSL     | Laminated Strand Lumber          | T      | Top                             |
| DBA           | Deformed Bar Anchor             | LVL     | Laminated Veneer Lumber          | T/     | Top Of                          |
| DBL           | Double                          | MAS     | Masonry                          | T&B    | Top & Bottom                    |
| DEMO          | Demolish                        | MAX     | Maximum                          | TC AX  | LD Top Chord Axial Load         |
| DEV           | Development                     | MECH    | Mechanical                       | TCX    | Top Chord Extension             |
| DF            | Douglas Fir                     | MEZZ    | Mezzanine                        | TDS    | Tie Down System                 |
| DIAG          | Diagonal                        | MFR     | Manufacturer                     | T&G    | Tongue & Groove                 |
| DIST          | Distributed                     | MIN     | Minimum                          | THKD   | Thickened                       |
| DL            | Dead Load                       | MISC    | Miscellaneous                    | THRD   | Threaded                        |
| DN            | Down                            | NIC     | Not in Contract                  | THRU   | Through                         |
| DO            | Ditto                           | NTS     | Not To Scale                     | TRANSV | Transverse                      |
| DP            | Depth/Deep                      | OC      | On Center                        | TYP    | Typical                         |
| DWG           | Drawing                         | OCBF    | Ordinary Concentric Braced Frame | UBC    | Uniform Building Code           |
| (E)           | Existing                        | OD      | Outside Diameter                 | UNO    | Unless Noted                    |
| EA            | Each                            | OF      | Outside Face                     | UNR    | Unreinforced                    |
| EF            | Each Face                       | OPG     | Opening                          | URM    | Unreinforced Masonry Unit       |
| EL            | Elevation                       | OPN     | Opening                          | VERT   | Vertical                        |
| ELEC          | Electrical                      | OPP     | Opposite                         | W      | Wide                            |
| ELEV          | Elevator                        | OWSJ    | Open Web Steel Joist             | W/     | With                            |
| EMBED         | Embedment                       | OWWJ    | Open Web Wood Joist              | W/O    | Without                         |
| EQ            | Equal                           | P       | Plate                            | WHS    | Welded Headed Stud              |
| EQUIP         | Equipment                       | PAF     | Powder Actuated Fastener         | WP     | Working Point                   |
| EW            | Each Way                        | PC      | Precast                          | W/F    | Welded Wire Fabric              |
| EXP           | Expansion                       | PERP    | Perpendicular                    | ±      | Plus or Minus                   |
| EXP JT        | Expansion Joint                 | PLWD    | Plywood                          |        |                                 |
| EXT           | Exterior                        | PP      | Partial Penetration              |        |                                 |
| FD            | Floor Drain                     | PREFAB  | Prefabricated                    |        |                                 |





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**STRUCTURAL LEGEND & ABBREVIATIONS**

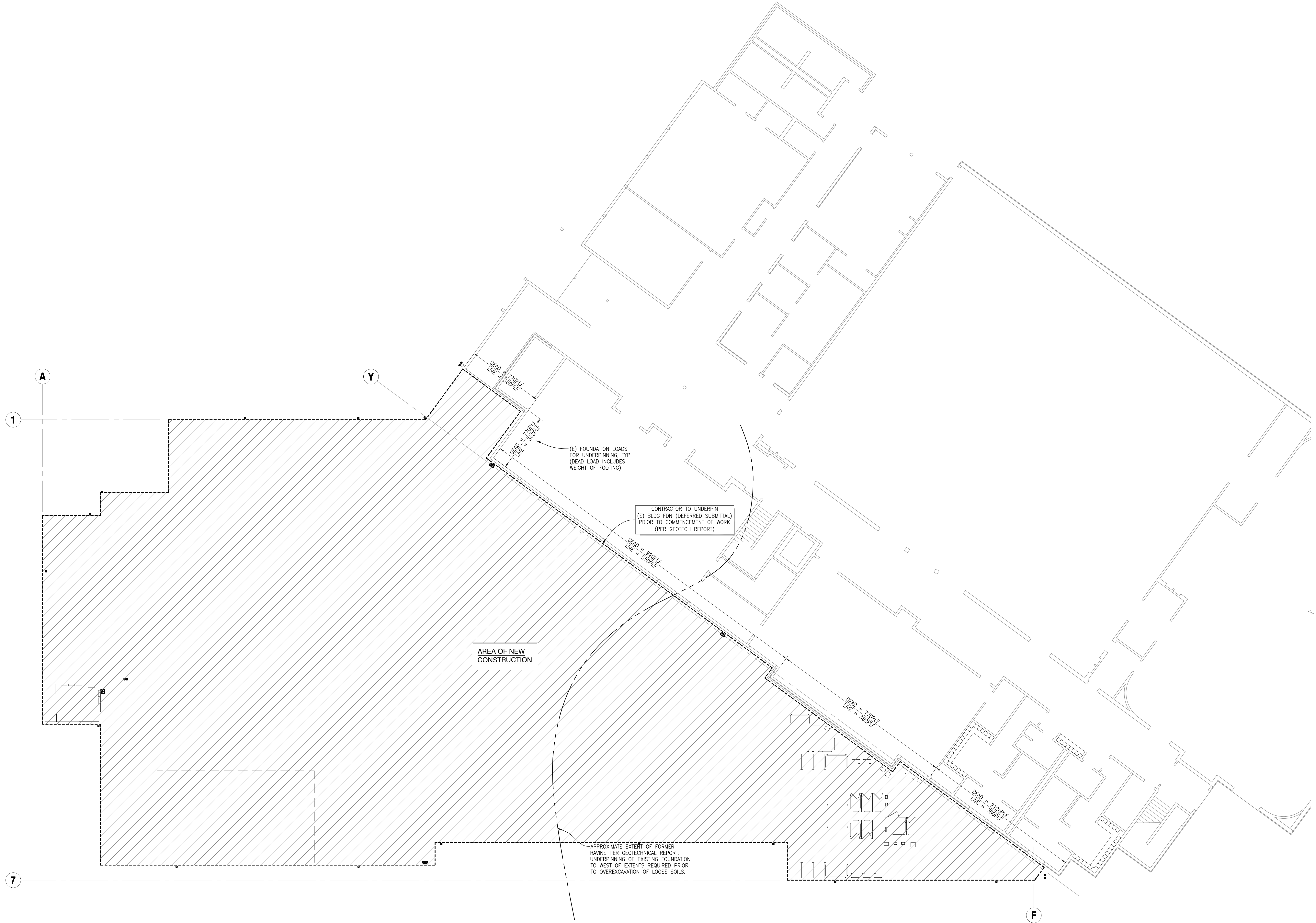
Drawn By: IK

Checked: SC

Date: 17 JUNE 2015

DCI Project #: 14091-0028

S1.3



**EXISTING FOUNDATION LOADING PLAN**  
 SCALE: 1"=10'-0" 

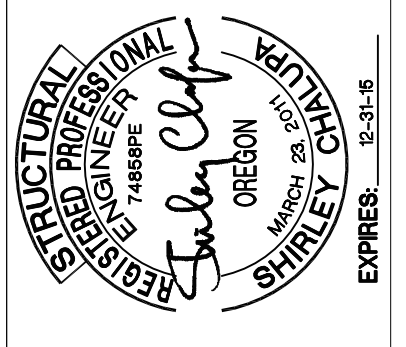
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| Checked  | SC           |
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**EXISTING FOUNDATION LOADING PLAN**

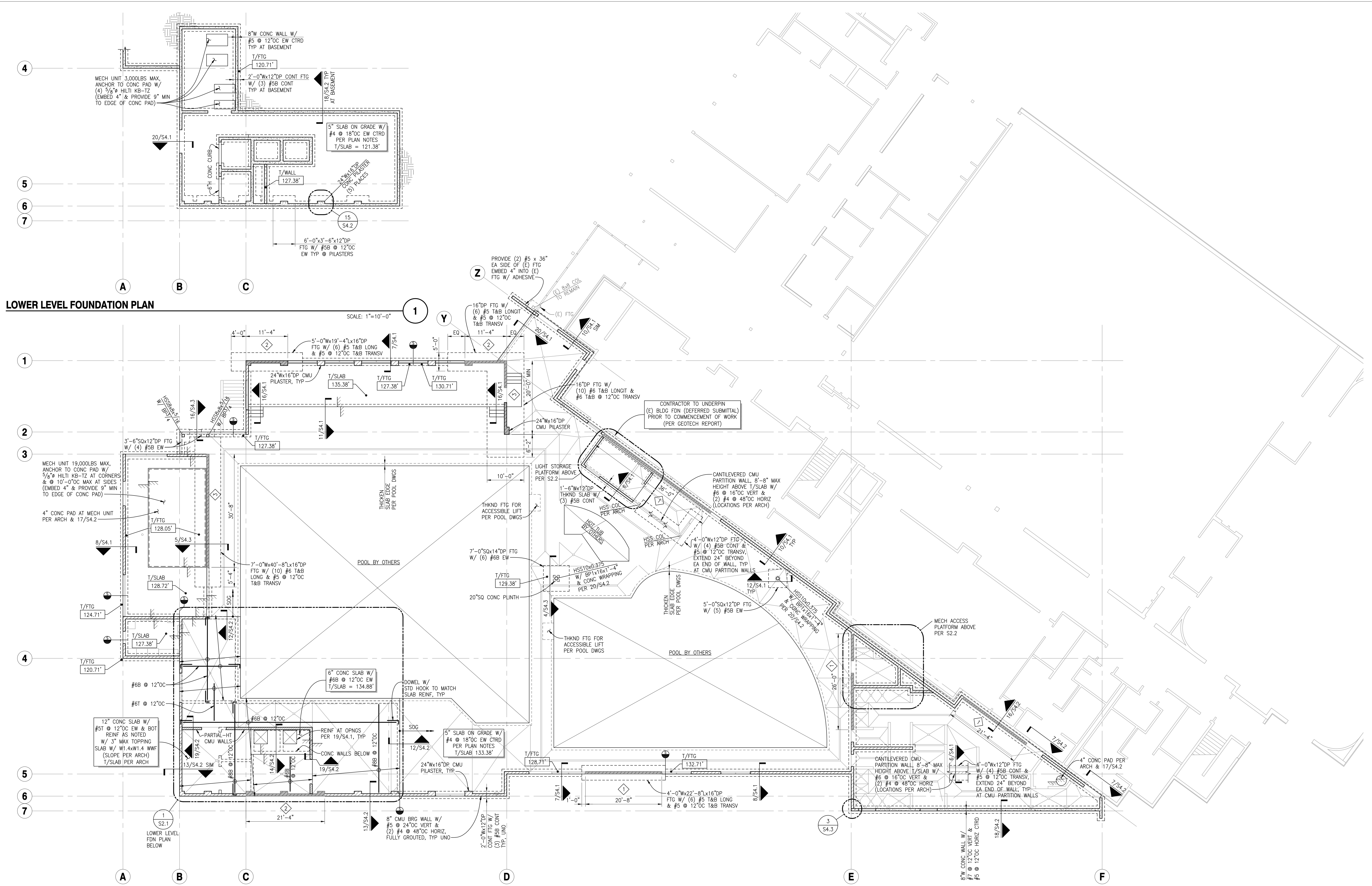
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**S2.0**



**LOWER LEVEL FOUNDATION PLAN**

**FOUNDATION PLAN NOTES:**

- STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S1.1 THRU S1.3.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.
- CONTRACTOR SHALL LOCATE AND VERIFY THE FOLLOWING WITH OTHERS PRIOR TO POURING CONCRETE: ALL DOOR OPENINGS IN FOUNDATION WALLS; BLOCKOUTS FOR POOLS, SPAS, PLUMBING, SPRINKLERS AND HVAC. ALL DUCTS, CHASES AND PIPES PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS. STAIR DETAILS AND GUARDRAILS PER ARCHITECTURAL DRAWINGS. CONCRETE CURBS AND LOCATIONS PER ARCHITECTURAL DRAWINGS. DRAINS AND SLOPES PER ARCH DWG.
- TOP OF SLAB (T/SLAB) ELEVATION ASSUMED 133.38'. FOR ACTUAL T/SLAB ELEVATION REFER TO CIVIL AND ARCHITECTURAL DRAWINGS. PROVIDE FREE-DRAINING GRANULAR FILL PER GEOTECH REPORT.
- TYPICAL TOP OF INTERIOR (T/INTERIOR) FOOTING ELEVATION = 132.71', UNO. TOP OF EXTERIOR (T/EXTERIOR) FOOTING ELEVATIONS PER PLAN.
- ALL FOOTINGS AND SLABS TO BEAR ON COMPETENT NATIVE SOIL AND/OR STRUCTURAL FILL. SUBGRADE PREPARATION, STRUCTURAL FILL, FOOTING DRAINS, AND OTHER REQUIREMENTS PER GEOTECH REPORT AS NOTED IN THE STRUCTURAL GENERAL NOTES.

- CJ INDICATES CONTROL JOINT PER PLAN.
- CONTRACTOR TO VERIFY TOP OF CONCRETE (T/CONC) WALL ELEVATIONS ON ALL PARTIAL HEIGHT RETAINING WALLS. MAINTAIN T/WALL ELEVATION A MINIMUM OF 6" ABOVE FINISH GRADE PER 7/S4.1.
- MOISTURE PROOF ALL CONCRETE STEM AND BASEMENT WALLS PER ARCHITECT.
- PROVIDE CONCRETE PAD ON SLAB ON GRADE PER 17/S4.2 WHERE INDICATED ON ARCHITECTURAL, POOL, OR MECHANICAL DRAWINGS. LOCATION, SIZE, AND THICKNESS PER ARCHITECTURAL, POOL, OR MECHANICAL DRAWINGS, UNO.
- TYPICAL DETAILS PER:
  - 2/S4.1 TYPICAL LAP SPLICE SCHEDULE
  - 9/S4.1 TYPICAL STEP FOOTING
  - 12/S4.1 TYPICAL BASE PLATE
  - 13/S4.1 TYPICAL DEPRESSED SLAB DETAIL
  - 14/S4.1 TYPICAL CONCRETE WALL OPENING REINFORCEMENT
  - 15/S4.1 STANDARD HOOKS AND BAR BENDS

**CMU SHEAR WALL REINFORCING SCHEDULE**

| TYPE | WALL THICKNESS | VERT REINF | HORIZ REINF    | GROUTING | END REINF  |
|------|----------------|------------|----------------|----------|--|
| 1    | 8"             | #5 @ 24"OC | (2) #4 @ 48"OC | SOLID    | (8) #6 EA END PER 6/S4.2   |
| 2    | 8"             | #5 @ 24"OC | (2) #4 @ 48"OC | SOLID    | (6) #7 EA END PER 11/S5.1  |
| 3    | 8"             | #5 @ 24"OC | (2) #5 @ 24"OC | SOLID    | (12) #6 EA END PER 6/S4.3 (AT PILASTER) & 7/S4.3 (AT STRAIGHT END) |

**MAIN LEVEL FOUNDATION PLAN**

SCALE: 1"=10'-0"

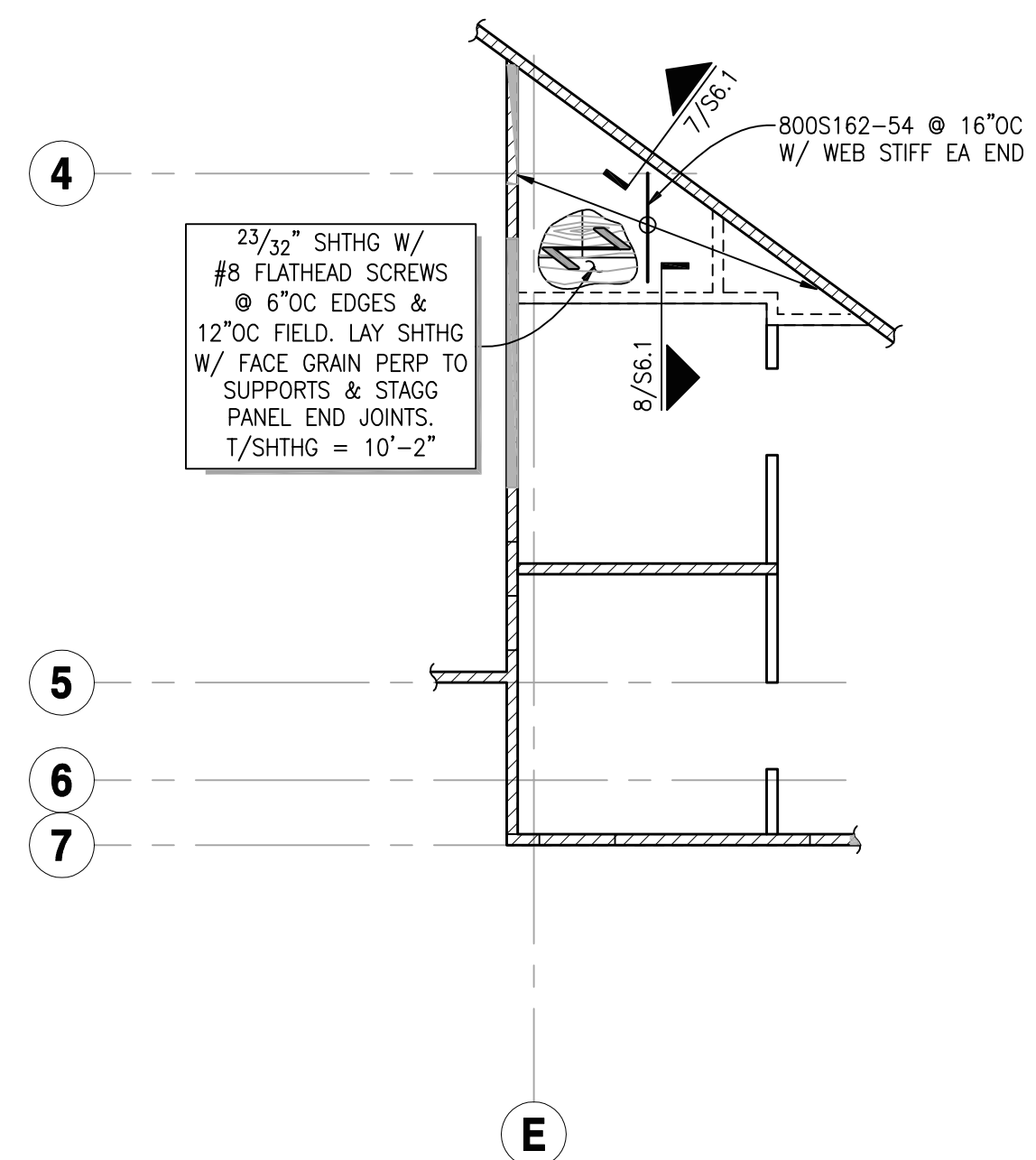
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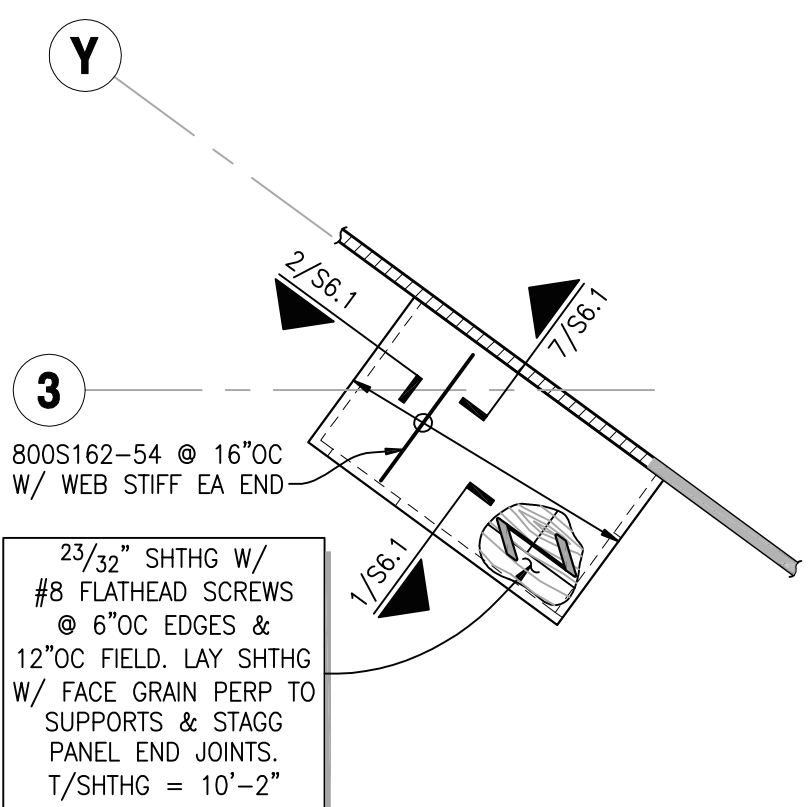
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STRUCTURAL FOUNDATION PLAN  
 IK  
 SC  
 DATE 17 JUNE 2015  
 PROJECT # 14091-0028

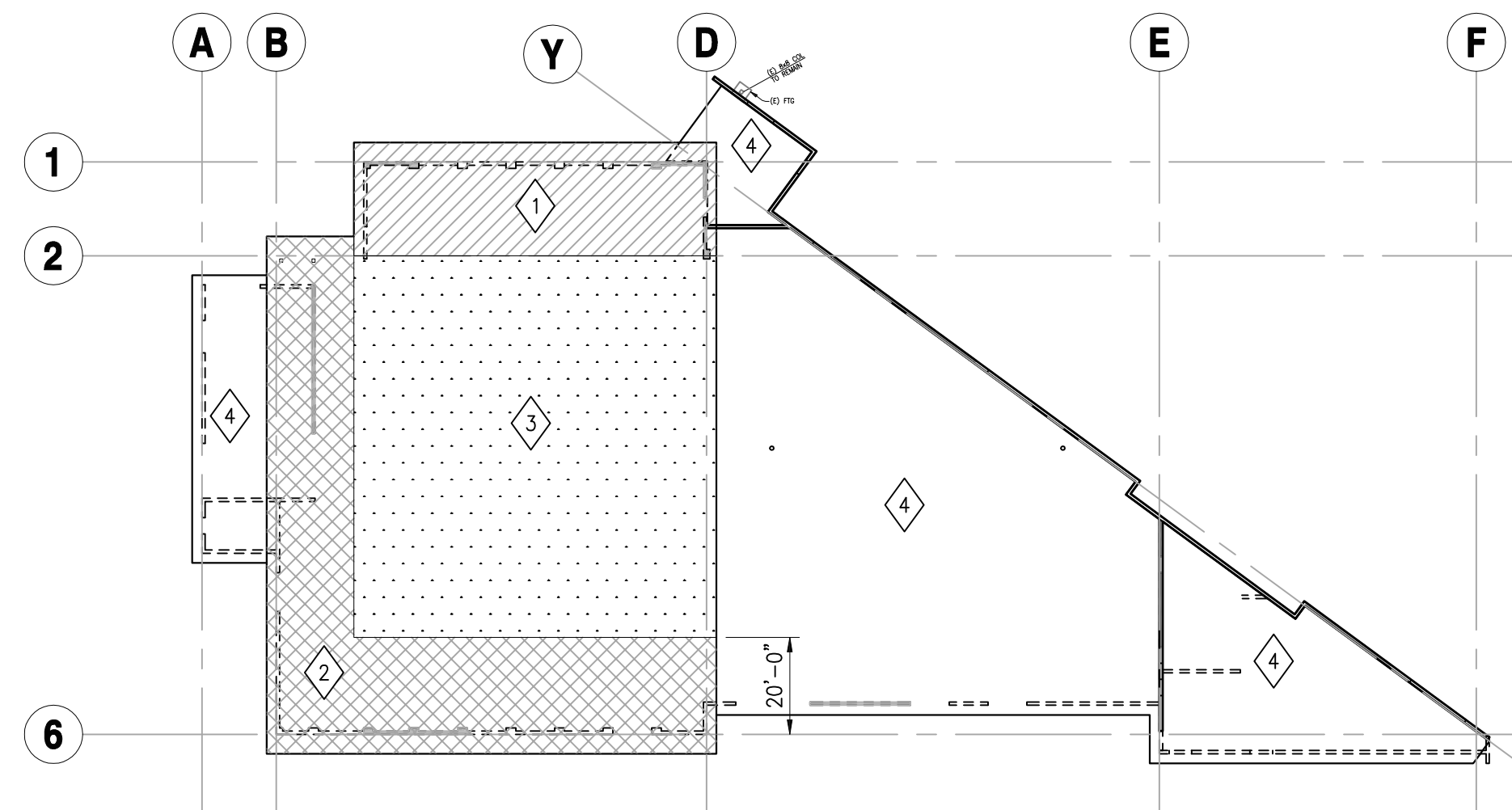
**S2.1**



**MECHANICAL ACCESS PLATFORM PLAN**  
SCALE: 1"=10'-0"



**LIGHT STORAGE PLATFORM PLAN**  
SCALE: 1"=10'-0"

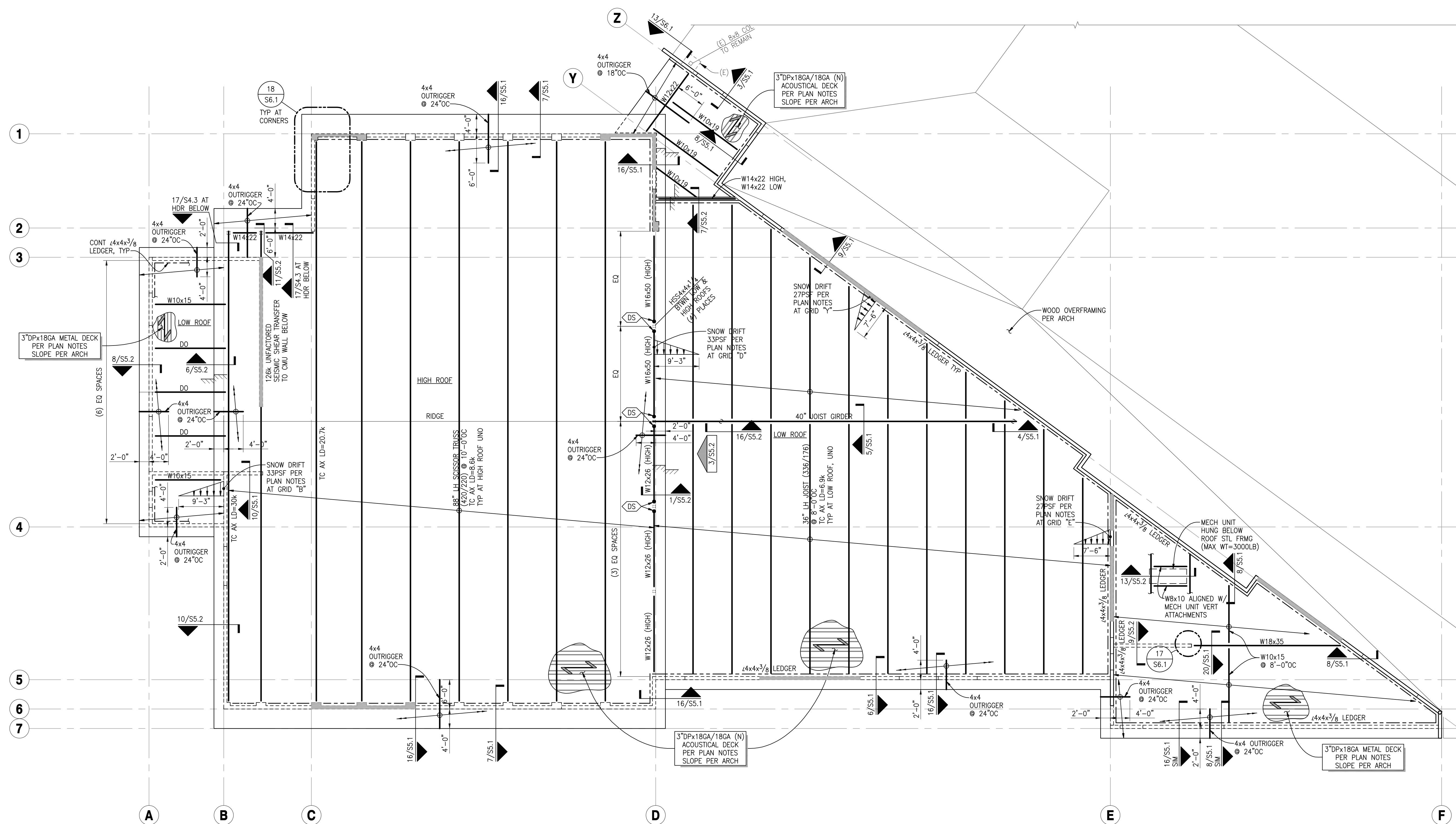


| DIAPHRAGM SCHEDULE |                            |                       |
|--------------------|----------------------------|-----------------------|
| TYPE               | SIDLAP CONNECTION          | ALLOWABLE SHEAR (PLF) |
| 1                  | VERCO SIDELAP CONN @ 12"OC | 1015                  |
| 2                  | TOP SEAM WELD @ 12"OC      | 860                   |
| 3                  | TOP SEAM WELD @ 24"OC      | 582                   |
| 4                  | BUTTON PUNCH @ 12"OC       | 574                   |

**NOTES:**

- [1] CONNECT DECK TO ALL TRANSVERSE AND PERIMETER SUPPORTS WITH 1/2" PUDDLE WELDS AT EACH RIB.
- [2] CONNECT DECK TO ALL LONGITUDINAL SUPPORTS WITH 1/2" PUDDLE WELDS @ 6"OC.

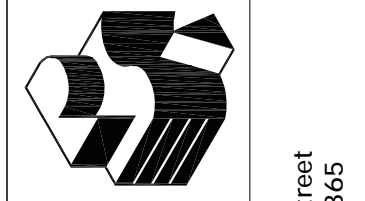
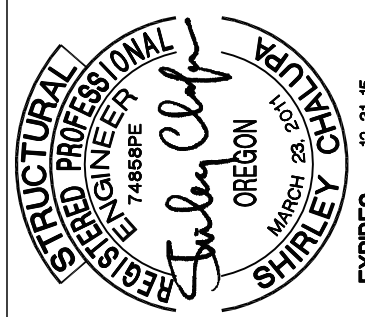
**DIAPHRAGM KEY PLAN PLAN**  
SCALE: 1/8"=1'-0"



**ROOF FRAMING PLAN NOTES:**

- STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S1.1 THRU S1.3.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECT'S DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.
- ALL DUCTS, CHASES AND PIPES SHALL BE PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS.
- X-X' INDICATES TOP OF STEEL (1/STL) ELEVATION AT JOISTS (1/STL = B/DECK) UNO; AT GIRDERS SUPPORTING OPEN WEB STEEL JOISTS (1/STL) = -4 1/2" FOR BEARING SEAT DEPTH. STEEL JOISTS SHALL BE EQUALLY SPACED. TYPICAL UNO.
- METAL DECK PER PLAN AND STRUCTURAL GENERAL NOTES. DECK ATTACHMENT REQUIREMENTS PER STRUCTURAL GENERAL NOTES.
- TYPICAL ROOF DECK OVERHANG TO BE 6" FROM CENTERLINE OF BEAM, UNO.
- NUMBERS INDICATED ON PLAN ADJACENT TO JOIST CALLOUT SHOWN THUS: (XXX/XXX) INDICATES TOTAL LOAD AND LIVE LOAD (N PLF) FOR WHICH JOISTS ARE TO BE DESIGNED BY OTHERS.
- SNOW DRIFTS TO BE ADDED TO FLAT ROOF SNOW LOAD PF PER STRUCTURAL GENERAL NOTES.
- ALL TOP CHORD AXIAL LOADS (TC AX LD) SHOWN ON JOISTS AND GIRDERS ARE UNFACTORED SEISMIC LOAD 1.0E.
- ROOF JOISTS TO BE DESIGNED FOR A NET UPLIFT WIND LOAD OF -20 PSF (ULTIMATE: 0.9D+W).
- ROOF JOISTS AND GIRDERS ARE TO BE REVIEWED FOR ADDITIONAL LOADS FROM MECHANICAL UNITS AND PIPING. ADDITIONAL LOADING REQUIREMENTS PER PLAN CONTRACTOR TO PROVIDE THE TRUSS/JOIST SUPPLIER WITH A DRAWING SHOWING THE LOCATION AND SUPPORT CONDITIONS FOR ALL MECHANICAL, ELECTRICAL, PLUMBING AND SPRINKLER LOADS. ROOF TRUSS/JOIST SUPPLIER IS RESPONSIBLE FOR ADDITIONAL FRAMING REQUIRED TO SUPPORT MECHANICAL EQUIPMENT, DUCTS, ELECTRICAL EQUIPMENT, PLUMBING AND FIRE PROTECTION.
- LEDGER ANGLES ARE REQUIRED WHERE METAL DECKING INTERFACES WITH CMU WALLS. REQUIREMENTS PER PLAN.
- CMU WALL TYPES, REINFORCING SIZE AND SPACING PER CMU WALL REINFORCING SCHEDULE. ALL WALLS SHALL BE SOLID GROUTED. UNO. MATERIALS AND SPECIAL INSPECTION REQUIREMENTS AS PER STRUCTURAL GENERAL NOTES, UNO.
- CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING.
- INDICATES DRAG CONNECTION (SLIP-CRITICAL BOLTS ARE REQUIRED).
- INDICATES DOUBLE SHEAR PLATE CONNECTION PER 20/S5.2.

**ROOF FRAMING PLAN**  
SCALE: 1"=10'-0"



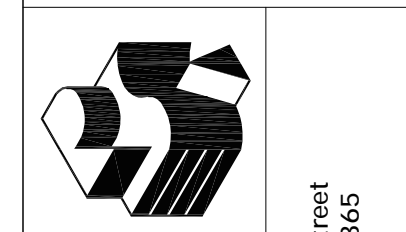
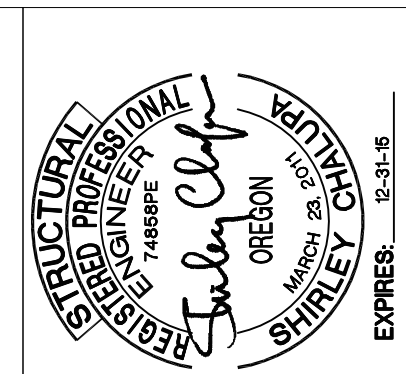
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**STRUCTURAL ROOF FRAMING PLAN**

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Date: 17 JUNE 2015  
Project #: 14091-0028

**S2.2**



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STRUCTURAL FOUNDATION DETAILS

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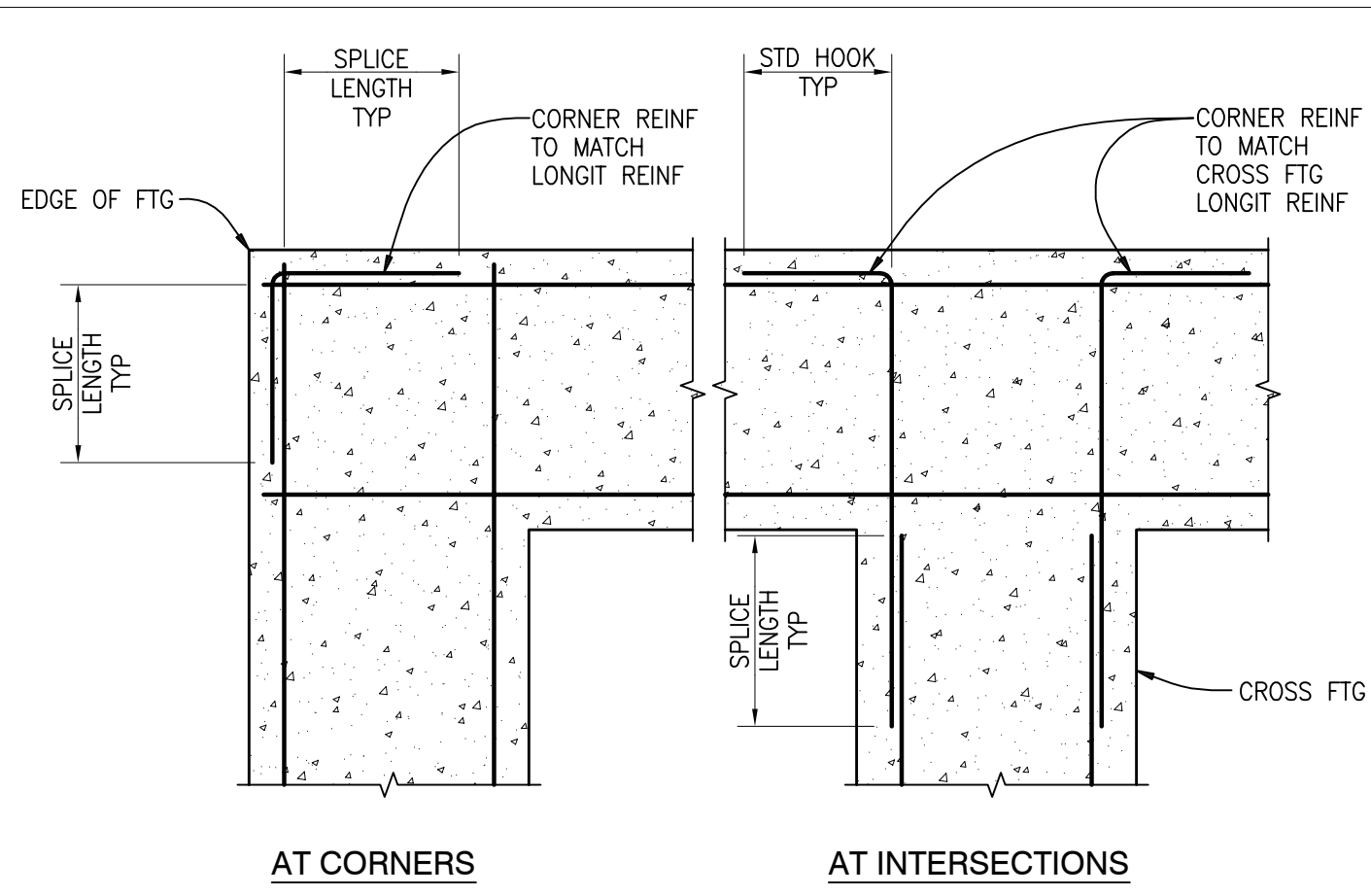
S4.1

| BAR SIZE     | MISC BARS |        | TOP BARS (see note #4) |        | HOOKED BARS |
|--------------|-----------|--------|------------------------|--------|-------------|
|              | Ld        | Splice | Ld                     | Splice |             |
| Fc = 3000psi |           |        |                        |        |             |
| #3           | 17        | 23     | 22                     | 29     | 9           |
| #4           | 22        | 29     | 29                     | 38     | 11          |
| #5           | 28        | 37     | 36                     | 47     | 14          |
| #6           | 33        | 43     | 43                     | 56     | 17          |
| #7           | 48        | 63     | 63                     | 82     | 20          |
| #8           | 55        | 72     | 72                     | 94     | 22          |
| #9           | 62        | 81     | 81                     | 106    | 25          |
| #10          | 70        | 91     | 91                     | 119    | 28          |
| #11          | 78        | 102    | 101                    | 132    | 31          |
| Fc = 4000psi |           |        |                        |        |             |
| #3           | 15        | 20     | 19                     | 25     | 8           |
| #4           | 19        | 25     | 25                     | 33     | 10          |
| #5           | 24        | 32     | 31                     | 41     | 12          |
| #6           | 29        | 38     | 37                     | 49     | 15          |
| #7           | 42        | 55     | 54                     | 71     | 17          |
| #8           | 48        | 63     | 62                     | 81     | 19          |
| #9           | 54        | 71     | 70                     | 91     | 22          |
| #10          | 61        | 80     | 79                     | 103    | 25          |
| #11          | 67        | 88     | 87                     | 114    | 27          |

- NOTES:**
- VALUES FOR UNCOATED REINFORCING AND NORMAL WEIGHT CONCRETE WITH CLEAR SPACING > db. CLEAR COVER > db AND MINIMUM STIRRUPS OR TIES THROUGHOUT Ld OR CLEAR SPACING > 2db AND CLEAR COVER > db.
  - DEVELOP ALL REINFORCING IN STRUCTURAL SLABS WITH MINIMUM DEVELOPMENT LENGTH Ld.
  - Ld = DEVELOPMENT LENGTH OF BAR WITH STANDARD HOOK.
  - TOP BAR = HORIZONTAL BAR WITH MORE THAN 12" OF FRESH CONCRETE BELOW (EXCLUDING WALL HORIZONTAL REINFORCING) OR AS NOTED ON DOCUMENTS AS "TOP BAR".
  - ALL TABULATED VALUES ARE IN INCHES.
  - COLUMN VERTICAL REINFORCING LAP SPICE SCHEDULE PER [01401]
  - SHEAR WALL REINFORCING LAP SPICE SCHEDULE PER [01404].
  - MOMENT FRAME REINFORCING LAP SPICE SCHEDULE PER [01405].

**TYPICAL LAP SPICE AND DEVELOPMENT LENGTH SCHEDULE**

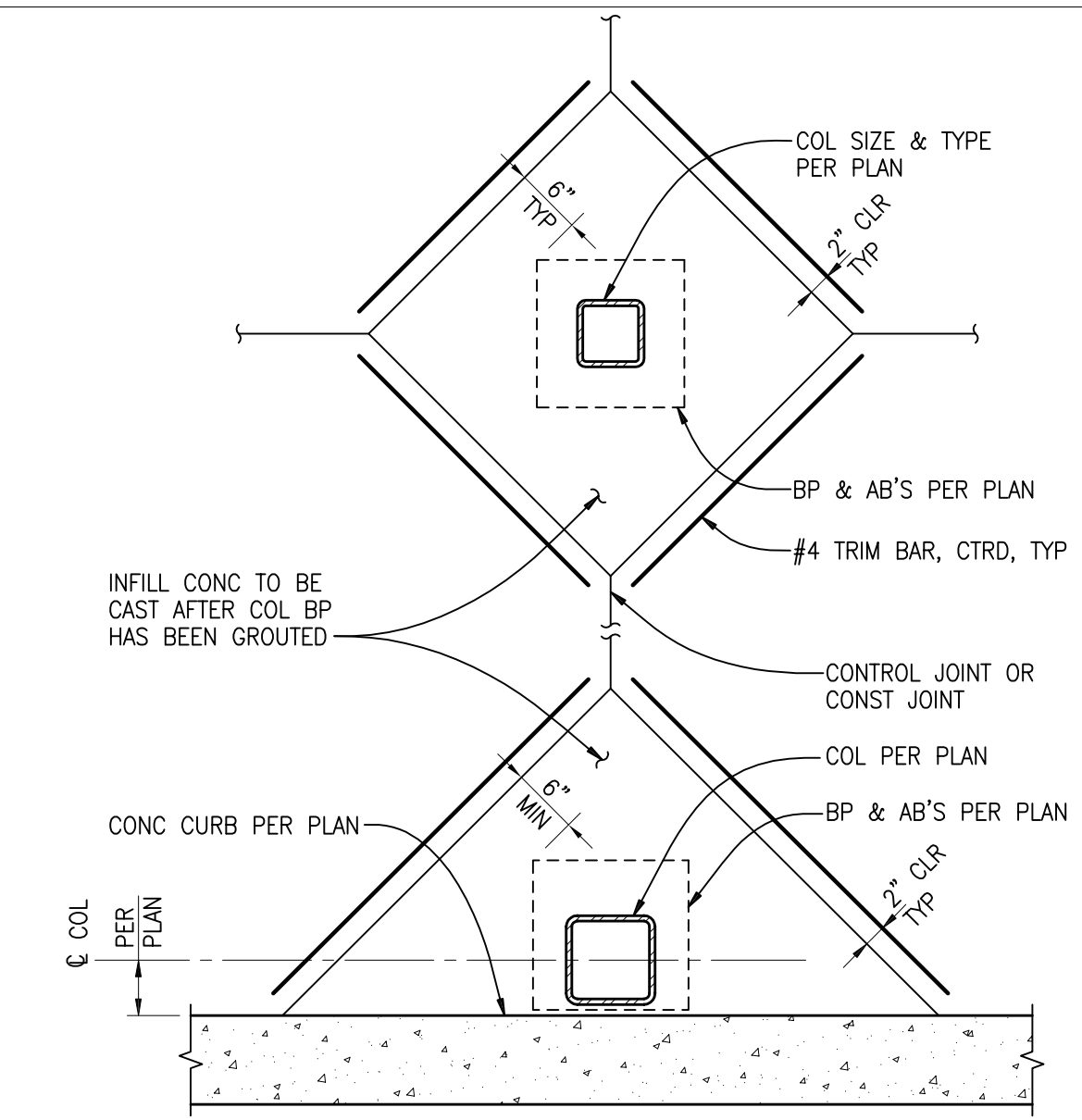
01400M SCALE: NONE



- NOTES:**
- SPICE LENGTHS PER LAP SPICE AND DEVELOPMENT LENGTH SCHEDULE.
  - FOOTING REINFORCING PER PLAN OR ELEVATIONS, SECTIONS AND DETAILS.

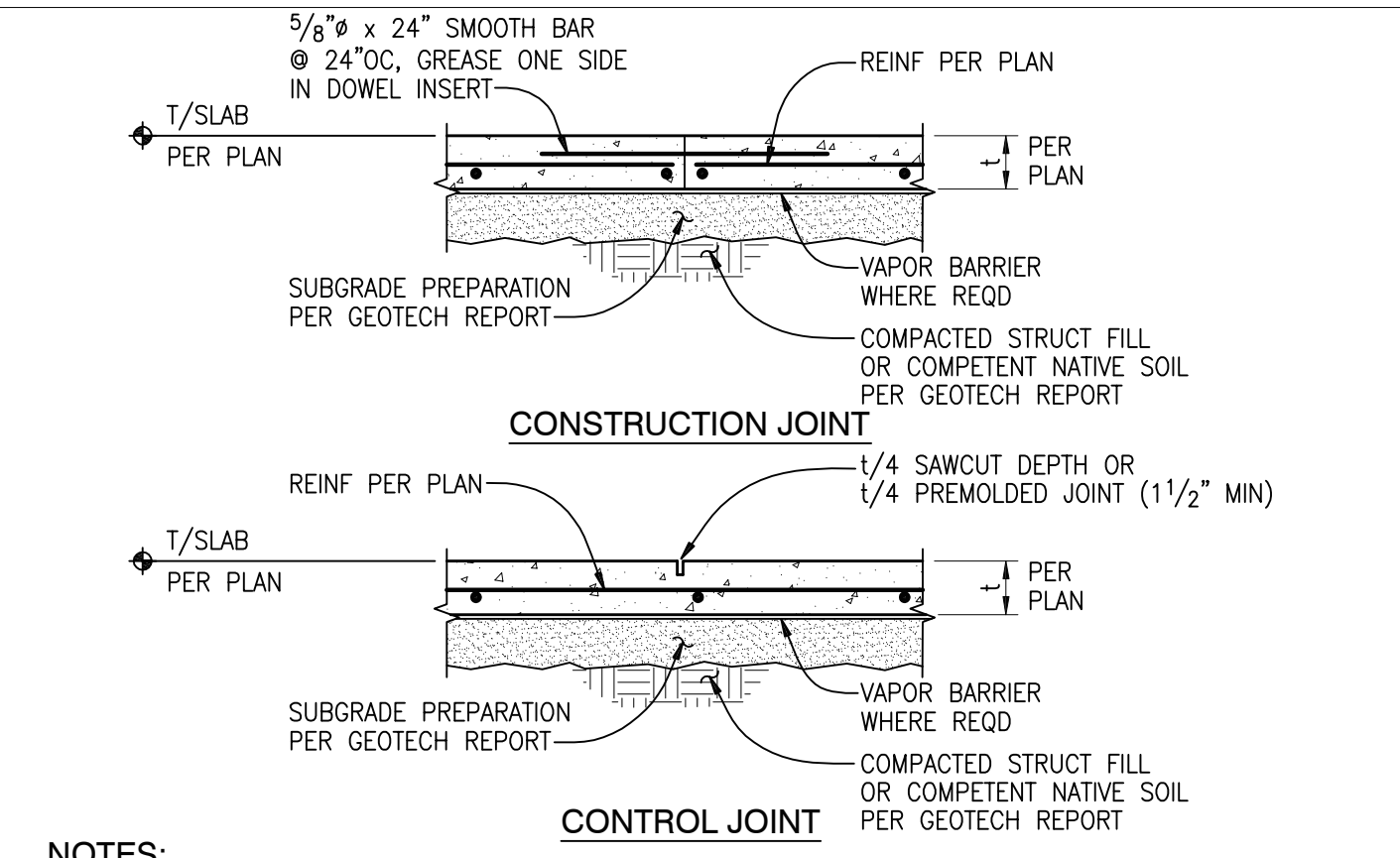
**PLAN - TYPICAL CORNER REINFORCING AT CONCRETE FOOTINGS**

03907 SCALE: 3/4"=1'-0"



**PLAN - TYPICAL CONTROL JOINTS AT HSS COLUMNS**

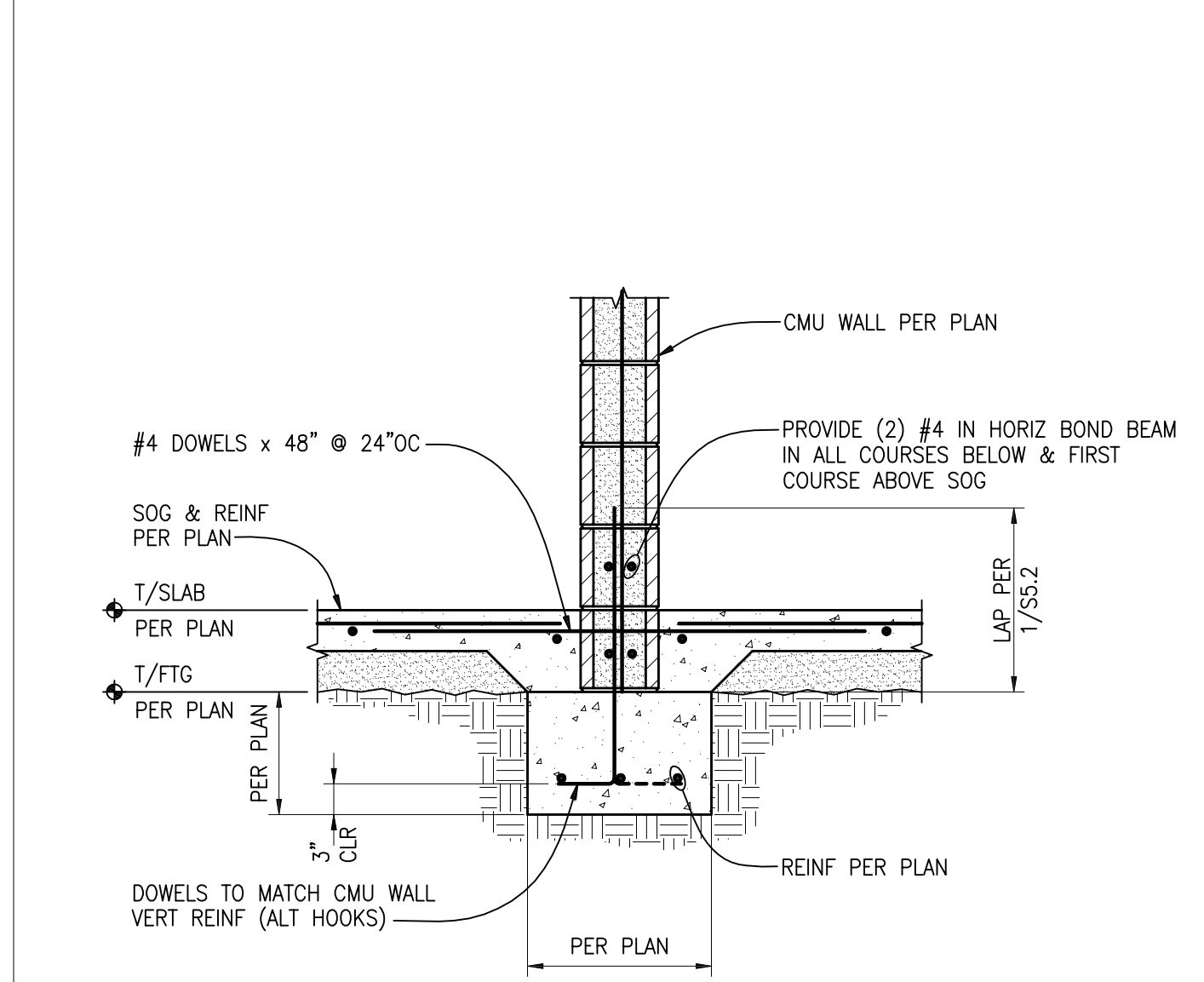
03212M SCALE: NONE



- NOTES:**
- USE "EARLY ENTRY DRY-CUT SAW" AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EDGES. SAWCUT ALONG SHORT DIRECTION OF POUR FIRST.
  - ALIGN A CONSTRUCTION OR CONTROL JOINT WITH RE-ENTRANT SLAB CORNERS, EACH WAY, TYPICAL.
  - PROVIDE CONSTRUCTION/CONTROL JOINT TO ENCLOSE APPROXIMATE SQUARE AREAS 225 SQUARE FEET MAXIMUM, WITH A MAXIMUM PANEL ASPECT RATIO OF 1.3 TO 1.0.
  - CONTRACTOR TO SUBMIT CONSTRUCTION/CONTROL JOINT PLAN TO STRUCTURAL ENGINEER OF RECORD FOR REVIEW/APPROVAL.

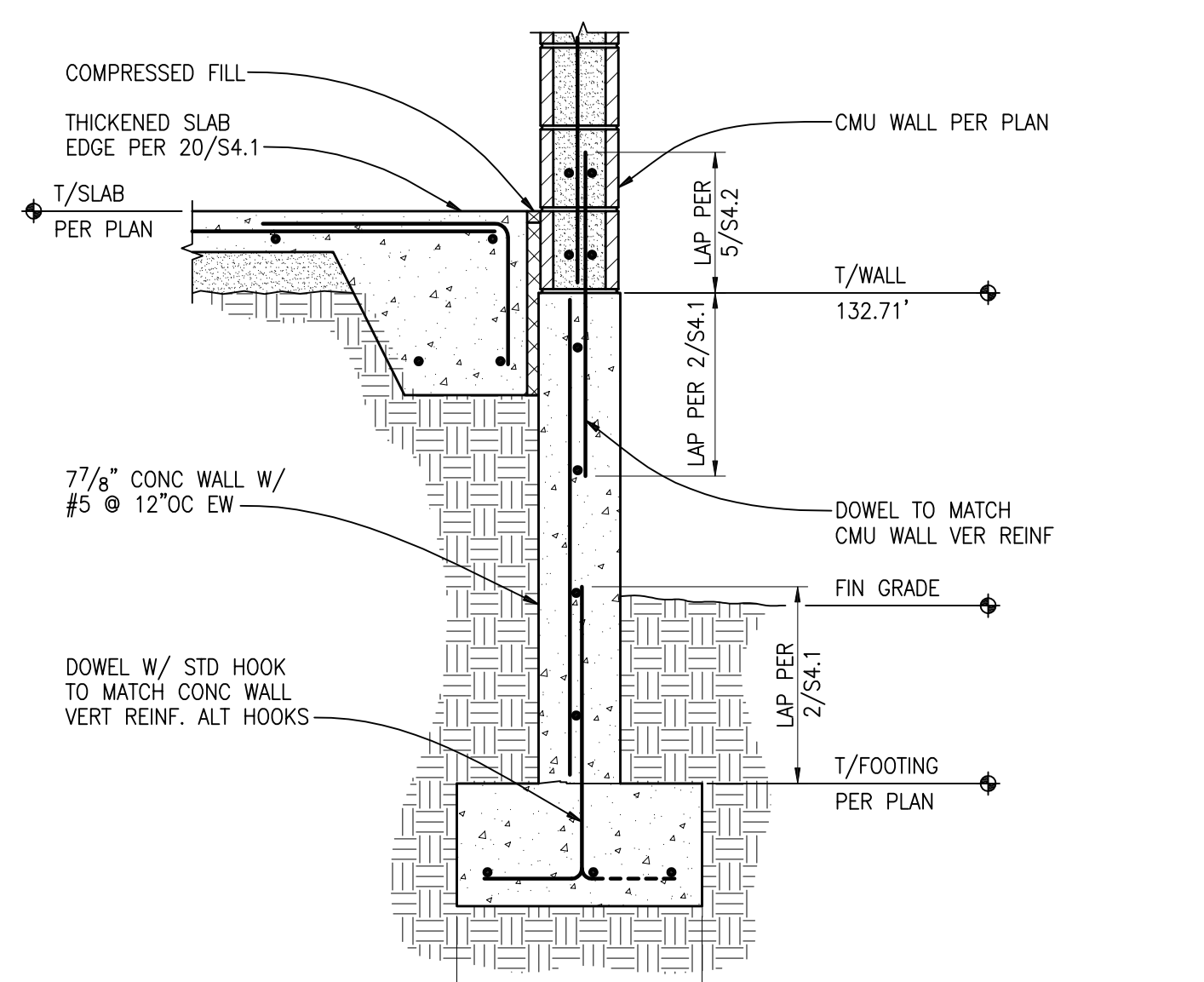
**TYPICAL SLAB ON GRADE JOINT DETAILS WITH REINFORCING**

03201 SCALE: 3/4"=1'-0"



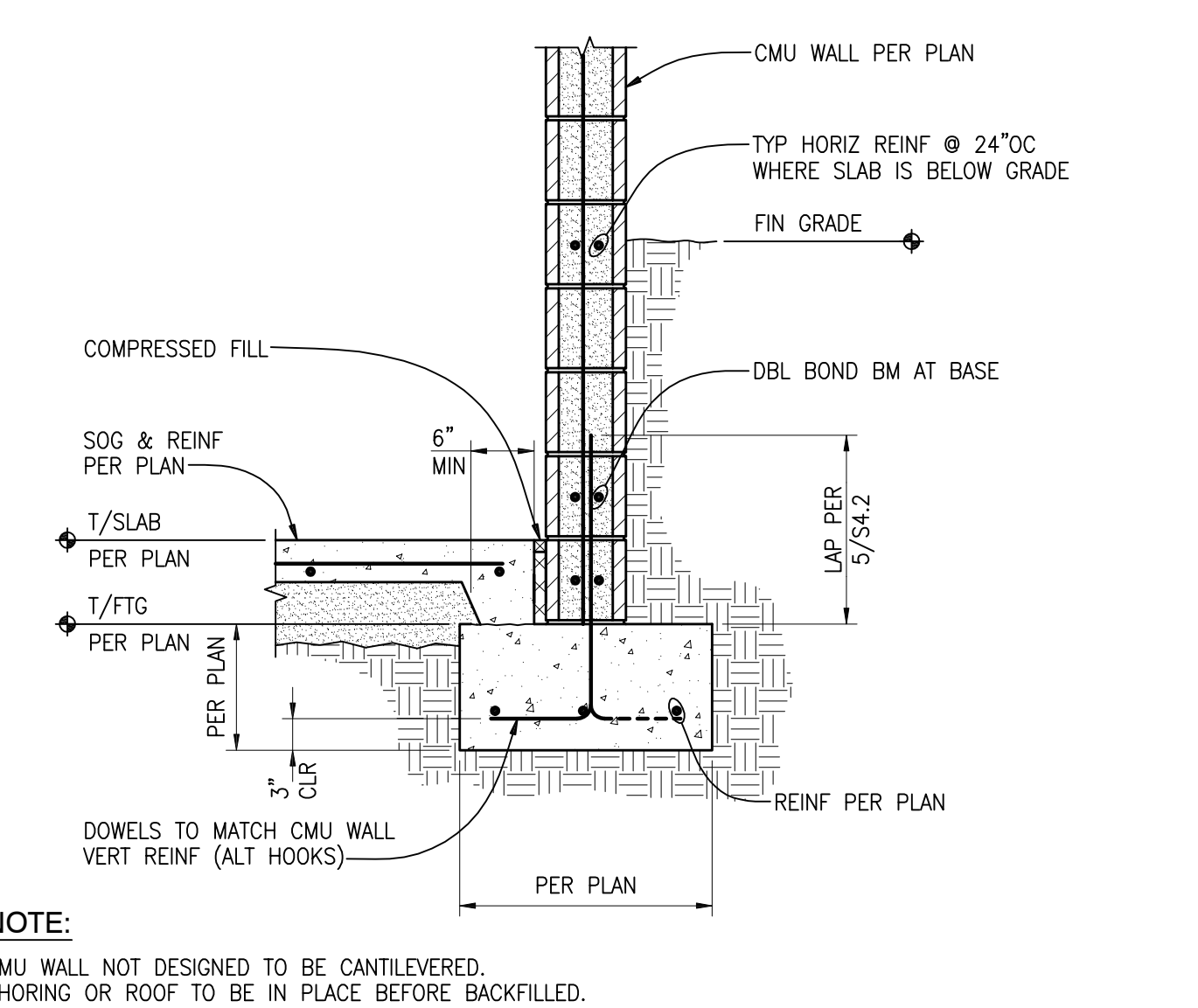
**INTERIOR FOOTING AT CMU BEARING WALL**

03160 SCALE: 3/4"=1'-0"



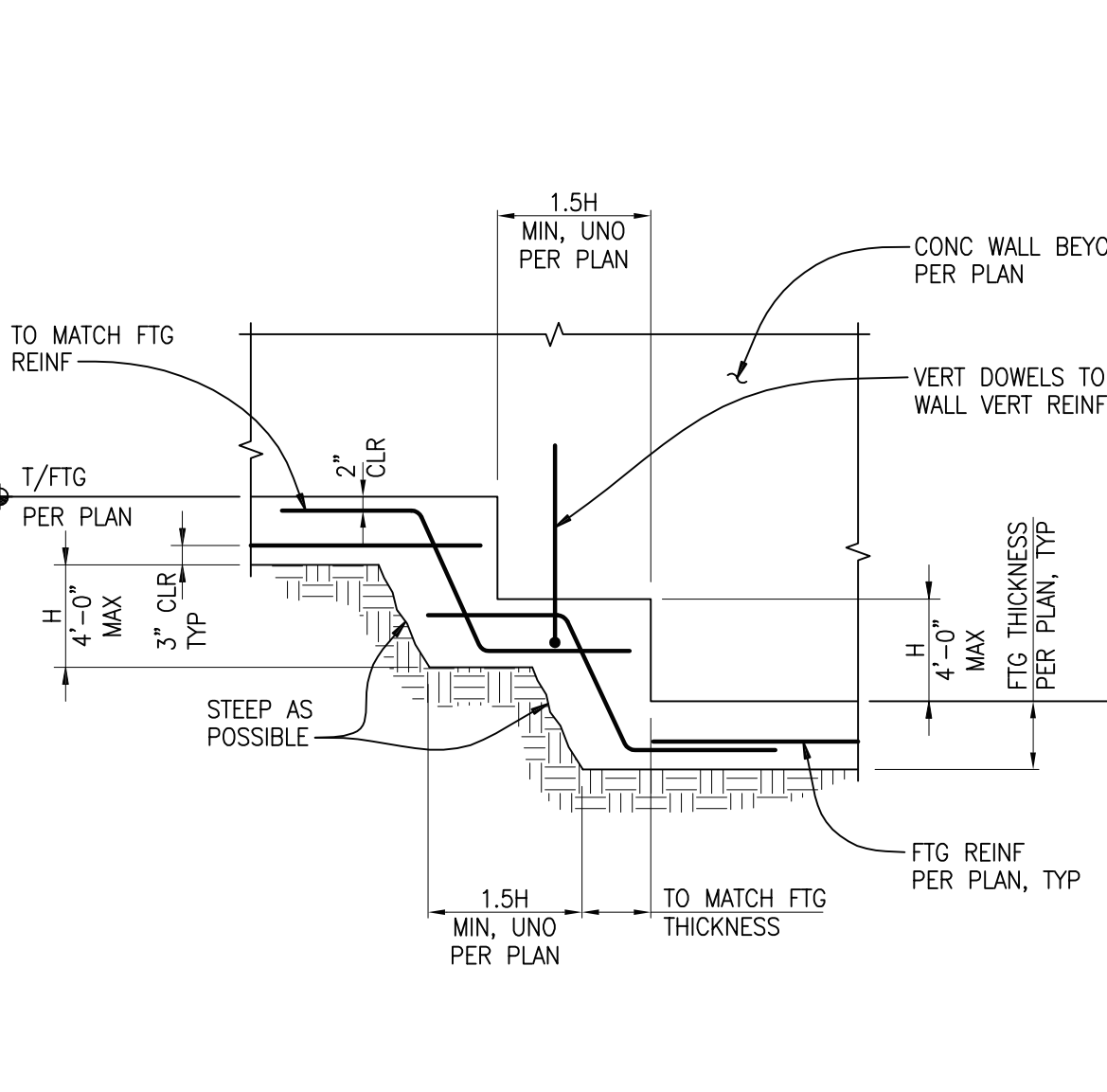
**EXTERIOR FOOTING AT CMU WALL - SLAB ABOVE GRADE**

03160 SCALE: 3/4"=1'-0"



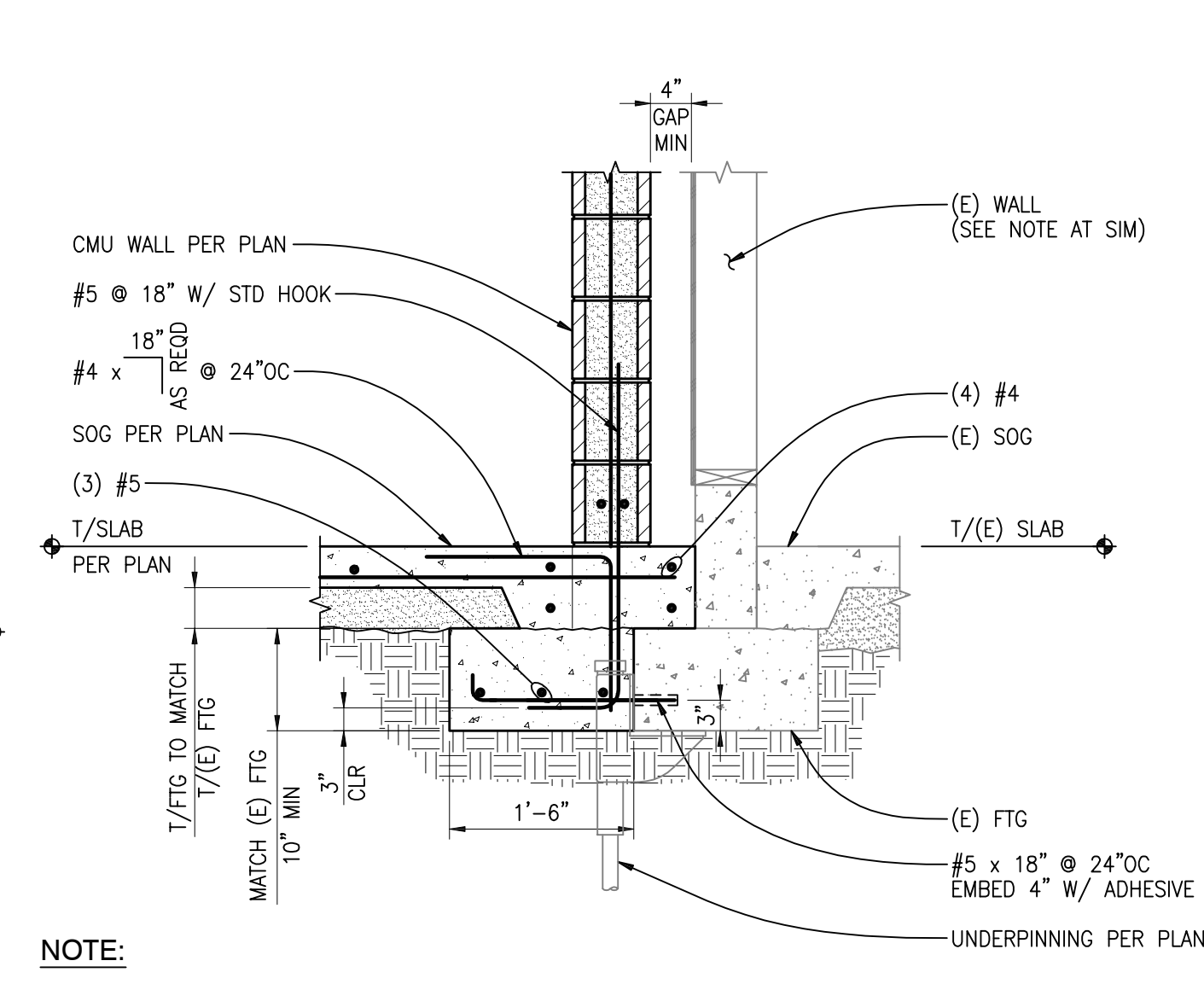
**EXTERIOR FOOTING AT CMU WALL - SLAB AT OR BELOW GRADE**

03901 SCALE: 3/4"=1'-0"



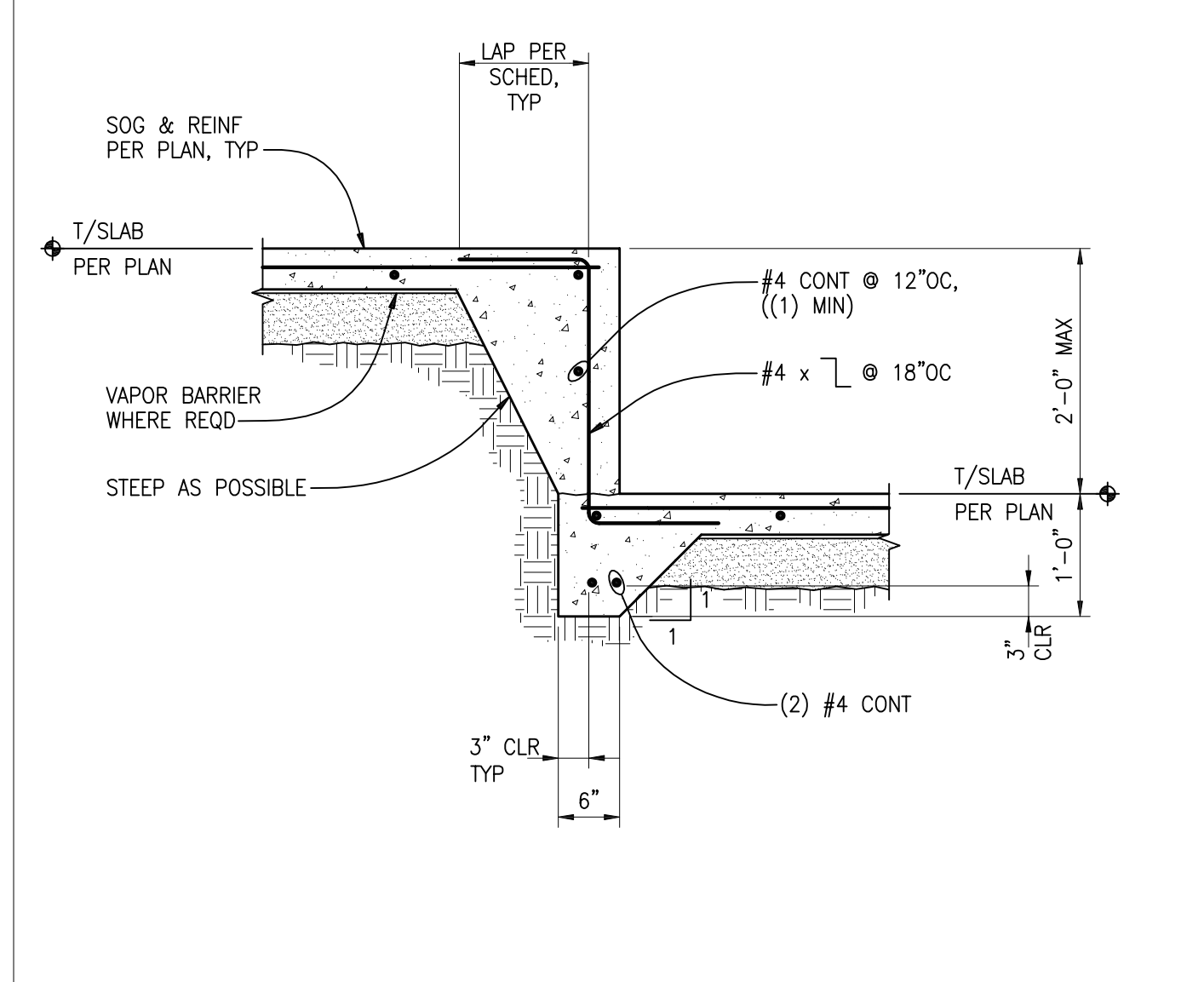
**TYPICAL STEPPED FOOTING**

03901 SCALE: NONE



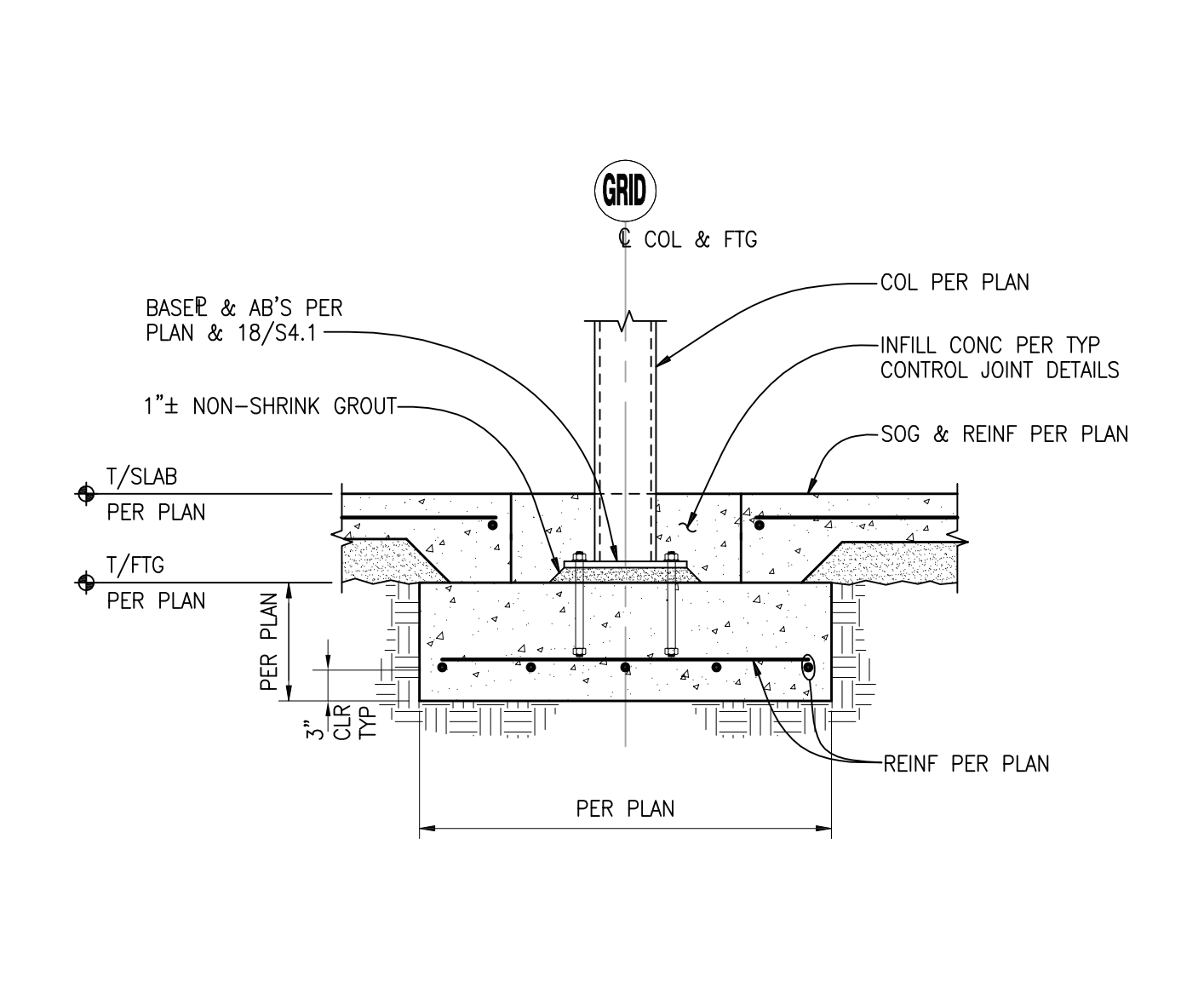
**FOOTING DETAIL AT EXISTING WALL**

03201 SCALE: 3/4"=1'-0"



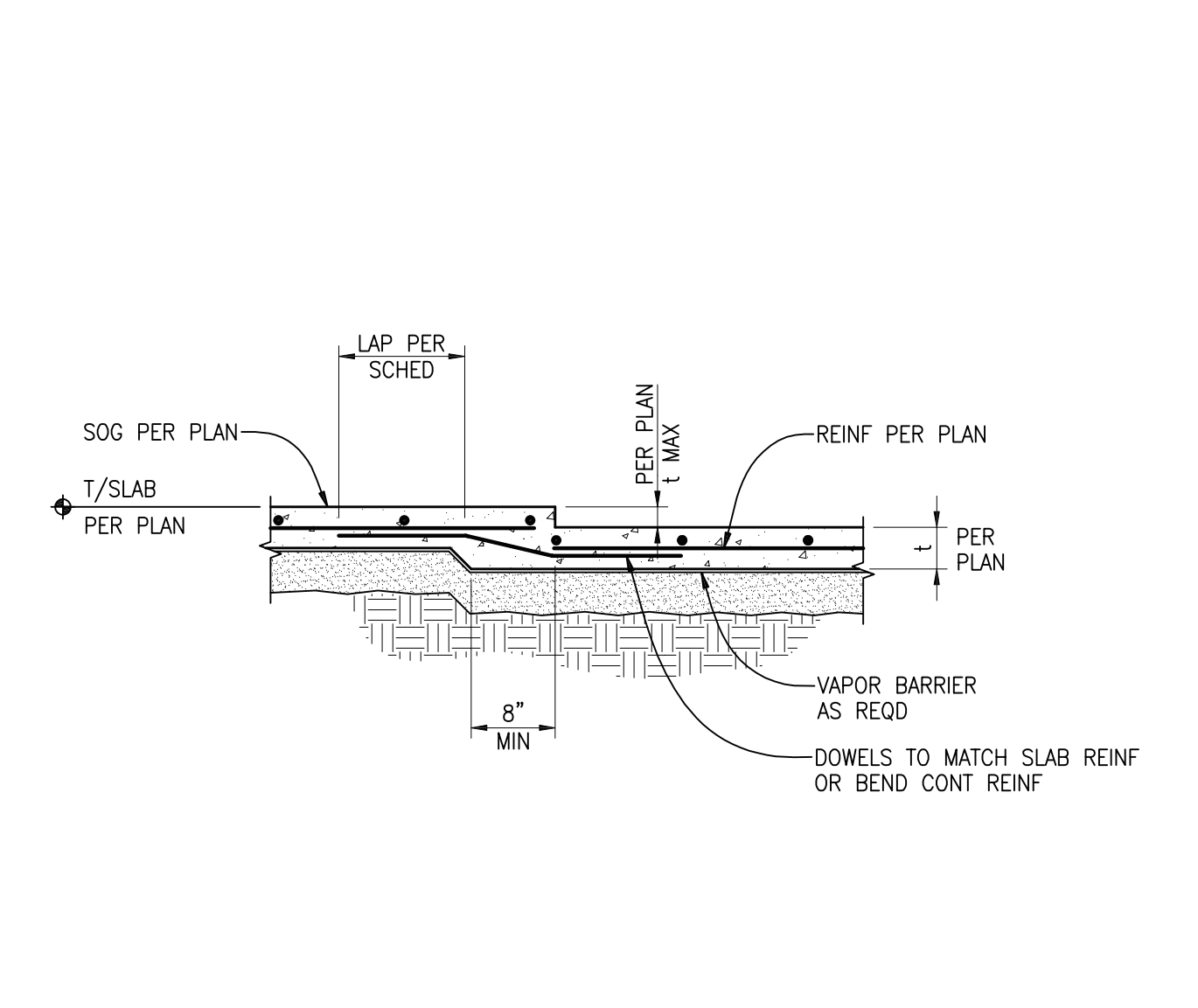
**TYPICAL STEP AT SLAB ON GRADE**

03202A SCALE: 3/4"=1'-0"



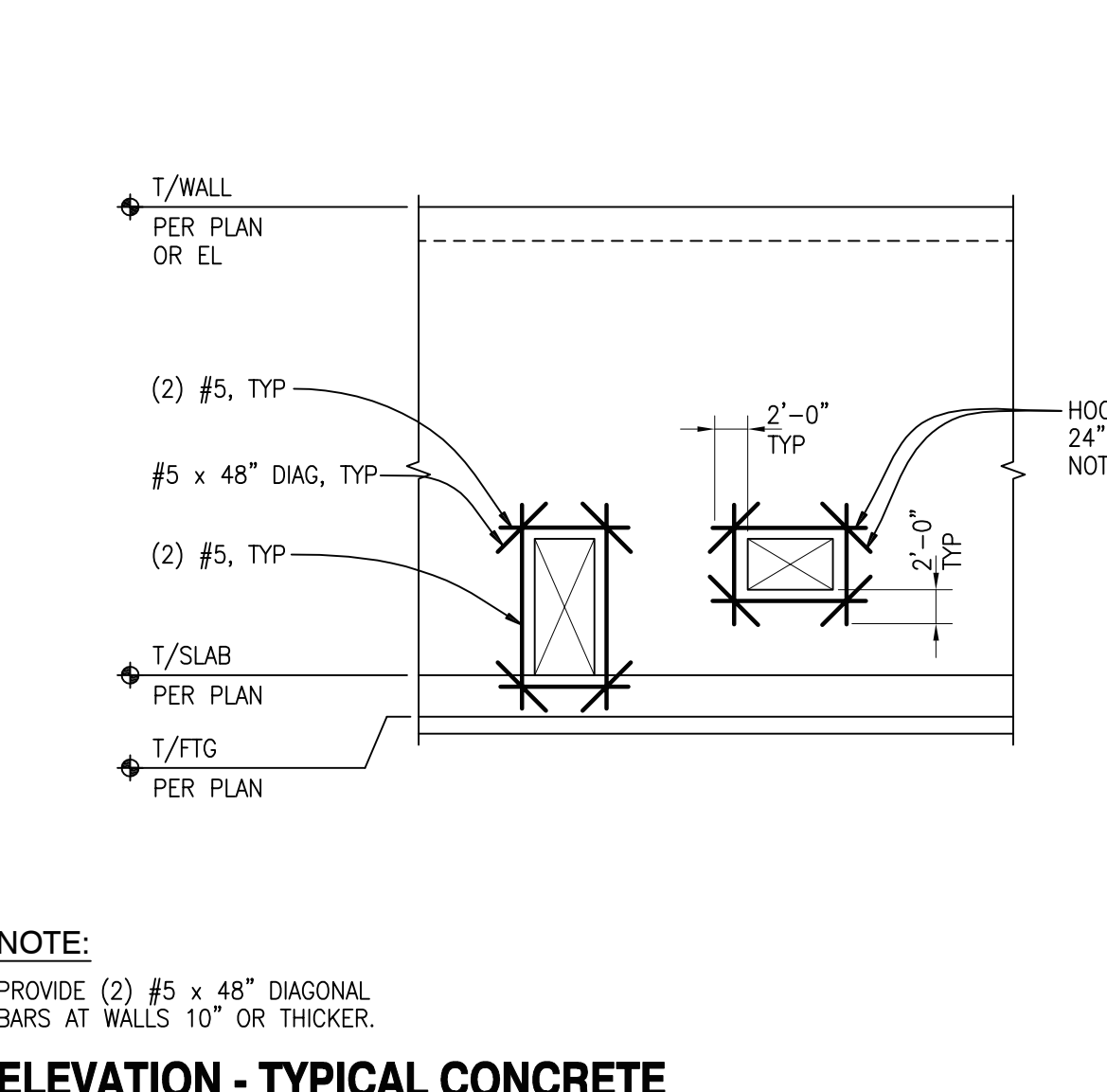
**INTERIOR SPREAD FOOTING AT STEEL COLUMN**

03005 SCALE: 3/4"=1'-0"



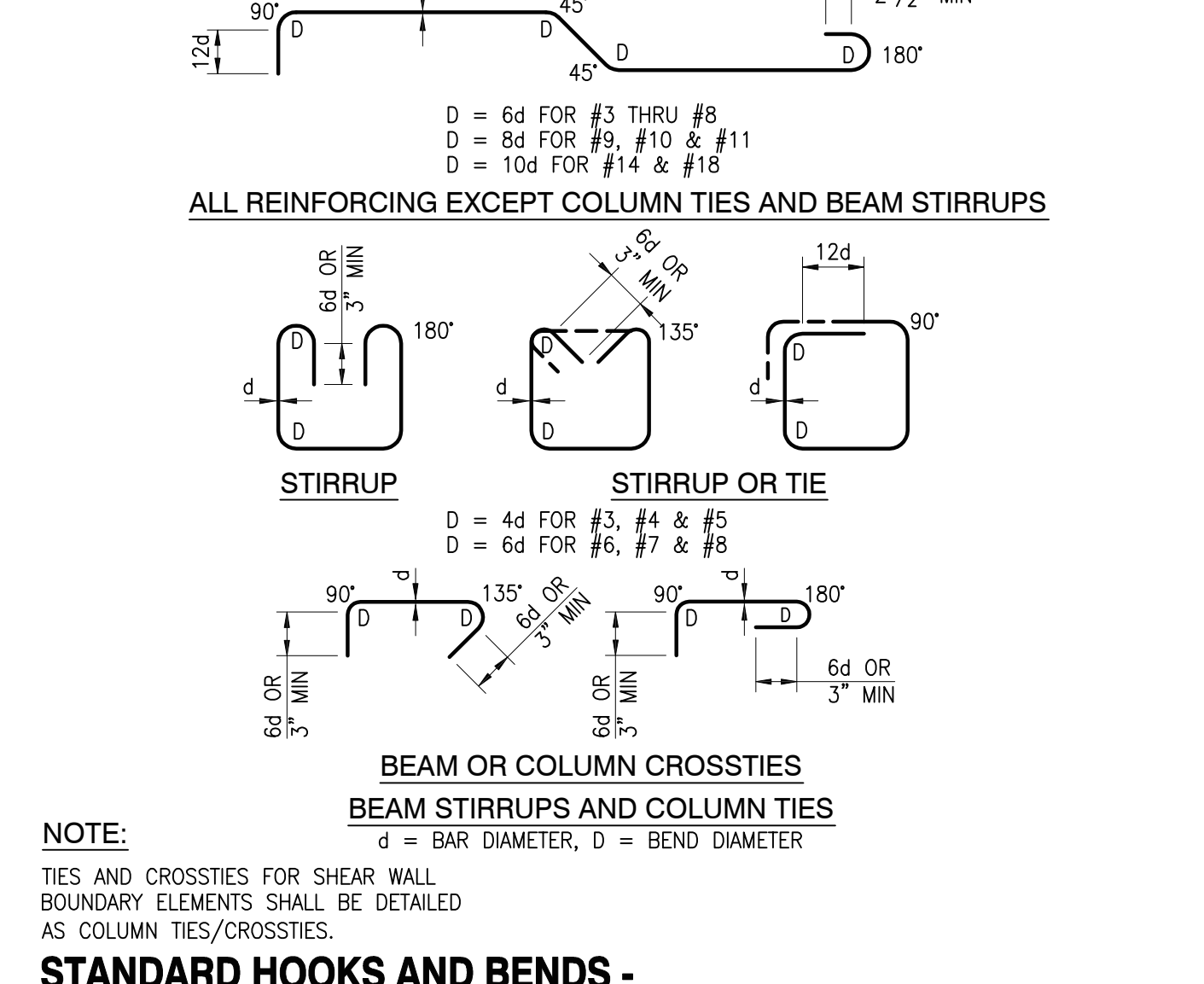
**TYPICAL DEPRESSED SLAB DETAIL**

03202 SCALE: 3/4"=1'-0"



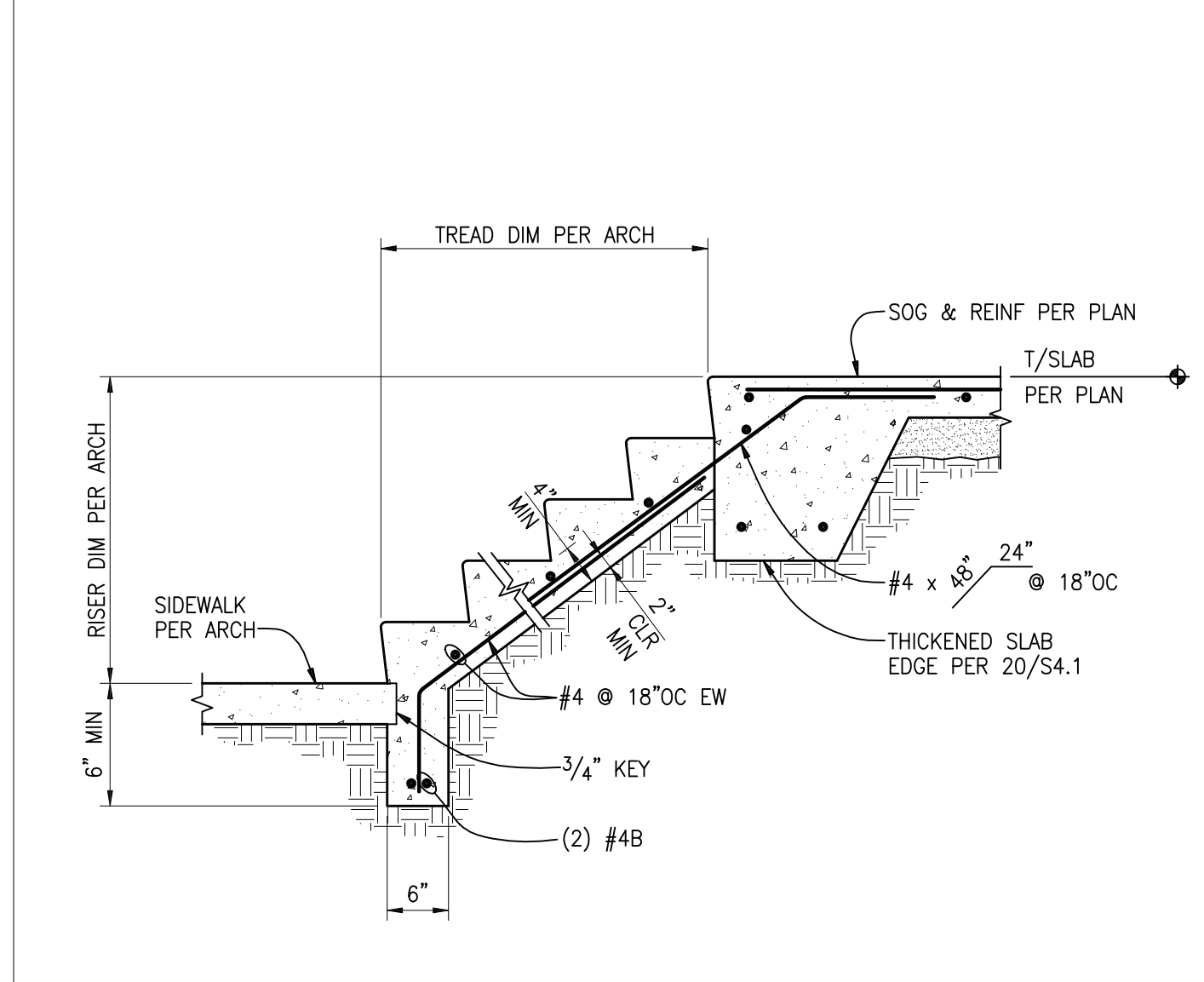
**ELEVATION - TYPICAL CONCRETE WALL OPENING REINFORCING**

03401 SCALE: NONE



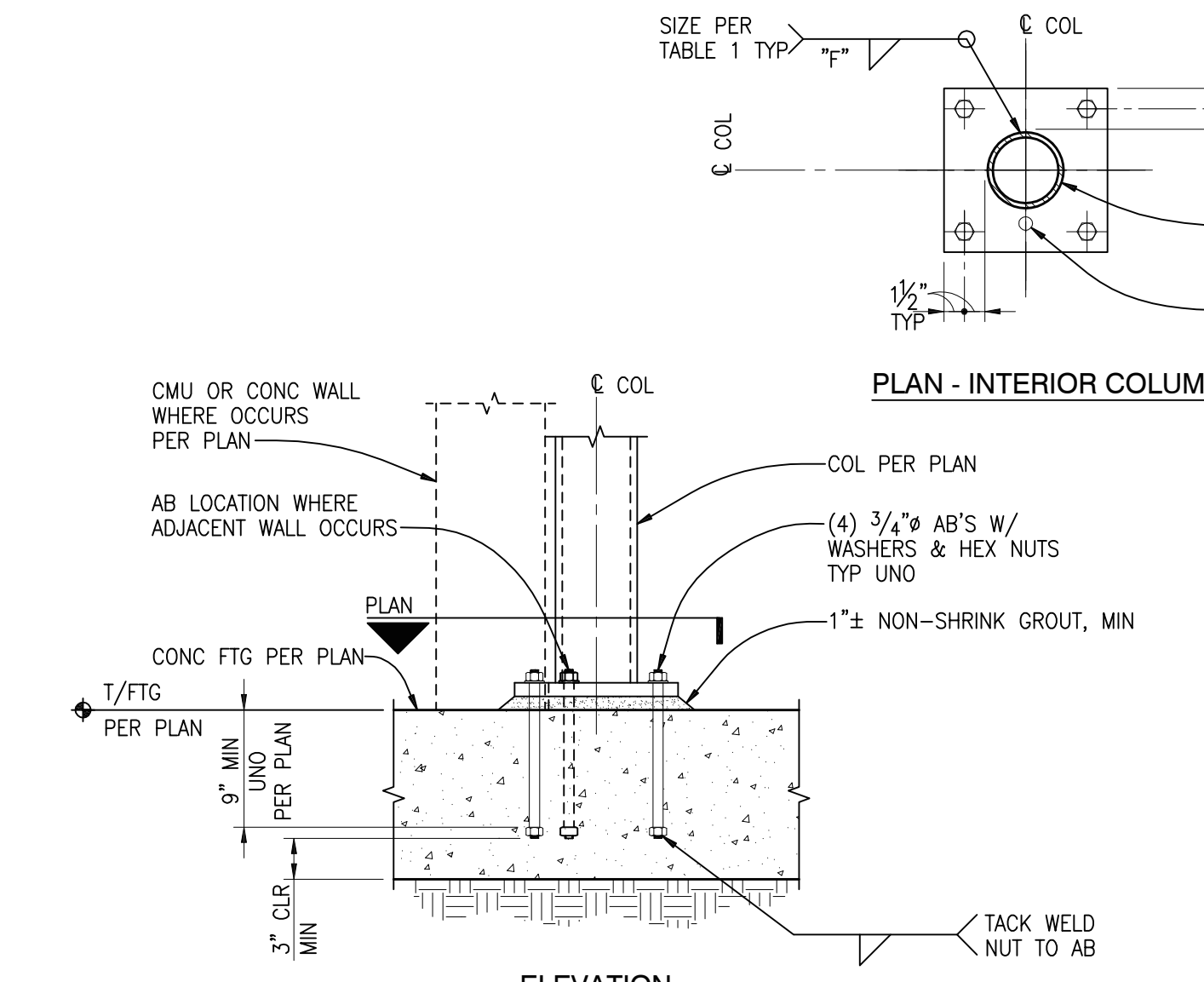
**STANDARD HOOKS AND BENDS - BEAM STIRRUPS AND COLUMN TIES**

03400 (FOR REVISIONS TO STANDARD HOOKS & BENDS REF TO CURRENT ACI) SCALE: NONE



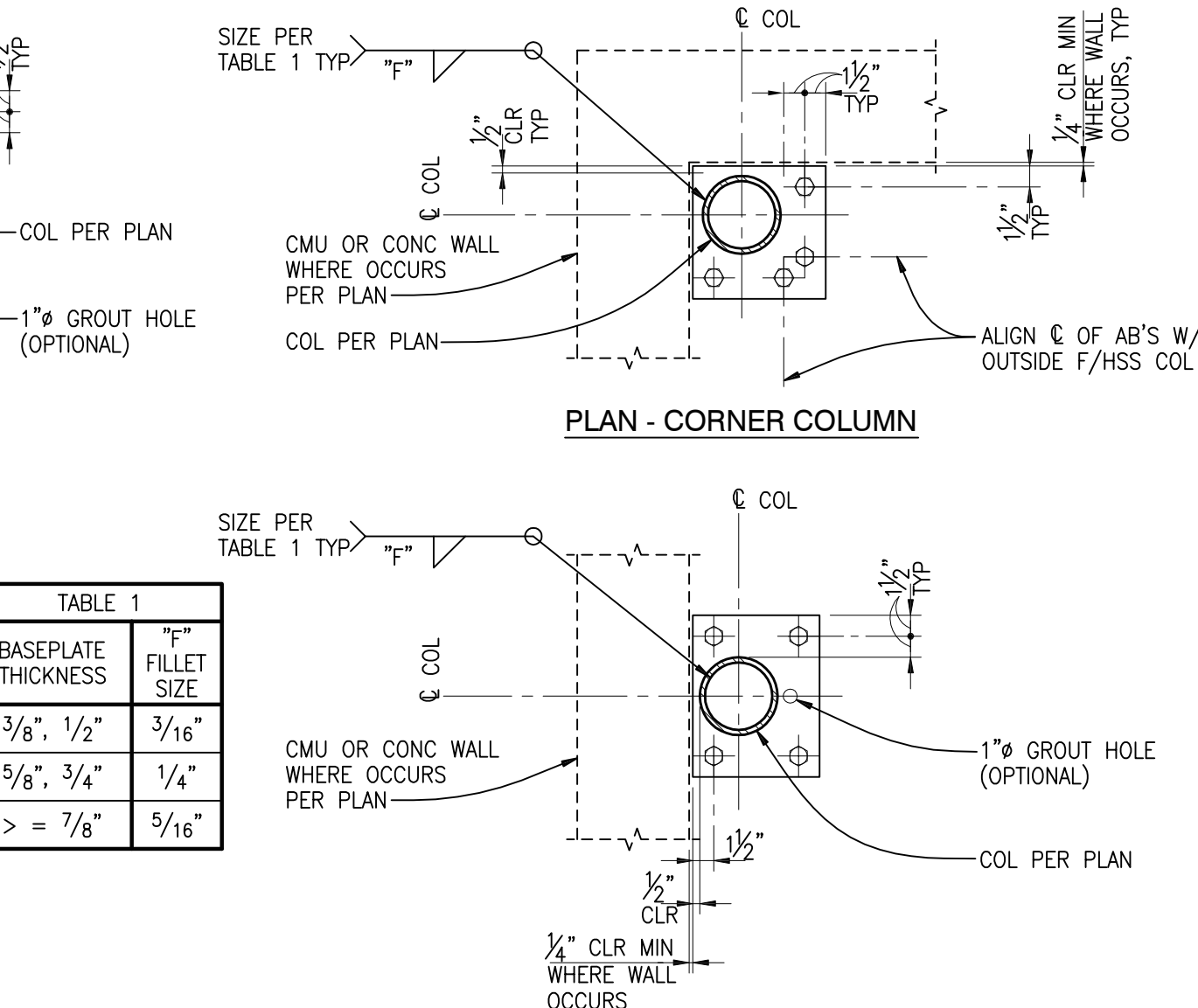
**TYPICAL STAIR ON GRADE**

03800M SCALE: 3/4"=1'-0"



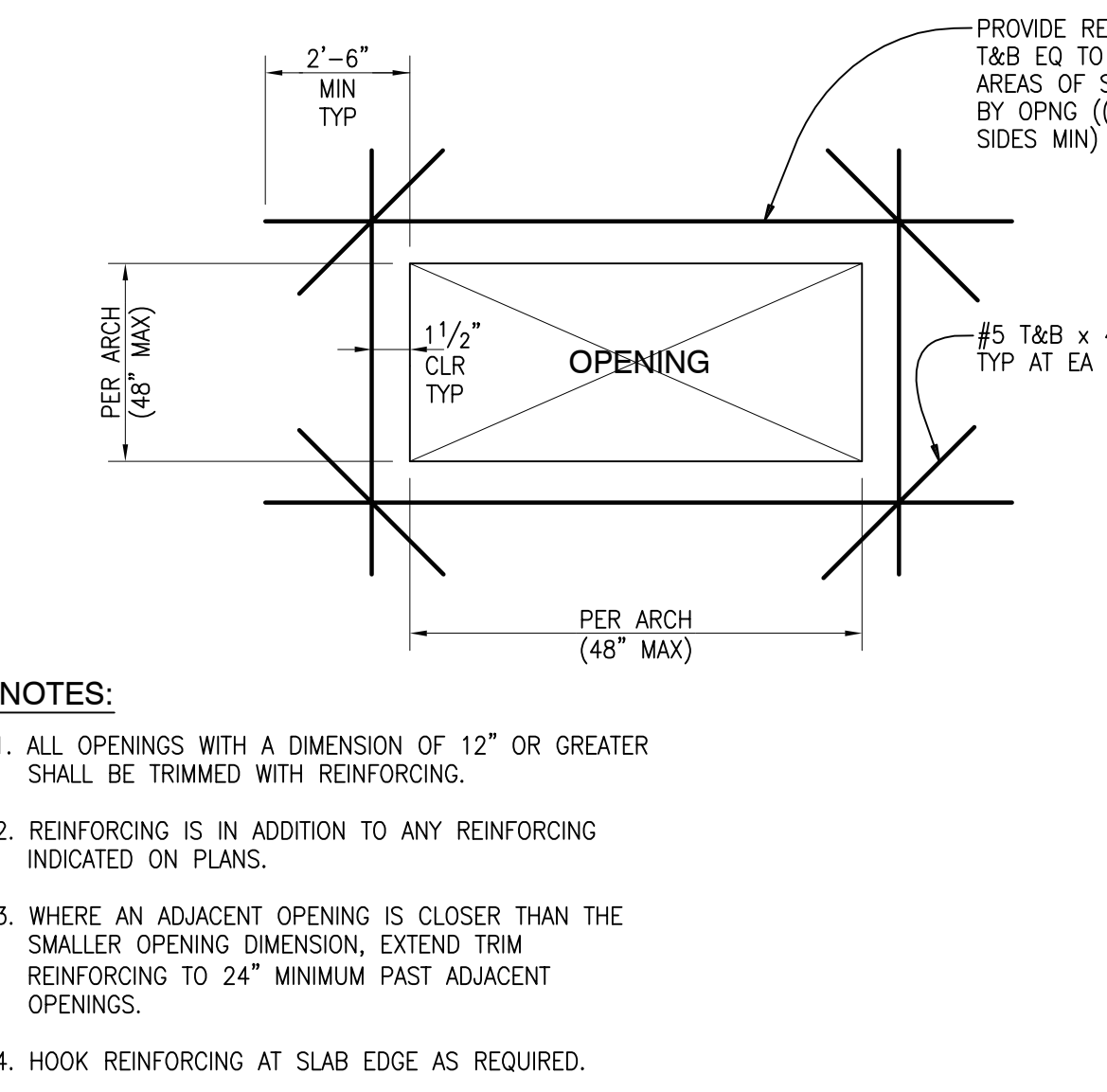
**TYPICAL BASEPLATE TO FOUNDATION CONNECTION - HSS COLUMN**

05030M SCALE: 1"=1'-0"



**PLAN - TYPICAL SLAB OPENING REINFORCING AT REINFORCED SLAB**

03220 SCALE: NONE

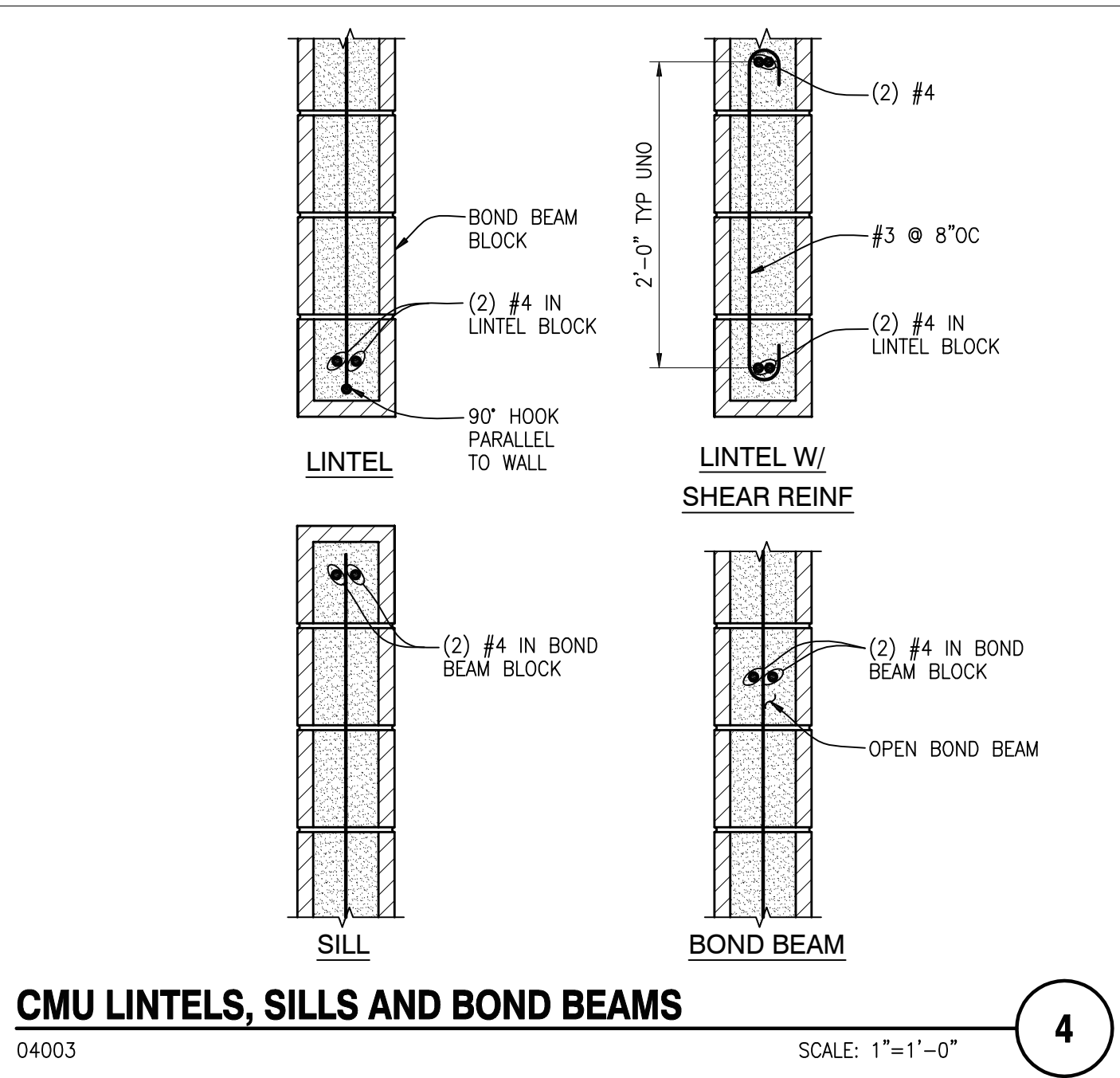
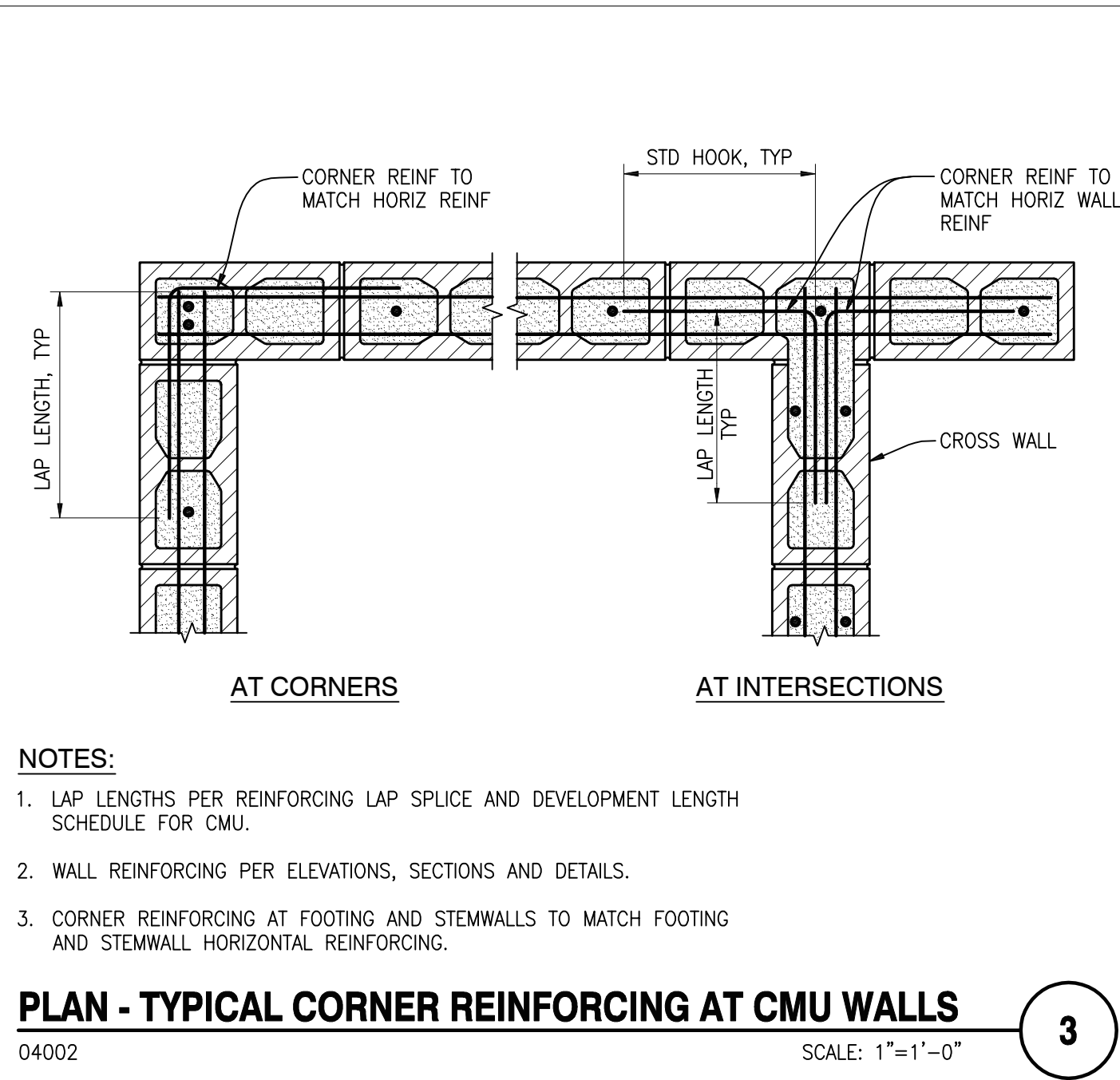
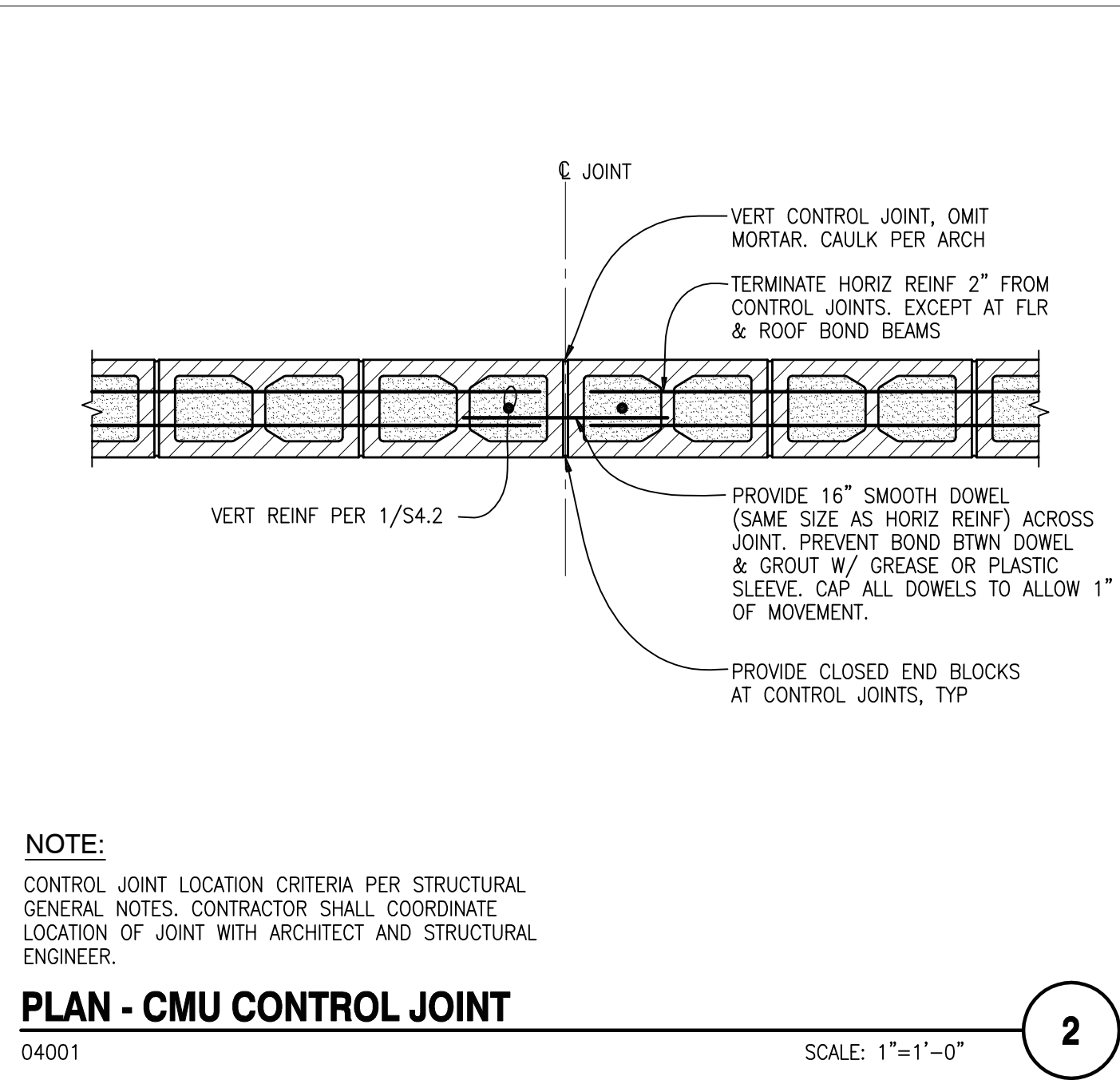
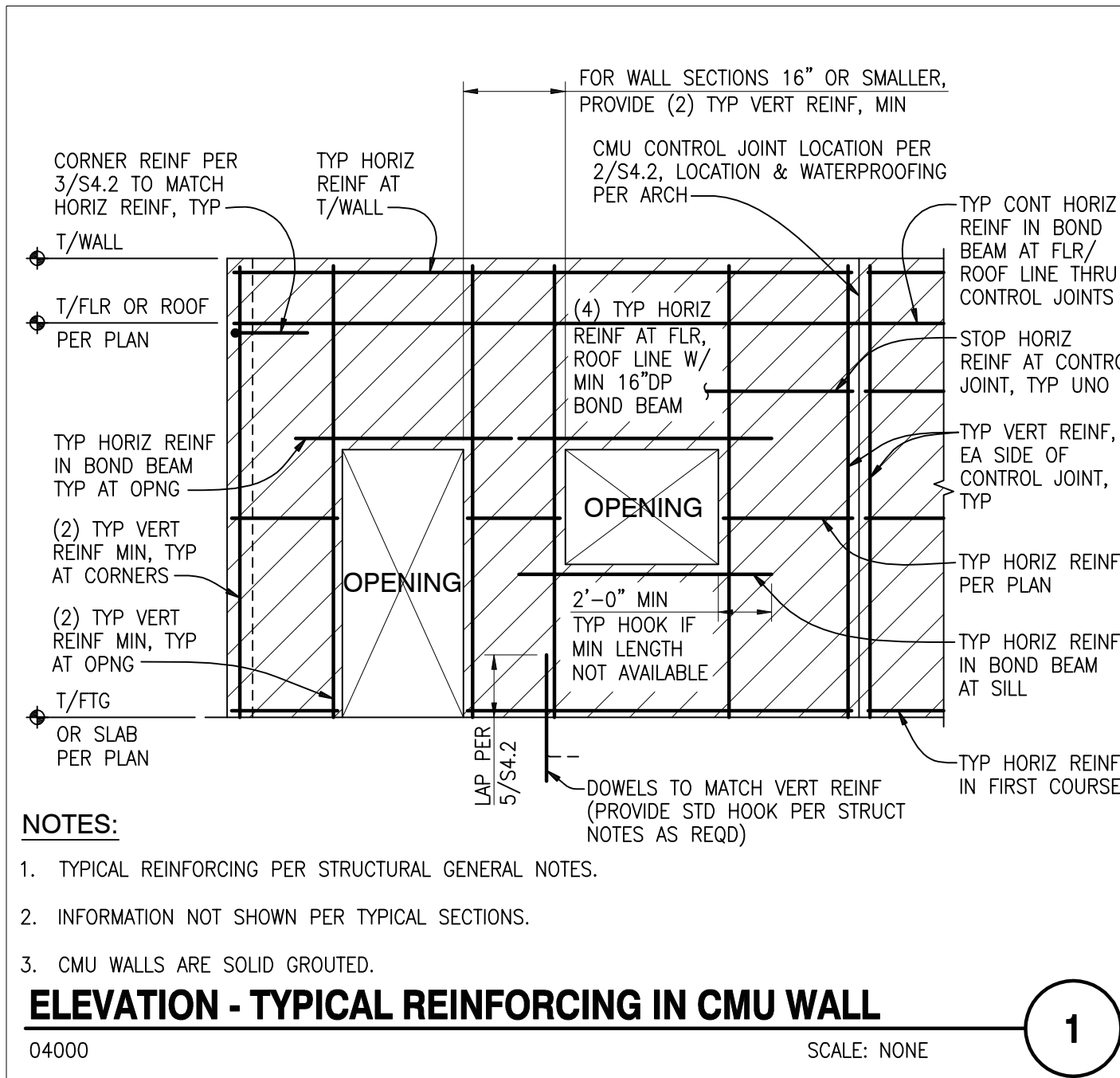


**TYPICAL THICKENED SLAB EDGE FOOTING**

03203 SCALE: 3/4"=1'-0"

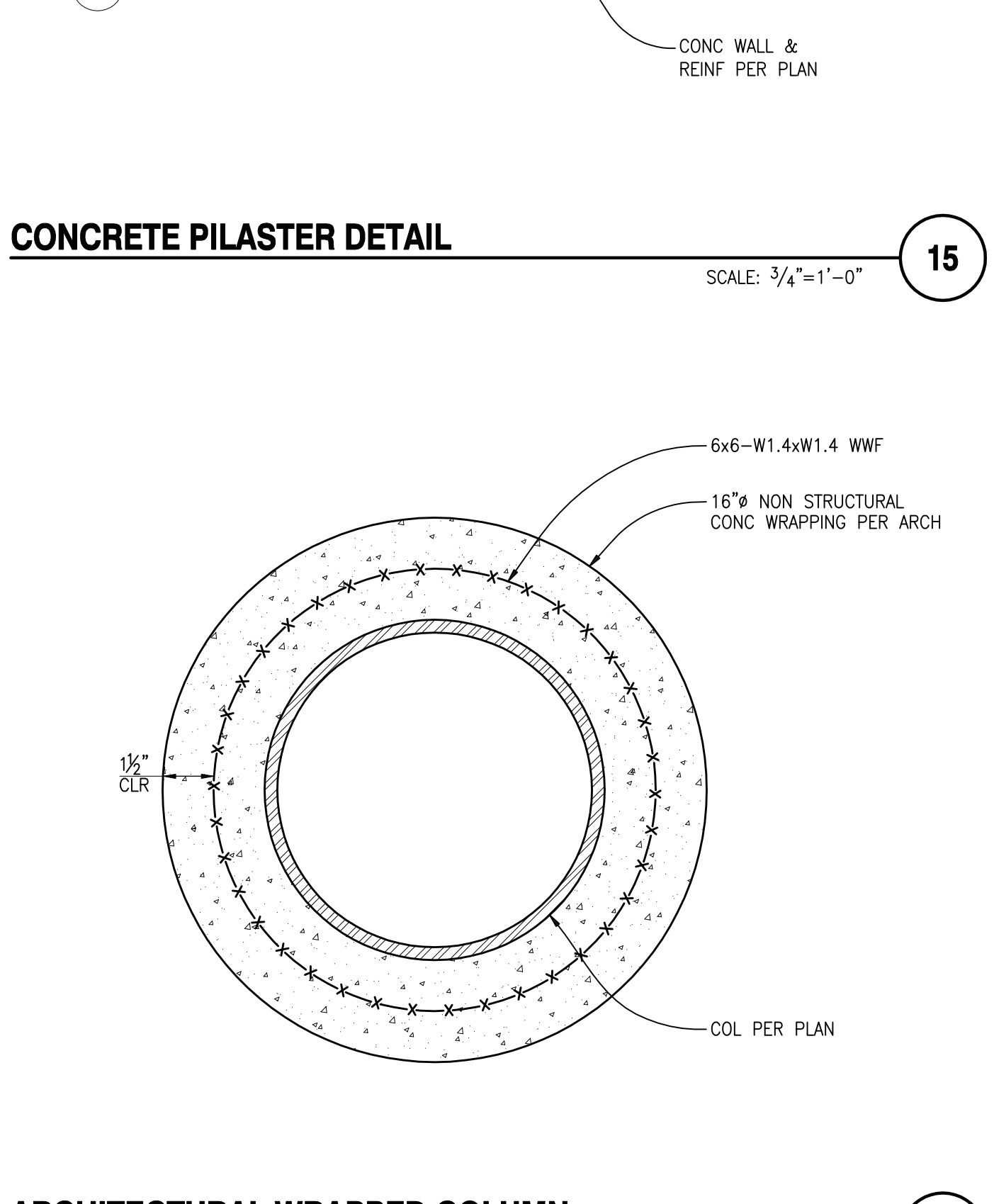
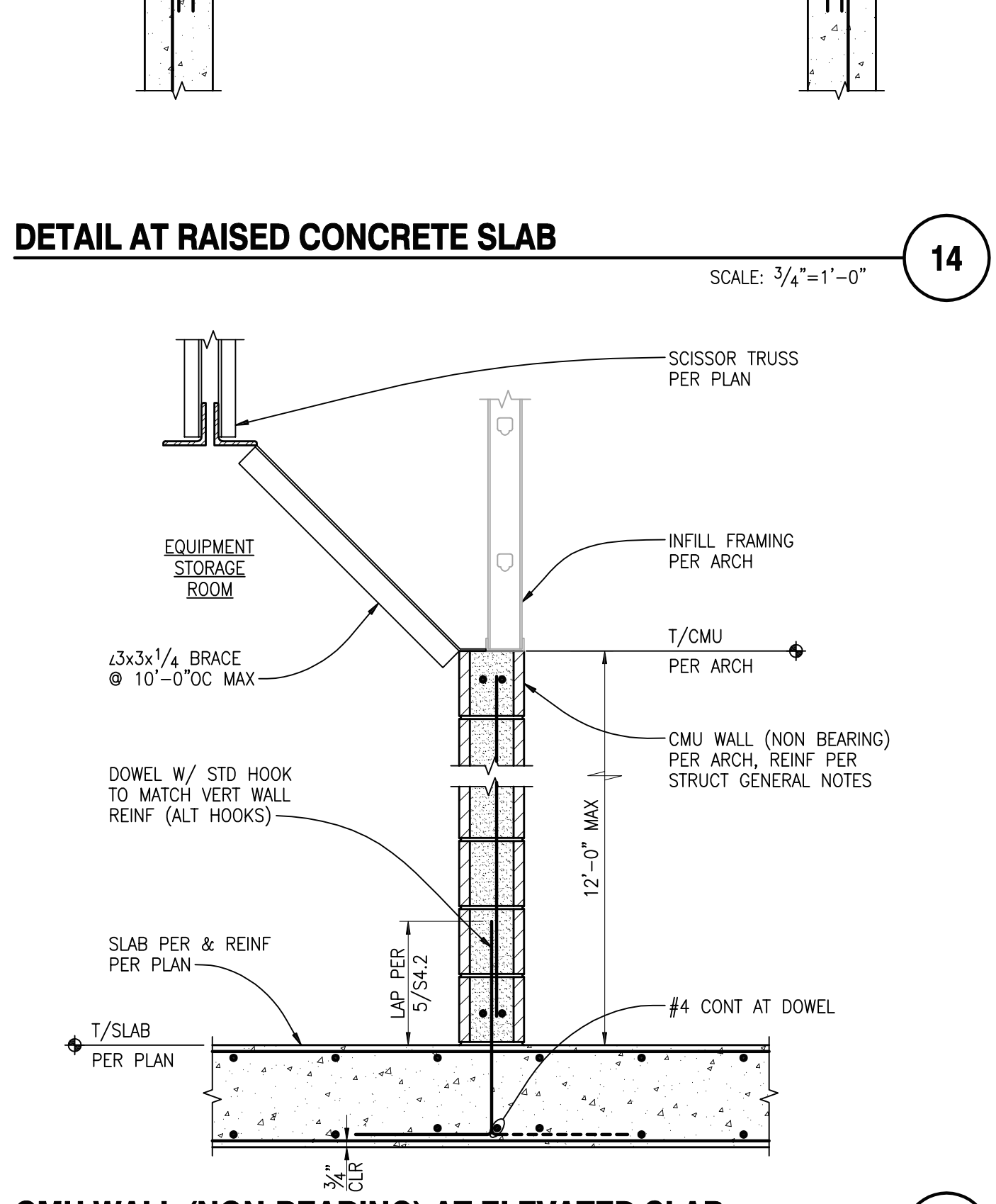
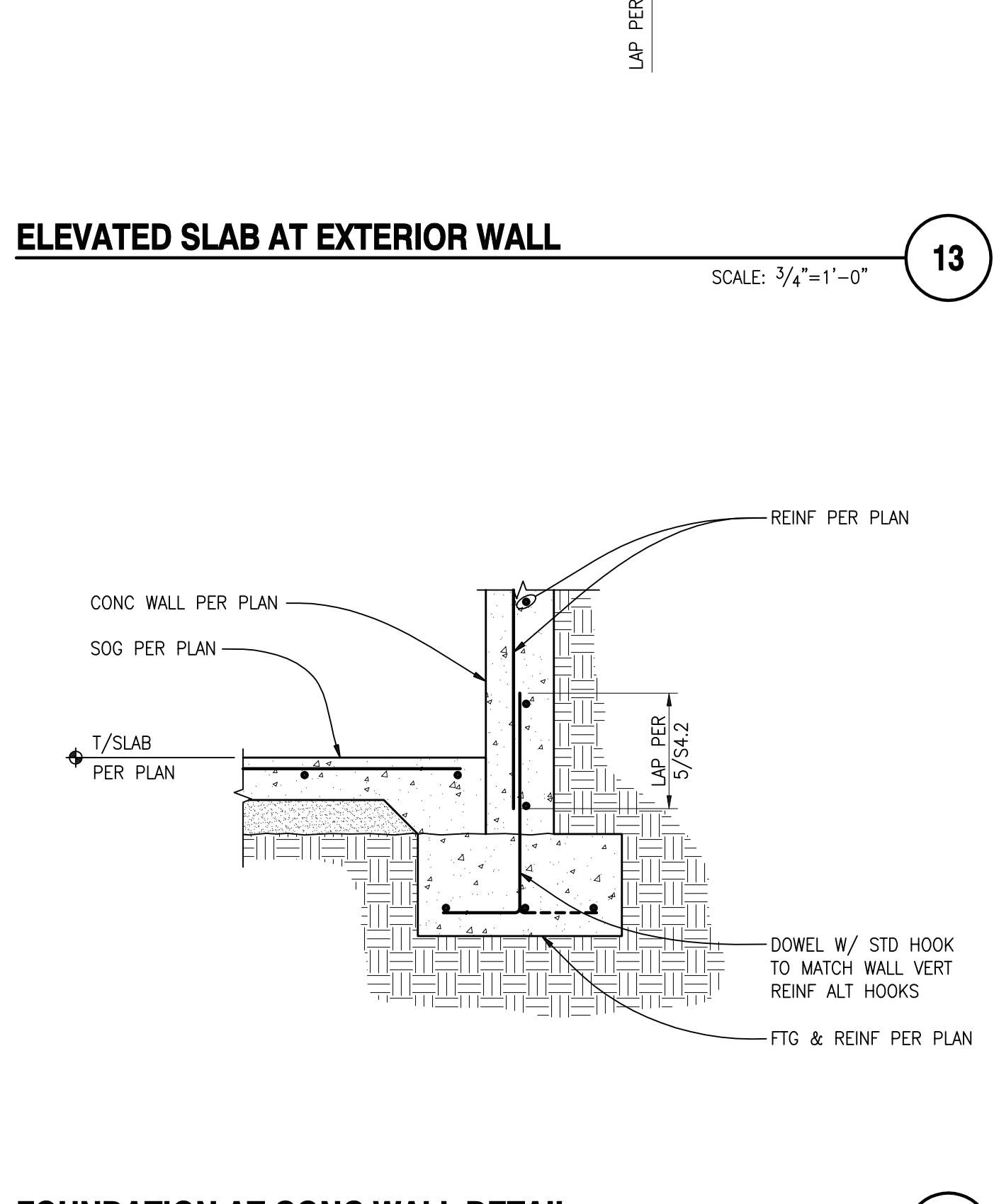
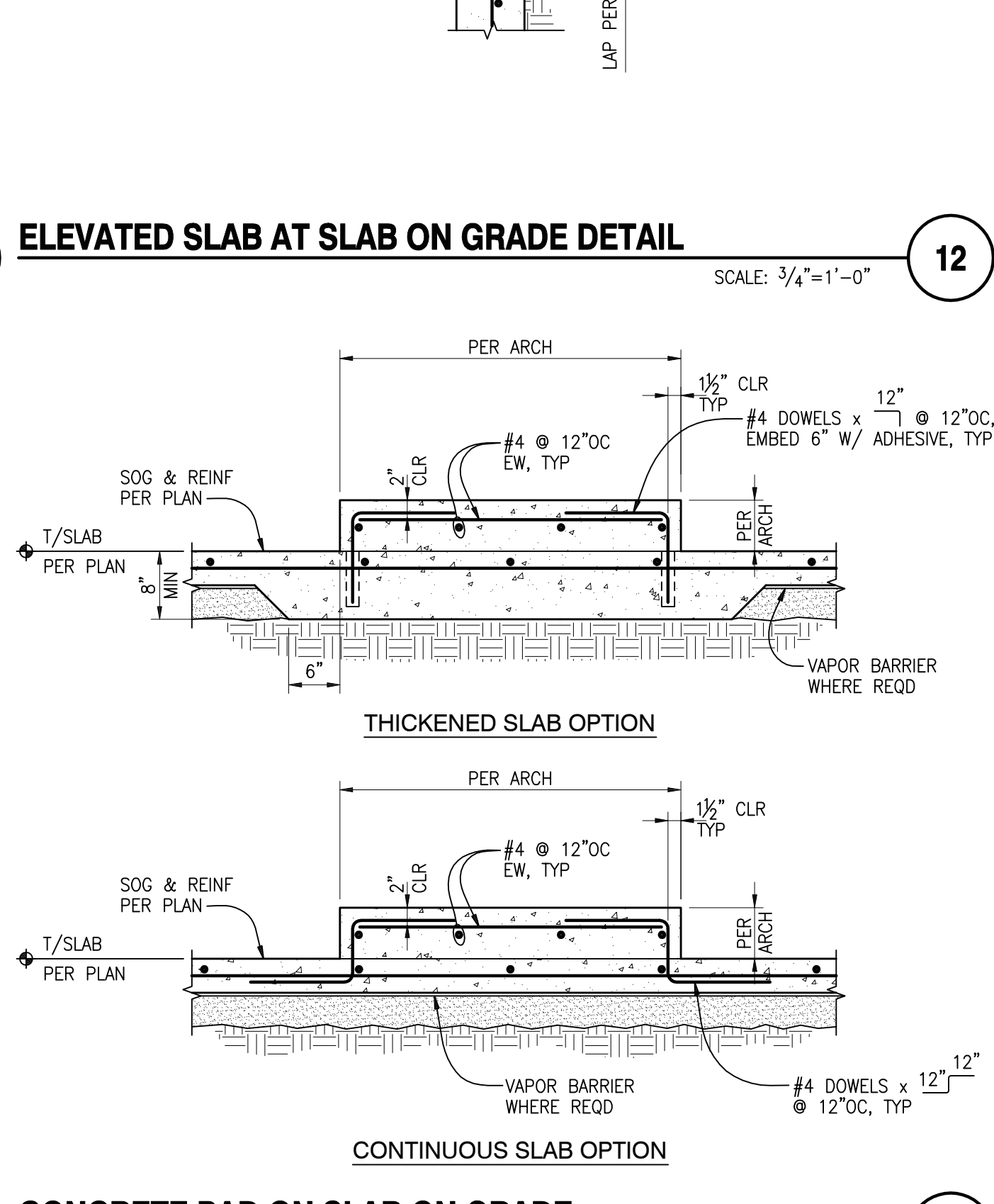
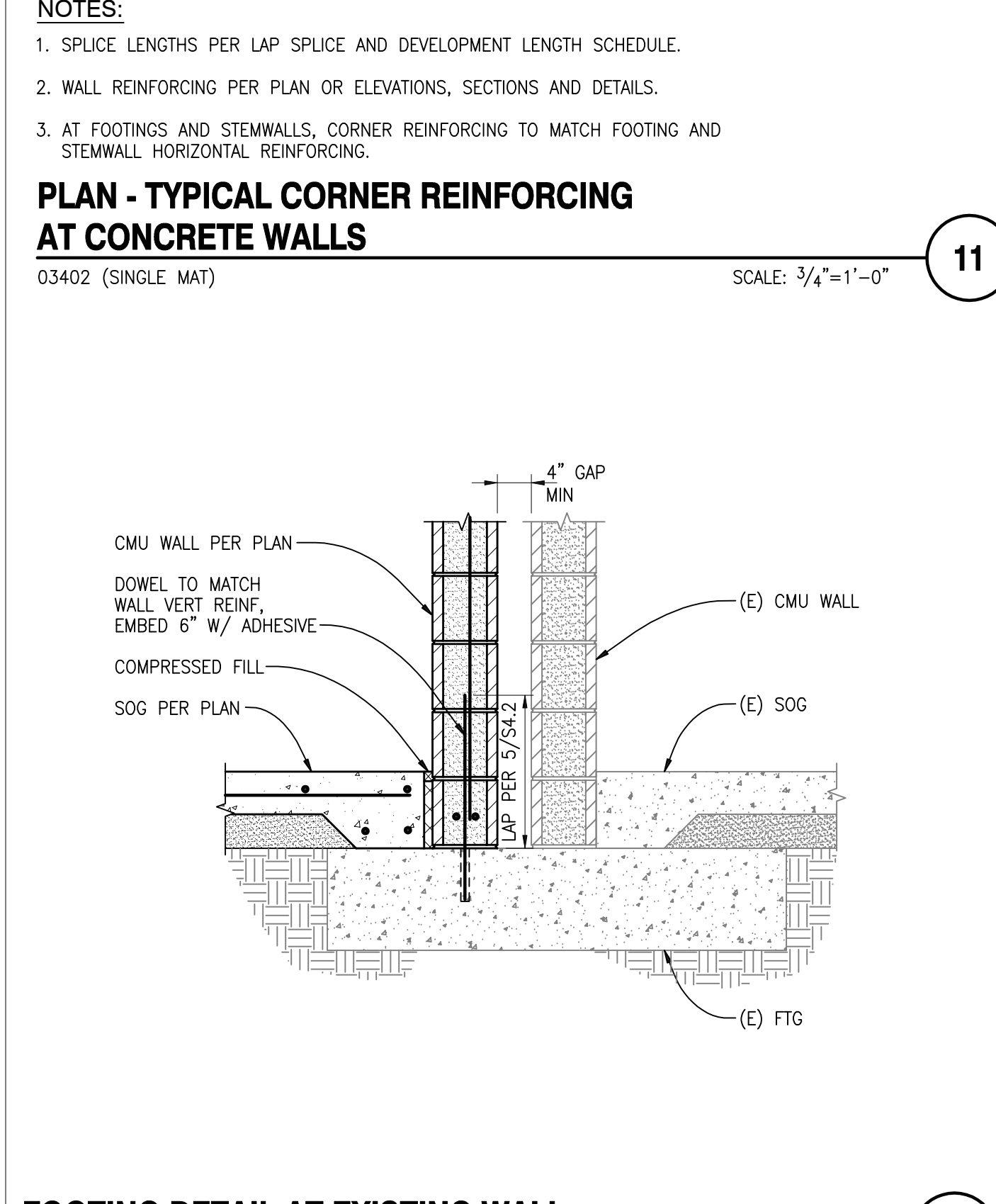
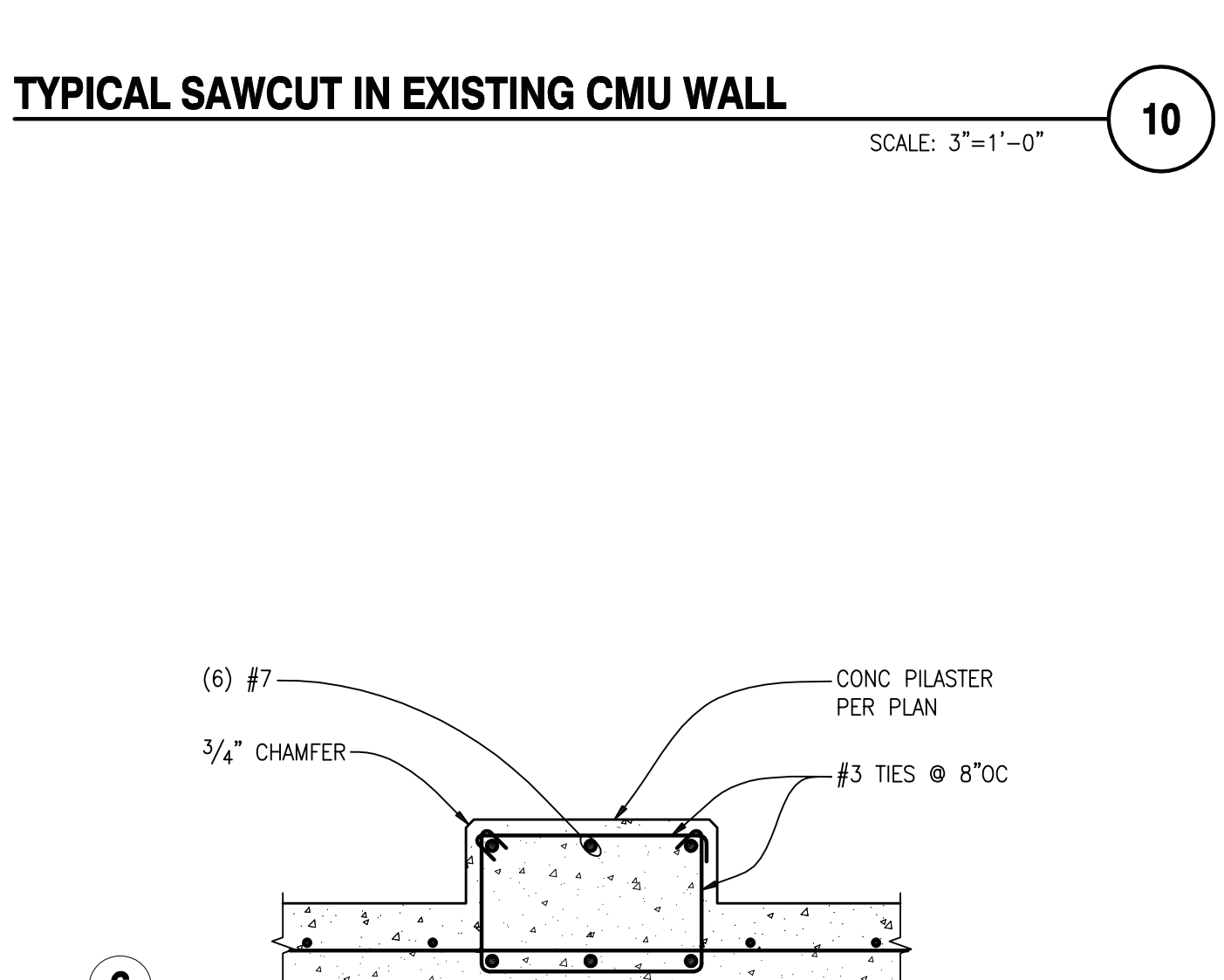
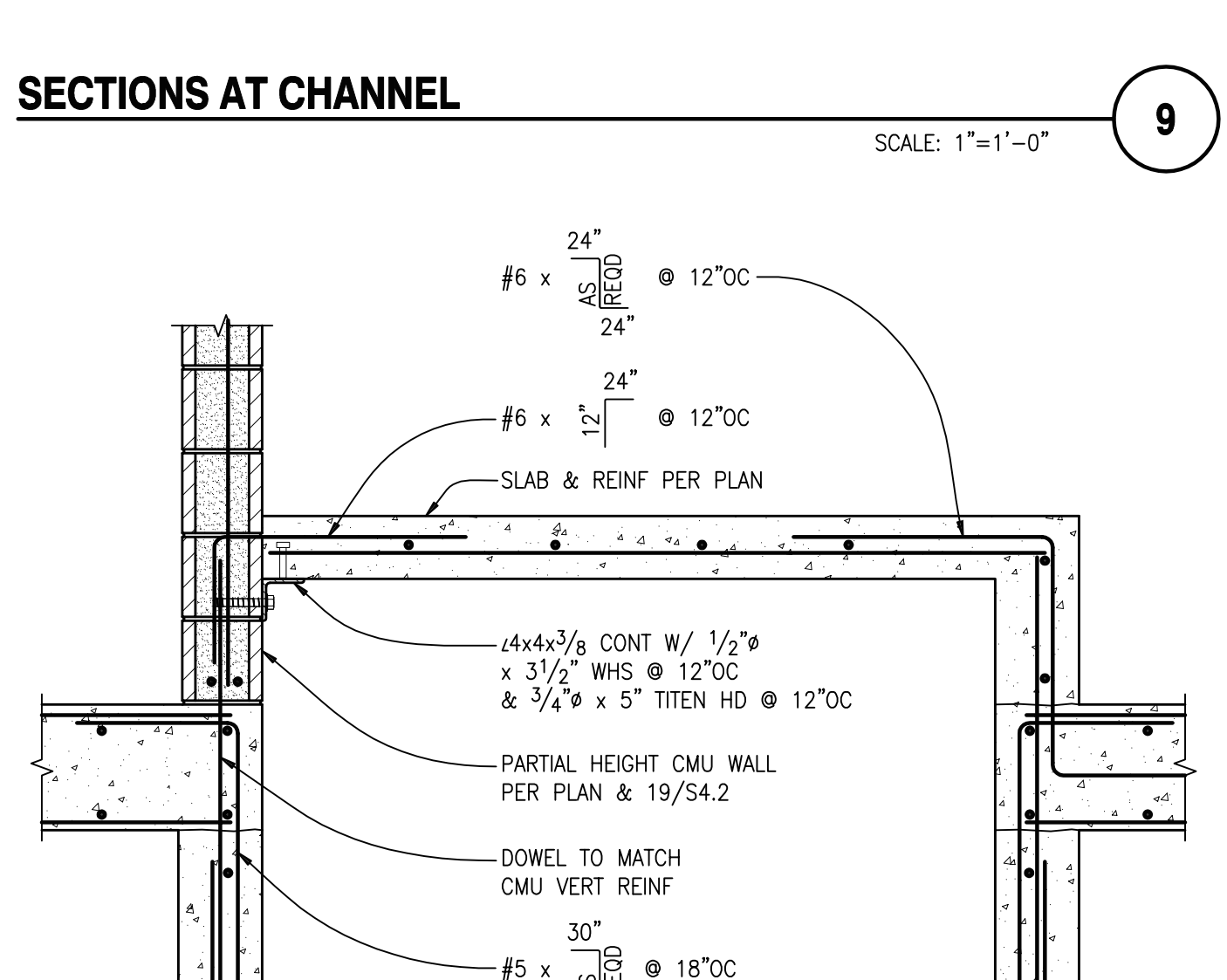
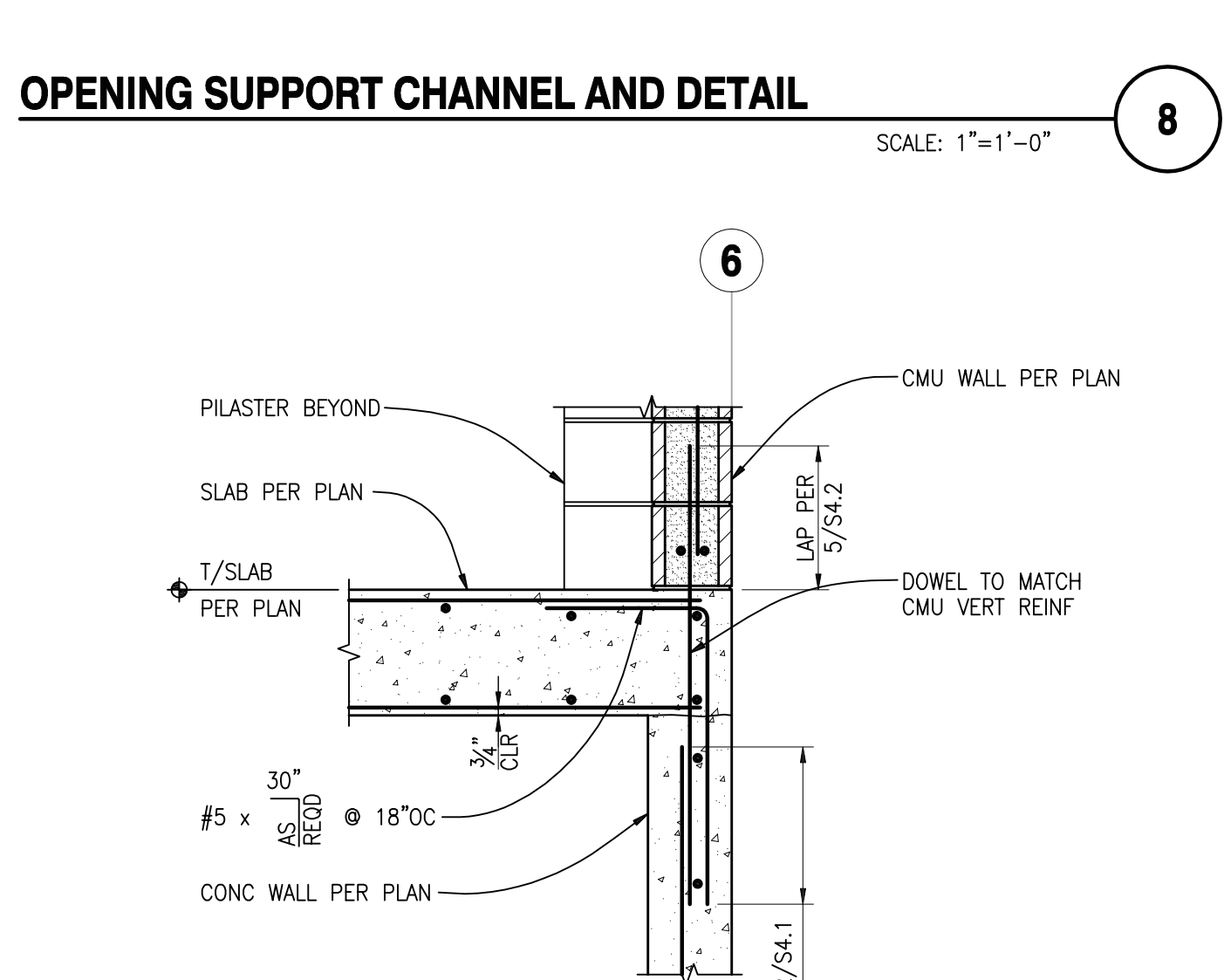
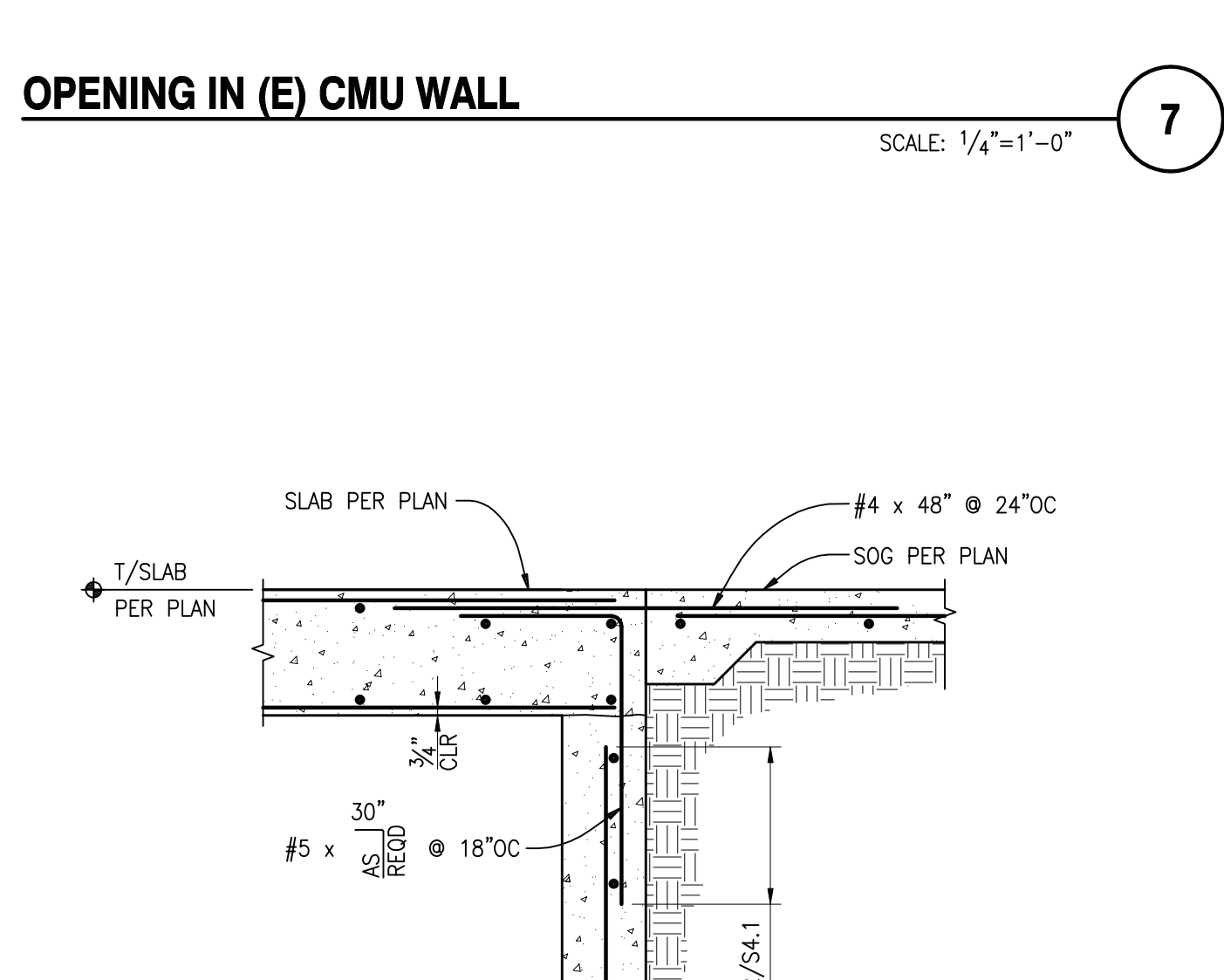
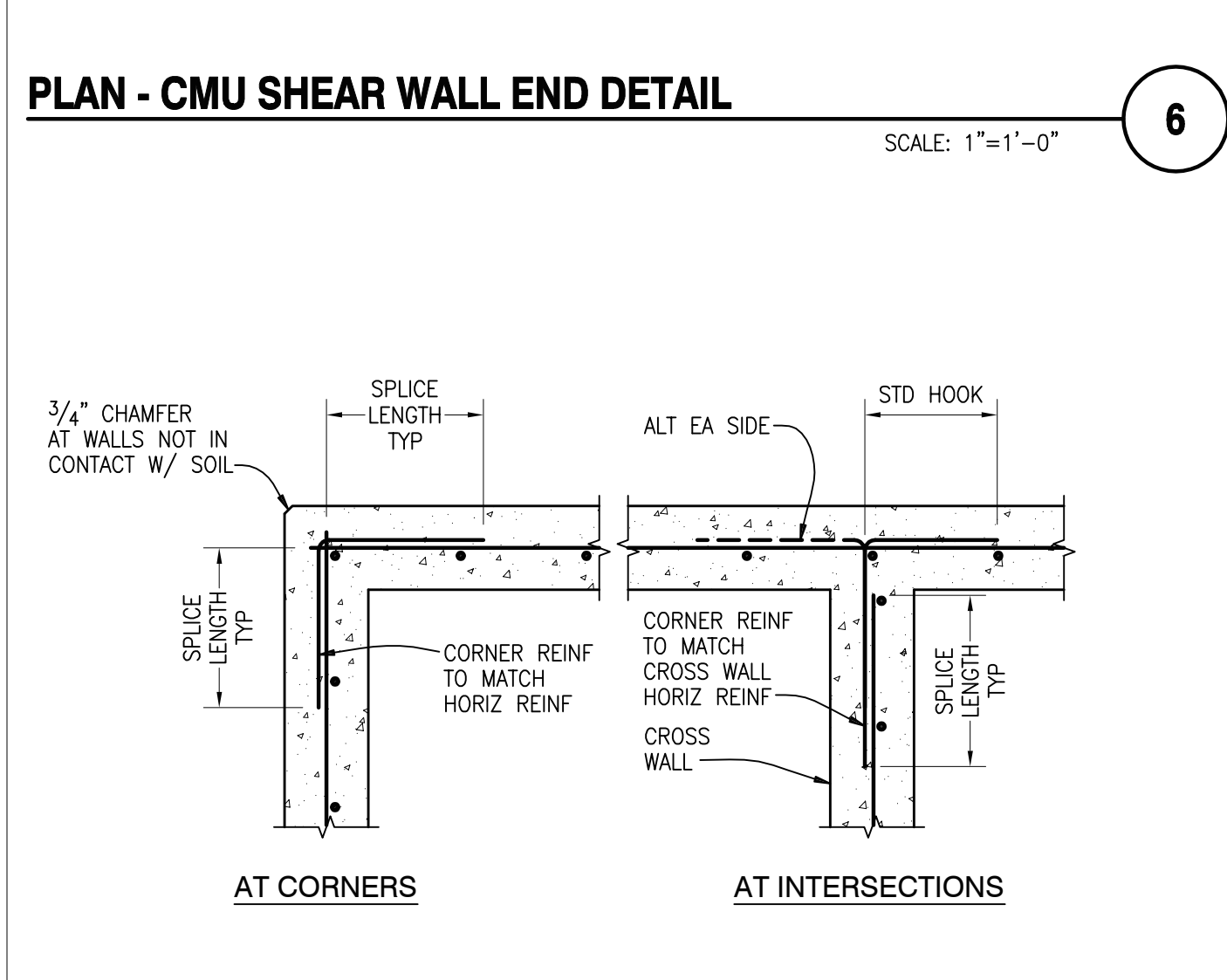
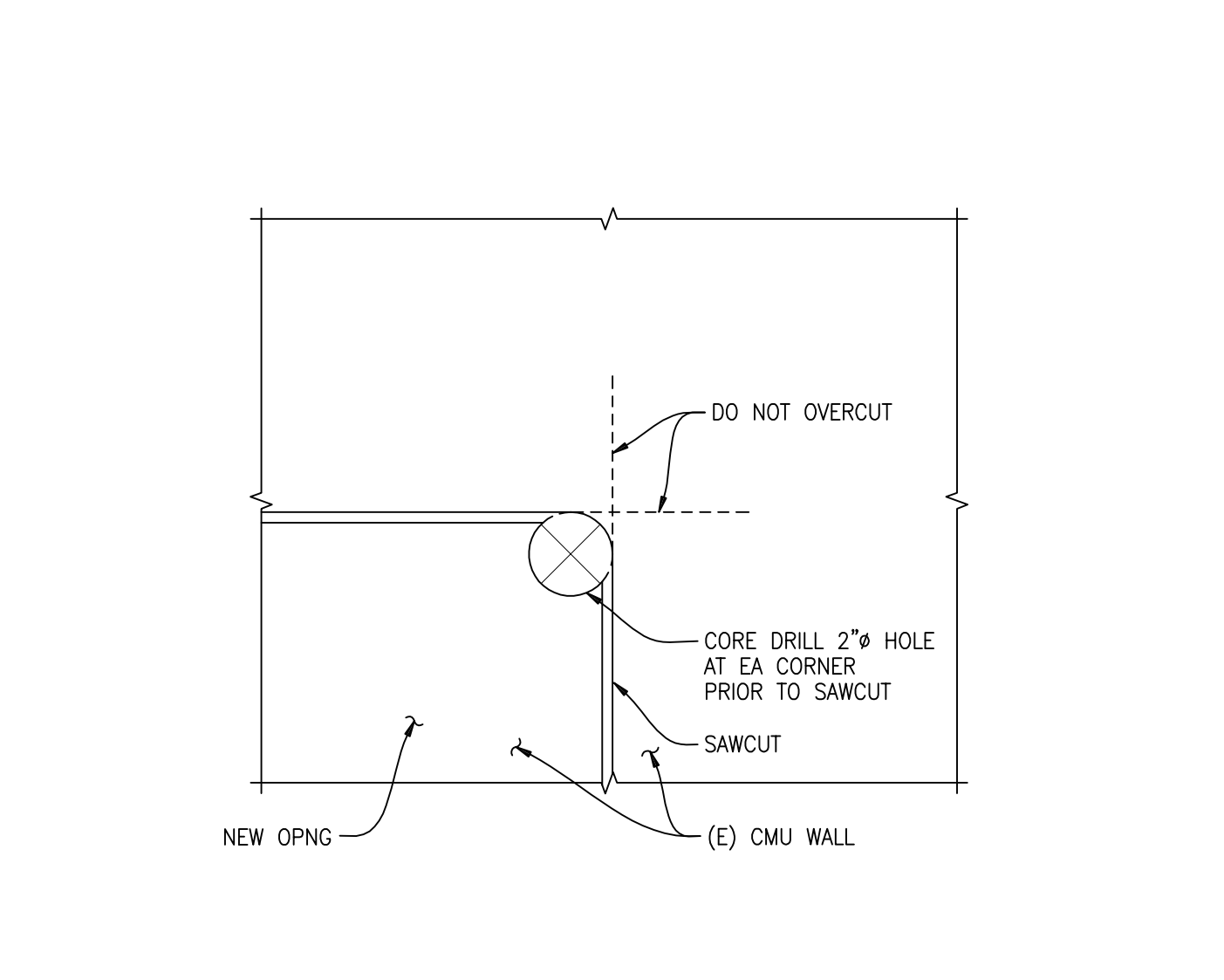
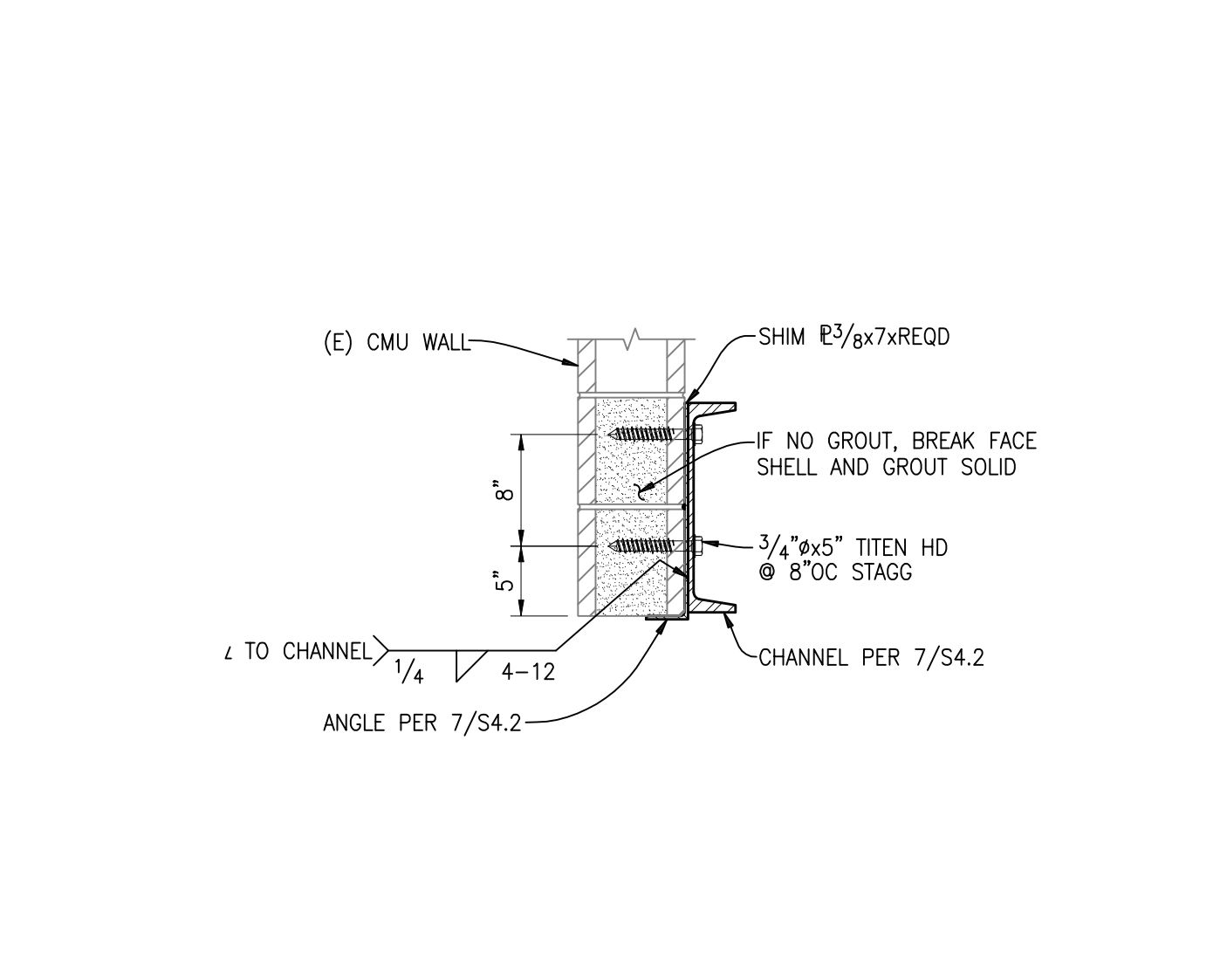
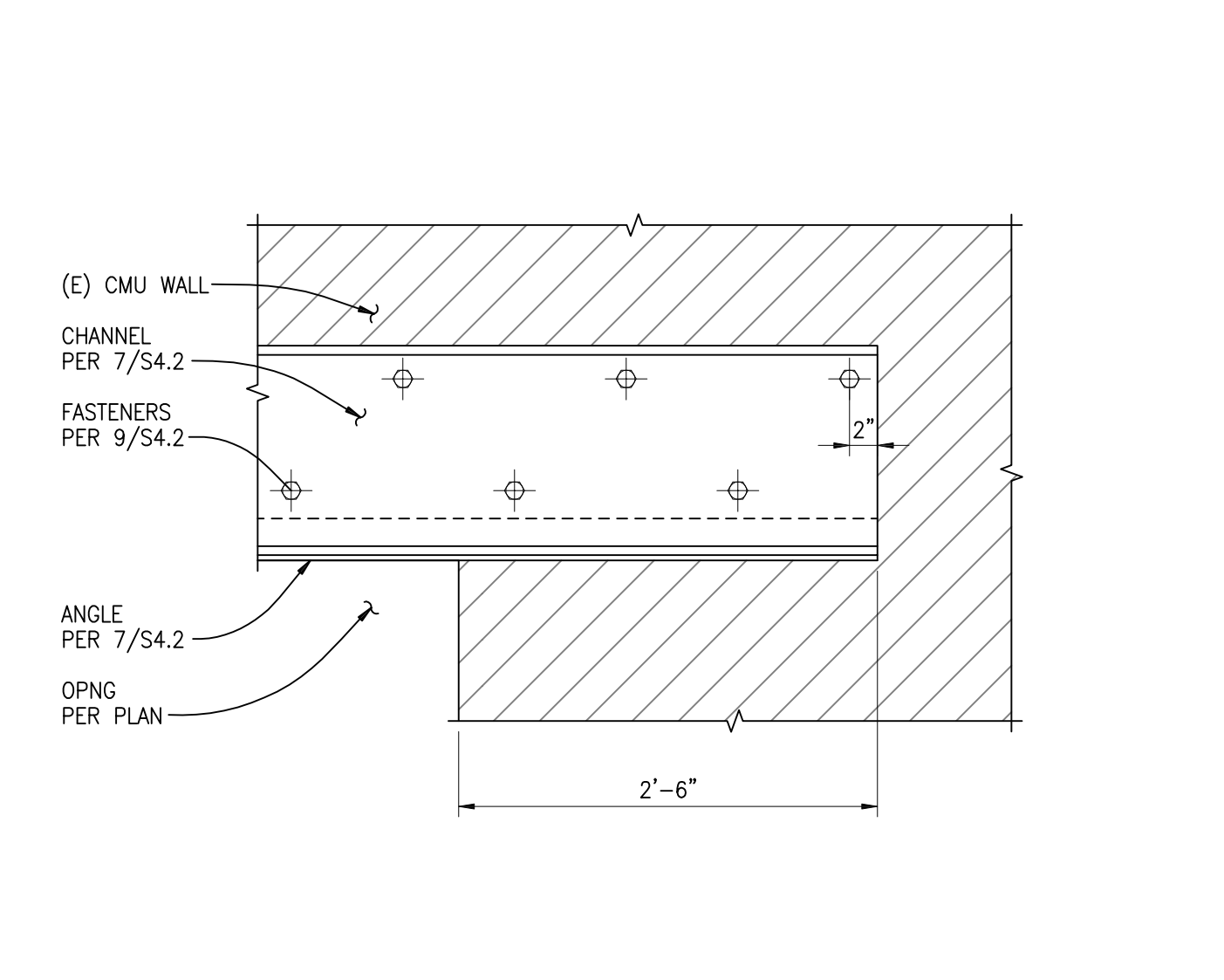
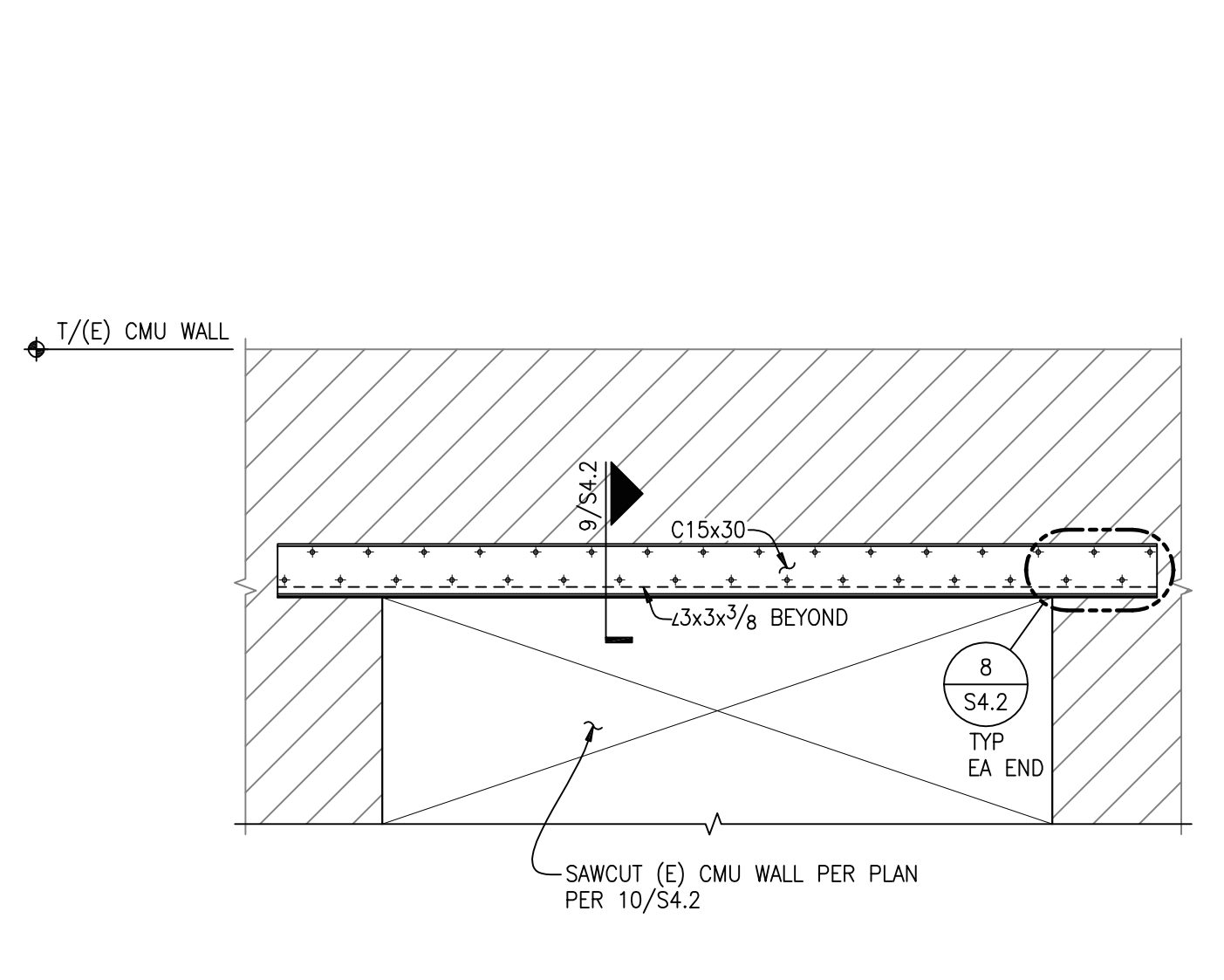
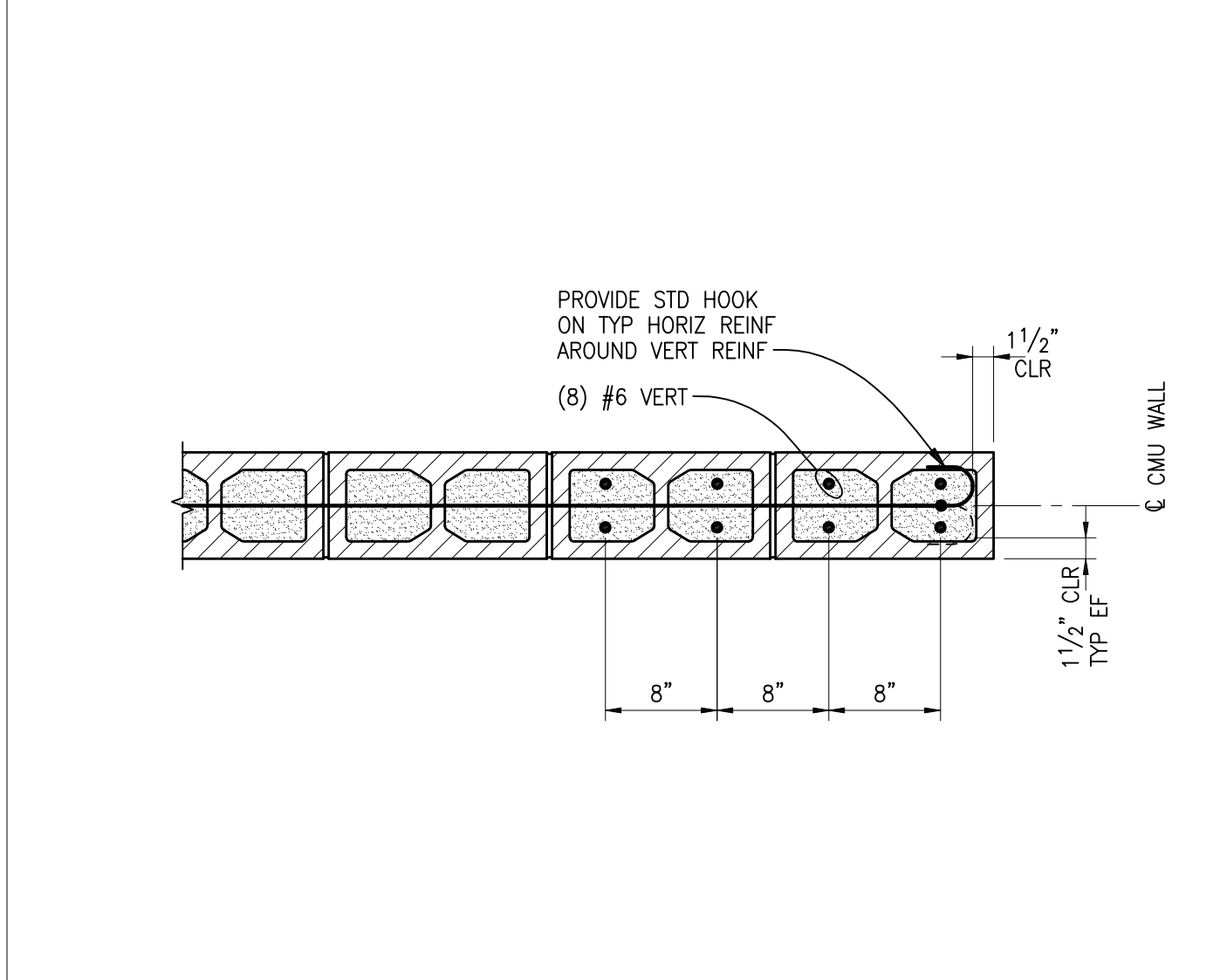
| BASEPLATE THICKNESS | FILLET SIZE |
|---------------------|-------------|
| 3/8", 1/2"          | 3/16"       |
| 5/8", 3/4"          | 1/4"        |
| > = 7/8"            | 5/16"       |

15-Jun-15 1:59 PM Robertson



**TYPICAL LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE FOR STRUCTURAL MASONRY**  
01402 SCALE: NONE

| REINFORCING SIZE | GRADE 40 | GRADE 60 |
|------------------|----------|----------|
| #4               | 20       | 24       |
| #5               | 25       | 30       |
| #6               | 30       | 36       |
| #7               | 35       | 42       |
| #8               | 40       | 48       |



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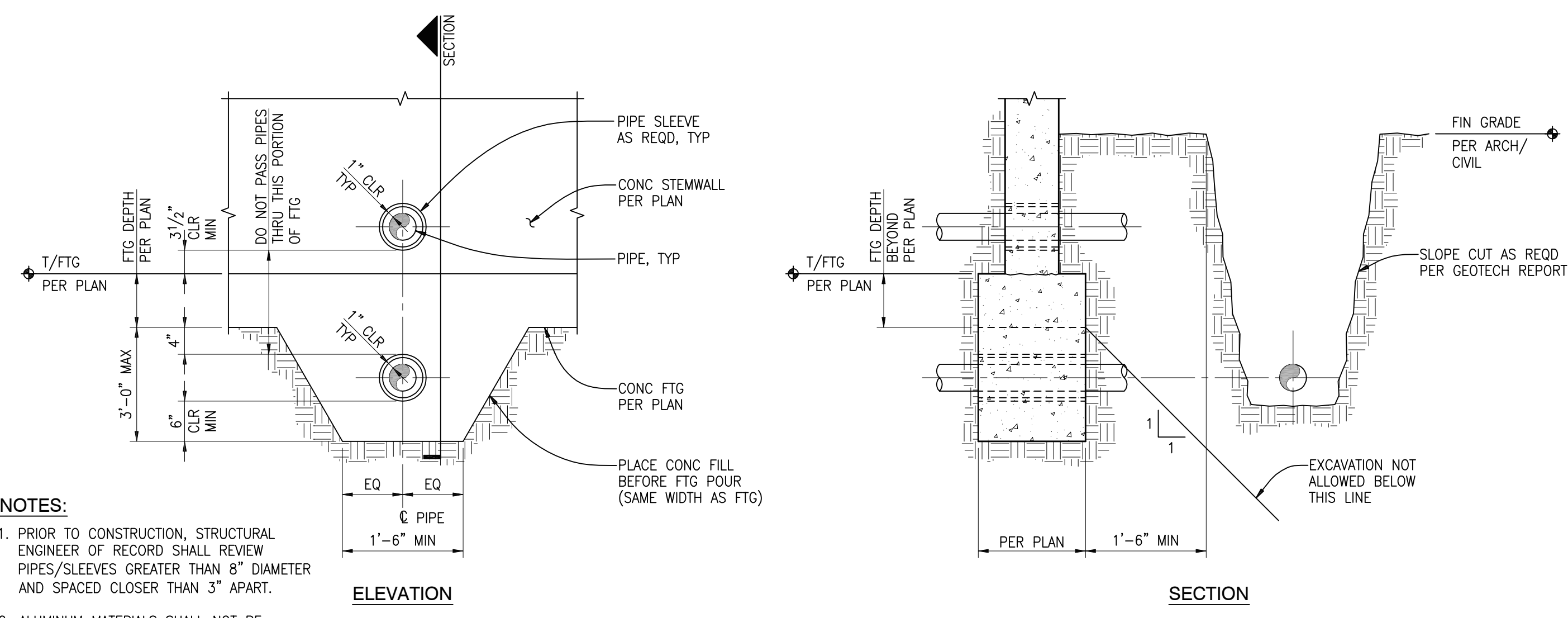
**STRUCTURAL DETAILS**

Drawn By: IK  
Checked: SC  
Date: 17 JUNE 2015  
Project #: 14091-0028

**S4.2**

225 SE Avery Street  
Newport, OR 97365  
EXPER. 53-5





**TYPICAL PIPE AND TRENCH LOCATIONS AT CONCRETE STEMWALL / FOOTING**

03906

SCALE: NONE

2

**PLAN - CONCRETE TO CMU WALL DETAIL**

SCALE: 3/4"=1'-0"

3

**CONCRETE PLINTH DETAIL**

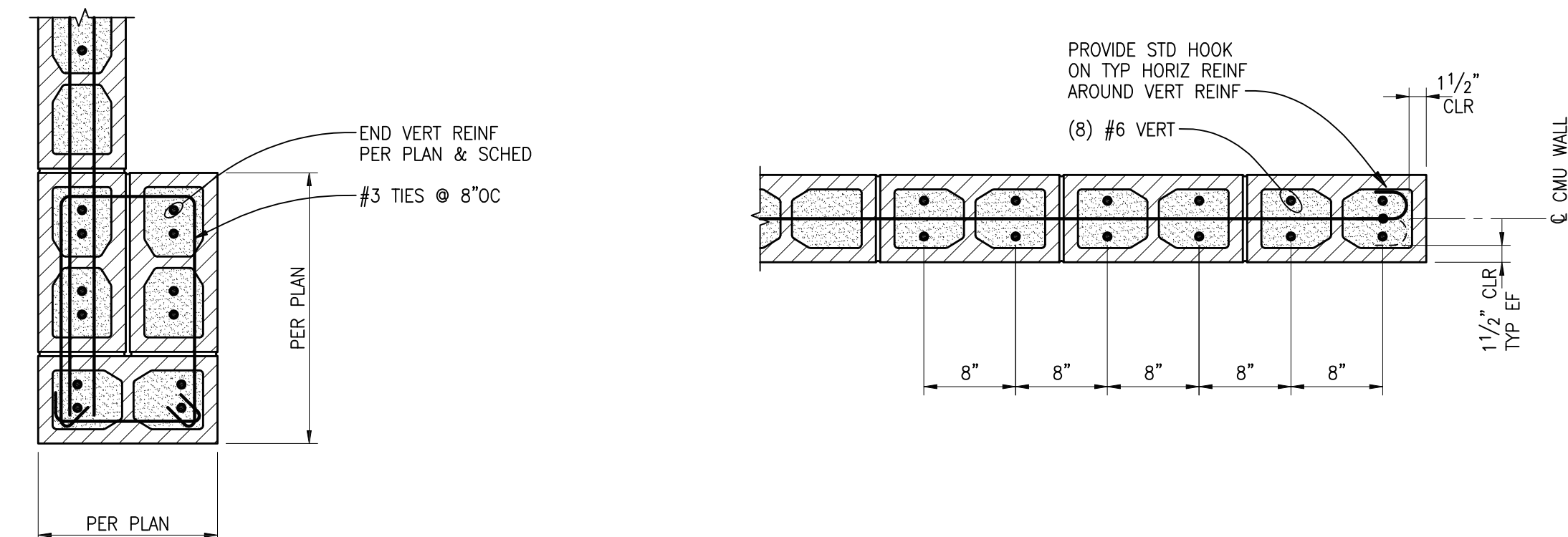
SCALE: 3/4"=1'-0"

4

**SHEAR WALL FOUNDATION BETWEEN GRIDS 'B' & 'C'**

SCALE: 3/4"=1'-0"

5



**PLAN - PILASTER DETAIL AT GRID 'D'**

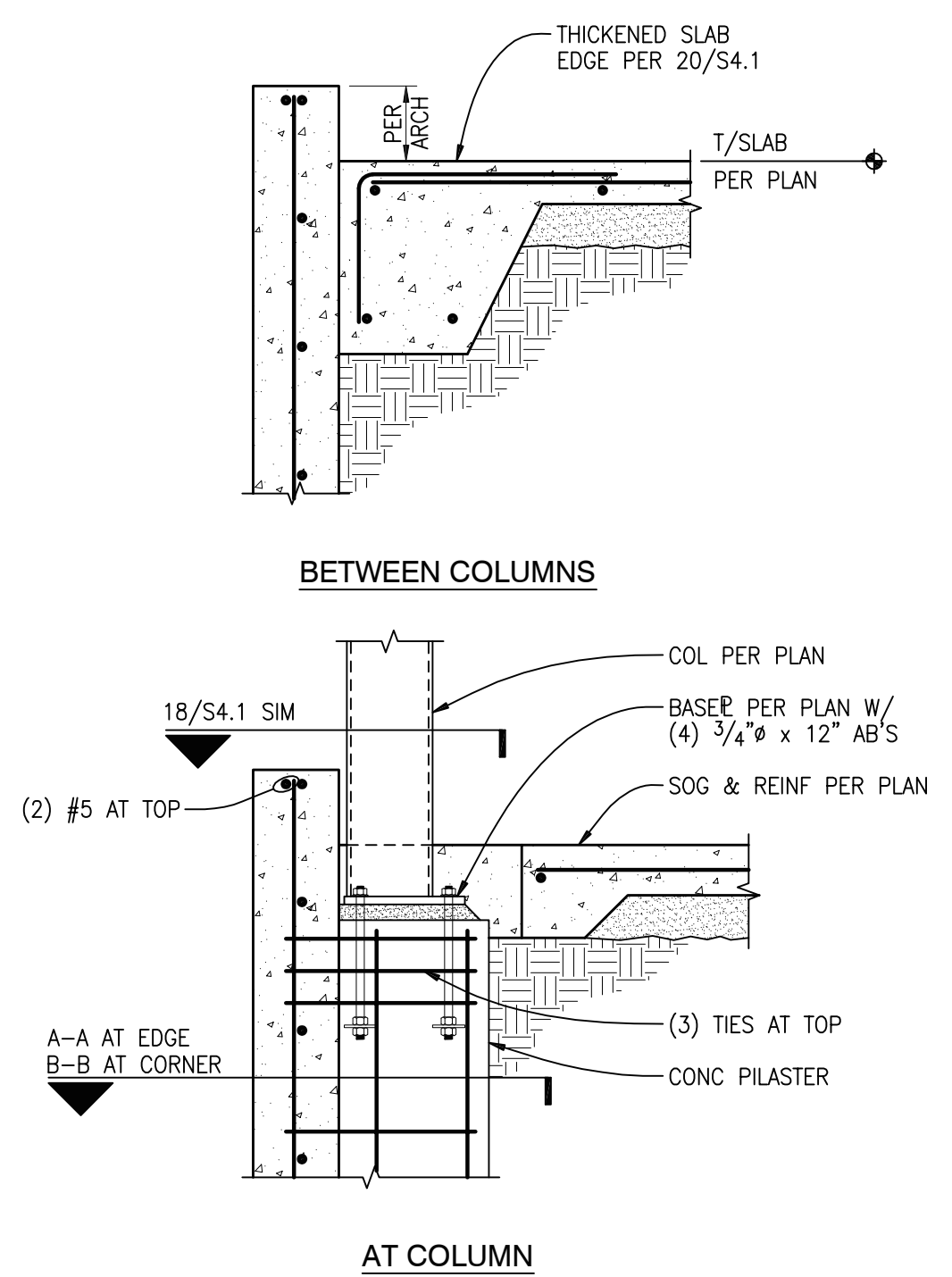
SCALE: 1"=1'-0"

6

**PLAN - CMU SHEAR WALL END DETAIL**

SCALE: 1"=1'-0"

7



**PILASTER DETAIL AT HSS8x8 COLUMNS**

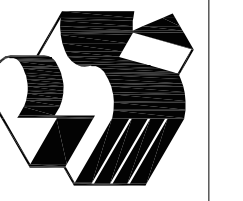
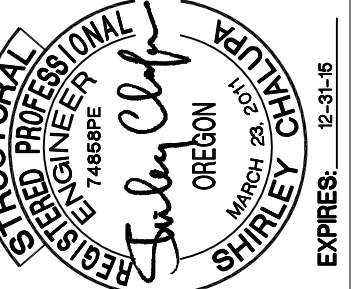
SCALE: 3/4"=1'-0"

16

**HEADER DETAIL AT GRID 2 AND B**

SCALE: 1"=1'-0"

17



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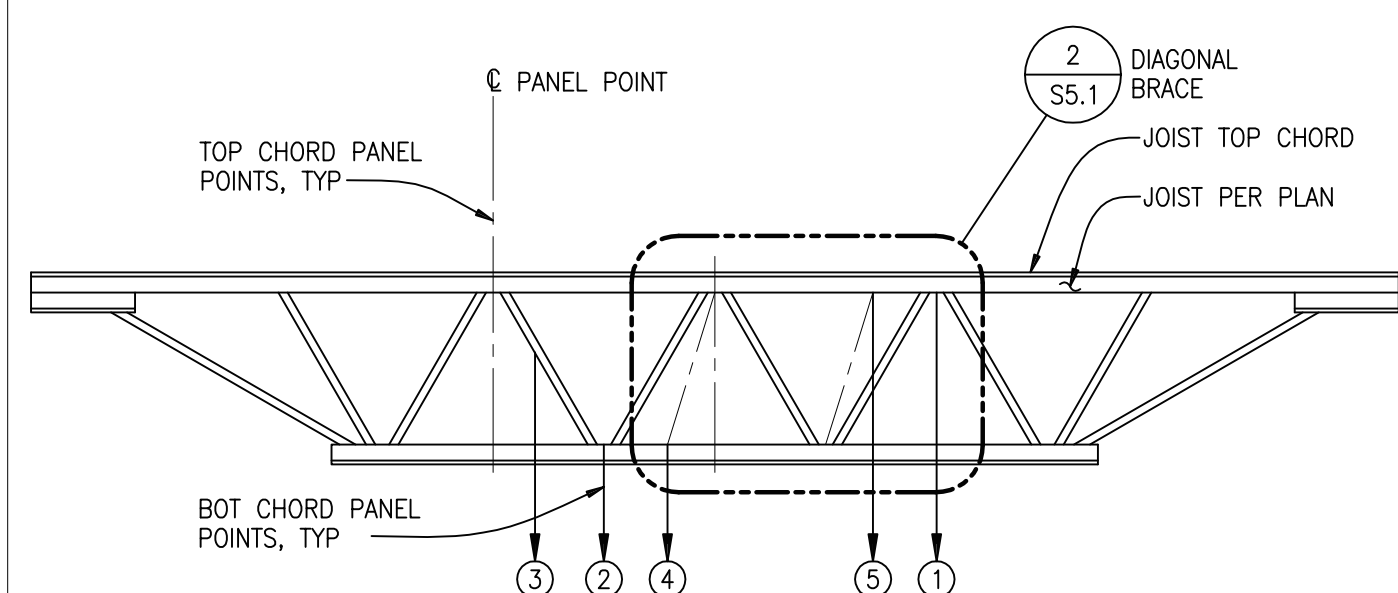
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**STRUCTURAL DETAILS**

|          |              |
|----------|--------------|
| Drawn By | IK           |
| Checked  | SC           |
| Date     | 17 JUNE 2015 |
| Proj #   | 14091-0028   |

**S4.3**

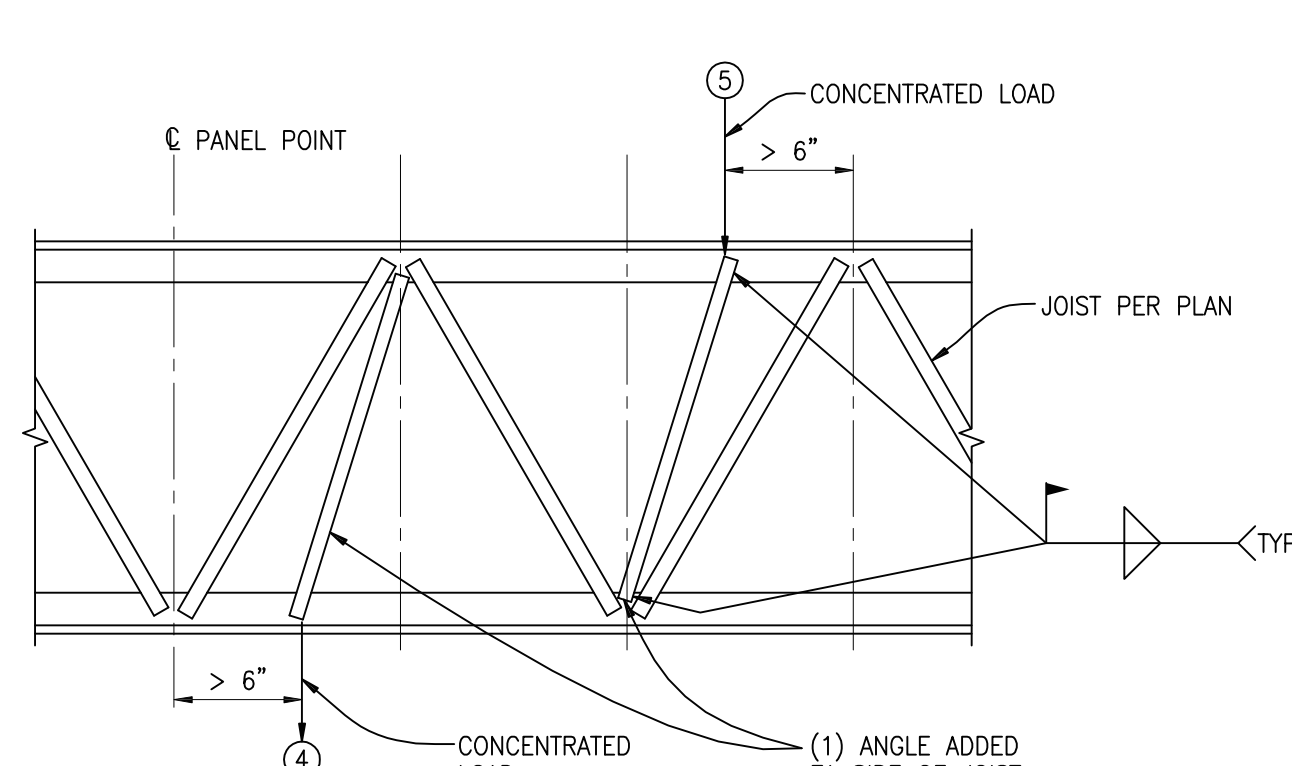


- HANG WITHIN 6" OF ANY UPPER PANEL POINT FOR JOISTS.
- HANG WITHIN 6" OF ANY LOWER PANEL POINT FOR JOISTS.
- TRAPEZE BETWEEN ANY PANEL POINTS.
- ADD AN ANGLE EACH SIDE TO STIFFEN THE BOTTOM CHORD PER DIAGONAL BRACE DETAIL 2/SS.1.
- ADD AN ANGLE EACH SIDE TO STIFFEN THE TOP CHORD PER DIAGONAL BRACE DETAIL 2/SS.1.

- NOTES:**
- DO NOT CUT OR DRILL ANY JOIST MEMBER.
  - THIS DETAIL IS APPLICABLE TO SUPPORTING MECHANICAL EQUIPMENT, SPRINKLER PIPES, ETC.

**ALLOWABLE METHODS AND LOCATIONS FOR SUPPORTING LOADS FROM OWSJ**

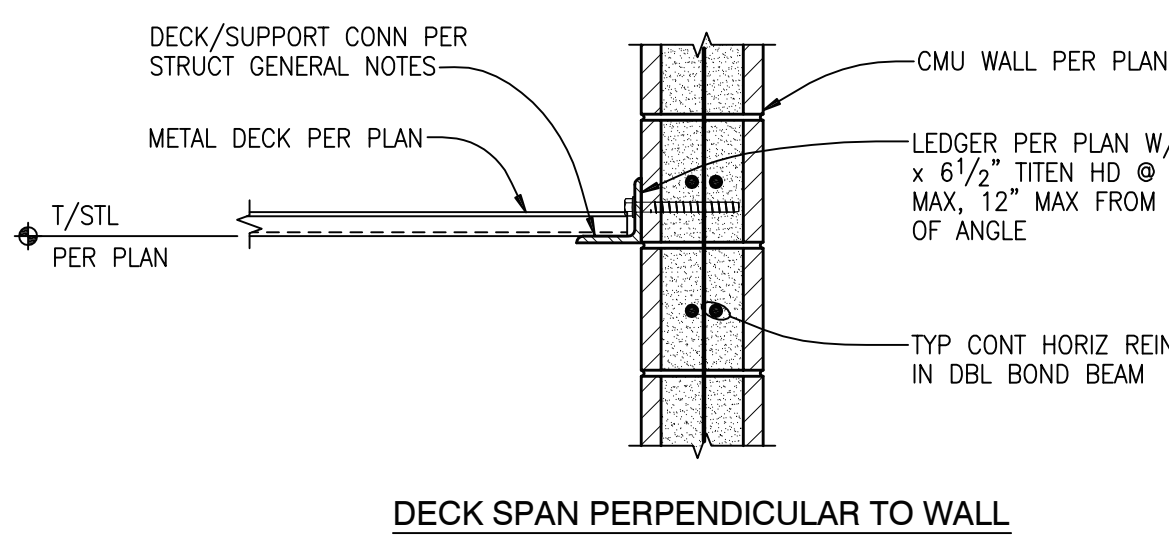
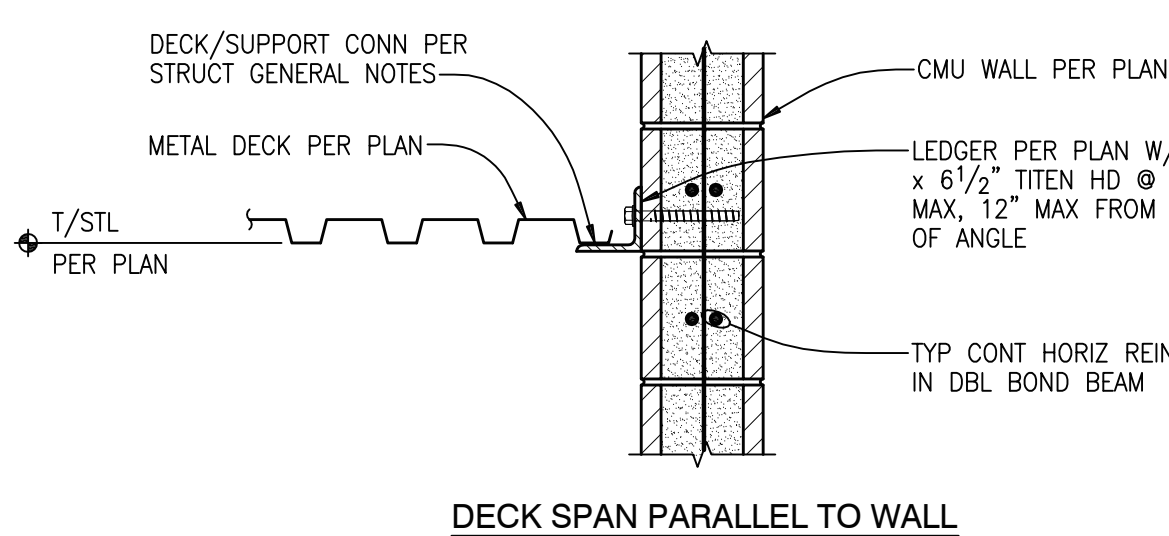
05401 SCALE: NONE **1**



- NOTES:**
- WHERE CONCENTRATED LOADS ARE SUPPORTED BY JOIST CHORDS AND ARE LOCATED MORE THAN 6" FROM A PANEL POINT, REINFORCE THE JOIST WITH AN ADDED ANGLE (EACH SIDE OF JOIST) EXTENDING FROM THE POINT LOAD TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD.
  - REMOVE LOAD FROM JOIST PRIOR TO WELDING ANGLE.
  - ADDED ANGLES AND WELDS BY JOIST MANUFACTURER.

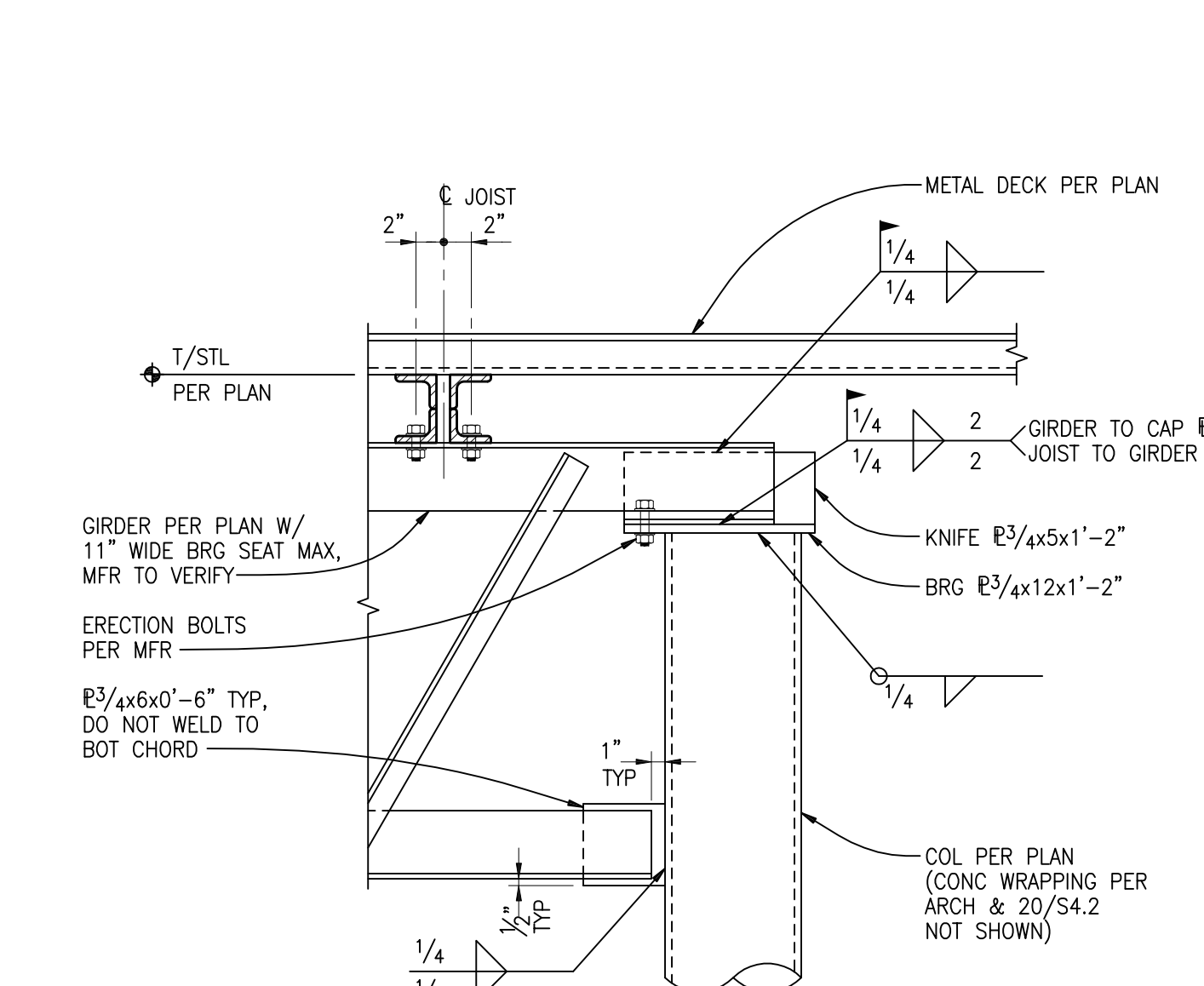
**DIAGONAL BRACE DETAIL**

05402 SCALE: 1"=1'-0" **2**



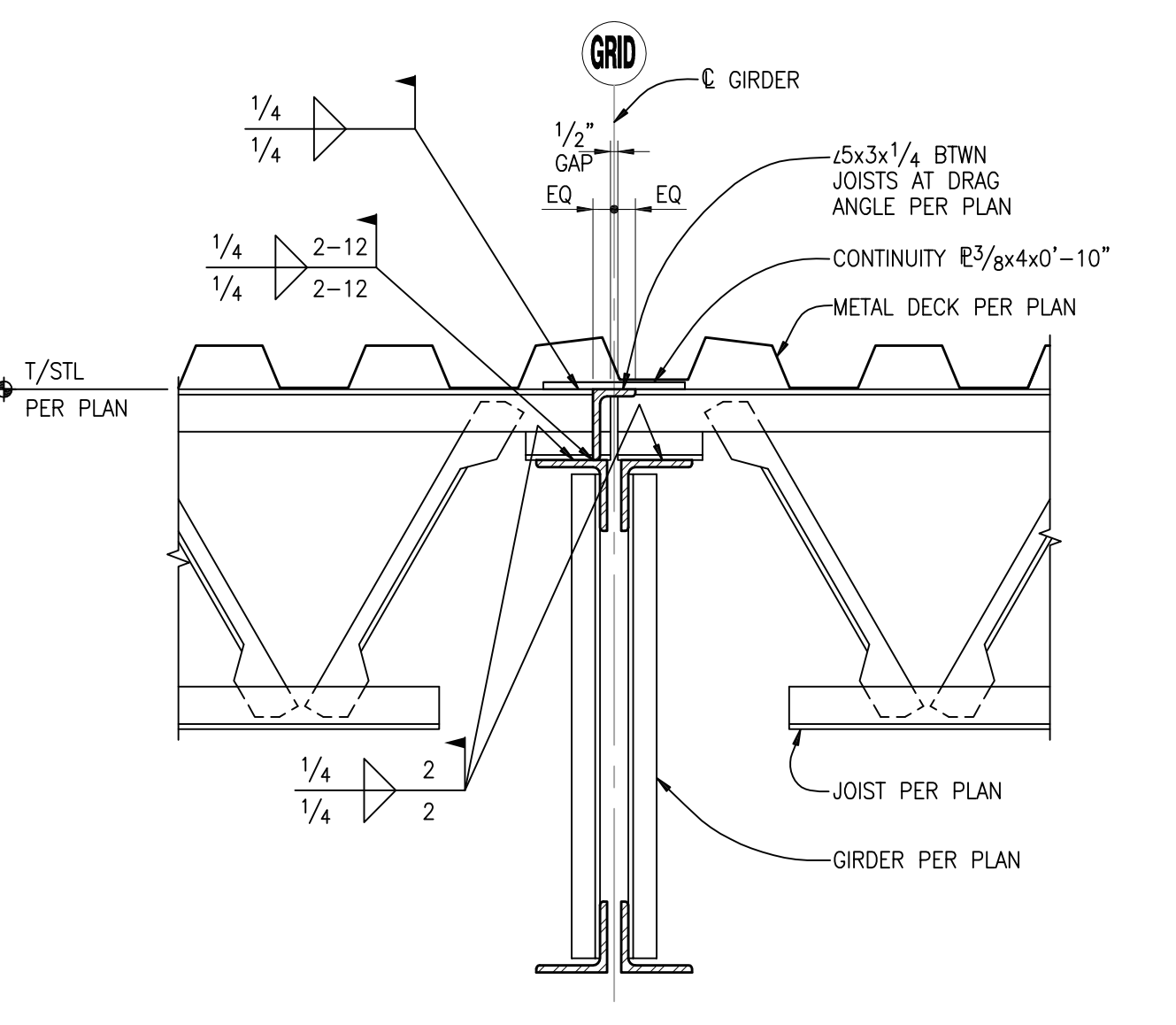
**METAL DECK TO CMU WALL CONNECTION**

04053 SCALE: 1"=1'-0" **3**



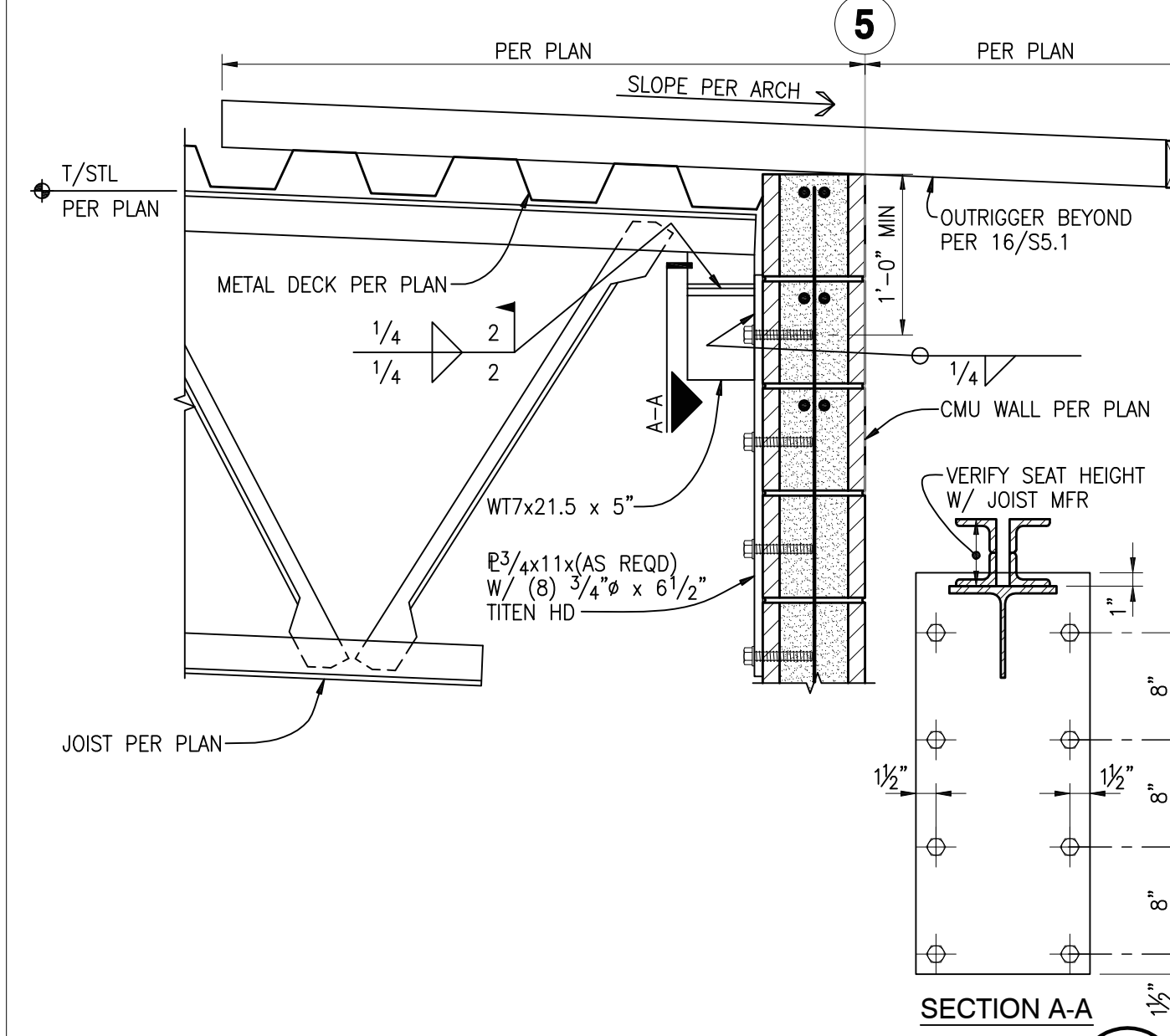
**KNIFE PLATE DETAIL AT ROOF GIRDER**

05408M SCALE: 1"=1'-0" **4**



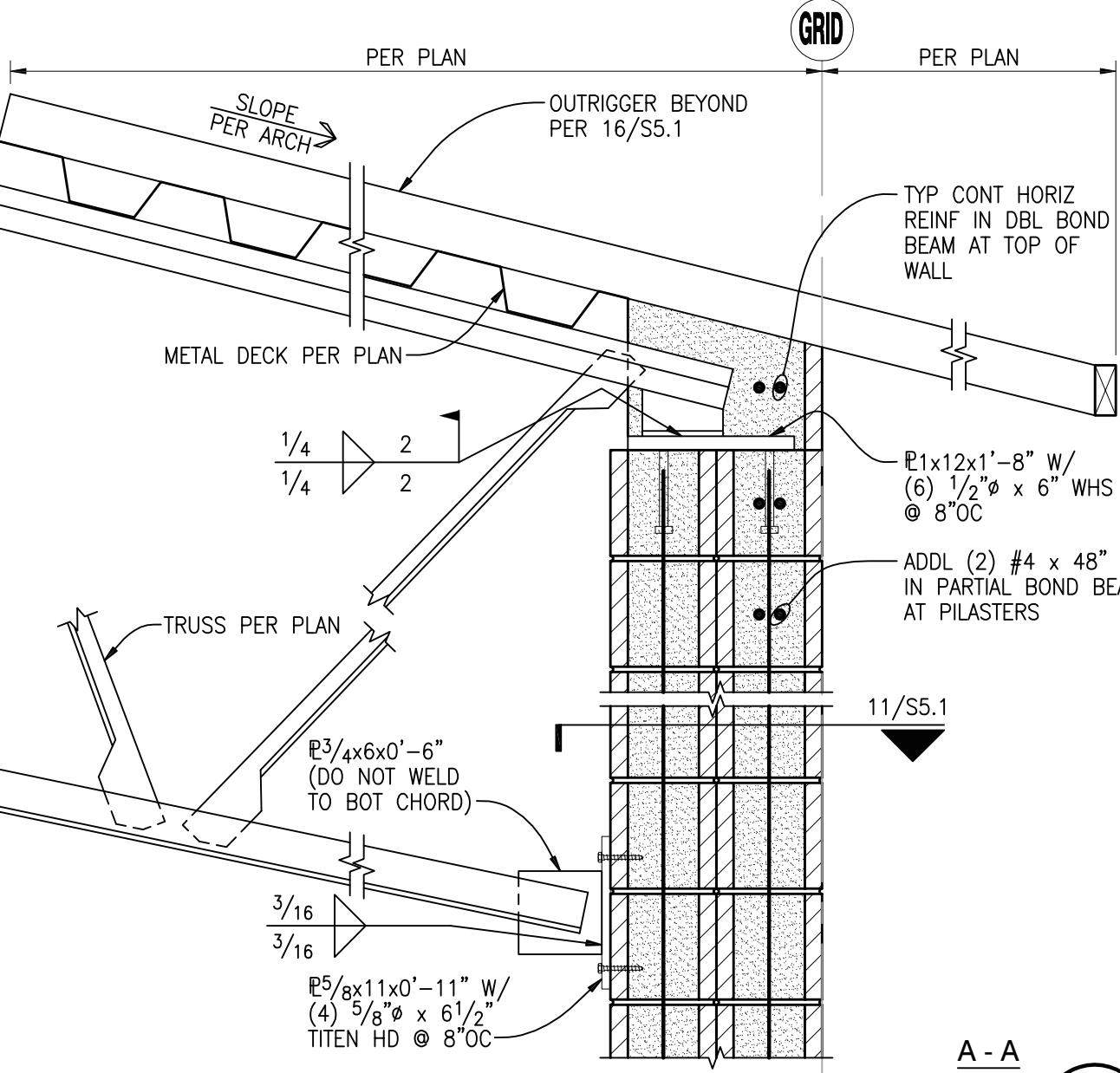
**CONTINUITY PLATE AT JOIST AT ROOF**

05409 SCALE: 1"=1'-0" **5**



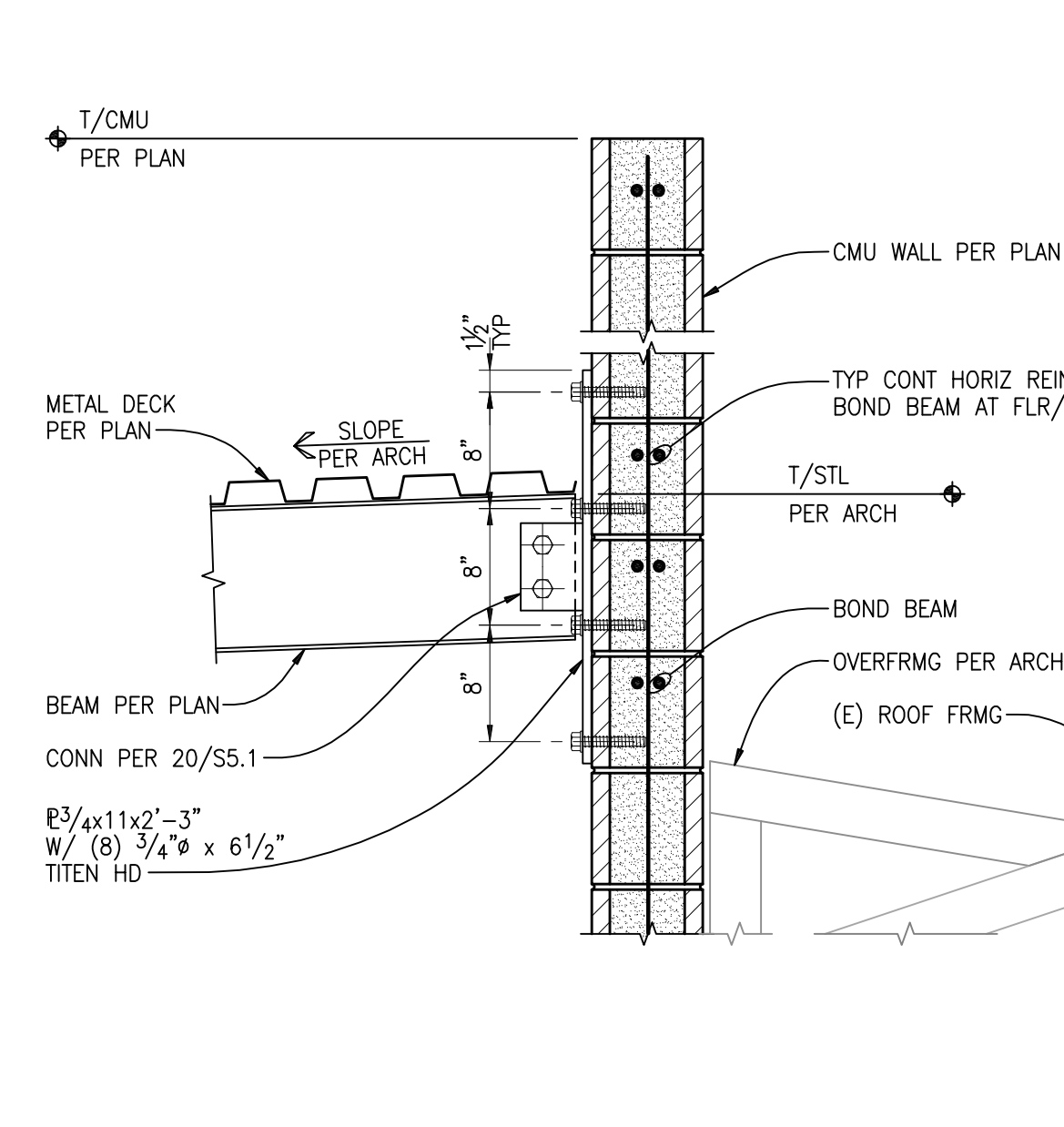
**JOIST TO CMU WALL DETAIL**

SCALE: 1"=1'-0" **6**



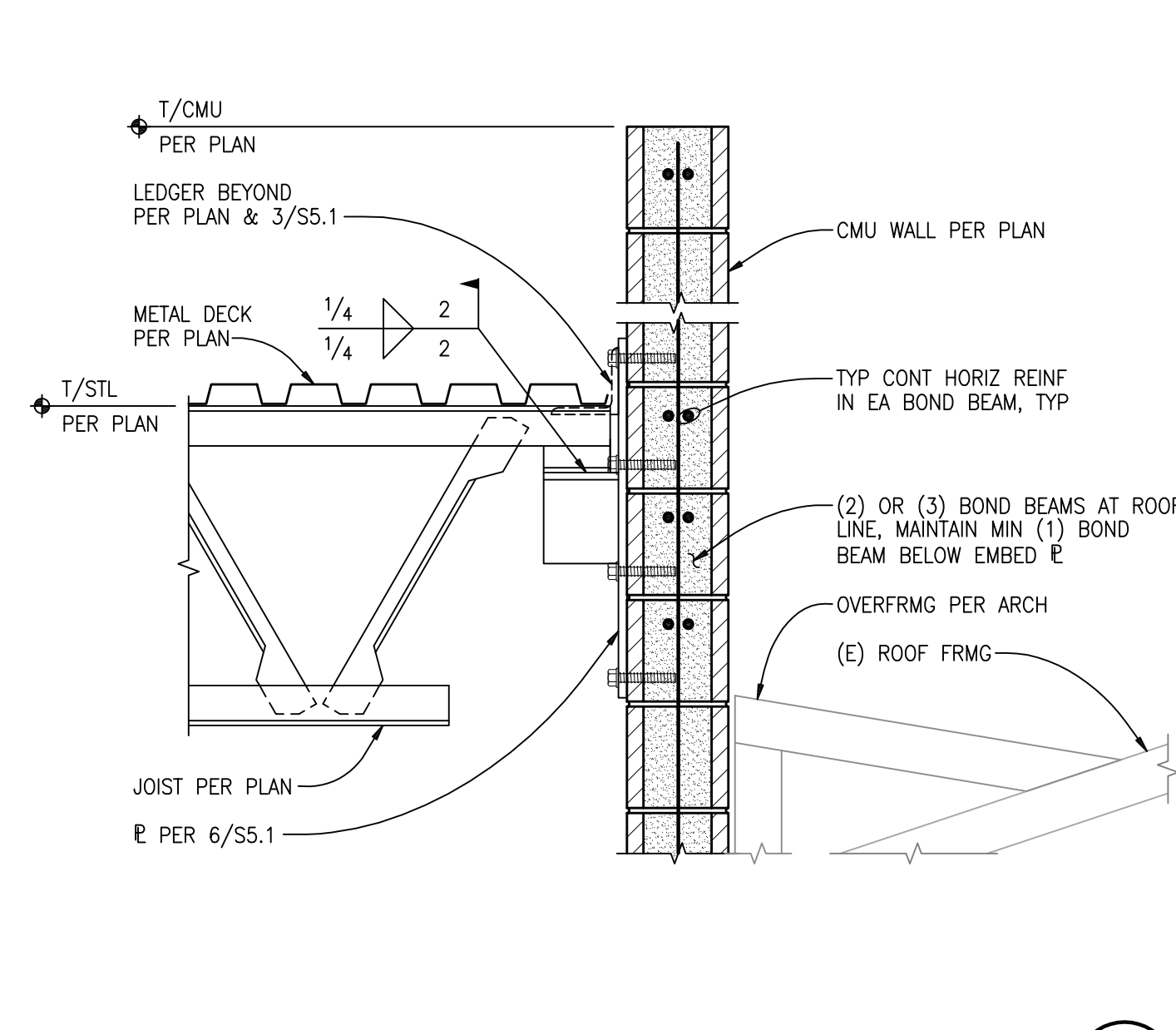
**SCISSOR TRUSS TO PILASTER DETAIL**

SCALE: 1"=1'-0" **7**



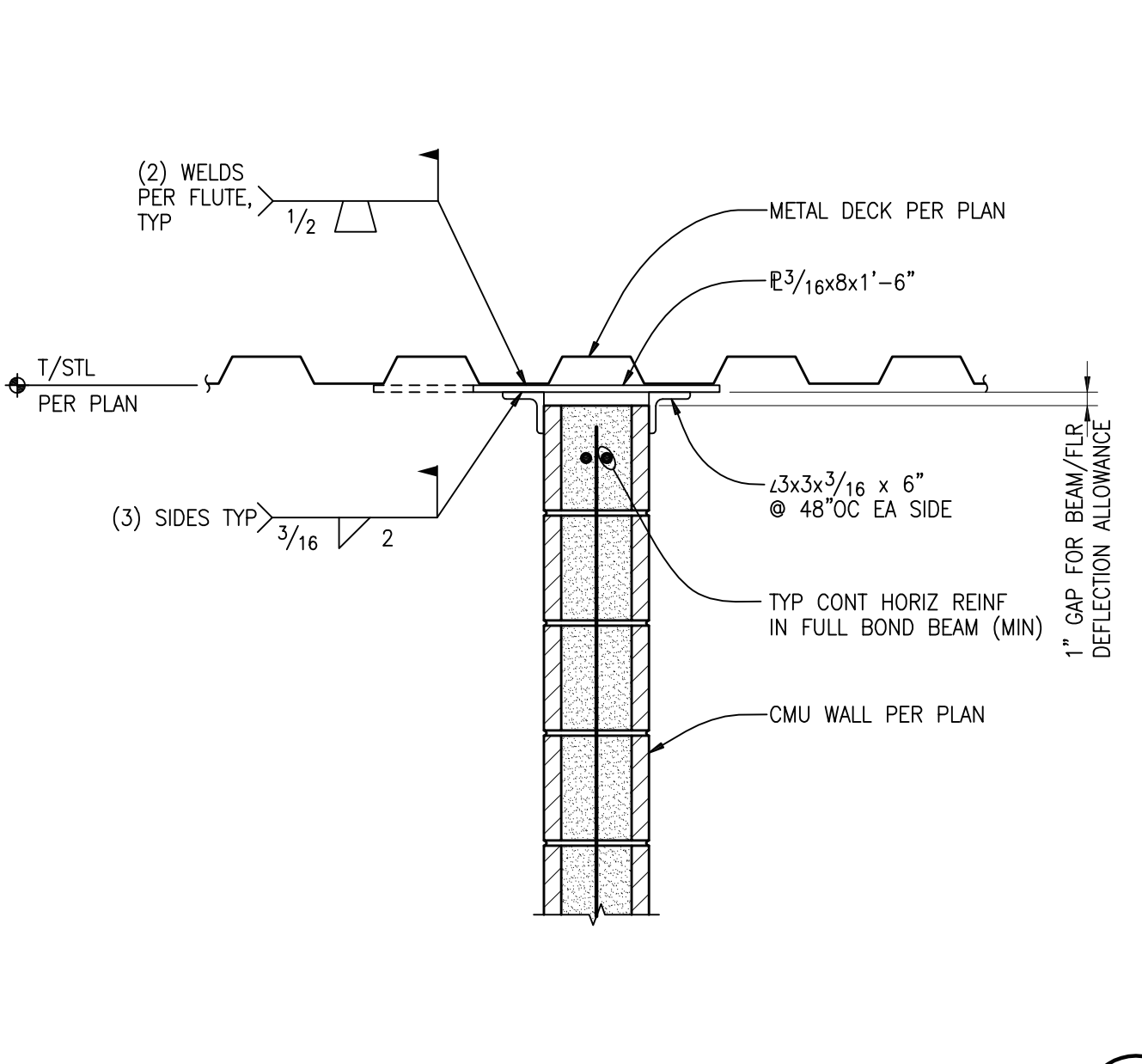
**BEAM TO CMU WALL CONNECTION**

04037M SCALE: 1"=1'-0" **8**



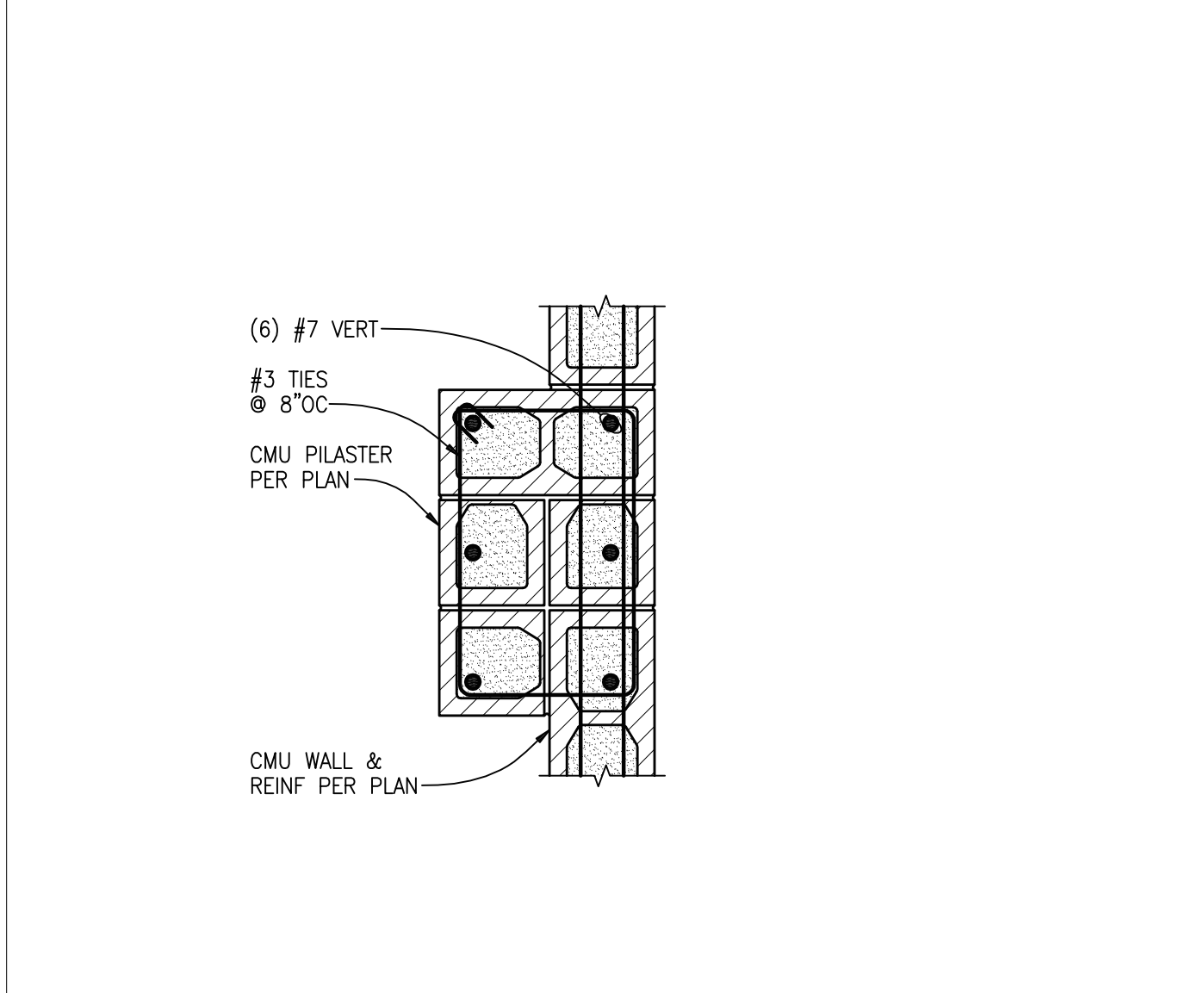
**JOIST TO CMU WALL CONNECTION**

04032M SCALE: 1"=1'-0" **9**



**TYPICAL CMU PARTITION WALL AT ROOF DECK**

04057 SCALE: 1"=1'-0" **10**



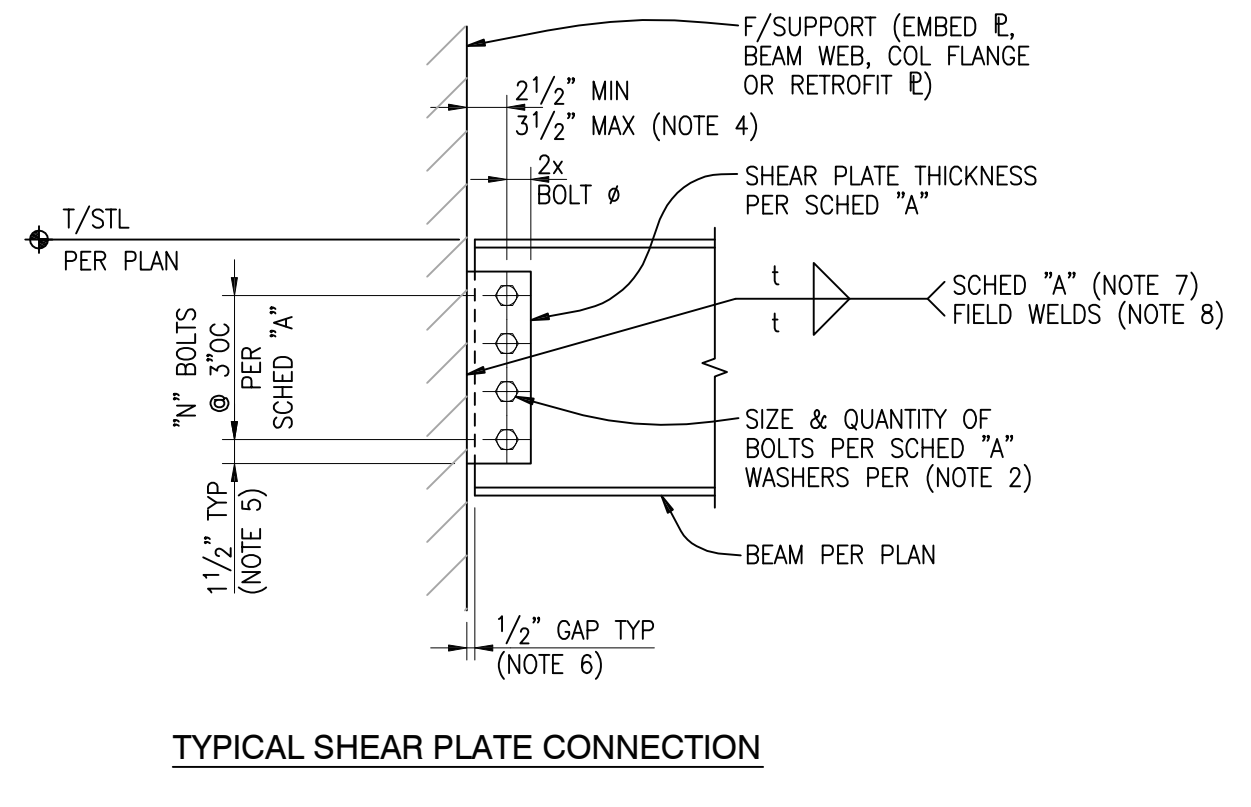
**CMU PILASTER DETAIL - PLAN**

SCALE: 1"=1'-0" **11**

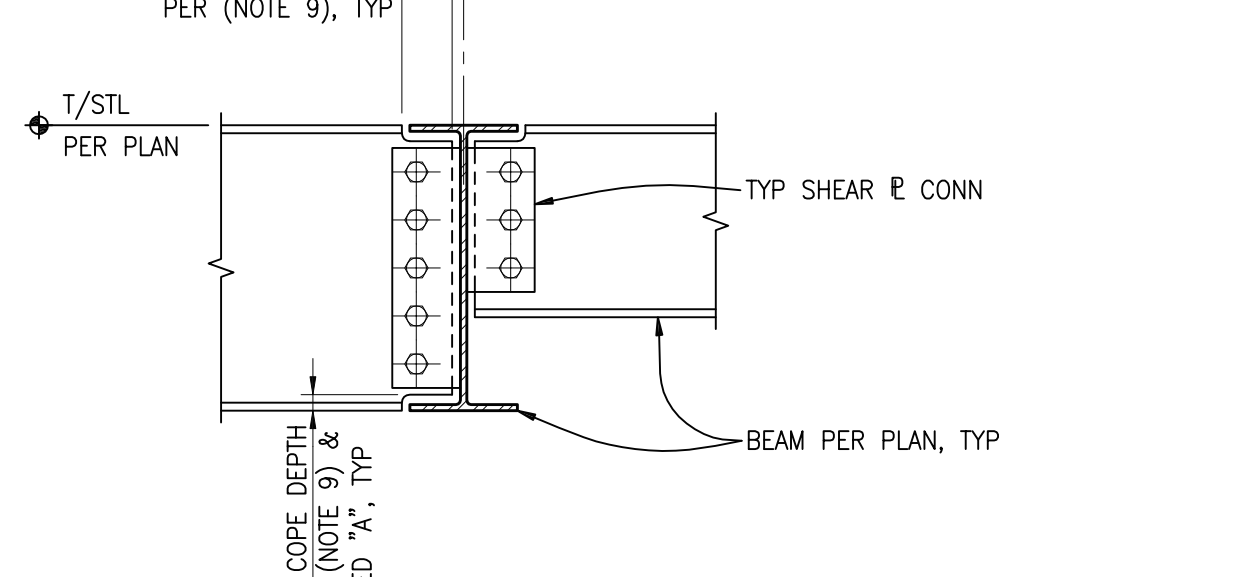
| BOLTED SINGLE SHEAR PLATE CONNECTION - SCHEDULE "A" |                        |                                      |                                    |               |   |                           |                |                               |              |              |  |
|---|------------------------|--------------------------------------|------------------------------------|---------------|---|---------------------------|----------------|-------------------------------|--------------|--------------|--|
| 3/4" Ø - A325-N                                     |                        | SINGLE ROW                           |                                    |               | BEAM F <sub>y</sub> =50KSI - CONNECTION PLATE F <sub>y</sub> =36KSI |                           |                | CONNECTION CAPACITY - ASD (3) |              |              |  |
| BEAM SIZE   | "N" BOLTS REQUIRED (1) | MIN SHEAR PLATE OR WT STEM THICKNESS | MIN HSS COLUMN WALL THICKNESS (10) | WELD SIZE (7) | MAX SINGLE COPE DEPTH (9)   | MAX DOUBLE COPE DEPTH (9) | UNCOPED SINGLE | UNCOPED DOUBLE                | COPED SINGLE | COPED DOUBLE |  |
| CB,C9,C10   | 2                      | 1/4"                                 | 1/4"                               | 3/16"         | 1 1/4"  | NR (11)                   | 13.2           | 7.6                           | NR (11)      |              |  |
| W8  | 2                      | 1/4"                                 | 1/4"                               | 3/16"         | 1 1/4"  | NR (11)                   | 13.2           | 7.6                           | NR (11)      |              |  |
| W10   | 2                      | 1/4"                                 | 1/4"                               | 3/16"         | 2 1/2"  | 1 1/4"                    | 13.2           | 11.0                          | 11.0         |              |  |
| C12,C15   | 3                      | 1/4"                                 | 1/4"                               | 3/16"         | 2"  | 1 1/4"                    | 25.6           | 17.5                          | 17.5         |              |  |
| W12   | 3                      | 1/4"                                 | 1/4"                               | 3/16"         | 2"  | 1 1/4"                    | 25.6           | 18.3                          | 18.3         |              |  |
| W14   | 3                      | 3/16"                                | 1/4"                               | 1/4"          | 2 1/2"  | 1 1/2"                    | 27.8           |                               | 23.9         |              |  |
| W16   | 4                      | 3/16"                                | 1/4"                               | 1/4"          | 2 1/2"  | 1 1/2"                    | 42.4           |                               | 36.6         |              |  |
| W18   | 5                      | 3/16"                                | 1/4"                               | 1/4"          | 2 1/2"  | 1 1/2"                    | 53.0           |                               |              |              |  |
| W21   | 6                      | 3/8"                                 | 5/16"                              | 5/16"         | 2 1/2"  | 1 1/2"                    | 63.6           |                               |              |              |  |
| W24   | 7                      | 3/8"                                 | 5/16"                              | 5/16"         | 2 1/2"  | 1 1/2"                    | 74.2           |                               |              |              |  |
| W27   | 8                      | 3/8"                                 | 5/16"                              | 5/16"         | 2 1/2"  | NR (11)                   | 84.8           |                               |              |              |  |
| W30   | 8                      | 7/16"                                | 3/8"                               | 5/16"         | 2 1/2"  | NR (11)                   | 84.8           |                               |              |              |  |
| W33   | 9                      | 7/16"                                | 3/8"                               | 5/16"         | 2 1/2"  | NR (11)                   | 95.4           |                               |              |              |  |
| W36   | 10                     | 7/16"                                | 3/8"                               | 5/16"         | 2 1/2"  | NR (11)                   | 103.2          |                               |              |              |  |

**BOLTED SINGLE ROW SHEAR PLATE CONNECTION NOTES:**

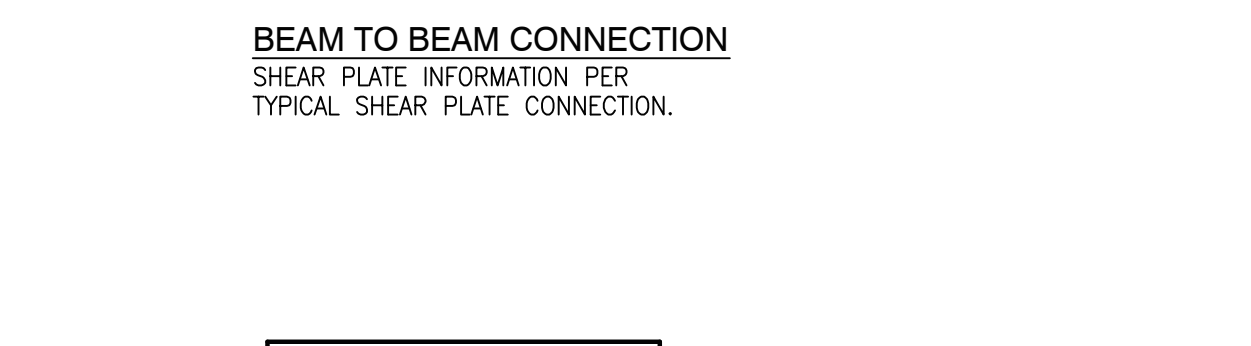
- PROVIDE EITHER STANDARD OR HORIZONTAL SHORT SLOTTED HOLES AS PERMITTED BY AISC J3.2 IN THE BEAM WEB AND/OR THE SHEAR PLATE.
- WHERE SHORT-SLOTTED HOLES ARE USED, PROVIDE HARDENED WASHERS PER AISC J3.2.
- CAPACITIES BASED ON AISC 13TH EDITION WITH ASTM A325-N BOLTS.
- HORIZONTAL DISTANCE FROM SUPPORT FACE TO CENTERLINE OF BOLT GROUP SHALL BE AS SHOWN IN THE DETAILS, BUT SHALL NOT EXCEED 3 1/2" IN THE AS-BUILT CONDITION. SUPPORT FACE FOR TEE IS THE INSIDE FACE OF FLANGE.
- VERTICAL EDGE DISTANCE FROM SUPPORT FACE TO EDGE OF STEEL SHALL BE 1 1/2" TYPICALLY, EXCEPT THAT 1 1/4" IS PERMITTED PER AISC TABLE J3.4 FOR 3/4" DIAMETER BOLTS WITHOUT ANY REDUCTION IN THE TABULATED CAPACITIES.
- GAP BETWEEN BEAM END AND SUPPORT FACE SHALL BE 1/2" EXCEPT FOR "WT" CONNECTORS USED WITH HSS COLUMNS. WHERE "WT" ARE USED AS SHEAR TAB ELEMENTS, THE GAP BETWEEN FACE OF COLUMN AND END OF BEAM SHALL NOT EXCEED THE LESSER OF 1 1/2" OR THE "X" DISTANCE OF THE "WT" PLUS 1/4".
- WELD SIZES SHALL BE THE LARGER OF THE SIZE (t), TABULATED IN SCHEDULE "A" OR MINIMUM SHOWN IN TABLE 1.
- FIELD FILLET WELDS SHALL BE SIZED TO BE AT LEAST 1/16" LARGER THAN THE WELD SIZE SHOWN IN SCHEDULE "A", UNLESS PROPER FIT-UP IS VERIFIED BY A SPECIAL INSPECTOR PRIOR TO WELDING.
- COPE DEPTHS (SINGLE AND DOUBLE) SHALL NOT EXCEED THE LESSER OF THOSE SHOWN IN SCHEDULE "A", NOR AS ALLOWED BY BOLT HOLE SPACING AND MINIMUM EDGE DISTANCE REQUIREMENTS. SINGLE COPE LENGTH SHALL NOT EXCEED 6 1/2". DOUBLE COPE LENGTHS SHALL NOT EXCEED THAT REQUIRED TO ACCOMMODATE GIRDER FLANGE + 1/2" MAX GAP BETWEEN FLANGES.
- UNCOPED CAPACITIES OF WT CONNECTIONS ARE VALID WITH MINIMUM NOMINAL HSS COLUMN WALL TABULATED THICKNESS. THE EFFECTIVE THROAT OF FLARE BEVEL GROOVE WELDS IS BASED ON OUTSIDE RADIUS OF HSS, AND IS TAKEN AS 5/8 TIMES THE HSS WALL THICKNESS BASED ON AWS D1.1, TABLE 2.1. WHEN 3/4" A325-N BOLTS ARE USED, A 3/16" HSS COLUMN WALL THICKNESS IS PERMITTED WITH A 20% REDUCTION OF THE WT CONNECTION CAPACITY.
- NR = NOT RECOMMENDED. DOUBLE COPES FOR THESE BEAMS ARE RESTRICTED BY CONNECTION GEOMETRY AND/OR LARGE REDUCTIONS IN SHEAR CAPACITY. DOUBLE COPES ARE POSSIBLE, BUT CAPACITIES MUST BE CALCULATED FOR SPECIFIC BEAM AND GIRDER GEOMETRIES AND MUST BE DETAILED SEPARATELY.



**TYPICAL SHEAR PLATE CONNECTION**



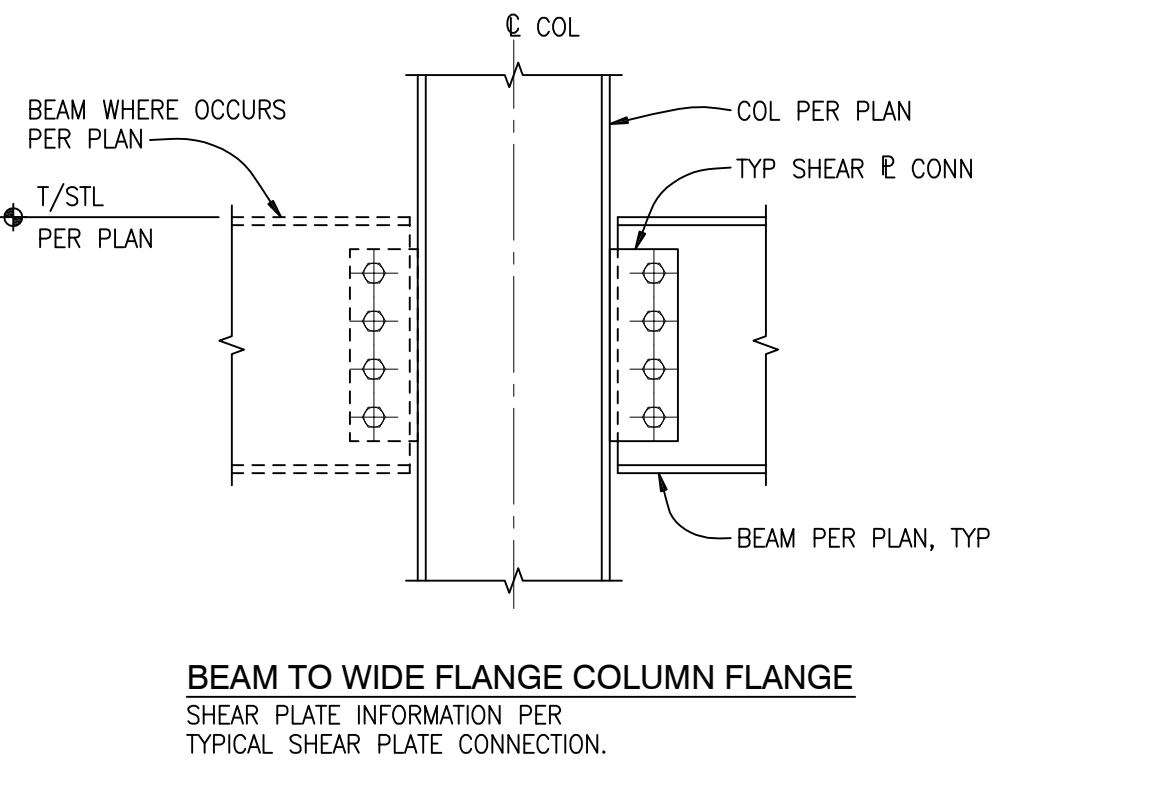
**BEAM TO WIDE FLANGE COLUMN WEB - OPTION 1 (BEAM FITS INSIDE COLUMN)**



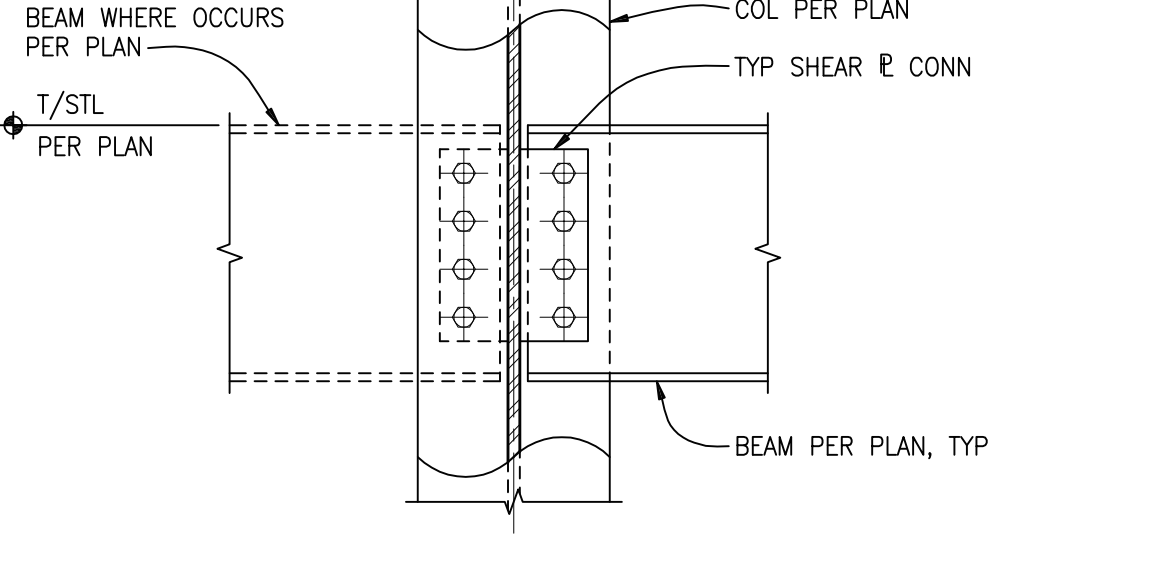
**BEAM TO WIDE FLANGE COLUMN WEB - OPTION 2**

| TABLE 1<br>MINIMUM WELD SIZE TABLE |                     |                   |                   |
|------------------------------------|---------------------|-------------------|-------------------|
| PLATE OR FLANGE THICKNESS (T) *    | MINIMUM FILLET SIZE | MINIMUM WELD SIZE | MINIMUM WELD SIZE |
| T ≤ 1/2"                           | 3/16"               | 3/16"             | 3/16"             |
| 1/2" < T ≤ 3/4"                    | 1/4"                | 1/4"              | 1/4"              |
| 3/4" < T                           | 5/16"               | 5/16"             | 5/16"             |

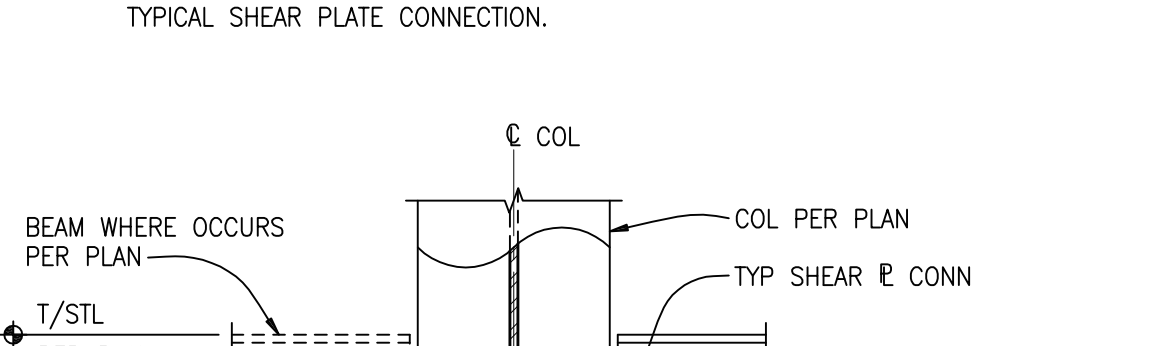
\* MINIMUM WELD SIZE TO BE BASED ON THICKNESS OF THE THICKER PART.



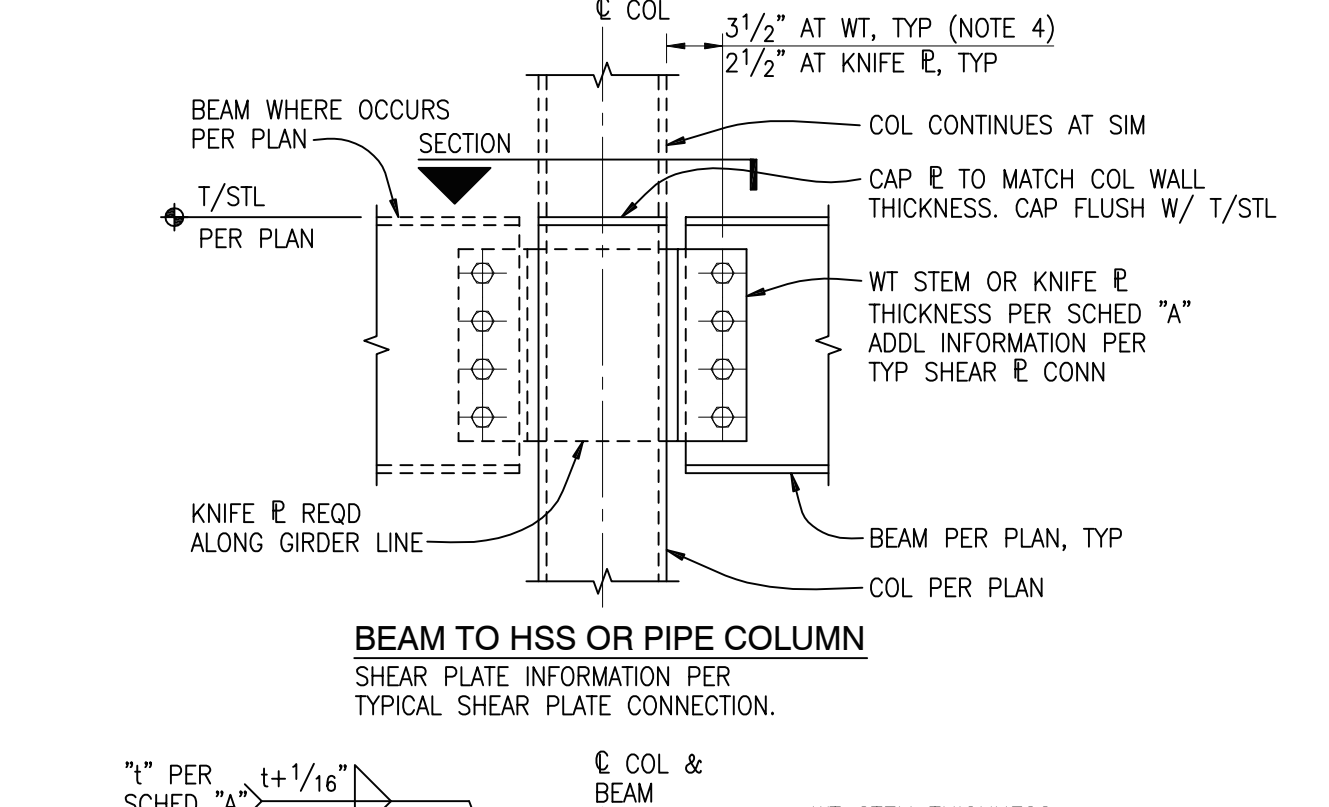
**BEAM TO WIDE FLANGE COLUMN WEB - OPTION 1 (BEAM FITS INSIDE COLUMN)**



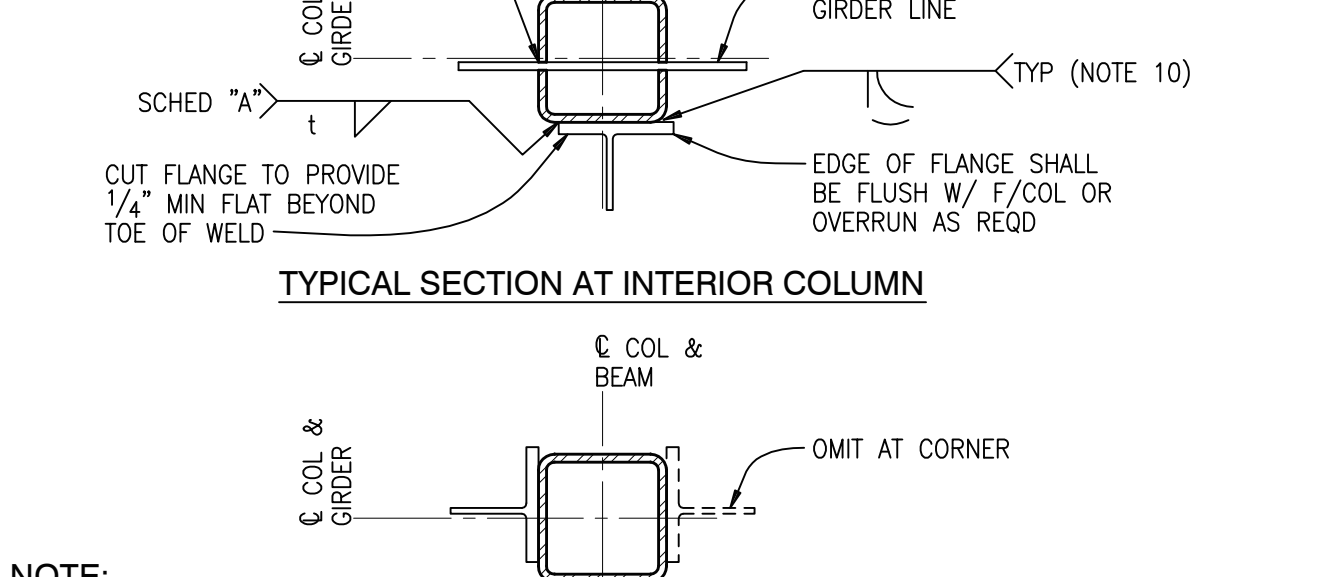
**BEAM TO WIDE FLANGE COLUMN WEB - OPTION 2**



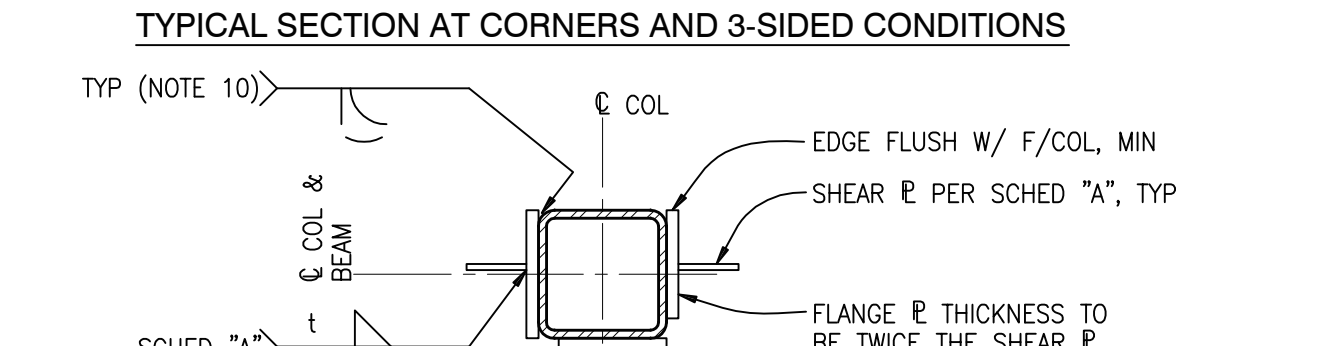
**BEAM TO WIDE FLANGE COLUMN WEB - OPTION 2**



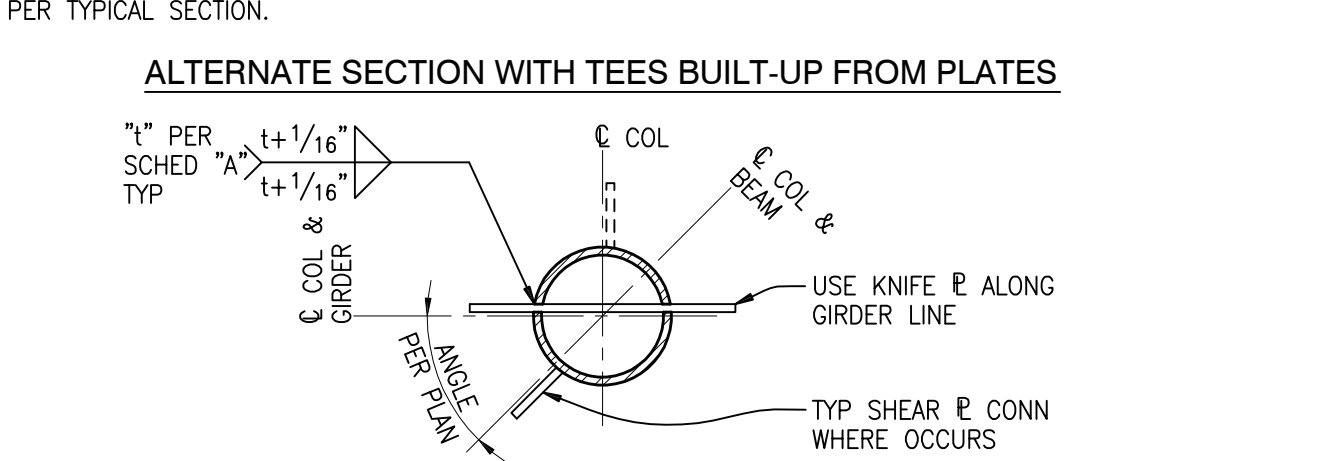
**BEAM TO HSS OR PIPE COLUMN**



**TYPICAL SECTION AT INTERIOR COLUMN**



**TYPICAL SECTION AT CORNERS AND 3-SIDED CONDITIONS**



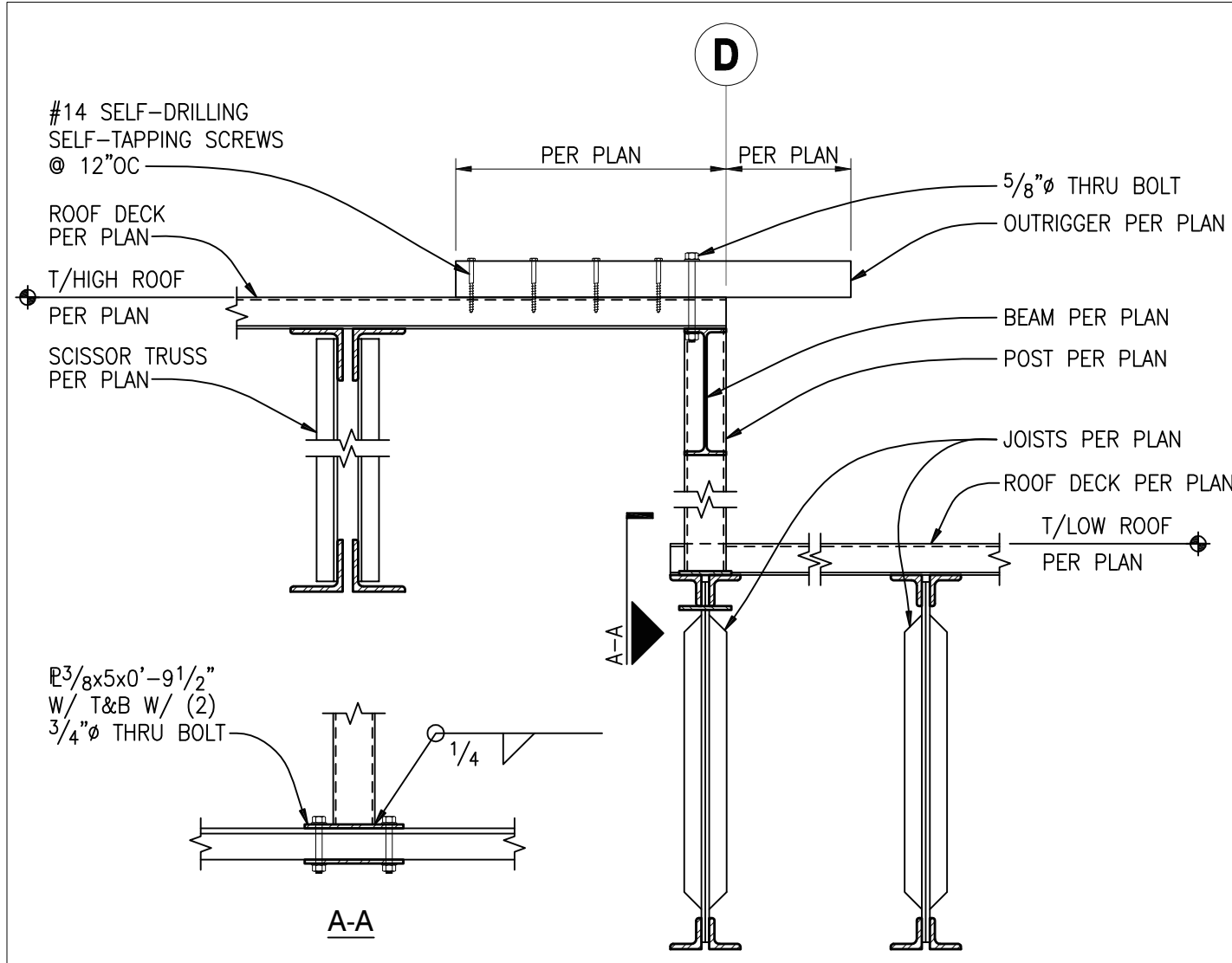
**ALTERNATE SECTION WITH TEES BUILT-UP FROM PLATES**

**ROOF OUTRIGGER DETAIL**

SCALE: 1"=1'-0" **16**

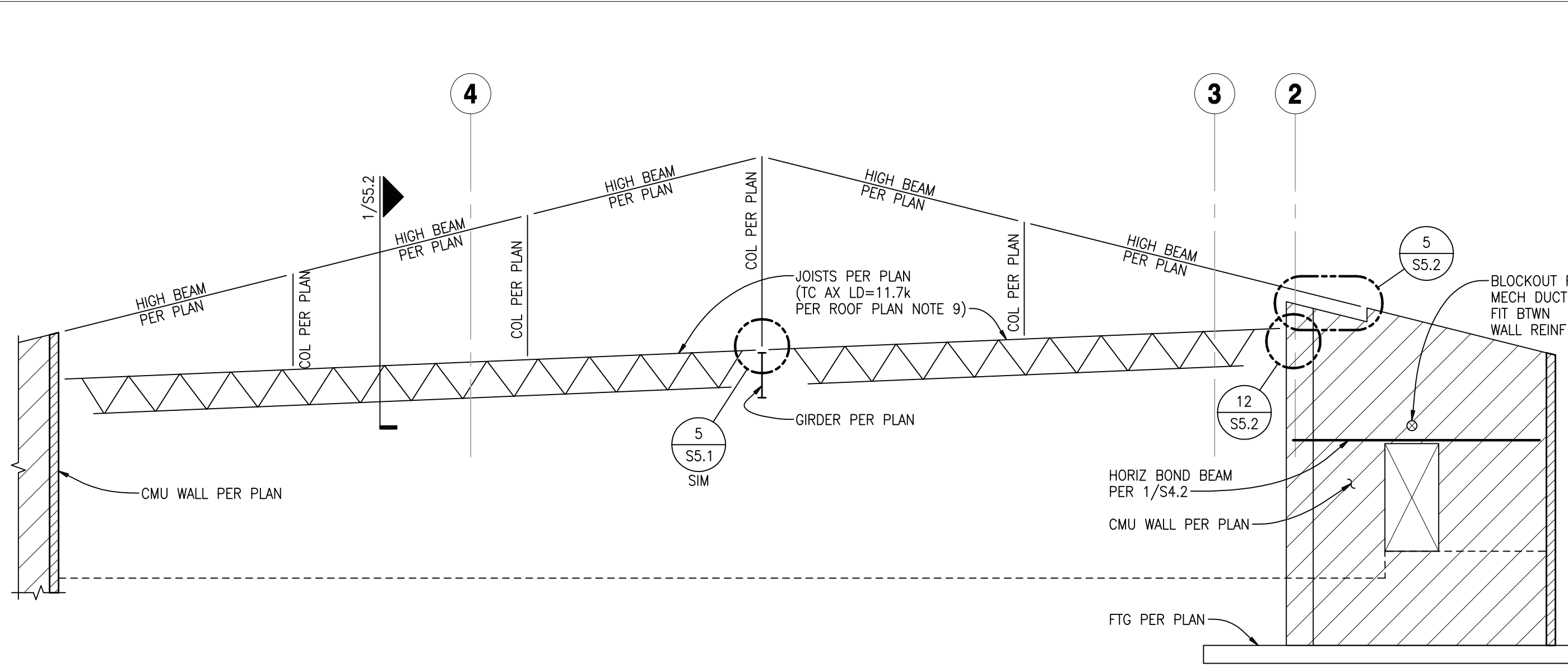
**SINGLE SHEAR PLATE (SINGLE ROW) CONNECTIONS**

05201 SCALE: 1"=1'-0" **16**



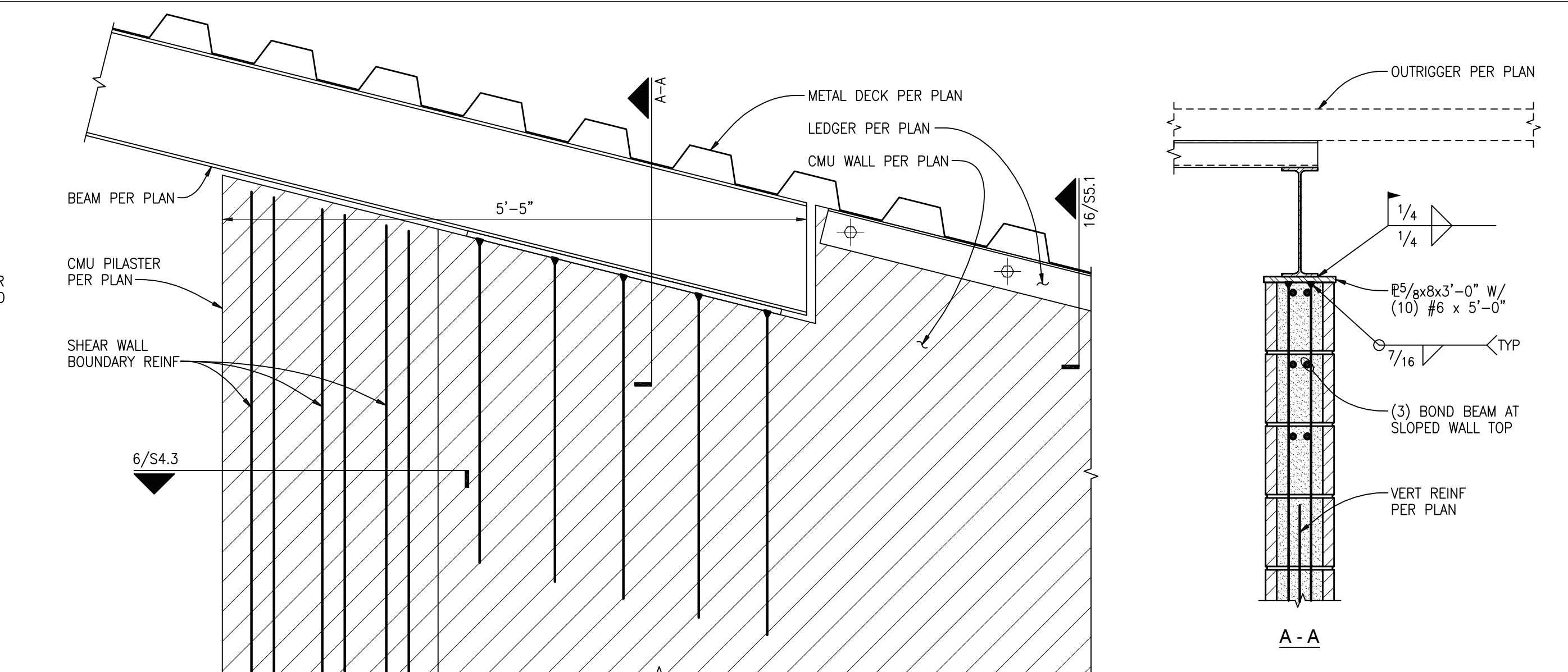
ROOF STEP DETAIL AT GRID D

SCALE: 3/4"=1'-0"



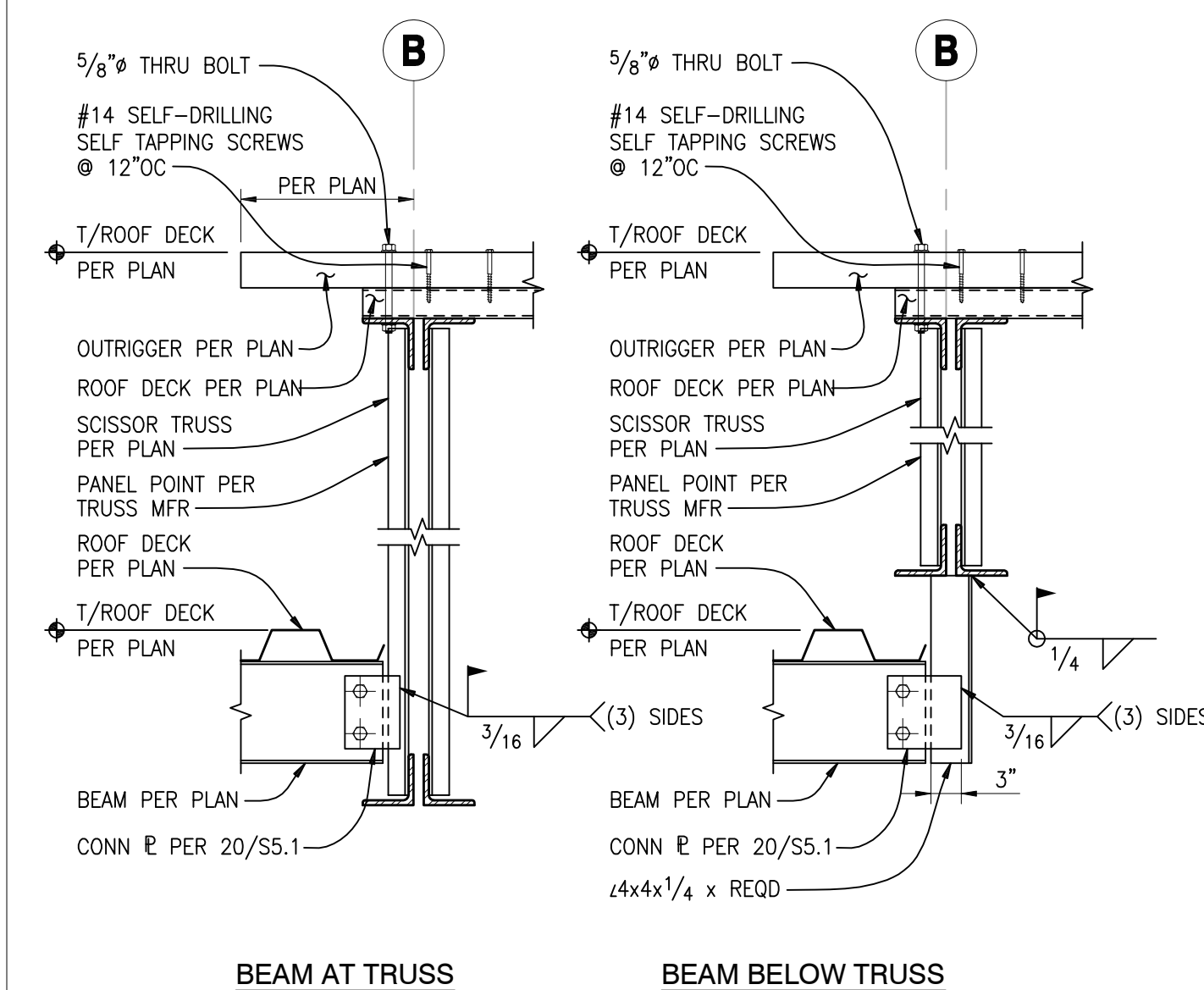
ELEVATION ALONG GRID D/5

SCALE: 1/8"=1'-0"



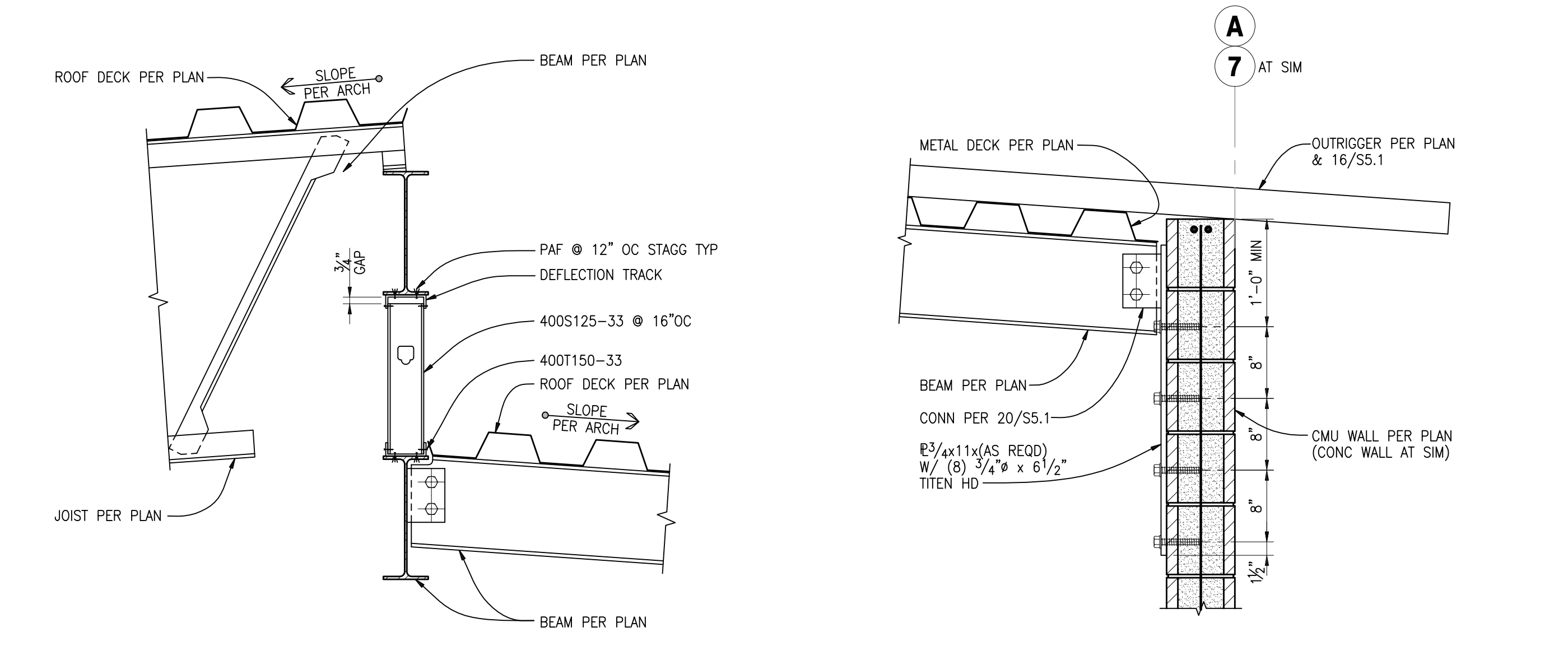
BEAM BEARING OVER CMU WALL

SCALE: 1"=1'-0"



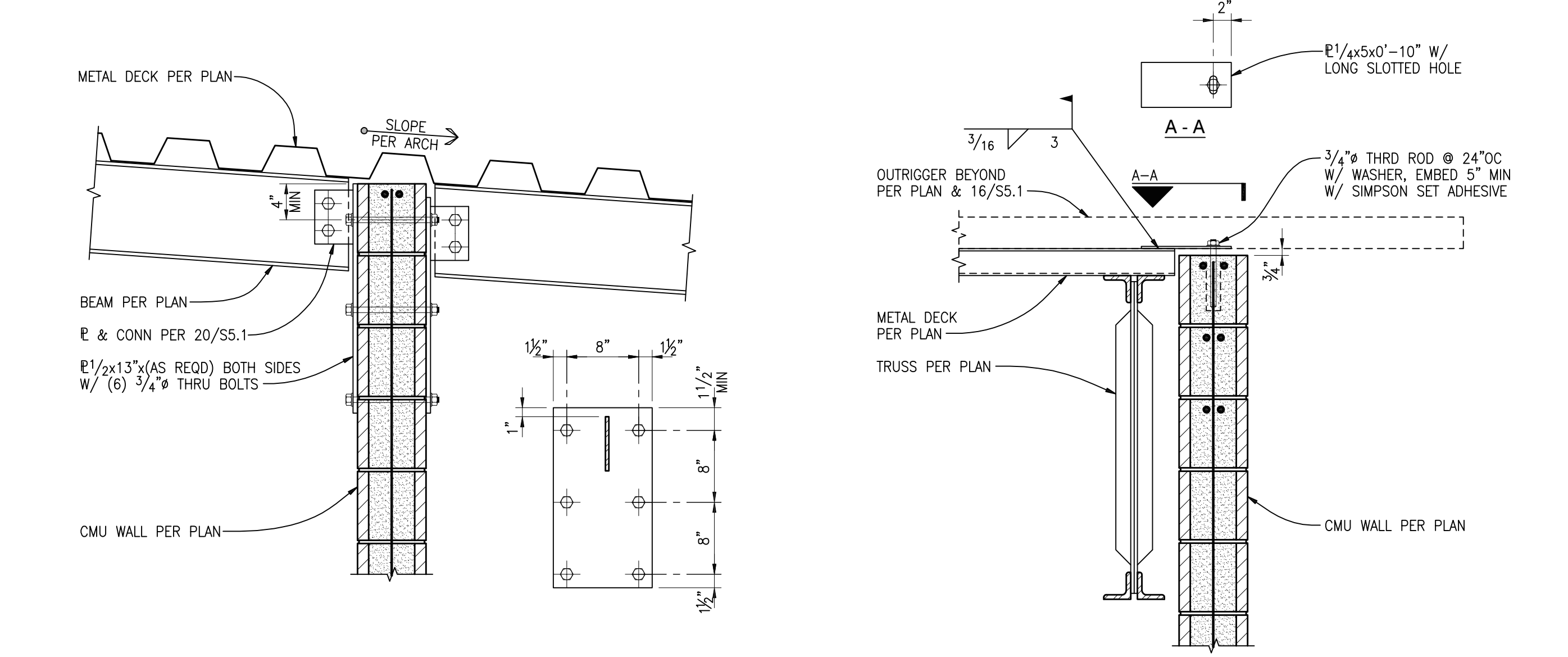
BEAM AT TRUSS DETAIL

SCALE: 3/4"=1'-0"



DETAIL AT ROOF STEP

SCALE: 1"=1'-0"

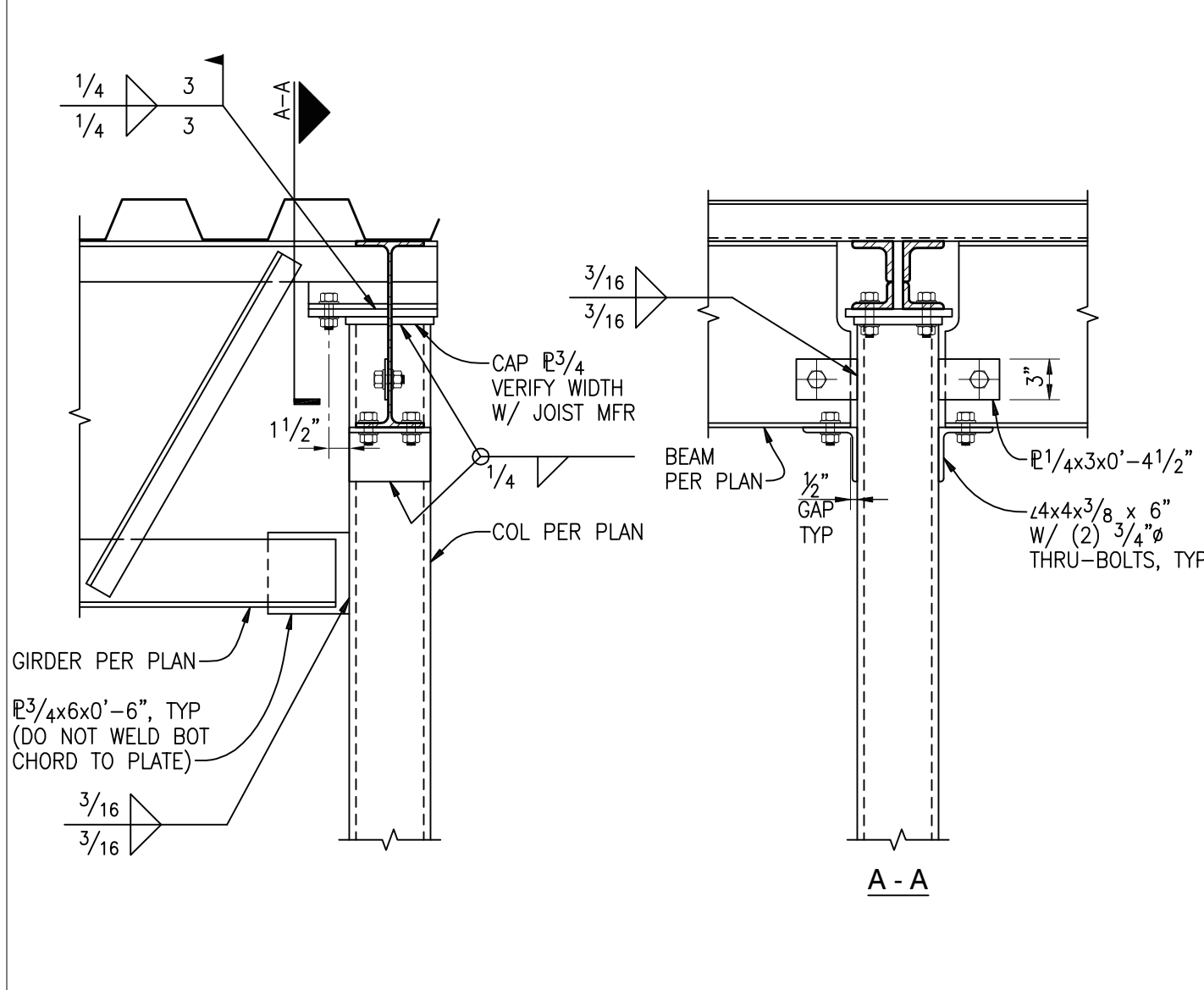


STEEL BEAM TO CMU WALL DETAIL

SCALE: 1"=1'-0"

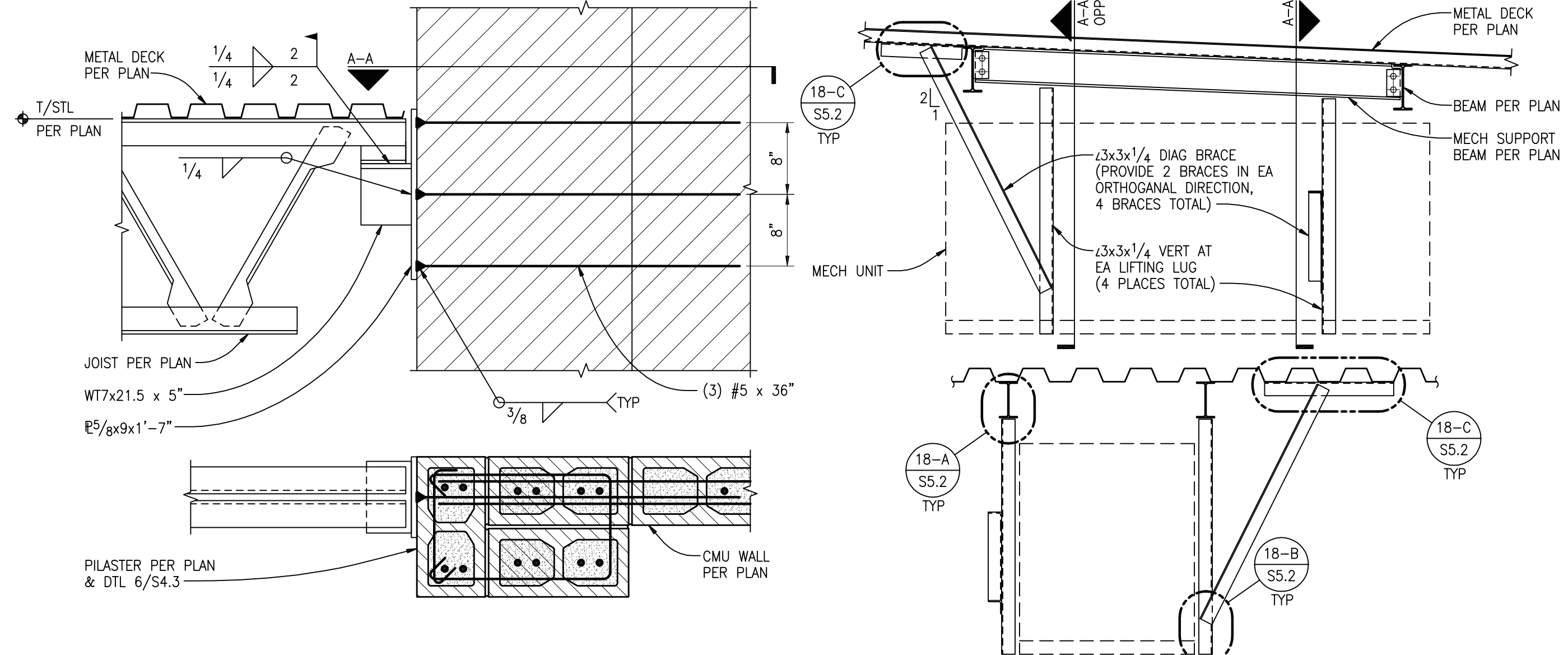
ROOF DETAIL AT NON-BEARING CMU WALL

SCALE: 1"=1'-0"



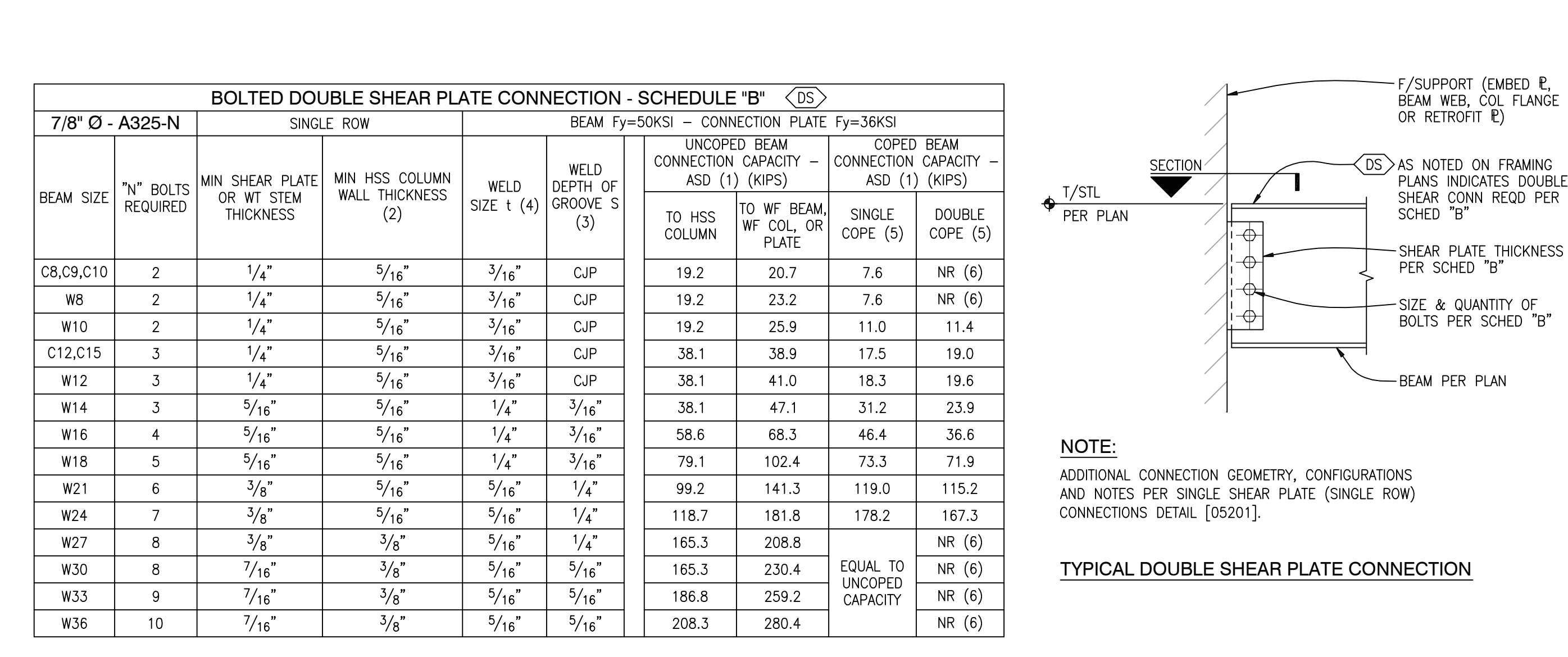
GIRDER TO COLUMN CONNECTION AT GRID 2

SCALE: 1"=1'-0"



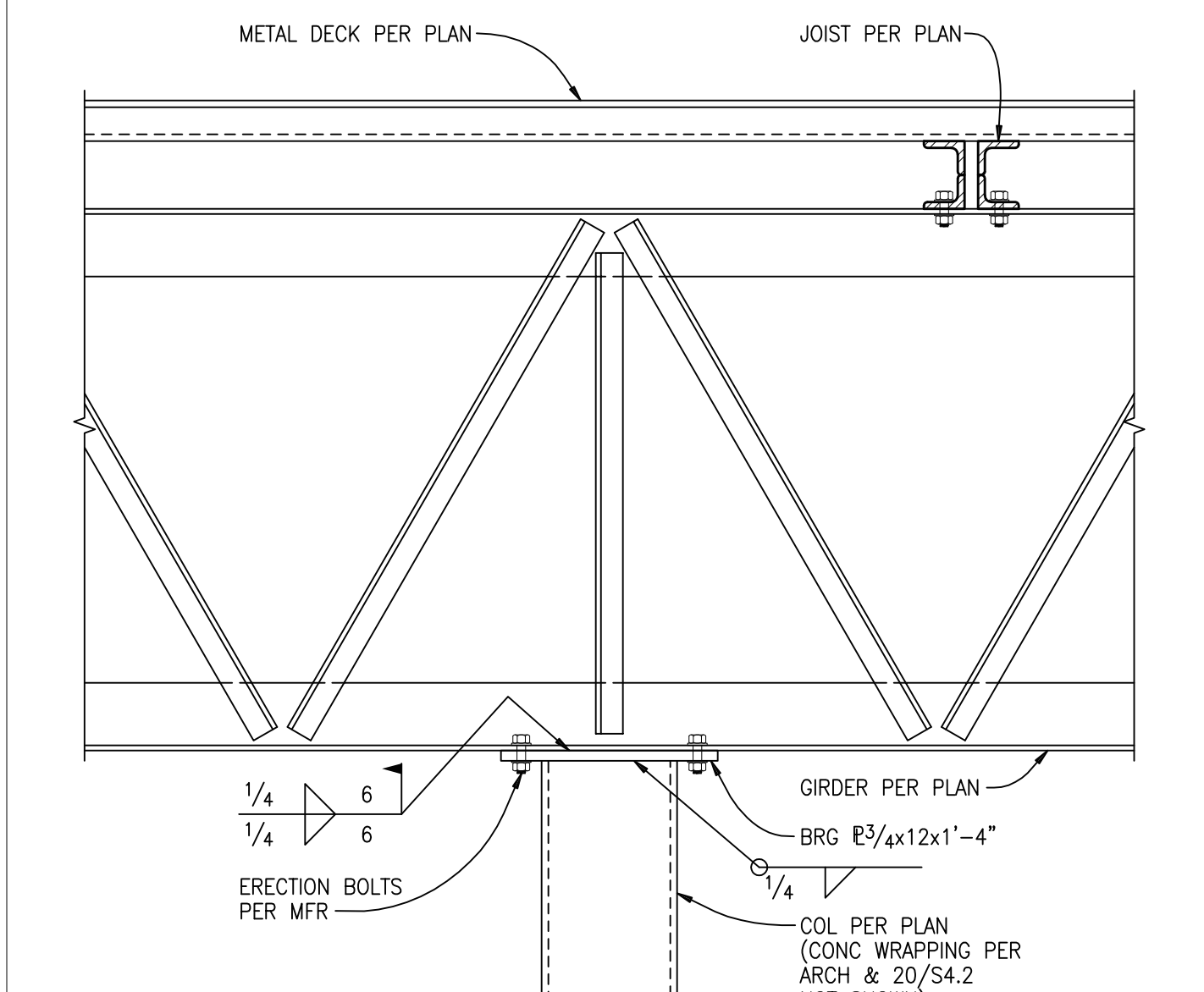
LOW JOIST TO CMU PILASTER AT GRID 'D'

SCALE: 1"=1'-0"



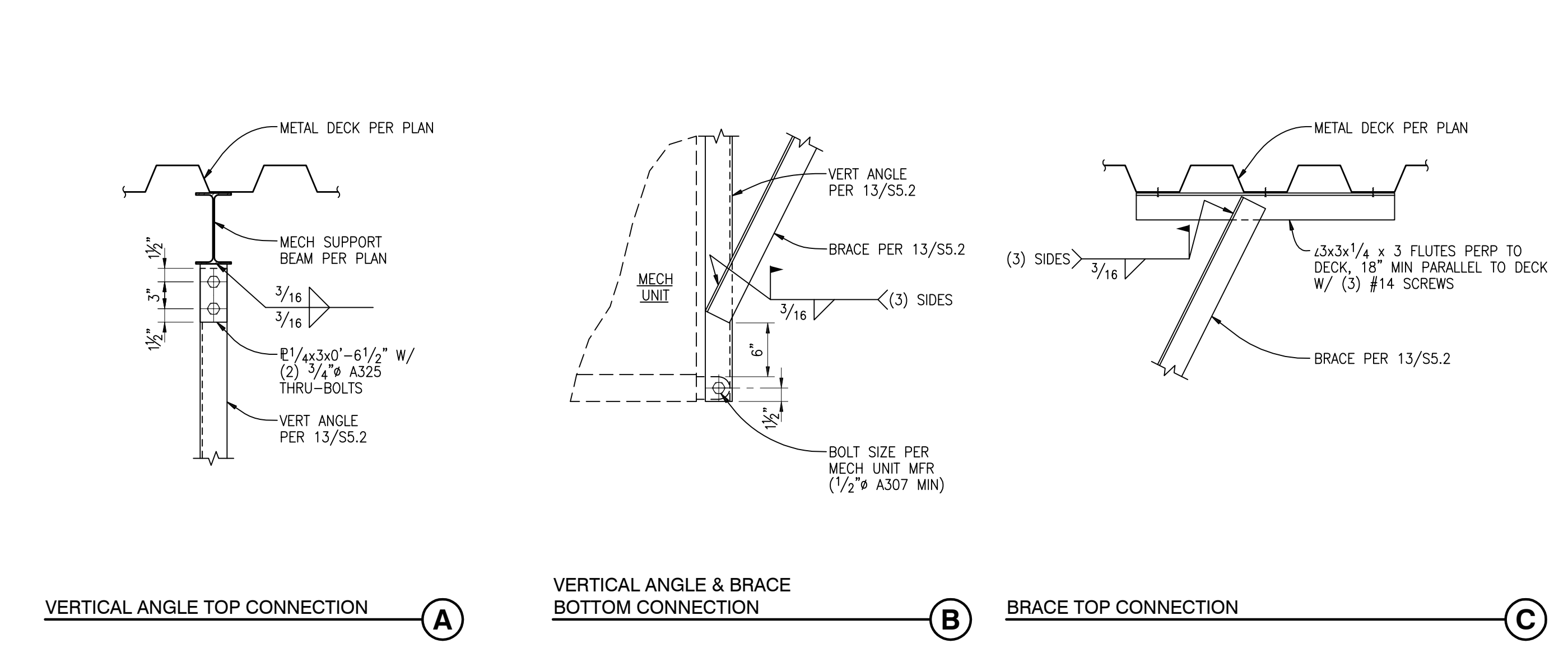
SECTION AT MECHANICAL UNIT

SCALE: 1/2"=1'-0"



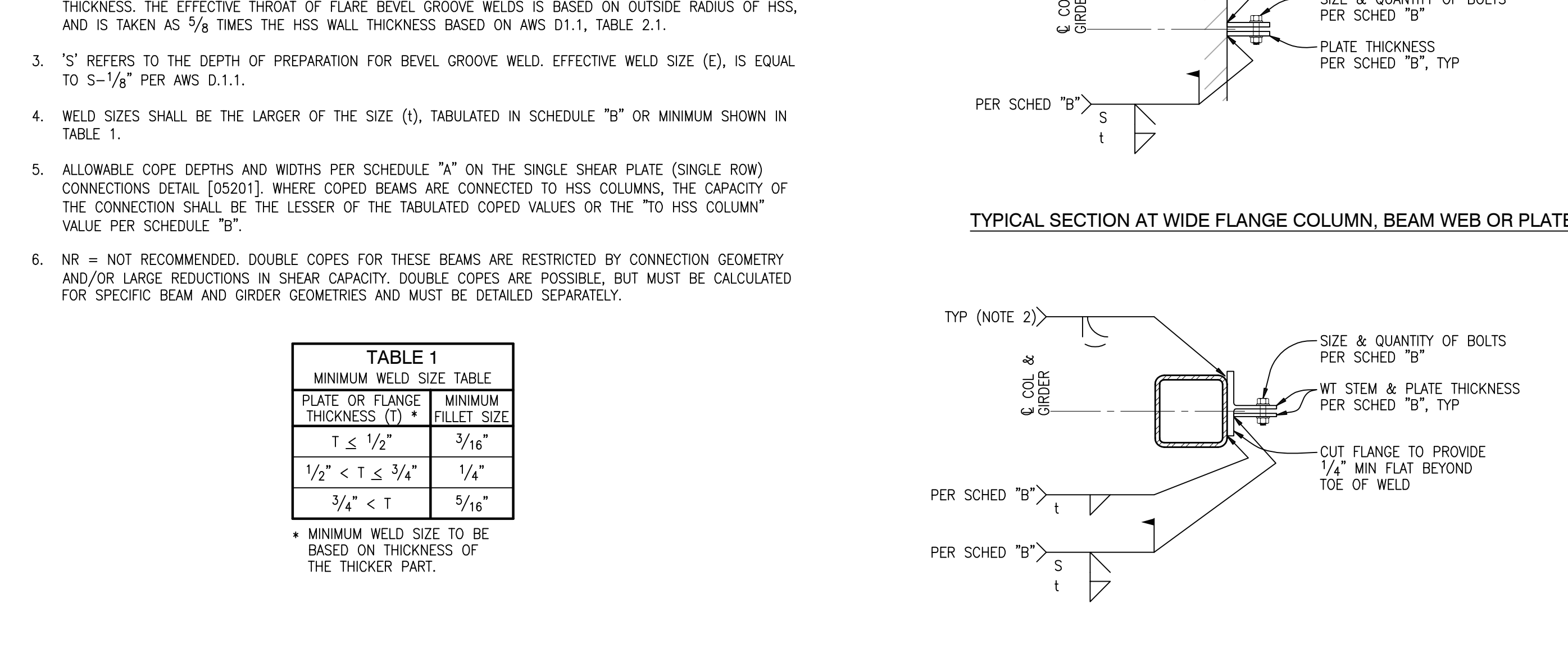
GIRDER TO COLUMN CONNECTION

SCALE: 1"=1'-0"



MECHANICAL UNIT FRAMING CONNECTIONS

SCALE: 1"=1'-0"



DOUBLE SHEAR PLATE (SINGLE ROW) CONNECTIONS

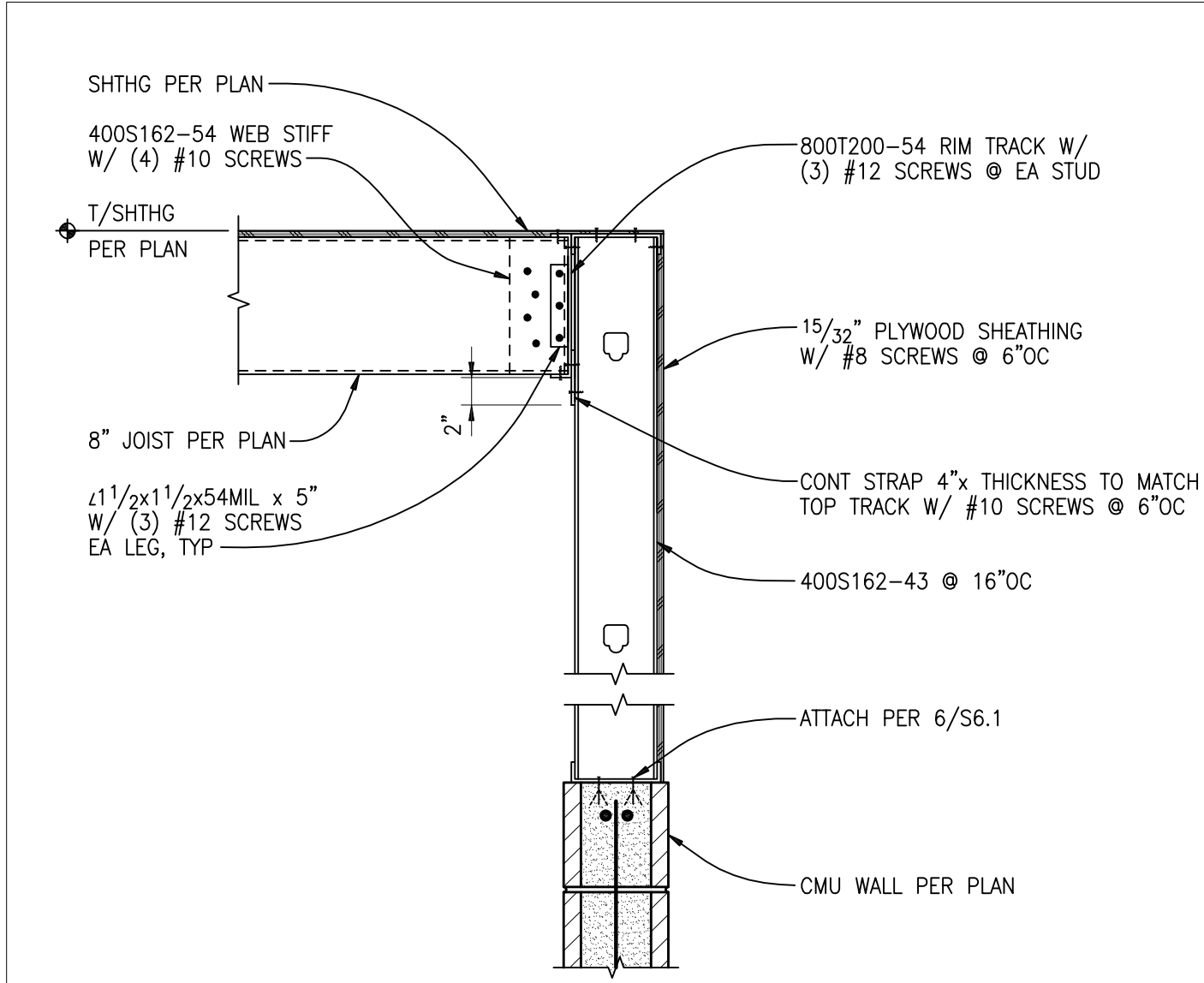
SCALE: 1"=1'-0"

| BOLTED DOUBLE SHEAR PLATE CONNECTION - SCHEDULE "B" <DS> |                    |                                      |                                   |               |   |   |                               |   |                 |
|--|--------------------|--------------------------------------|-----------------------------------|---------------|---|---|-------------------------------|---|-----------------|
| 7/8" Ø - A325-N  |                    | SINGLE ROW                           |                                   |               | BEAM F <sub>y</sub> =50KSI - CONNECTION PLATE F <sub>y</sub> =36KSI |   |                               |   |                 |
| BEAM SIZE  | "N" BOLTS REQUIRED | MIN SHEAR PLATE OR WT STEM THICKNESS | MIN HSS COLUMN WALL THICKNESS (2) | WELD SIZE (4) | WELD DEPTH OF GROOVE (3)  | UNCOPED BEAM CONNECTION CAPACITY - ASD (1) (KIPS) |                               | COPED BEAM CONNECTION CAPACITY - ASD (1) (KIPS) |                 |
|  |                    |                                      |                                   |               |   | TO HSS COLUMN                                     | TO WF BEAM, WF COL., OR PLATE | SINGLE COPE (5)                                 | DOUBLE COPE (5) |
| C8,C9,C10  | 2                  | 1/4"                                 | 5/16"                             | 3/16"         | CJP   | 19.2  | 20.7                          | 7.6   | NR (6)          |
| W8   | 2                  | 1/4"                                 | 5/16"                             | 3/16"         | CJP   | 19.2  | 23.2                          | 7.6   | NR (6)          |
| W10  | 2                  | 1/4"                                 | 5/16"                             | 3/16"         | CJP   | 19.2  | 25.9                          | 11.0  | 11.4            |
| C12,C15  | 3                  | 1/4"                                 | 5/16"                             | 3/16"         | CJP   | 38.1  | 38.9                          | 17.5  | 19.0            |
| W12  | 3                  | 1/4"                                 | 5/16"                             | 3/16"         | CJP   | 38.1  | 41.0                          | 18.3  | 19.6            |
| W14  | 3                  | 3/16"                                | 5/16"                             | 1/4"          | 3/16"   | 38.1  | 47.1                          | 31.2  | 23.9            |
| W16  | 4                  | 3/16"                                | 5/16"                             | 1/4"          | 3/16"   | 58.6  | 68.3                          | 46.4  | 36.6            |
| W18  | 5                  | 3/16"                                | 5/16"                             | 1/4"          | 3/16"   | 79.1  | 102.4                         | 73.3  | 71.9            |
| W21  | 6                  | 3/8"                                 | 5/16"                             | 1/4"          | 3/16"   | 99.2  | 141.3                         | 119.0   | 115.2           |
| W24  | 7                  | 3/8"                                 | 5/16"                             | 1/4"          | 3/16"   | 118.7   | 181.8                         | 178.2   | 167.3           |
| W27  | 8                  | 3/8"                                 | 3/8"                              | 3/16"         | 1/4"  | 165.3   | 208.8                         | NR (6)  | NR (6)          |
| W30  | 8                  | 7/16"                                | 3/8"                              | 3/16"         | 3/16"   | 165.3   | 230.4                         | EQUAL TO UNCOPE CAPACITY                        | NR (6)          |
| W33  | 9                  | 7/16"                                | 3/8"                              | 3/16"         | 3/16"   | 186.8   | 259.2                         | EQUAL TO UNCOPE CAPACITY                        | NR (6)          |
| W36  | 10                 | 7/16"                                | 3/8"                              | 3/16"         | 3/16"   | 208.3   | 280.4                         | EQUAL TO UNCOPE CAPACITY                        | NR (6)          |

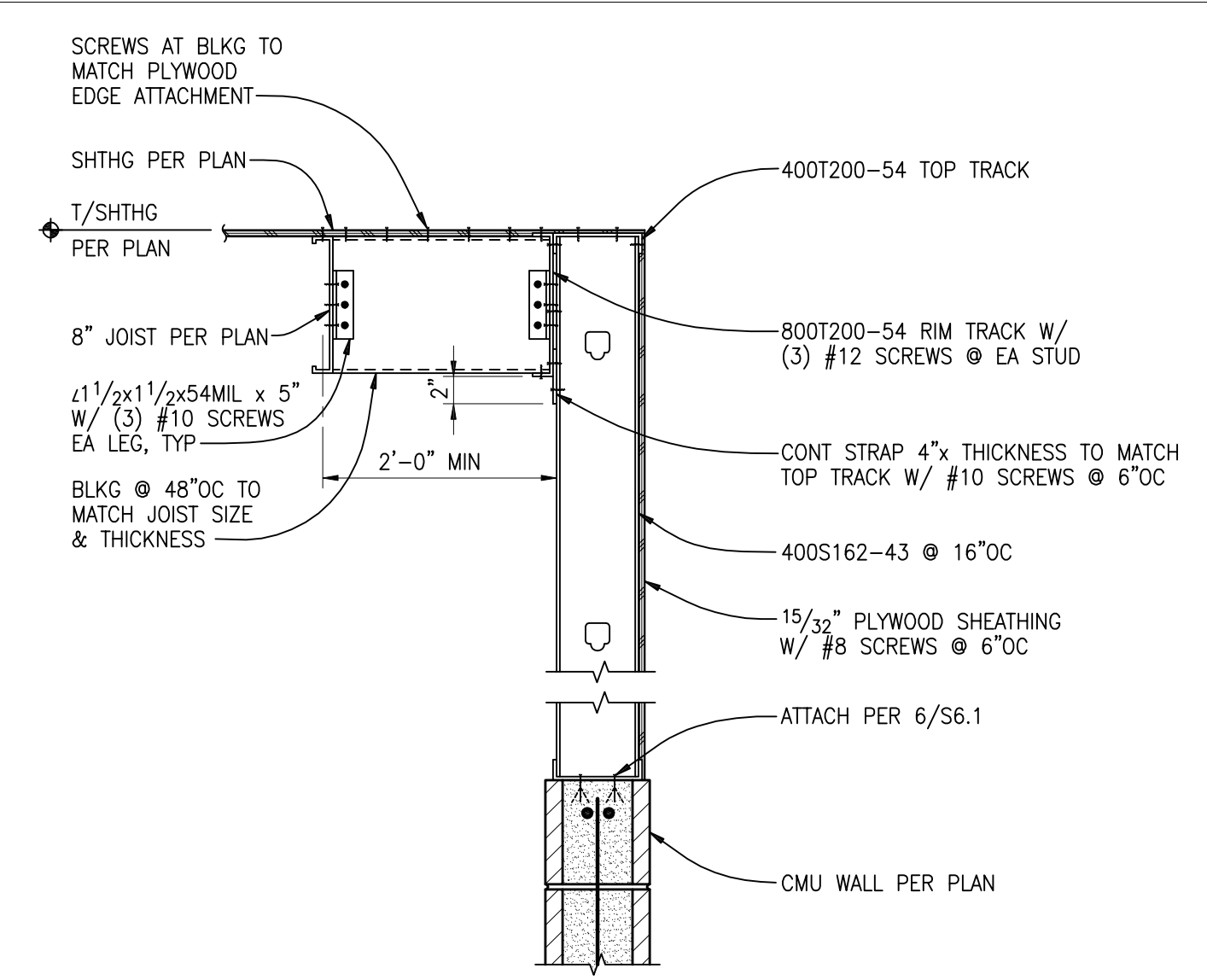
- BOLTED DOUBLE SHEAR PLATE CONNECTION NOTES:**
- ALLOWABLE STRENGTH DESIGN (ASD) AND LOAD RESISTANCE FACTOR DESIGN (LRFD) VALUES AS NOTED IN SCHEDULE "B" ARE CAPACITIES BASED ON AISC 13TH EDITION.
  - UNCOPE CAPACITIES OF WT CONNECTIONS ARE VALID WITH MINIMUM NOMINAL HSS COLUMN WALL TABULATED THICKNESS. THE EFFECTIVE THROAT OF FLARE BEVEL GROOVE WELDS IS BASED ON OUTSIDE RADIUS OF HSS, AND IS TAKEN AS 5/8 TIMES THE HSS WALL THICKNESS BASED ON AWS D1.1, TABLE 2.1.
  - "S" REFERS TO THE DEPTH OF PREPARATION FOR BEVEL GROOVE WELD. EFFECTIVE WELD SIZE (E), IS EQUAL TO S-1/8" PER AWS D1.1.
  - WELD SIZES SHALL BE THE LARGER OF THE SIZE (1), TABULATED IN SCHEDULE "B" OR MINIMUM SHOWN IN TABLE 1.
  - ALLOWABLE COPE DEPTHS AND WIDTHS PER SCHEDULE "A" ON THE SINGLE SHEAR PLATE (SINGLE ROW) CONNECTIONS DETAIL [S5201] WHERE COPED BEAMS ARE CONNECTED TO HSS COLUMNS, THE CAPACITY OF THE CONNECTION SHALL BE THE LESSER OF THE TABULATED COPED VALUES OR THE "TO HSS COLUMN" VALUE PER SCHEDULE "B".
  - NR = NOT RECOMMENDED. DOUBLE COPES FOR THESE BEAMS ARE RESTRICTED BY CONNECTION GEOMETRY AND/OR LARGE REDUCTIONS IN SHEAR CAPACITY. DOUBLE COPES ARE POSSIBLE, BUT MUST BE CALCULATED FOR SPECIFIC BEAM AND GIRDER CAPACITIES AND MUST BE DETAILED SEPARATELY.

| TABLE 1<br>MINIMUM WELD SIZE TABLE |                     |                   |
|------------------------------------|---------------------|-------------------|
| PLATE OR FLANGE THICKNESS (T) *    | MINIMUM FILLET SIZE | MINIMUM WELD SIZE |
| T ≤ 1/2"                           | 3/16"               | 3/16"             |
| 1/2" < T ≤ 3/4"                    | 1/4"                | 3/16"             |
| 3/4" < T                           | 5/16"               | 3/16"             |

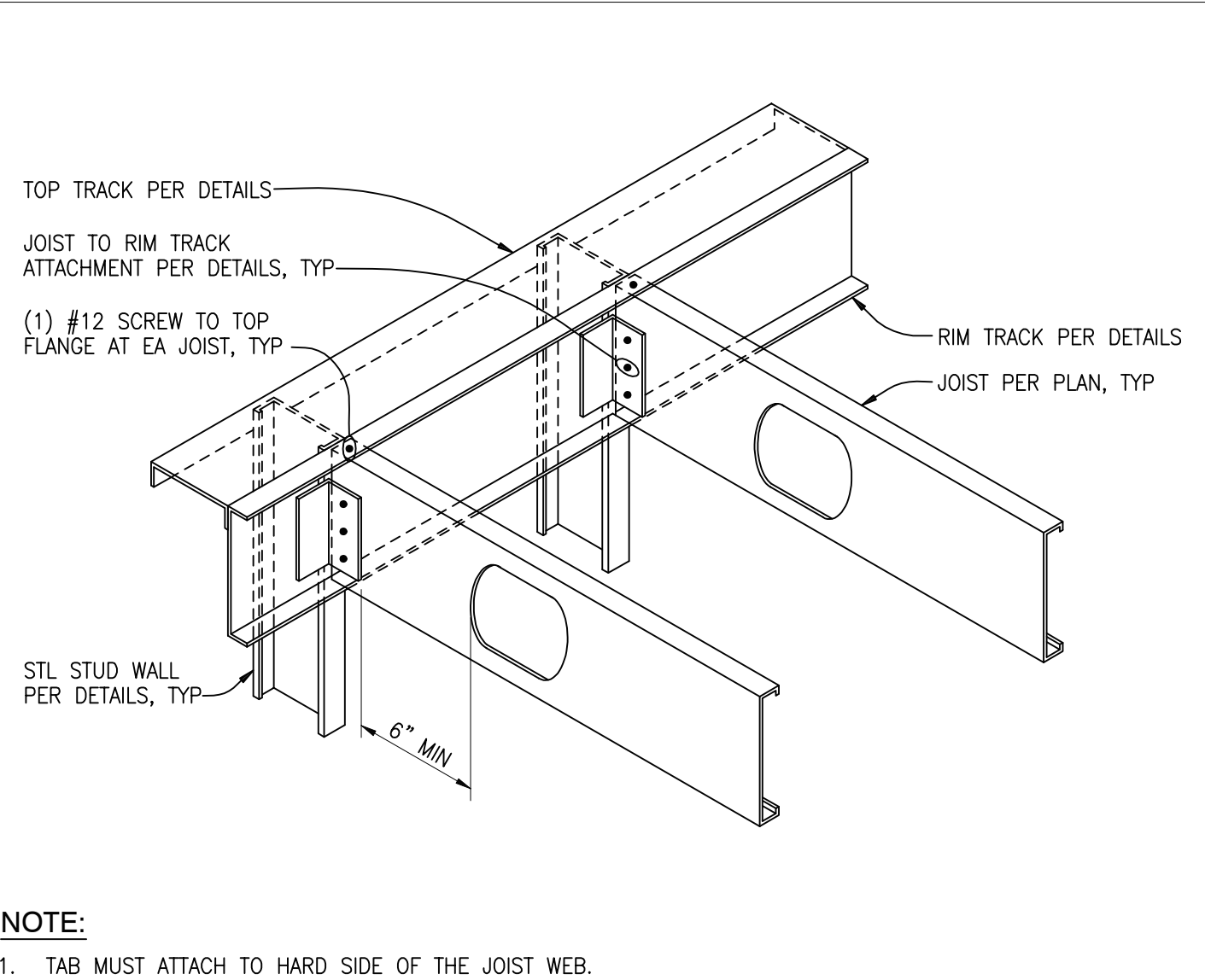
\* MINIMUM WELD SIZE TO BE BASED ON THICKNESS OF THE THICKER PART.



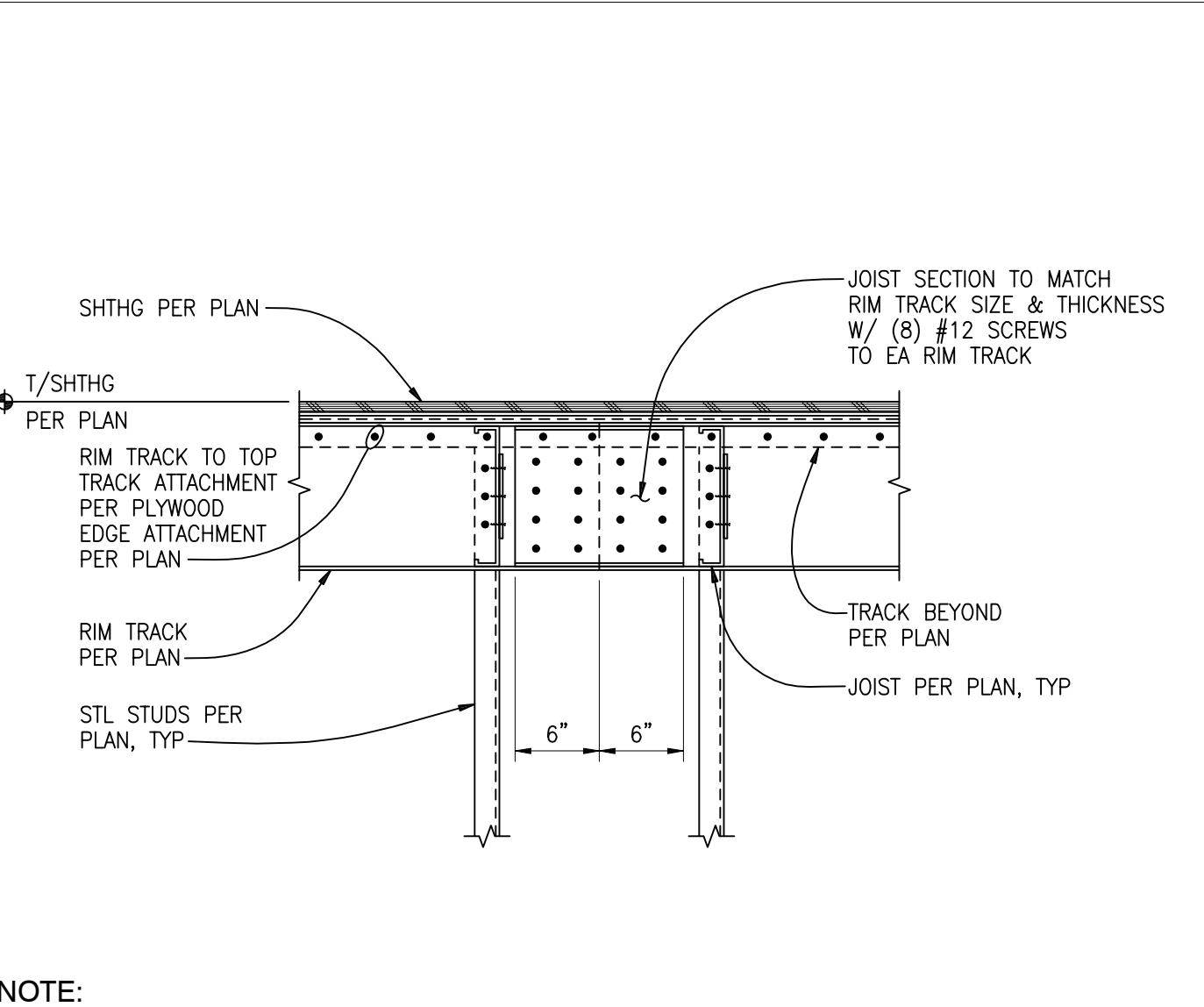
**TYPICAL WALL WITH JOIST PERPENDICULAR**  
 07110M SCALE: 1"=1'-0" ①



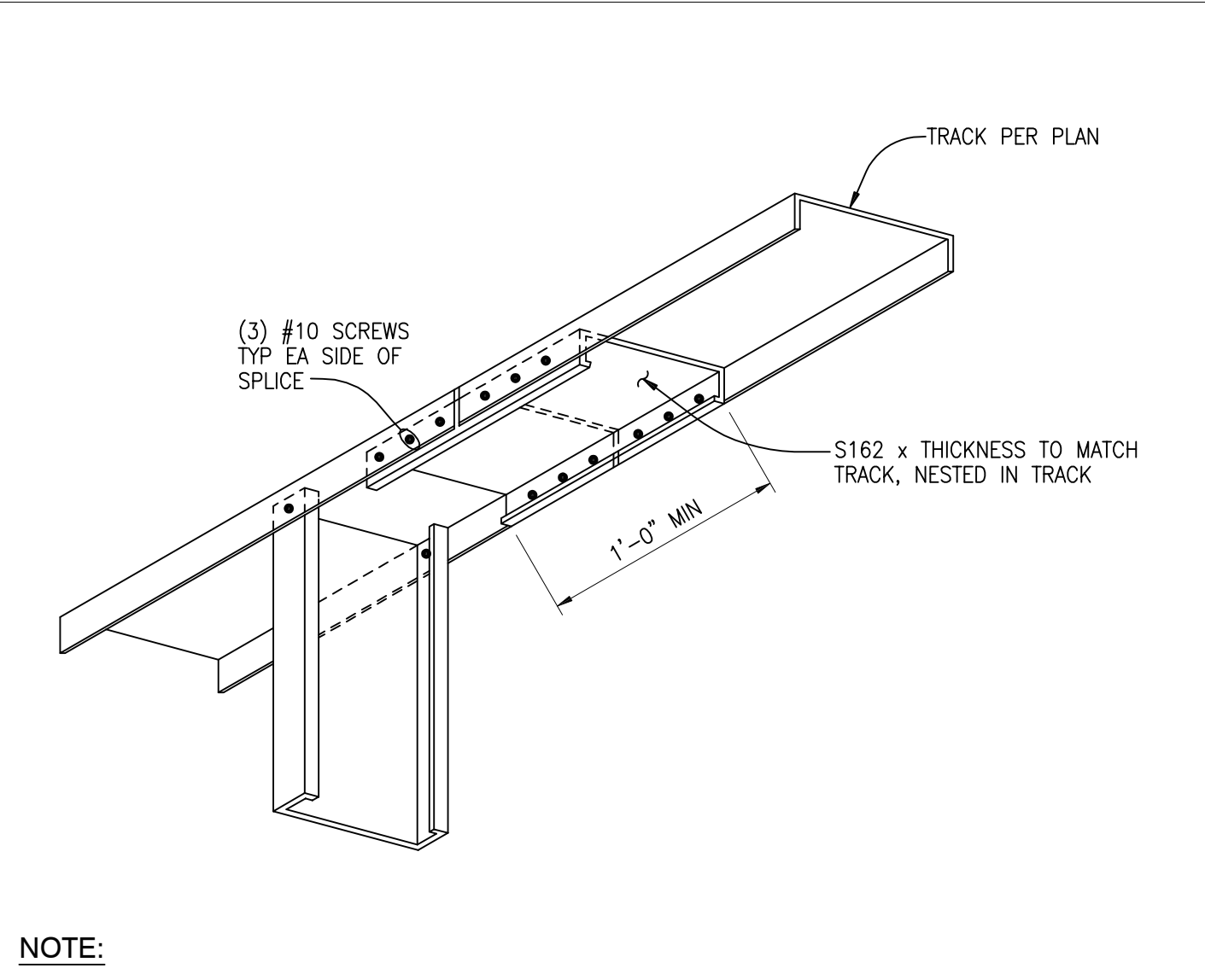
**TYPICAL WALL WITH JOIST PARALLEL**  
 07111M SCALE: 1"=1'-0" ②



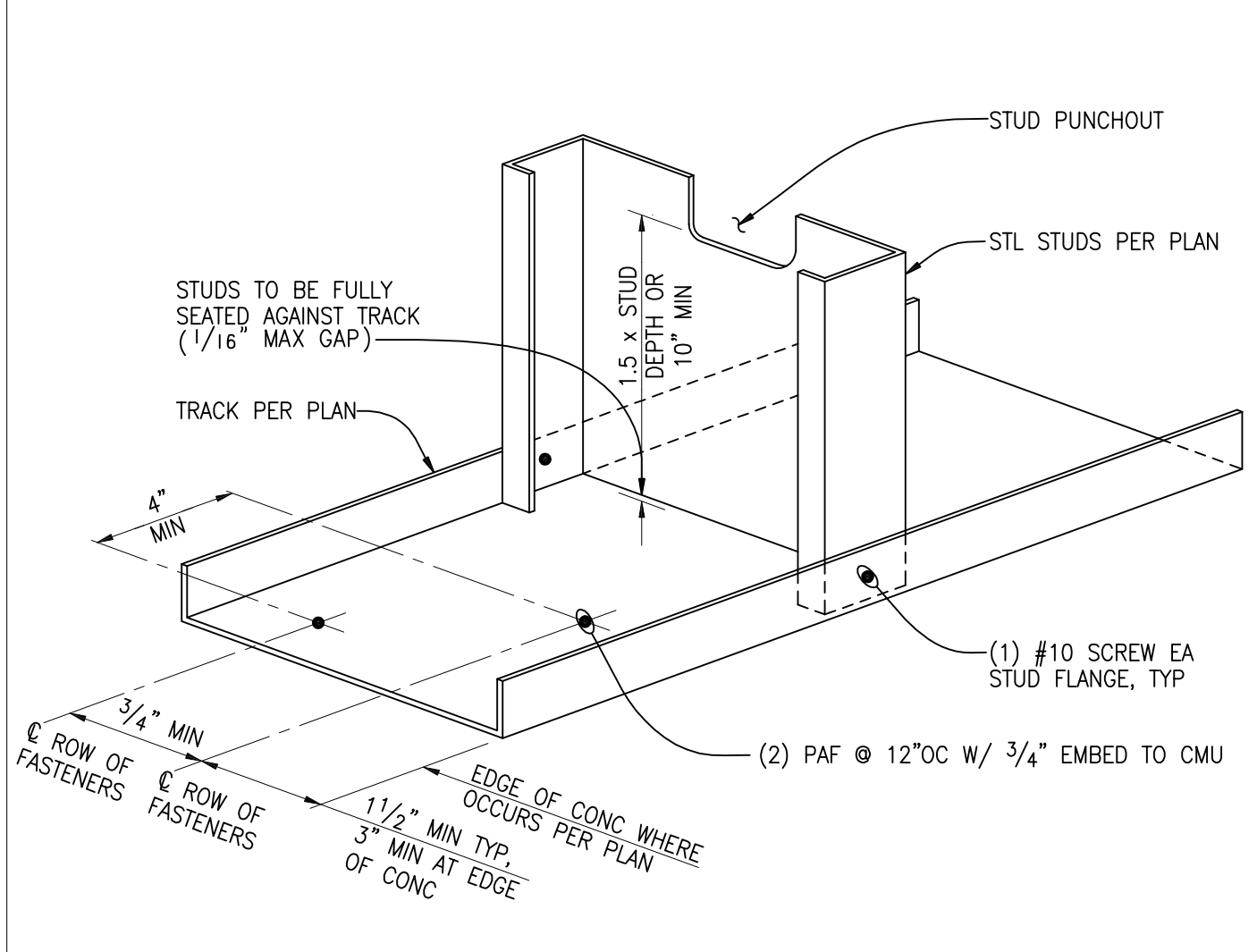
**TYPICAL JOIST FRAMING CONSTRUCTION**  
 07100M SCALE: 1"=1'-0" ③



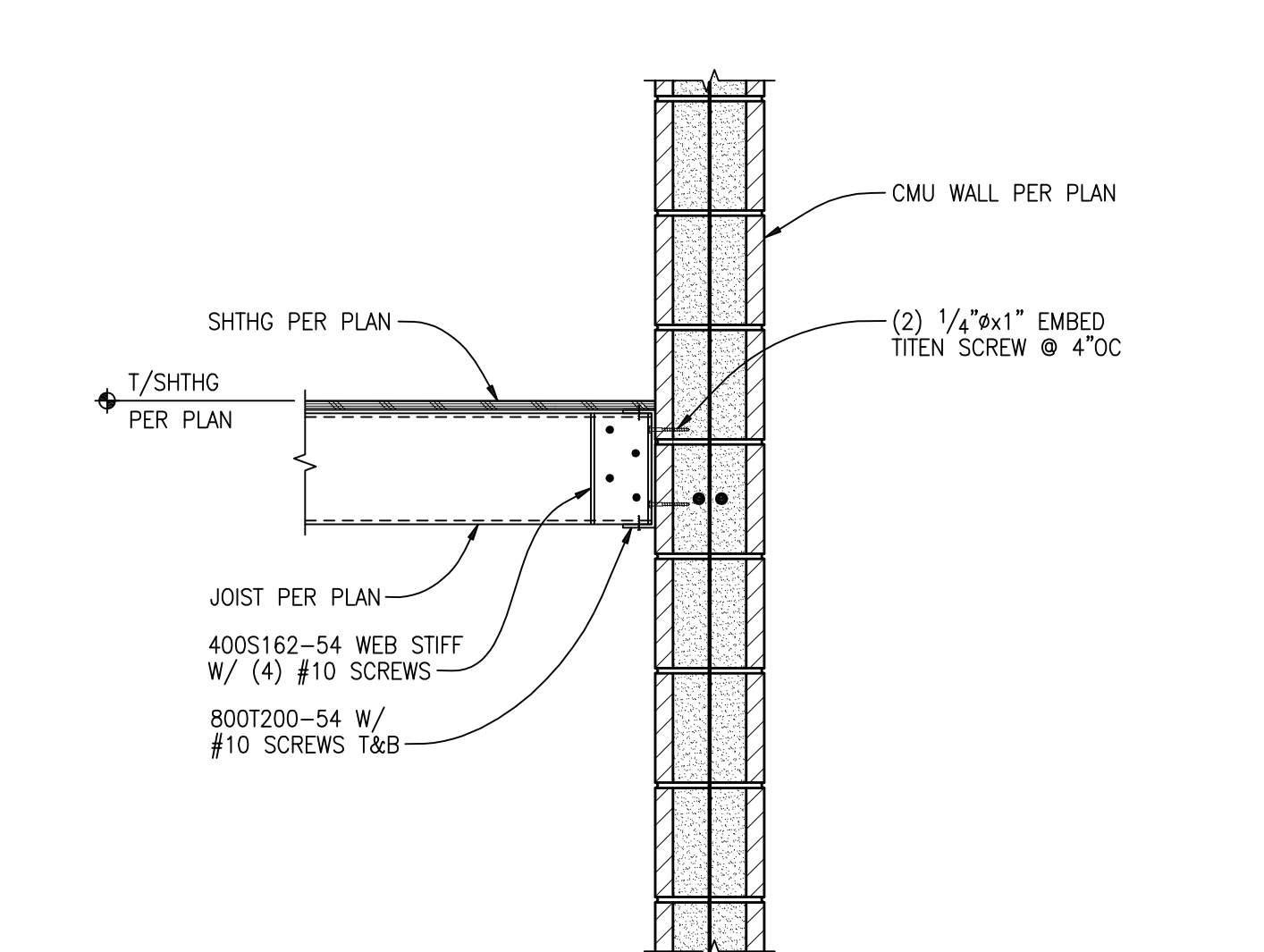
**TYPICAL RIM TRACK SPLICE**  
 07101M SCALE: 1"=1'-0" ④



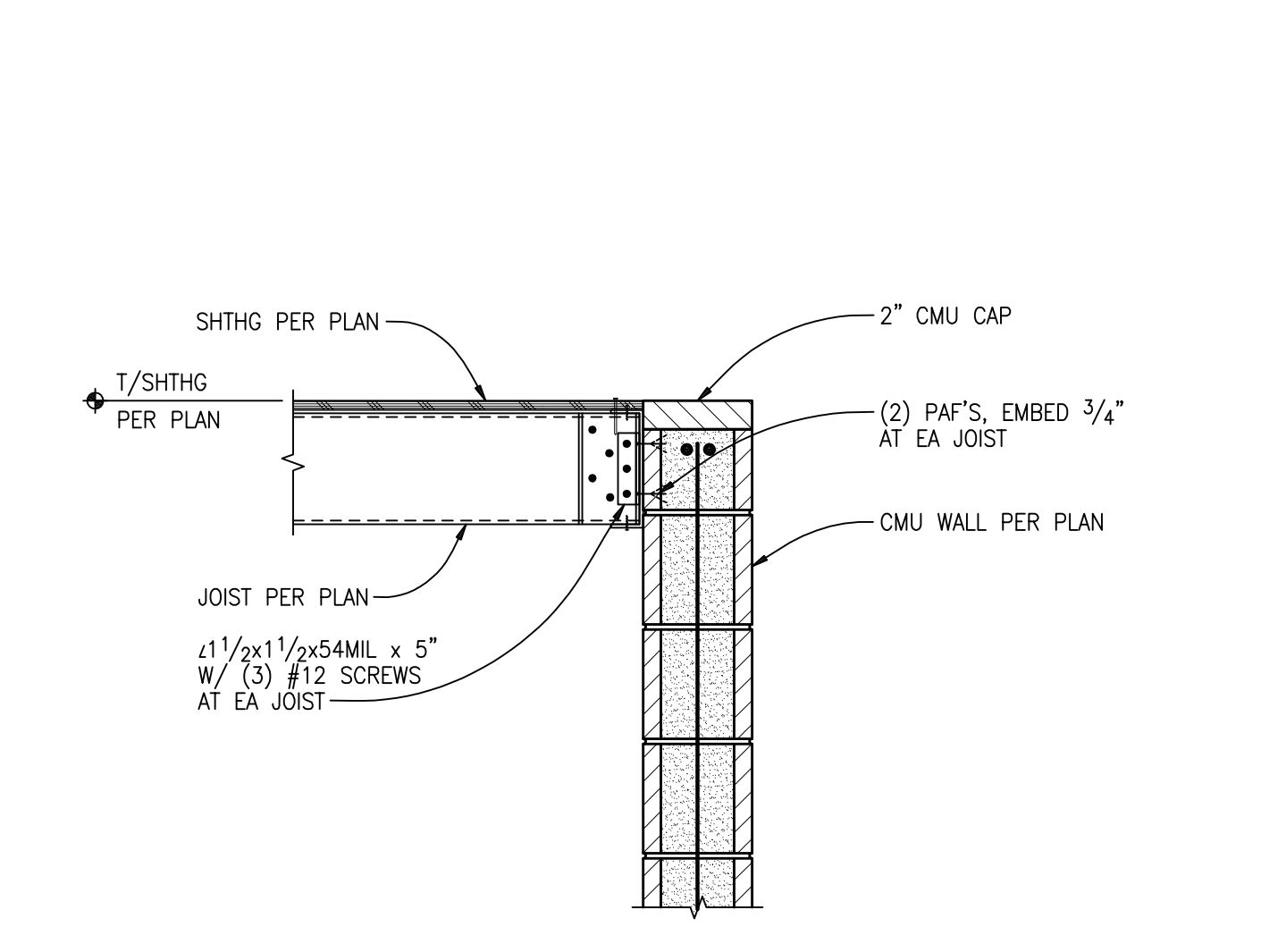
**TYPICAL TRACK SPLICE**  
 07001 SCALE: NONE ⑤



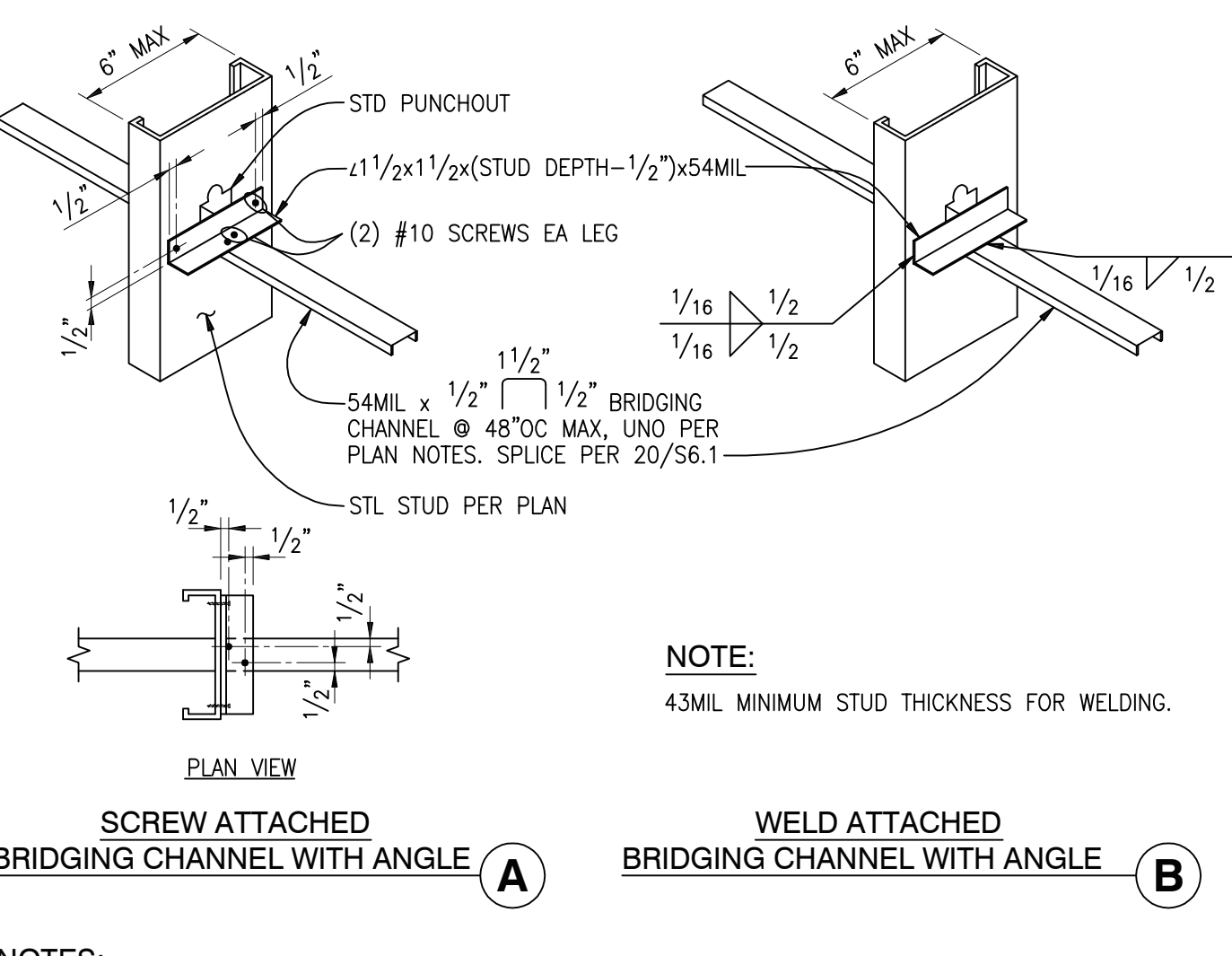
**TYPICAL TOP AND BOTTOM TRACK DETAIL**  
 07000M SCALE: NONE ⑥



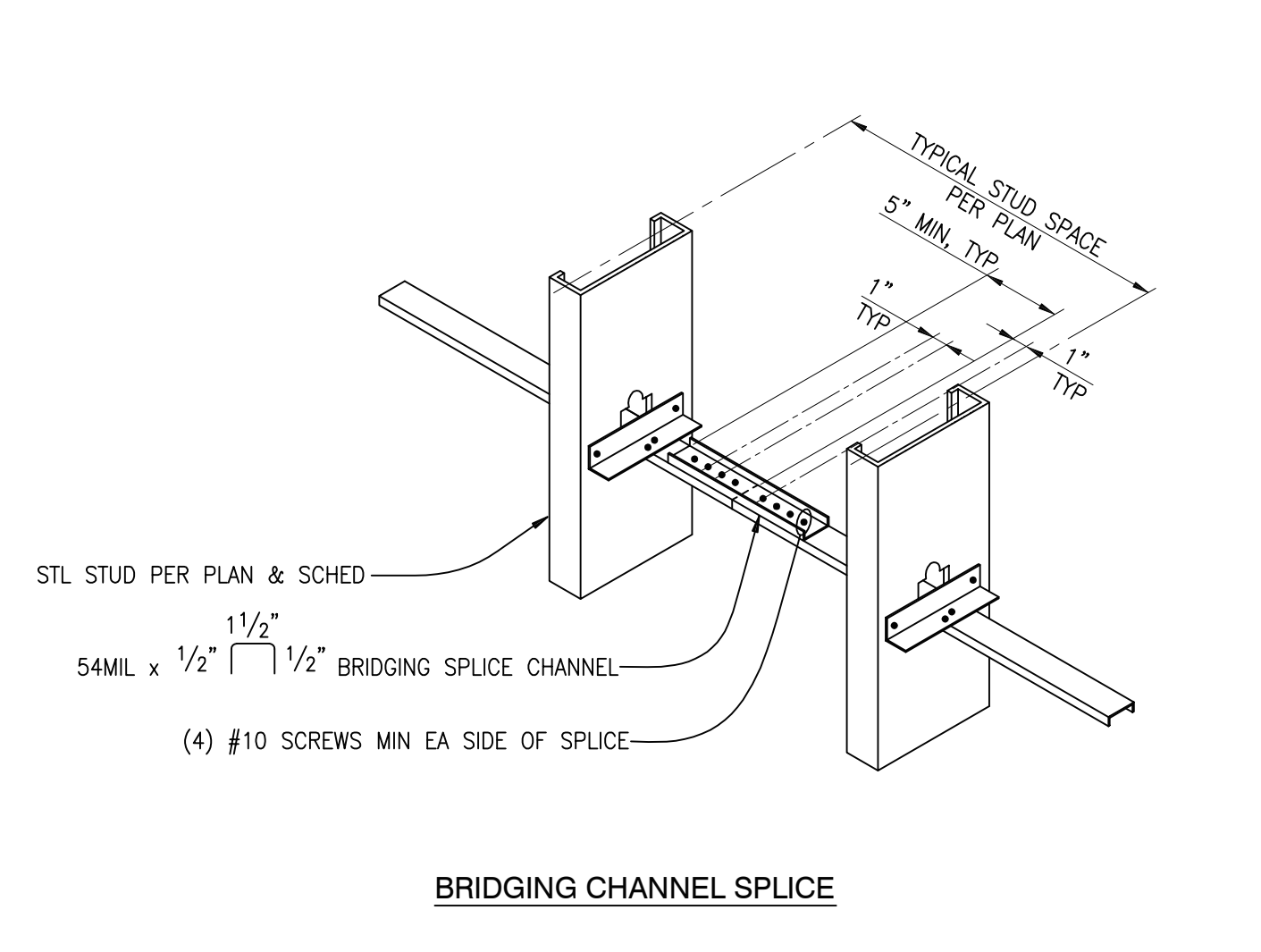
**PLATFORM FRAMING DETAIL**  
 SCALE: 1"=1'-0" ⑦



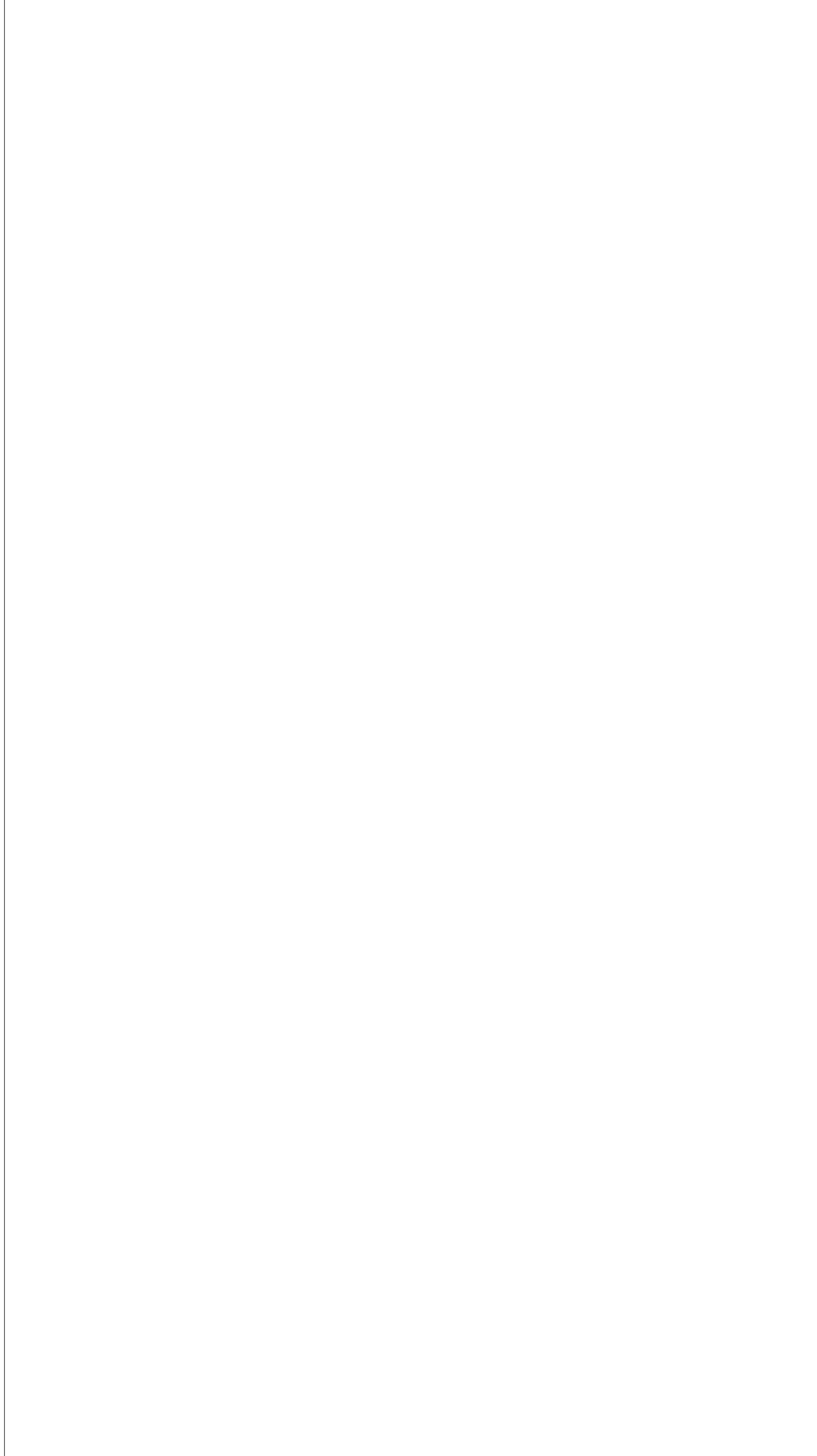
**JOIST CONNECTION AT TOP OF CMU WALL**  
 07101M SCALE: 1"=1'-0" ⑧



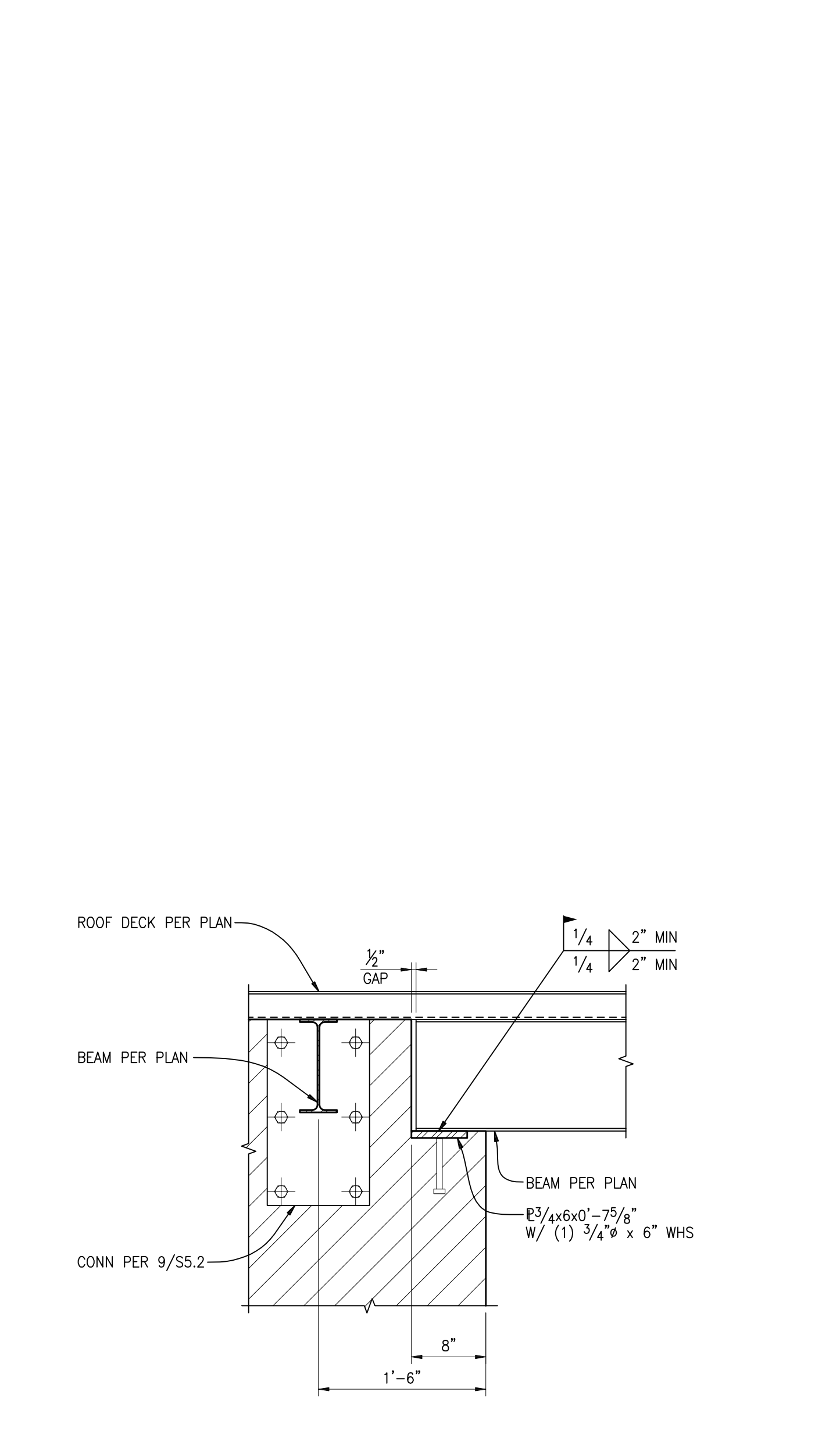
**TYPICAL STEEL STUD WALL BRIDGING**  
 07101M SCALE: NONE ⑨



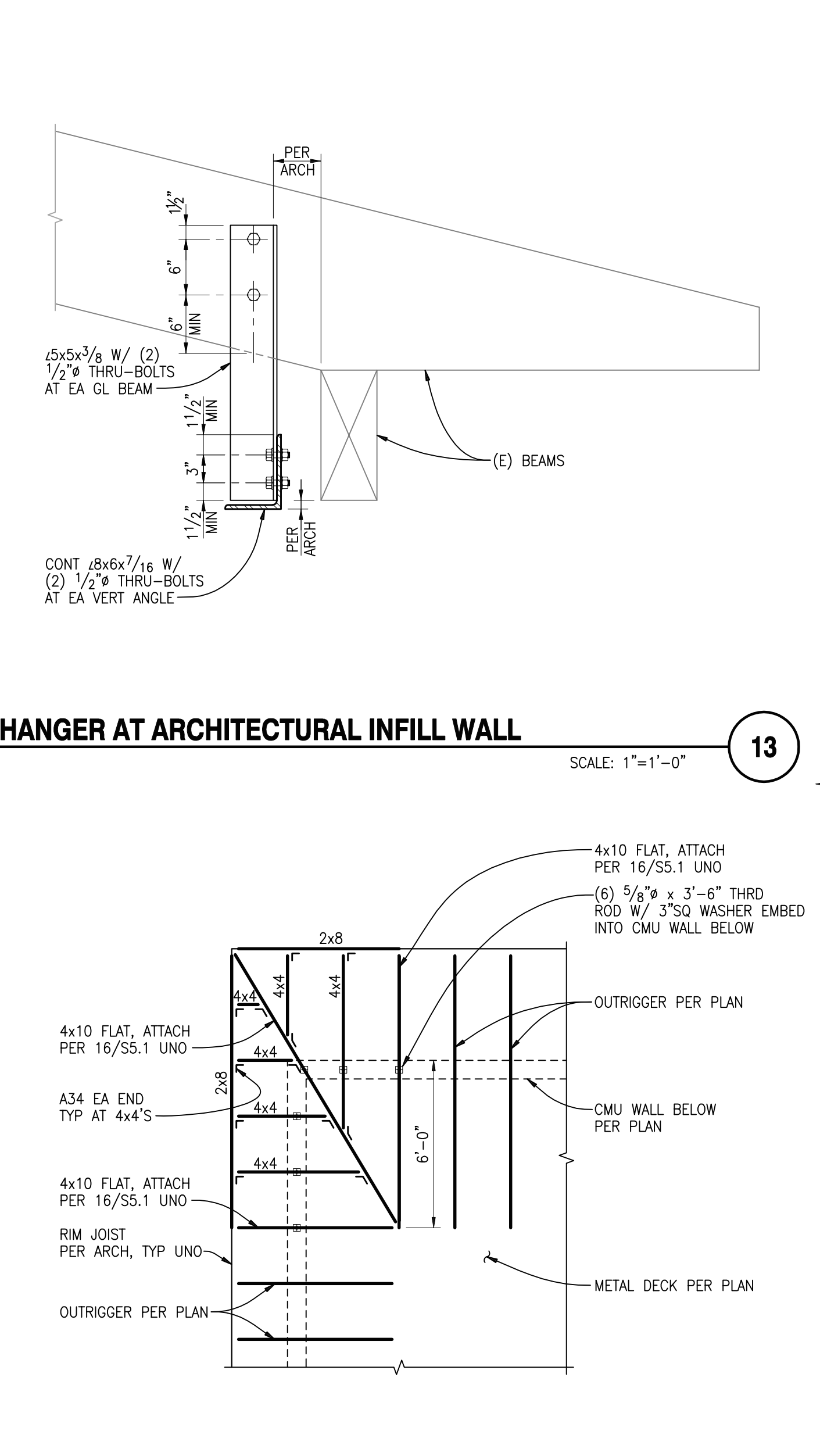
**TYPICAL STEEL STUD WALL BRIDGING SPLICE DETAIL**  
 07011M SCALE: NONE ⑩



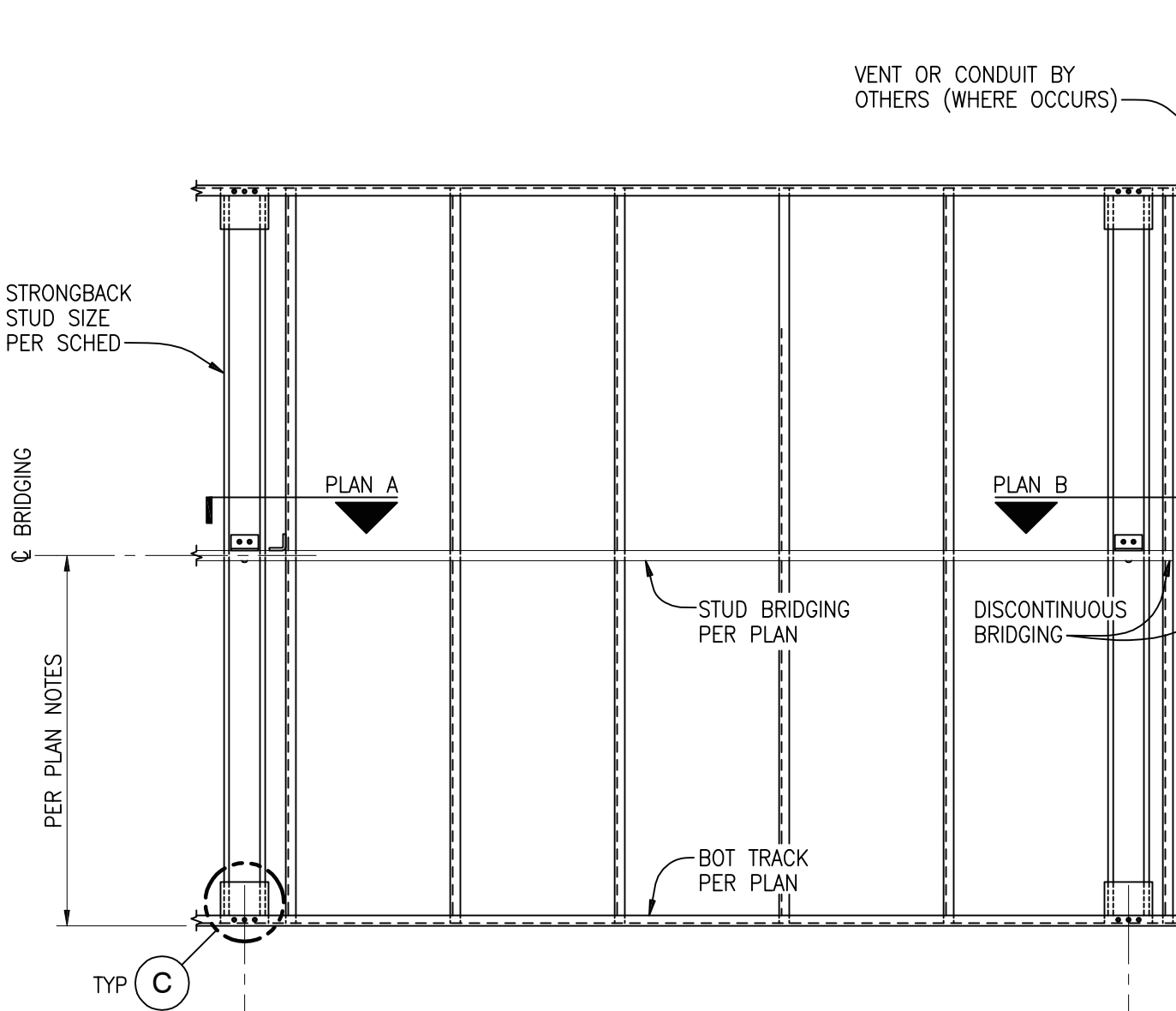
**BEAM CONNECTION TO CMU WALL**  
 SCALE: 1"=1'-0" ⑪



**ROOF OUTRIGGER DETAIL AT CORNER - PLAN VIEW**  
 SCALE: 1/4"=1'-0" ⑫

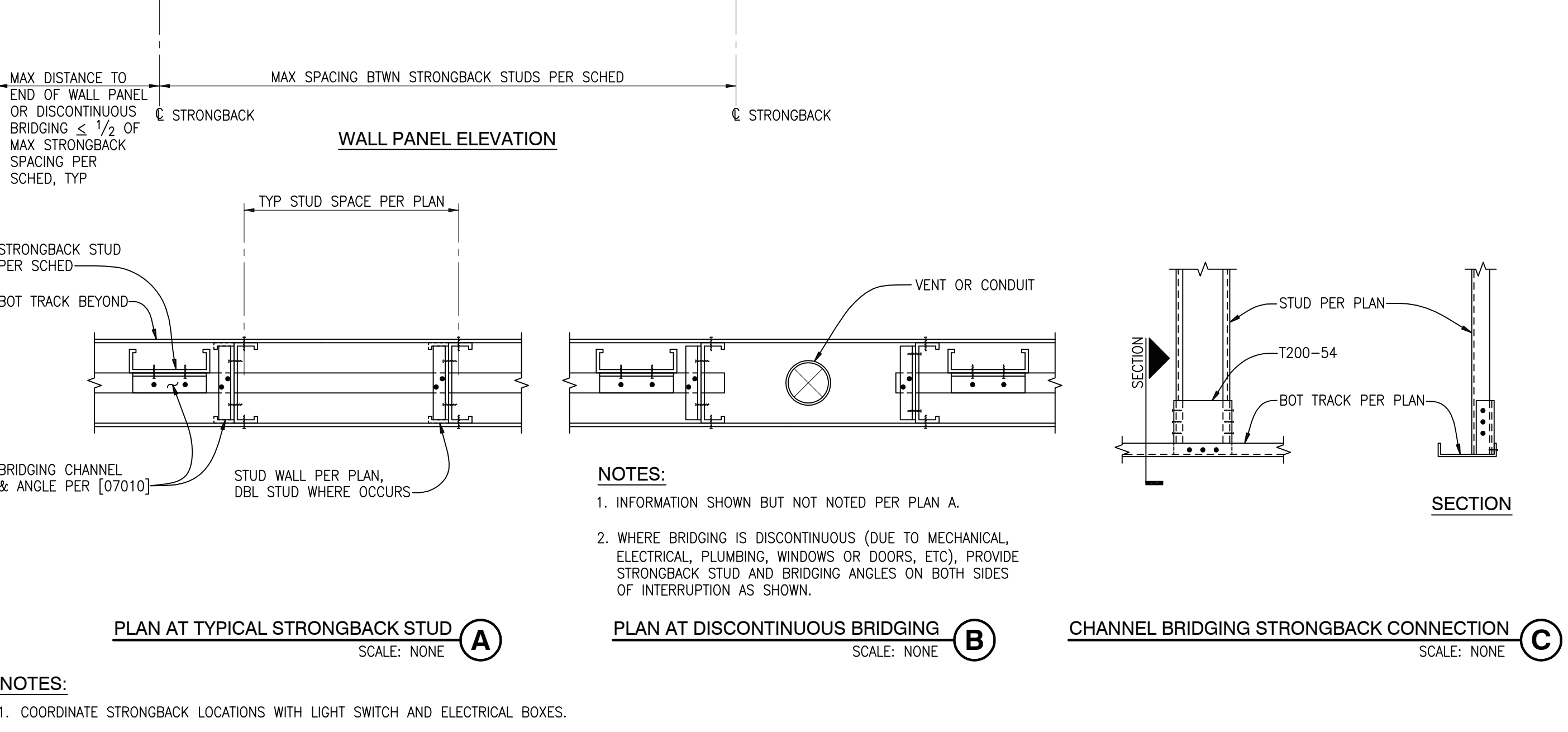


**HANGER AT ARCHITECTURAL INFILL WALL**  
 SCALE: 1"=1'-0" ⑬



**TYPICAL STRONGBACK SCHEDULE FOR STUD DEPTH ≤ 4'**

| STUD WALL TYPE     | CUSTOM STRONGBACK STUD | MAX STRONGBACK SPACING |
|--------------------|------------------------|------------------------|
| 400S162-43 @ 16"OC | 400S162-43             | 15'-0"                 |



**TYPICAL STEEL STUD BEARING/SHEAR WALL CHANNEL BRIDGING ANCHORAGE**  
 07021 SCALE: 1/2"=1'-0" ⑭

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**STRUCTURAL STEEL STUD FRAMING DETAILS**  
 Drawn By IK  
 Checked SC  
 Date 17 JUNE 2015  
 Project # 14091-0028  
**S6.1**