

General Structural Notes

GENERAL DRAWING NOTES:

- DO NOT SCALE DRAWINGS. USE DIMENSIONS PROVIDED. TYPICALLY. IN THE CASE OF DIMENSIONAL CONFLICT, ARCHITECTURAL DIMENSIONS GOVERN OVER STRUCTURAL DIMENSIONS. TYPICALLY.
- CONTRACTOR SHALL COORDINATE THE STRUCTURAL DOCUMENTS w/ THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, & CIVIL DOCUMENTS. SC&D SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCY OR OMISSION.
- THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. TEMPORARY SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED, FURNISHED, & INSTALLED BY THE CONTRACTOR. TYPICALLY.
- STRUCTURAL DRAWINGS ARE NOT TO BE REPRODUCED WITHOUT WRITTEN CONSENT FROM STRUCTURAL CONCEPTS & DESIGN, LLC ANY REPRODUCTION OF THESE CONTRACT DOCUMENTS WITHOUT WRITTEN CONSENT OF STRUCTURAL CONCEPTS & DESIGN, LLC WILL BE REJECTED & NOT REVIEWED.
- SHOP DRAWING REVIEW SHALL REQUIRE TWO (2) WEEKS FOR COMPLETION FROM TIME OF DELIVERY TO STRUCTURAL CONCEPTS & DESIGN, LLC. SHOP DRAWINGS SHALL BE CHECKED & APPROVED BY GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO ARCHITECT.
- CONTRACTORS SUBMITTING SHOP DRAWINGS TO PROVIDE THREE (3) BACKLUNE COPIES FOR MARK-UP. ADDITIONAL COPIES WILL BE RETURNED WITHOUT MARKS OR APPROVAL STAMP.

SUBMITTALS:

THE GENERAL CONTRACTOR SHALL PREPARE A DETAILED LIST & SCHEDULE OF ALL SUBMITTAL ITEMS TO BE SENT TO THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION. THIS LIST SHALL BE UPDATED, REVISED, & KEPT CURRENT AS THE JOB PROGRESSES.

THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW & APPROVAL THE FOLLOWING ITEMS:

- CONCRETE MIX DESIGNS
- CONSTRUCTION JOINT LOCATIONS IN CONCRETE SLAB-ON-GRADE
- MISCELLANEOUS STEEL
- REINFORCING STEEL: FOUNDATIONS, MASONRY, & CONCRETE
- ENGINEERED TILT-UP WALL PANEL LIFTING SYSTEMS*
- METAL ROOF DECK
- ENGINEERED STEEL STAIR SYSTEMS*
- ENGINEERED ALUMINUM/STEEL HANDRAIL SYSTEMS*
- STRUCTURAL STEEL: SHOP & ERECTION DRAWINGS
- STRUCTURAL STEEL CONNECTIONS*
- SURVEY OF STRUCTURAL STEEL ERECTION
- ENGINEERED COLD-FORMED METAL FRAMING USED TO SUPPORT EXTERIOR CLADDING*
- ENGINEERED WOOD ROOF TRUSS SYSTEMS*
- ENGINEERED STEEL/ALUMINUM CANOPIES/SUNSHADE SYSTEMS*

* SHOP DRAWING SUBMITTALS NOTED WITH AN "*" ARE REQUIRED TO BE SIGNED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED.

THE GENERAL CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS PREPARED AND SIGNED & SEALED BY A PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED TO THE STRUCTURAL ENGINEER FOR REVIEW & APPROVAL FOR THE FOLLOWING ITEMS:

- ENGINEERED TILT-UP WALL PANEL LIFTING SYSTEMS*
- ENGINEERED STEEL STAIR SYSTEMS*
- ENGINEERED ALUMINUM/STEEL HANDRAIL SYSTEMS*
- STRUCTURAL STEEL: SHOP & ERECTION DRAWINGS
- STRUCTURAL STEEL CONNECTIONS*
- ENGINEERED COLD-FORMED METAL FRAMING USED TO SUPPORT EXTERIOR CLADDING*
- ENGINEERED WOOD ROOF TRUSS SYSTEMS*
- ENGINEERED STEEL/ALUMINUM CANOPIES/SUNSHADE SYSTEMS*

00200 BUILDING CODES:

- FLORIDA BUILDING CODE 8th EDITION (2023)
- ASCE/SEI 7-22: MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES

00500 STRUCTURAL DESIGN CRITERIA:

THE STRUCTURE HAS BEEN DESIGNED IN ACCORD WITH METHOD 1- ALLOWABLE STRESS DESIGN AS REQUIRED BY SECTION 2302.1 OF THE FLORIDA BUILDING CODE. REQUIREMENTS FOR TYPICAL STRUCTURAL LOADS ARE GIVEN BELOW UNLESS SPECIFIC AREAS OF THE DRAWING SPECIFICALLY CALL FOR DIFFERENT LOADING CRITERIA.

GRAVITY DEAD LOADING TO BE SELF-WEIGHT OF MATERIALS PLUS 10 PSF (MIN.), TYP. (U.N.O.)
GRAVITY DEAD LOADING TO BE UNIFORM

LIVE LOADING PER FLORIDA BUILDING CODE & ASCE 7:

- PUBLIC AREAS: 100 PSF
- SLAB-ON-GRADE AREAS: 150 PSF
- FLAT ROOFS: 30 PSF (REDUCIBLE)
- SLOPED ROOFS: 20 PSF (REDUCIBLE)

RAIN LOADING PER FLORIDA BUILDING CODE & ASCE 7

- RAIN INTENSITY = 8.99 in./hr BASED ON ASCE HAZARD TOOL (ascehazardtool.org)
- ROOF RAIN LOAD: R_s = 26.4 PSF (FLAT ROOFS)
- ROOF RAIN LOAD: R_s = 0 PSF (SLOPED ROOFS)

SNOW LOADING PER FLORIDA BUILDING CODE & ASCE 7

- GROUND SNOW LOAD: P_s = 0 PSF

WIND LOADING PER FLORIDA BUILDING CODE

- ULTIMATE DESIGN WIND SPEED: V_{ult} = 160 MPH (3 SECOND GUST)
- NOMINAL DESIGN WIND SPEED: V₅₀ = 124 MPH (3 SECOND GUST)
- RISK CATEGORY = "II"
- EXPOSURE CATEGORY = "C"
- INTERNAL PRESSURE COEFFICIENTS = +/- 0.18 (ENCLOSED)
- COMPONENT & CLADDING WIND PRESSURES SHOWN ON SHEET "S2.01"

* THIS PROJECT IS LOCATED WITHIN A WIND BORNE DEBRIS REGION.

EARTHQUAKE DESIGN DATA PER FLORIDA BUILDING CODE & ASCE/SEI 7

- SEISMIC IMPORTANCE FACTOR: (I) = 1.0
- SPECTRAL RESPONSE ACCELERATIONS: S₁ = 0.061g S_{0.1} = 0.028g
- SITE CLASS = "D"
- SPECTRAL RESPONSE COEFFICIENTS: S_{0.1} = 0.054g S_{0.1} = 0.039g
- SEISMIC DESIGN CATEGORY = "A"
- BASIC SEISMIC FORCE RESISTING SYSTEM: REINFORCED CONCRETE SHEAR WALLS
- DESIGN BASE SHEAR = 13.85 KIPS
- RESPONSE MODIFICATION FACTOR (R) = 2
- ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE PROCEDURE

ESTIMATED DEFLECTIONS (IN INCHES) ARE AS FOLLOWS:

	LIVE LOAD L/360 or I" L/360	TOTAL LOAD L/240 L/240
ROOF MEMBERS:		
FLOOR MEMBERS:		

WHERE "L" = SPAN LENGTH (IN.) BETWEEN CENTERLINES OF SUPPORTS.

01051 DRAWING DIMENSIONS AND COORDINATION:

DIMENSIONAL INFORMATION, PRICING, ALL DETAILS AND CONSTRUCTION SHALL BE BASED ON THE ENTIRE SET OF CONTRACT DOCUMENTS. COORDINATE THE REQUIREMENTS OF ALL PROFESSIONALS. USE INFORMATION FROM APPROVED SHOP DRAWINGS TO SUPPLEMENT CONTRACT DOCUMENTS WHERE NECESSARY. REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING.

01100 SCOPE OF SERVICE:

STRUCTURAL CONCEPTS & DESIGN, LLC AS THE STRUCTURAL ENGINEER OF RECORD HAS DESIGNED AND IS RESPONSIBLE FOR ONLY THE SPECIFIC STRUCTURAL COMPONENTS SHOWN IN THIS SET OF STRUCTURAL CONSTRUCTION DOCUMENTS. IF A DELEGATED SPECIALTY ENGINEER, AS DEFINED BY THE DEPARTMENT OF PROFESSIONAL REGULATION, IS REQUIRED, HIS SERVICES MUST COMPLY WITH THE SCOPE OF SERVICES AS OUTLINED IN THE PROJECT CONSTRUCTION DOCUMENTS.

02000 FOUNDATIONS:

GEOTECHNICAL DATA AND RECOMMENDATIONS HAVE BEEN PROVIDED BY SHARMILA PANT, P.E. (FL #98836) & MARK ZRALLACK, P.E. (FL #86546) OF ARDAMAN & ASSOCIATES, INC., 460 NW CONCOURSE PLACE, UNIT 1, PORT ST. LUCIE, FL 34986, PHONE (772) 878-0072, A&A FILE NO. 24-66-5463. REPORT DATED SEPTEMBER 25, 2024 & REVISED SEPTEMBER 27, 2024. BASED ON THEIR RECOMMENDATIONS, THE FOLLOWING FOUNDATION SYSTEM WILL BE USED:

- SHALLOW STRIP & SPREAD FOOTINGS w/ NET ALLOWABLE BEARING PRESSURE = 3,000 PSF

THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR SPECIFYING AND MONITORING ALL TESTING, INSTALLATION, EVALUATION, AND REPORTING RELATED TO THE FOUNDATION SYSTEM, INCLUDING ALL WORKMANSHIP PROVISIONS RELATING TO THE SOIL - STRUCTURE INTERFACE. THE STRUCTURAL ENGINEER IS RESPONSIBLE FOR SPECIFYING THE MATERIALS USED TO CONSTRUCT THE FOUNDATION UNITS AND FOR THE SELECTION OF VARIOUS SIZE UNITS TO SUPPORT THE STRUCTURAL FRAME.

DO NOT PLACE ANY FOOTINGS OR MATS UNTIL RECEIPT OF WRITTEN AUTHORIZATION BY THE GEOTECHNICAL ENGINEER THAT THE PREPARED SUBGRADE OR DEEP FOUNDATION SYSTEM HAS BEEN PROPERLY EXECUTED IN ACCORD WITH THE DESIGN AND THAT ANY VARYING CONDITIONS ENCOUNTERED DURING CONSTRUCTION HAVE BEEN EVALUATED AND CORRECTED WHERE NECESSARY TO INSURE PROPER FOUNDATION PERFORMANCE.

02200 EARTHWORK:

CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL CONCRETE CAN BE PLACED IN THE DRY. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. THE BACKFILL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST WALLS WHICH DO NOT HAVE PERMANENT FLOORS AT THE TOP & BOTTOM WITHOUT PROVISIONS FOR ADEQUATE TEMPORARY BRACING OF THOSE WALLS. PROVIDE ADEQUATE EXCAVATION BRACING IN ACCORD WITH GEOTECHNICAL ENGINEERS RECOMMENDATIONS TO MAINTAIN EXISTING FOOTINGS, UTILITIES, AND OTHER IMPROVEMENTS IN A SAFE CONDITION.

02201 STRUCTURAL FILL:

FOUNDATIONS PLACED ON COMPACTED STRUCTURAL FILL HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING PRESSURE OF 3,000 PSF. FILL TO BE COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557. PLACE FILL IN LAYERS OF 12" THICK MAXIMUM & UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER. FILL TO BE TESTED TO VERIFY COMPACTION AS REQUIRED BY THE GEOTECHNICAL ENGINEER AT THE FOLLOWING INTERVALS:

- AT ONE (1) LOCATION FOR EVERY 2,500 SF OF BUILDING AREA
- AT ONE (1) LOCATION FOR EVERY 50 LINEAR FEET OF CONT. WALL FOOTING

02260 PROOF-ROLLING:

SHALLOW FOOTINGS SHALL NOT BE LESS THAN 2'-6" SQUARE & 2'-0" EMBEDMENT OR 2'-0" WIDE STRIP & 2'-0" EMBEDMENT AT 3,000 PSF ALLOWABLE NET BEARING ON SOIL IMPROVED BY PROOF-ROLLING NOT LESS THAN THREE COVERAGES. FOR FOOTING WIDTHS OR EMBEDMENTS LESS THAN THOSE SPECIFIED, THE ALLOWABLE BEARING PRESSURES ARE REDUCED PROPORTIONALLY. PERFORM ALL PROOF-ROLLING OPERATIONS IN ACCORD WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER IN THE PRESENCE OF THE OWNER'S AUTHORIZED AGENCY.

03100 FORMWORK:

CONTRACTOR SHALL DESIGN AND ERECT FORMWORK IN STRICT COMPLIANCE WITH ACI 347. SEE TYPICAL DETAILS FOR CAMBER REQUIREMENTS. CONTRACTOR SHALL COORDINATE ALL OPENINGS AS REQUIRED FOR OTHER TRADES. OPENINGS WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE TO IDENTIFY DESIGN INTENT ONLY. THE SPECIFIC DIMENSIONS AND LOCATIONS SHALL BE FURNISHED OR CONFIRMED BY THE TRADE REQUIRING THE OPENING. PROVIDE CHAMFERS AT ALL CORNERS IN CONCRETE MEMBERS EXPOSED TO VIEW. FORMWORK TO REMAIN IN PLACE UNTIL CONCRETE HAS ATTAINED ENOUGH STRENGTH TO SUPPORT ALL DEAD LOADS PLUS A MINIMUM OF 50 PSF OF ADDITIONAL CONSTRUCTION LOAD. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

03200 CONCRETE REINFORCEMENT:

WORK SHALL BE IN ACCORD WITH ACI 301, ACI 315, ACI 318-08, CRSI "MANUAL OF STANDARD PRACTICE" 2001, CRSI "PLACING REINFORCING BARS" (CURRENT EDITION), WIRE REINFORCEMENT INSTITUTE "MANUAL OF STANDARD PRACTICE-STRUCTURAL WELDED WIRE REINFORCEMENT" (CURRENT EDITION), BARS SHALL CONFORM TO ASTM SPECIFICATION A615(S1), GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. CONCRETE COVER REQUIRED AS FOLLOWS:

A. CAST AGAINST AND EXPOSED TO EARTH:	3"
B. FORMED, EXPOSED TO EARTH OR WEATHER:	2" (#6 & LARGER) 1½" (#5 & SMALLER)
C. SLABS AND WALLS:	
NO EARTH OR WEATHER EXPOSURE	¾" (#1 & SMALLER)
3 HOUR FIRE RATING AND LESS	¾"
D. BEAMS:	
3 HOUR FIRE RATING AND LESS	¾"
E. COLUMNS:	
TO MAIN VERTICAL REINFORCING:	1" (3 HOUR RATING or 2" WHICHEVER IS LESS.

LAP SPlice LENGTHS SHALL BE AS FOLLOWS:

- ALL LAP SPICES SHALL BE TENSION CLASS "B" UNLESS OTHER LAP CONDITIONS ARE SPECIFICALLY SHOWN ON THE DRAWINGS.
- SPICE LENGTHS SHALL BE SHOWN ON SHOP DRAWINGS.
- USE GENERAL HOOK BAR DEVELOPMENT LENGTHS UNLESS SPECIAL CONFINEMENT CONDITIONS ARE SATISFIED IN ACCORD WITH ACI 318.

03210 FIBROUS REINFORCING (ALTERNATE TO W.W.F. IN SLAB-ON-GRADE):

REINFORCING FIBERS ARE ONLY TO BE USED IN THE CONCRETE SLABS-ON-GRADE & ARE TO BE VIRGIN 100% POLYPROPYLENEFIBERS, SPECIFICALLY MANUFACTURED FOR USE IN CONCRETE, CONTAINING NO REPROCESSED OLEFIN MATERIALS, WITH THE FOLLOWING MINIMUM PROPERTIES:

- SPECIFIC GRAVITY: 0.91
- YOUNG'S MODULUS: 0.5 (3.5KN/MM²)
- TENSILE STRENGTH: 45 KG - 60 KG
- LENGTH: ¾" MINIMUM (MULTI-GRADATION DESIGN)

FIBERS ARE TO BE ADDED IN ACCORDANCE WITH THE FIBER MANUFACTURER'S RECOMMENDATIONS WITH A MINIMUM OF 1.5 LBS. PER CUBIC YARD FOR POLY & NYLON. CONCRETE IS TO BE MIXED IN ACCORDANCE WITH THE FIBER MANUFACTURER'S RECOMMENDATIONS FOR UNIFORM & COMPLETE DISPERSION OF FIBER BUNDLES INTO SINGLE MONOFILAMENTS WITHIN CONCRETE.

03300 CAST-IN-PLACE CONCRETE:

TO BE MIXED AND PLACED IN ACCORDANCE WITH ACI 301, ACI 506 & 506.2. ALL REINFORCED CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS:

ALL STRUCTURAL ELEMENTS F_c = 4,000 PSI, TYP. UNLESS NOTED OTHERWISE.

- COLUMNS: F_c = 4,000 PSI
- TILT-UP WALL PANELS: F_c = 4,000 PSI
- BEAMS: F_c = 4,000 PSI
- FOUNDATIONS: F_c = 3,000 PSI
- SLAB ON GRADE: F_c = 3,000 PSI

ALL CONCRETE MIX DESIGN SUBMITTALS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.

03310 CONCRETE TESTING:

OWNER WILL EMPLOY AN INDEPENDENT TESTING LABORATORY TO PERFORM THE FOLLOWING TESTS AND SUBMIT TEST REPORTS ON CAST IN PLACE CONCRETE:

- ASTM C143 "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE" - SLUMP SHALL NOT EXCEED LIMIT INDICATED ON APPROVED MIX DESIGN, OR 6" (WHICHEVER IS SMALLER)
- ASTM C39 "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS" - CYLINDERS SHALL BE TAKEN FOR EACH MIX DESIGN USED, AND FOR EVERY 50 CUBIC YARDS OF CONCRETE PLACED. TEST CYLINDERS AT THE FOLLOWING AGES:

1 CYLINDER AT 3 DAYS, 1 CYLINDER AT 7 DAYS, 2 CYLINDERS AT 28 DAYS

HOLD ONE RESERVE CYLINDER TO BE TESTED AS REQUESTED BY THE ENGINEER. IF REQUIRED 28 DAY STRENGTH IS ACHIEVED, THE RESERVE CYLINDER MAY BE DISCARDED.

03470 TILT - UP WALL PANELS:

TILT-UP CONCRETE WALL PANELS SHALL BE OF THE CONFIGURATION SHOWN ON PLANS AND SHALL HAVE A MINIMUM OF REINFORCEMENT SHOWN ON PLANS. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE JOIST SEATS, BRIDGING CONNECTIONS, DECK ANGLE CONNECTIONS, ETC. WITH THE APPROVED STEEL JOIST SHOP DRAWINGS & WITH THE STRUCTURAL DRAWINGS. TILT-UP CONCRETE WALL PANELS HAVE BEEN DESIGN TO WITHSTAND ALL GRAVITY LOADS & WIND LOADS AS INDICATED IN THE STRUCTURAL DRAWINGS. REINFORCING SHOWN ON THE DRAWINGS DOES NOT ALLOW FOR LIFTING AND ERECTION STRESSES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT LIFTING, HANDLING OPERATIONS, AND BRACING WILL NOT OVERSTRESS PANEL MATERIALS. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW SHOWING PANEL LAYOUT WITH REINFORCEMENT, EMBEDS, OPENINGS, DIMENSIONS, JOINTS, ETC. AS REQUIRED TO PROPERLY CONSTRUCT THE WALL PANELS. THE SUBMITTAL SHALL INCLUDE DRAWINGS, DETAILS, & CALCULATIONS SHOWING LIFTING & HANDLING STRESSES, & BRACING REQUIREMENTS. SUBMITTED SHOP DRAWINGS & CALCULATIONS SHALL BE SIGNED & SEALED BY THE DELEGATED SPECIALTY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

03600 GROUT:

GROUTING IS CLASSIFIED AS "PRECISION GROUTING" FOR SUPPORT OF OPERATING MACHINE BASES. EQUIPMENT SUBJECT TO THERMAL MOVEMENT, AND BASE PLATES, BEARING PLATES, AND EXPANSION BEARINGS EXCEEDING 8" IN LEAST DIMENSION. ALL OTHER GROUTING MAY BE "ORDINARY GROUTING". METALLIC AGGREGATE GROUT MAY BE USED ONLY IN INTERIOR APPLICATIONS NOT EXPOSED TO VIEW IN FINISHED BUILDING AREAS. USE ORDINARY CEMENT GROUT ONLY WHERE SPECIFICALLY NOTED AS "CEMENT GROUT" ON DETAILS. USE NON-SHRINK GROUT FOR ALL OTHER LOCATIONS. PRECISION GROUT SHALL CONFORM TO CRD-C621-80 WHEN MIXED TO FLUID CONSISTENCY OF 22 TO 25 SECONDS (FLOW CONE METHOD, CRD-C611-80). REQUIRED 28 DAY STRENGTHS SHALL BE AS FOLLOWS:

- CEMENT GROUT: 1,800 PSI
- NON-SHRINK GROUT: 5,000 PSI
- PRECISION GROUT: 6,500 PSI

05055 WELDING:

ALL WELDING TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) D1.1 - 2001 "STRUCTURAL WELDING CODE - STEEL" AND AS INDICATED ON THE STRUCTURAL DRAWINGS. WELDING ELECTRODES SHALL BE E70XX, UNLESS NOTED OTHERWISE. WELDING ELECTRODES, WELDING PROCESS, MINIMUM PREHEAT AND INTERPASS TEMPERATURES TO BE IN ACCORDANCE WITH THE A.W.S. SPECIFICATIONS. ANY STRUCTURAL STEEL DAMAGED IN WELDING TO BE REPLACED OR ACCEPTABLY REINFORCED. ALL FULL PENETRATION GROOVE WELDS TO BE SUBJECT TO RADIOGRAPHIC, MAGNETIC PARTICLE, ULTRASONIC, AND LIQUID PENETRANT INSPECTION CONDUCTED BY AN INDEPENDENT TESTING AGENCY PAID FOR BY THE OWNER.

ALL WELDING OF STAINLESS STEEL TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) D1.6:1999 "STRUCTURAL WELDING CODE - STAINLESS STEEL" AND AS INDICATED ON THE STRUCTURAL DRAWINGS. WELDING ELECTRODES, WELDING PROCESS, MINIMUM PREHEAT AND INTERPASS TEMPERATURES TO BE IN ACCORDANCE WITH THE A.W.S. SPECIFICATIONS. ANY STAINLESS STEEL DAMAGED IN WELDING TO BE REPLACED OR ACCEPTABLY REINFORCED. ALL FULL PENETRATION GROOVE WELDS TO BE SUBJECT TO RADIOGRAPHIC, MAGNETIC PARTICLE, ULTRASONIC, AND LIQUID PENETRANT INSPECTION CONDUCTED BY AN INDEPENDENT TESTING AGENCY PAID FOR BY THE OWNER.

05120 STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". STRUCTURAL STEEL TO CONFORM TO:

- W/F SHAPES: ASTM A572, GRADE 50 OR ASTM A992
- SHAPES & PLATES: ASTM A36
- PIPES: ASTM A 53 GRADE B
- TUBES: ASTM A 500 GRADE B

ALL SHOP AND FIELD CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS OR WELDING. BOLTING TO BE IN ACCORDANCE WITH RCBRSJ SPECIFICATIONS. ANY CONNECTION NOT SPECIFICALLY DETAILED SHALL BE DESIGNED BY THE SPECIALTY ENGINEER FOR THE FORCES SHOWN ON THE STRUCTURAL CONSTRUCTION DOCUMENTS. WHERE FORCES ARE NOT PROVIDED DESIGN SHALL BE BASED ON THE MAXIMUM LOAD CAPACITIES OF THE CONNECTING MEMBERS. ALL STRUCTURAL SUBMITTALS REQUIRING ENGINEERING INPUT SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS AND BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER. ALL STEEL AT AND BELOW FINISHED GRADE TO BE FIELD PAINTED AND COVERED WITH A MINIMUM OF 2" CONCRETE. ALL BEAMS BEARING ON CONCRETE TO HAVE A ½" x 7½" x 8" BEARING PLATE WITH TWO (2) ½" Ø HEADED ANCHOR BOLTS 12" LONG (8" EMBEDMENT), TYPICAL (UNLESS NOTED OTHERWISE).

05210 STEEL JOISTS:

THE DETAILING, FABRICATION AND ERECTION TO CONFORM TO THE LATEST STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI). PROVIDE BRIDGING AND ANCHORS WITH SIZE AND SPACING IN ACCORD WITH SJI WHERE BRIDGING IS NOT SHOWN ON FRAMING PLANS. FOLLOW LATEST SJI SPECIFICATIONS. MINIMUM BRIDGING SIZE TO BE 1 1/8" x 1/8" IN LIEU OF ROUND BARS. PROVIDE ADDITIONAL BRIDGING AS REQUIRED TO SATISFY NET UPLIFT REQUIREMENTS OR UNBRACED TOP CHORDS WHERE SHOWN ON THE DRAWINGS. PROVIDE CONTINUOUS ANGLE 2½"x2½"x¼" (WELDED TO JOIST ENDS) TO RECEIVE DECK WHERE JOISTS CHANGE DIRECTION. PROVIDE DESIGN CAPACITY FOR A MAXIMUM CONCENTRATION OF DESIGN LOADS TO BE AS FOLLOWS:

- AT ANY PANEL POINT: 400#
- BETWEEN TOP CHORD PANEL POINTS: 150#
- BETWEEN BOTTOM CHORD PANEL POINTS: 50#
- (CONCENTRATED LOADS ARE NOT ADDITIVE TO UNIFORM DESIGN LOADS)

SEE STRUCTURAL DRAWINGS FOR SUSPENDED EQUIPMENT SUPPORTS. ALL STRUCTURAL SUBMITTALS PROVIDED BY THE JOIST MANUFACTURER MUST BE SIGNED AND SEALED BY A DELEGATED SPECIALTY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THAT HIS INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY. NOTE: NET UPLIFT FOR DESIGN OF BAR JOISTS AND BRIDGING SHALL BE 25 PSF (MIN.), TYP. (U.N.O.)

05312 STEEL ROOF DECK:

THIS SECTION COVERS NOMINALLY FLAT-TOP ROOF DECK TO SUPPORT RIGID BOARD TYPE ROOF INSULATION SYSTEMS. CONFORM TO STEEL DECK INSTITUTE (SDI) "SPECIFICATIONS AND COMMENTARY FOR STEEL ROOF DECK" AND AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS". DRAWING SHOP DECK STYLES IN STANDARD SDI NOTATION WHERE "NR" IS NARROW RIB, "IR" IS INTERMEDIATE RIB, "WR" IS WIDE RIB, "3 DR" IS 3" DEEP RIB, AND THE TWO DIGIT NUMBER IS THE NOMINAL GAUGE THICKNESS. ATTACHMENTS SHALL BE WITH SELF-DRILLING SCREWS INTO JOIST CHORDS WITH THICKNESSES LESS THAN ¾" THICK. WELDING MAY BE USED INTO THICKER MEMBERS. 16 GAUGE WELDING WASHERS SHALL BE USED FOR 22 GAUGE DECK. WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS) D13-98. "STRUCTURAL WELDING CODE-SHEET STEEL". SIDE LAP FASTENERS SHALL BE #12 SELF-DRILLING SCREWS OR BUSHING PUNCHING, DEPENDING ON THE DECK STYLE. FASTENERS TO CONCRETE OR MASONRY SHALL BE ½" DIAMETER TAPCON OR KWIK-CON. TYPICAL FASTENER SPACING SHALL BE AS FOLLOWS:

- ¾" DIAMETER PLUG WELD TO STEEL: 36/4 PATTERN
- #12 SELF-DRILLING SCREWS TO STEEL: 36/4 PATTERN
- ½" TAPCON OR KWIK-CON TO CONCRETE: 36/4 PATTERN
- SIDE LAP WITH #10 TEK SCREWS: 3 PER SPAN
- SIDE LAP BUTT-PUNCHED: 3 PER SPAN

DECREASE FASTENER SPACING WHERE DRAWINGS NOTE SPECIAL DIAPHRAGM CONSIDERATIONS. PROVIDE CONTINUOUS ANGLE 2½"x2½"x¼" (WELDED TO JOIST ENDS) TO RECEIVE DECK WHERE SUPPORT MEMBERS CHANGE DIRECTION.

05400 COLD-FORMED METAL FRAMING:

DESIGN FABRICATION AND ERECTION SHALL CONFORM TO AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" 2002 EDITION, INCLUDING COMMENTARY AND SUPPLEMENTARY INFORMATION. WELDING SHALL CONFORM TO AWS "STRUCTURAL WELDING CODE-SHEET STEEL" D13-98 AND PERFORMED ONLY BY WELDERS CERTIFIED UNDER D1.3. SELF-DRILLING SCREWS SHALL BE EQUIVALENT TO BUILDX TEK'S AND HAVE ALLOWABLE SERVICE LOAD CAPACITIES WITH 4:1 FACTOR OF SAFETY FROM TEST DATA. ALL LIGHT GAUGE STUDS SHALL BE 3½" DEEP SERIES "CS1" STUDS AS MANUFACTURED BY DETTRICH INDUSTRIES, OR APPROVED EQUAL MINIMUM TRACK FASTENING SHALL BE 0.145" Ø POWDER ACTUATED FASTENERS SPACED AT 16" O.C., TYPICALLY. AXIALLY LOADED STUDS SHALL TRANSFER LOADS THROUGH BEARING ONLY, THROUGH SQUARE AND CLEAN CUTS AT TOP AND BOTTOM OF EACH STUD. NO CUTS ARE PERMITTED IN LOAD BEARING STUDS OR TRACKS EXCEPT AS APPROVED BY ENGINEER OF RECORD. ALL PANELS SHALL BE BRACED AT THE THIRD POINTS OF STUD HEIGHT WITH 1½" CHANNEL BRACING ATTACHED TO EACH STUD. SEE ARCHITECTURAL DRAWINGS FOR NON LOAD BEARING STUDS. TYPICALLY, FULL SHOP DRAWINGS FOR MANUFACTURER DATA ON STUDS AND FASTENERS SHALL BE SUBMITTED PRIOR TO FABRICATION.

05410 PRE-ENGINEERED COLD-FORMED METAL FRAMING:

THERE ARE SYSTEMS OF PRE-ENGINEERED EXTERIOR WALL & ROOF MEMBERS, COMPONENTS, & CONNECTIONS WHICH SHALL BE DESIGNED & DETAILED BY A DELEGATED SPECIALTY ENGINEER. SUBMIT COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. SEE SPECIFICATION "05410" FOR SUBMITTAL REQUIREMENTS FOR PRE-ENGINEERED EXTERIOR WALL FRAMING. DESIGN FABRICATION AND ERECTION SHALL CONFORM TO THE CURRENT EDITION OF THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" INCLUDING COMMENTARY & SUPPLEMENTARY INFORMATION. WELDING SHALL CONFORM TO AWS "STRUCTURAL WELDING CODE-SHEET STEEL" D13-98 & PERFORMED ONLY BY WELDERS CERTIFIED UNDER D1.3. SELF-DRILLING SCREWS SHALL BE EQUIVALENT TO BUILDX TEK'S & HAVE ALLOWABLE SERVICE LOAD CAPACITIES WITH A 4:1 FACTOR OF SAFETY (MIN.) FROM TEST DATA. THE ENTIRE SYSTEM INCLUDING ALL STRUCTURAL STUDS, CONNECTORS BETWEEN STUDS & COMPONENTS, BRIDGING, TEMPORARY BRACING FOR ERECTION, ANCHORAGE, & ATTACHMENTS TO THE SUPPORTING STRUCTURAL FRAMING SYSTEM SHALL BE DESIGNED BY THE DELEGATED SPECIALTY ENGINEER. THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THAT HIS INTENT HAS BEEN UNDERSTOOD & THAT THE SPECIFIED DESIGN CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY. COMPLETE STRUCTURAL CALCULATIONS OF ALL FRAMING CONDITIONS, COMPLETE SHOP DRAWINGS OF ALL FRAMING CONDITIONS, CONNECTOR CALCULATIONS, & ERECTION PLANS SHALL BE SIGNED & SEALED BY DELEGATED SPECIALTY ENGINEER & SUBMITTED TO THE ARCHITECT & ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION & ERECTION. THE WALL SYSTEM SHOULD BE DESIGNED TO WITHSTAND WIND LOADS AS OUTLINED IN THE GENERAL STRUCTURAL NOTES. UNLESS NOTED OTHERWISE, IN THE ABSENCE OF SPECIFIC LOADS SHOWN IN THE ARCHITECTURAL, STRUCTURAL, & MECHANICAL DRAWINGS, USE APPLICABLE LOCAL CODE FOR LIVE LOAD & ACTUAL WEIGHT OF BUILDING MATERIALS FOR DEAD LOAD. IF BUILDING EXPANSION JOINT EXISTS PROVIDE FRAMING ACCORDINGLY, COORDINATING WITH STRUCTURAL & MECHANICAL DRAWINGS. COLD-FORMED STEEL SUPPLIER IS TO COORDINATE ALL DETAILS WITH ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. TYPICALLY.

05510 ENGINEERED STEEL STAIRS:

STACK STEEL STAIR SYSTEM INCLUDING MEMBERS, COMPONENTS, & CONNECTIONS SHALL BE DESIGNED BY A DELEGATED SPECIALTY ENGINEER & DETAILED BY THE SUPPLIER. SUBMIT COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. DESIGN LOADS SHALL BE A MINIMUM OF 100 PSF UNIFORM OR 300# APPLIED TO ANY 6'x6" AREA, WHICHEVER CONTROLS. PROVIDE DETAILS SO THAT STAIR CAN BE ASSEMBLED AND INSTALLED IN PROPER SEQUENCE WITH ADJACENT WORK. METAL PAIN STAR TREADS AND LANDINGS SHALL HAVE NOT LESS THAN 2" NOR MORE THAN 3" OF CONCRETE FILL FOR WALKING SURFACES. COORDINATE WITH ARCHITECTURAL DRAWINGS & MEET ALL APPLICABLE LOCAL BUILDING CODES.

05521 ENGINEERED STEEL/ALUMINUM HANDRAILS:

STEEL OR ALUMINUM RAILING SYSTEM INCLUDING MEMBERS, COMPONENTS, & CONNECTIONS SHALL BE DESIGNED BY A DELEGATED SPECIALTY ENGINEER & DETAILED BY THE SUPPLIER. SUBMIT COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE LOCATIONS & CONFIGURATION OF THE RAILING SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS & MEMBERS SHOWN ARE TO BE CONSIDERED AS MINIMUM. THE RAILING SYSTEM & ALL CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE PLANS & IN THE BUILDING CODES. ALL LOADS SHALL BE CLEARLY INDICATED ON THE CALCULATIONS & SHOP DRAWINGS. SHOP DRAWINGS SHALL SHOW & SPECIFY ALL CONNECTIONS UTILIZED WITHIN THE RAILING SYSTEM AS WELL AS CONNECTIONS TO & LOADS IMPOSED UPON THE STRUCTURAL FRAMING SYSTEM.

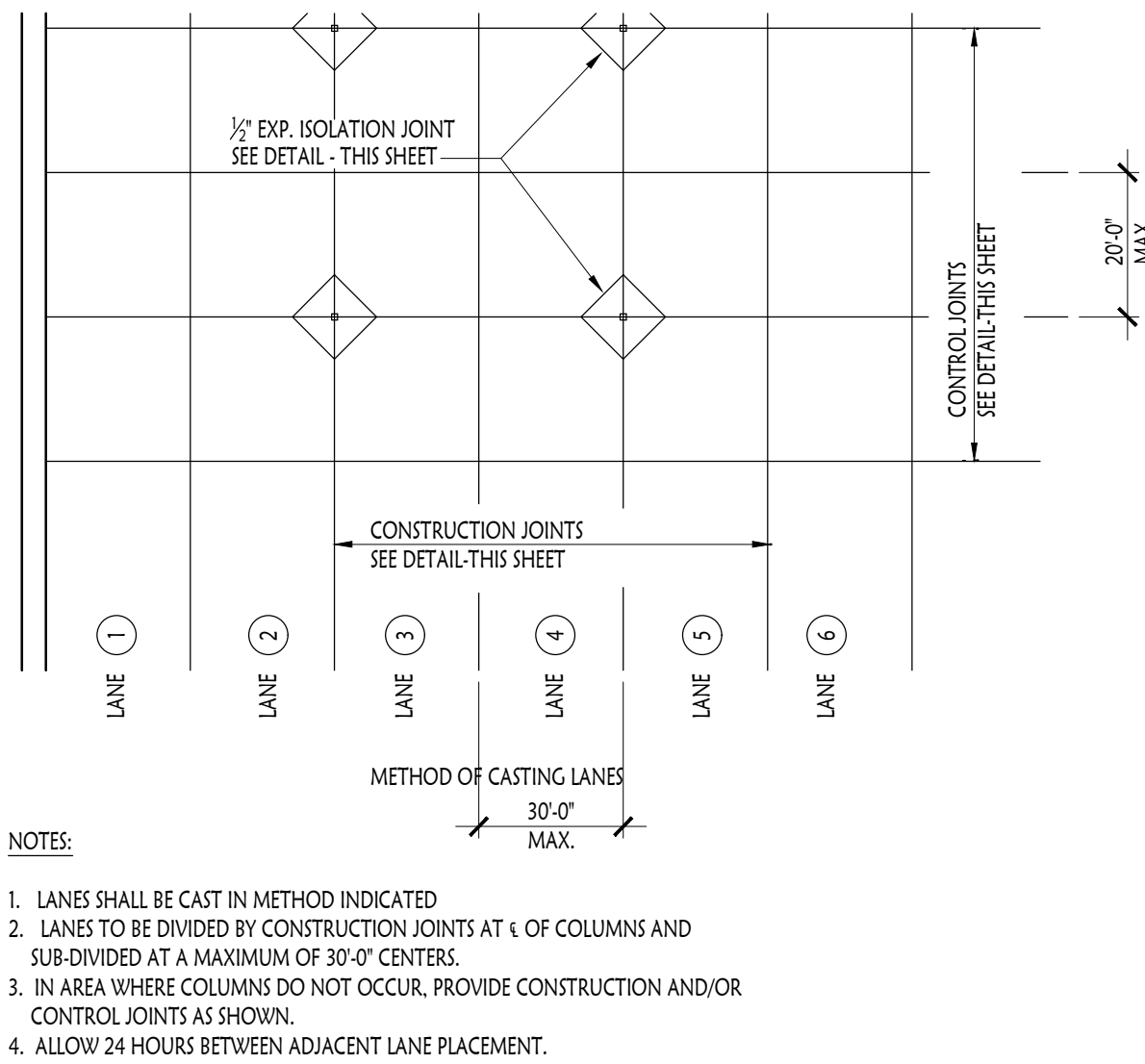
05531 ENGINEERED STEEL/ALUMINUM AWNINGS & CANOPIES:

STEEL OR ALUMINUM AWNING/CANOPY SYSTEM INCLUDING MEMBERS, COMPONENTS, & CONNECTIONS SHALL BE DESIGNED BY A DELEGATED SPECIALTY ENGINEER & DETAILED BY THE SUPPLIER. SUBMIT COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A DELEGATED SPECIALTY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE LOCATIONS & CONFIGURATION OF THE AWNING/CANOPY SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS & MEMBERS SHOWN ARE TO BE CONSIDERED AS MINIMUM. THE AWNING/CANOPY SYSTEM & ALL CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE PLANS & IN THE BUILDING CODES. ALL LOADS SHALL BE CLEARLY INDICATED ON THE CALCULATIONS & SHOP DRAWINGS. SHOP DRAWINGS SHALL SHOW & SPECIFY ALL CONNECTIONS UTILIZED WITHIN THE AWNING/CANOPY SYSTEM AS WELL AS CONNECTIONS TO & LOADS IMPOSED UPON THE STRUCTURAL FRAMING SYSTEM.

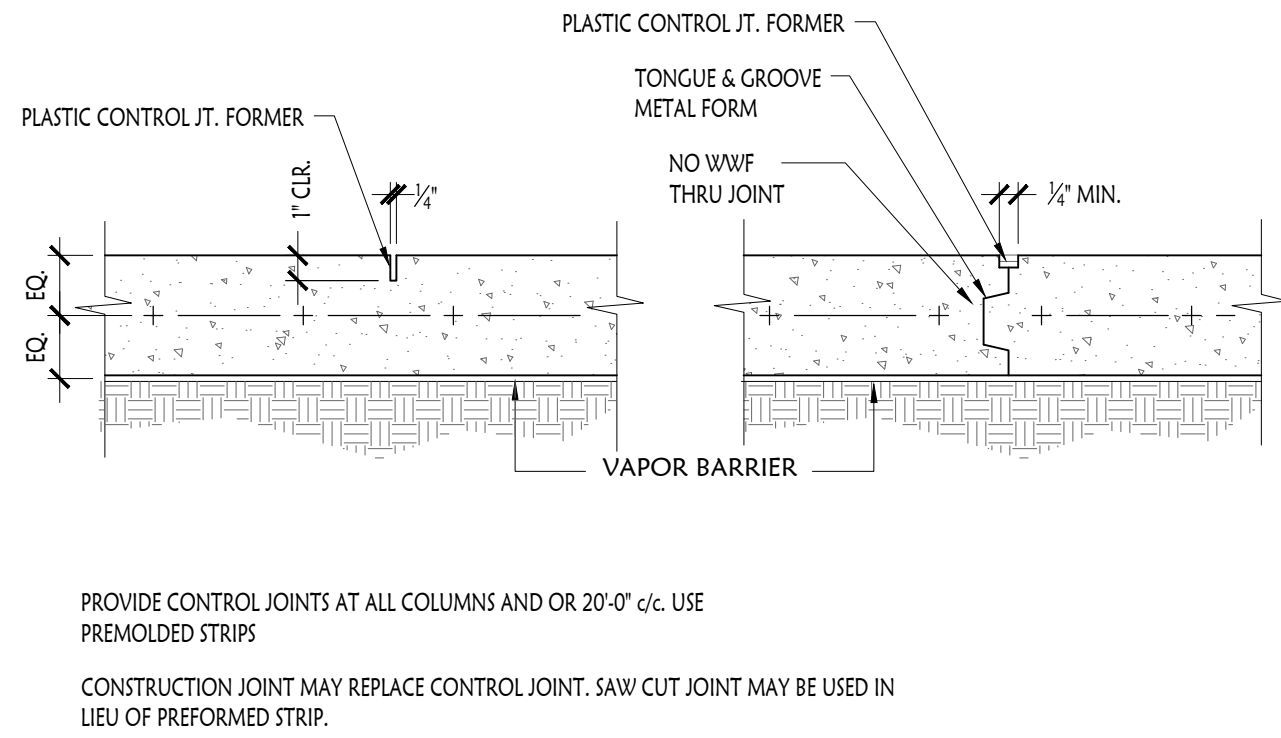
06115 STRUCTURAL SHEATHING:

PLYWOOD SHALL CONFORM TO PS-83 & SHALL BE APA GRADE-STAMPED. ROOF SHEATHING SHALL BE "APA RATED SHEATHING EXTERIOR EXPOSURE", ¾" THICK PER PLAN WITH PLY CLIPS AT JOINTS BETWEEN JOISTS OR TRUSSES. FLOOR SHEATHING SHALL BE "APA RATED SHEATHING EXPOSURE 1", ¾" THICK. WALL SHEATHING SHALL BE "APA RATED SHEATHING EXTERIOR EXPOSURE", ¾" THICK WITH PLY CLIPS AT JOINTS WHERE REQUIRED. CONFORM TO APA RECOMMENDATIONS FOR INSTALLATION OF PLYWOOD WALL SHEATHING. PROVIDE P.T. PLYWOOD @ FIRST 48" ABOVE SLAB ON GRADE. TYP. TREAT ALL FRAMING IN CONTACT WITH CONCRETE OR MASONRY IN ACCORD WITH AMERICAN WOOD PRESERVERS' BUREAU LP-2 OR PROVIDE ¼" THICK 60 DUROMETER BEARING PAD BETWEEN CONCRETE OR MASONRY AND UNTREATED WOOD MEMBER.

ORIENTED STRAND BOARD (O.S.B.) SHALL BE APA GRADE-STAMPED. ROOF SHEATHING SHALL

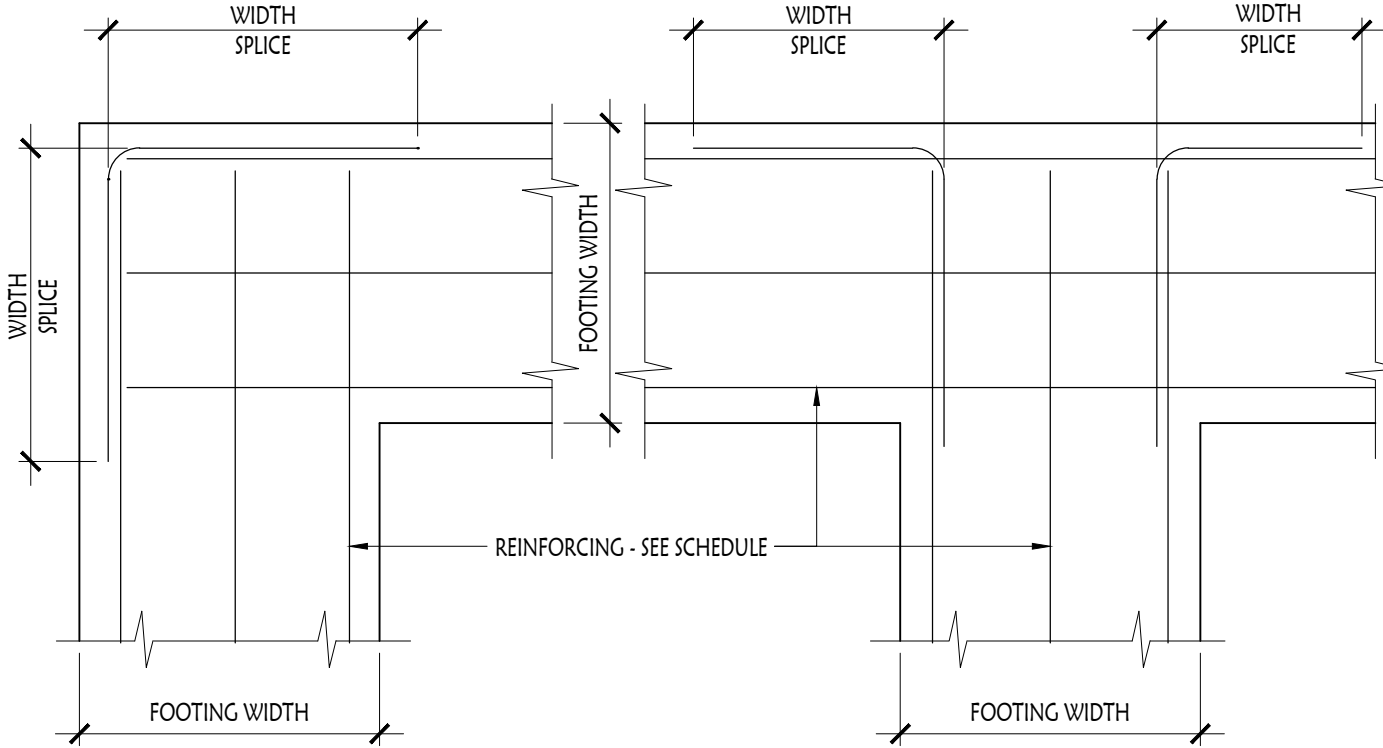


1 Concrete Slab-On-Grade
SCALE: 3/4" = 1'-0"

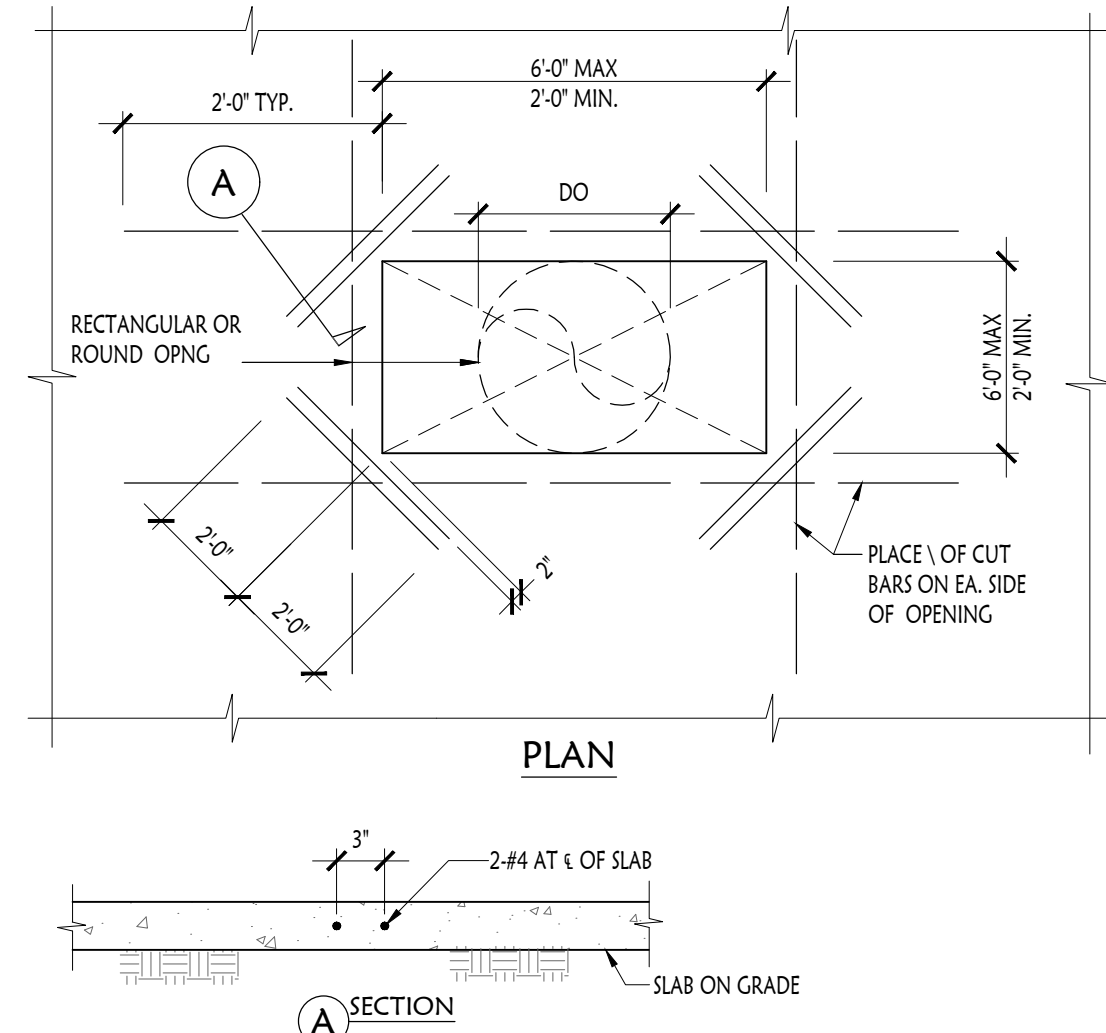


A CONTROL JOINT DETAIL **B** CONSTRUCTION JOINT DETAIL

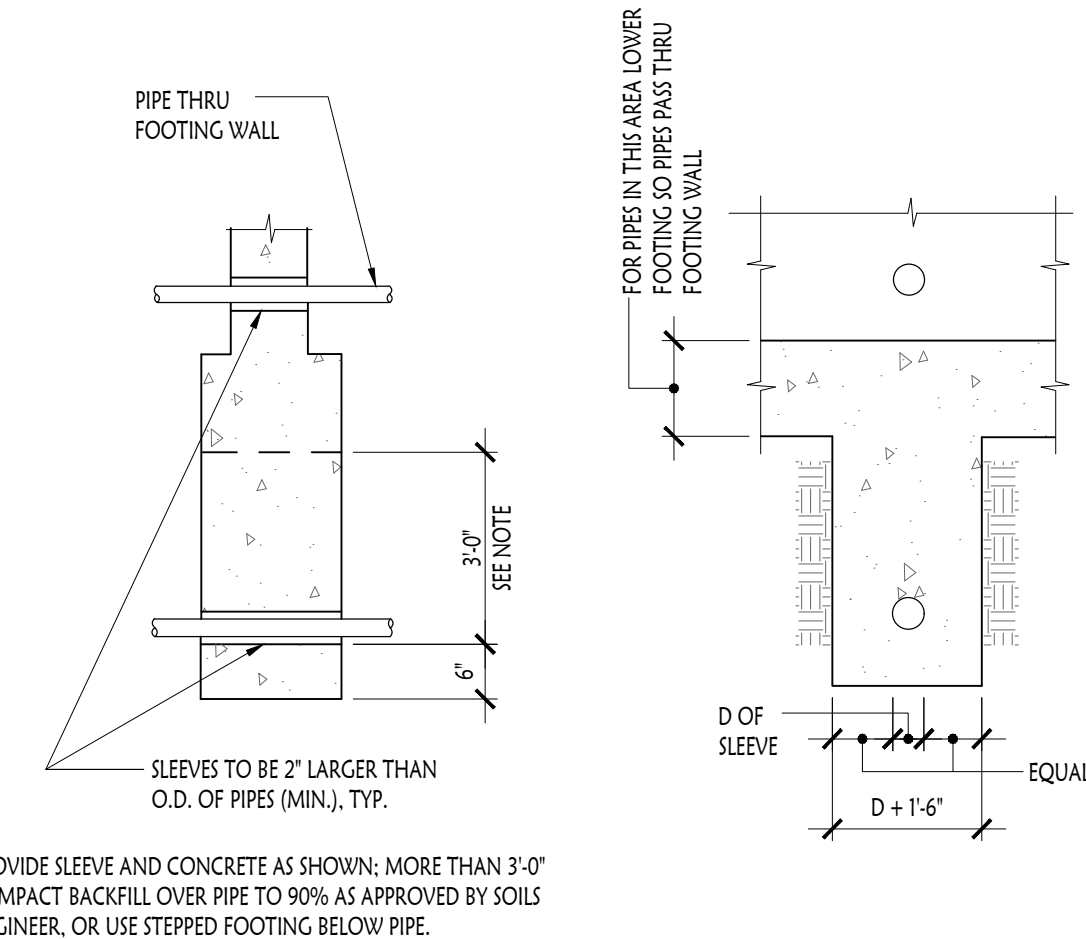
2 Slab-On-Grade Joint Detail
SCALE: 3/4" = 1'-0"



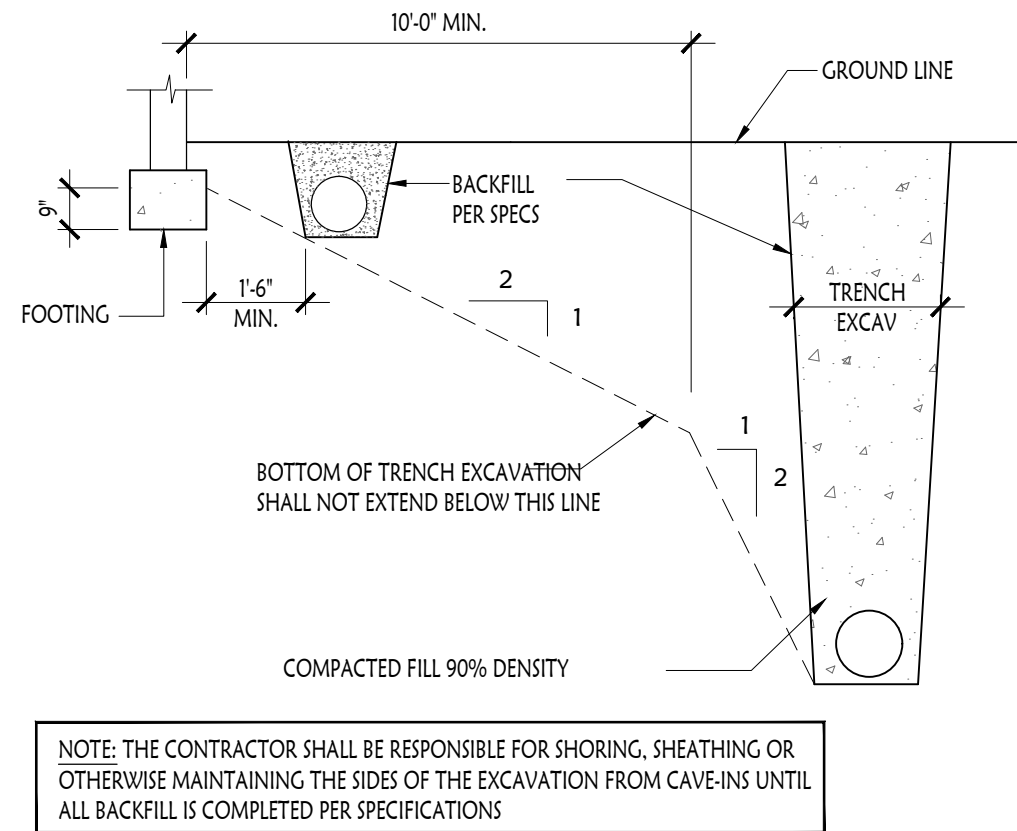
3 Footing Intersection Reinforcing
SCALE: 3/4" = 1'-0"



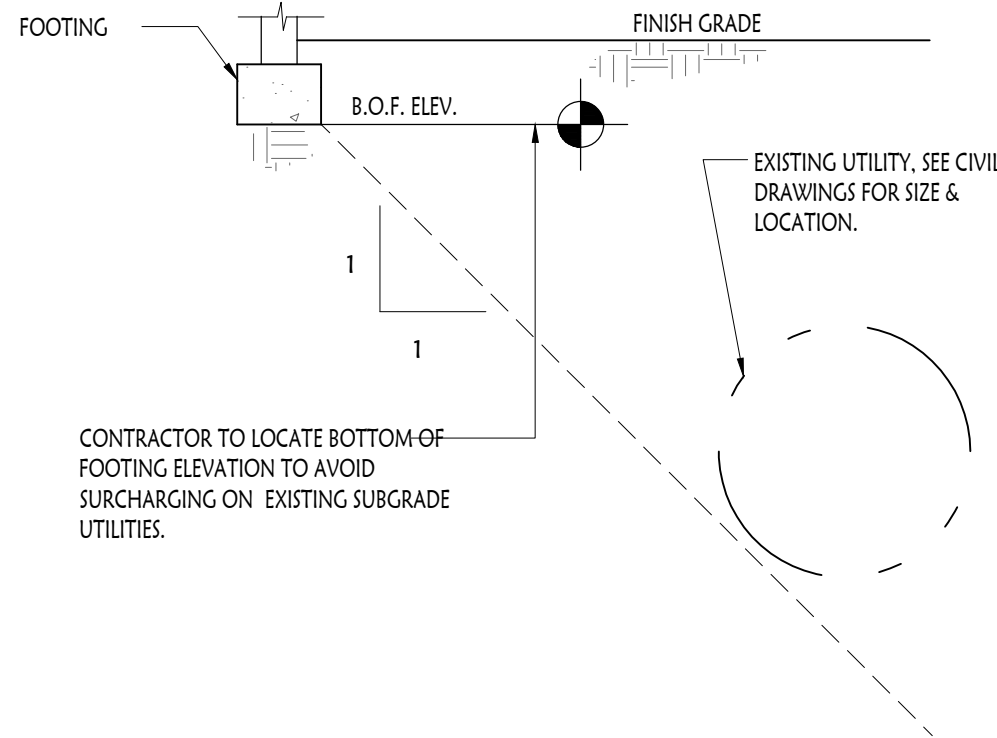
4 Opening In Slab-On-Grade
SCALE: 3/4" = 1'-0"



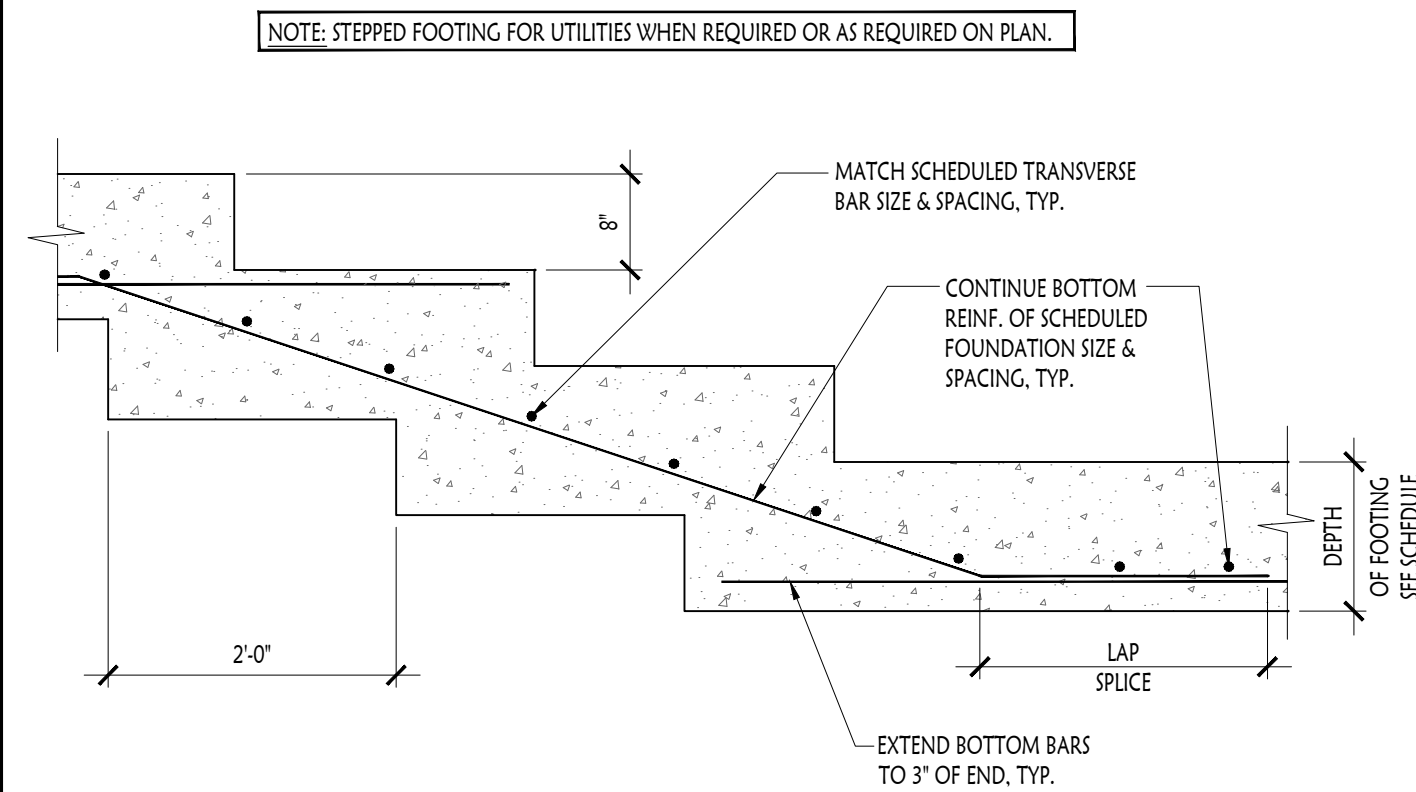
5 Typical Excavation Perpendicular To Footing
SCALE: N.T.S.



6 Excavation Parallel To Footing
SCALE: N.T.S.



7 Footing Parallel To Existing Utilities
SCALE: 3/4" = 1'-0"

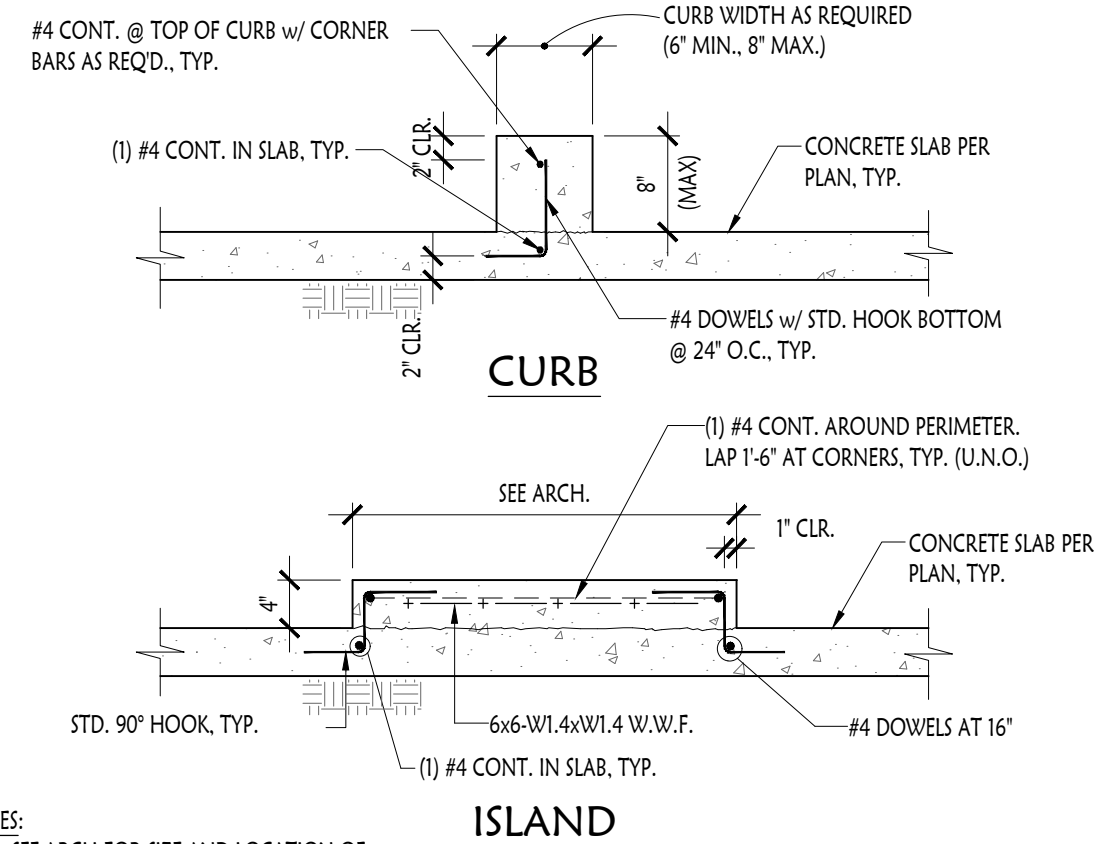


8 Typical Stepped Footing Reinforcing Detail
SCALE: 3/4" = 1'-0"

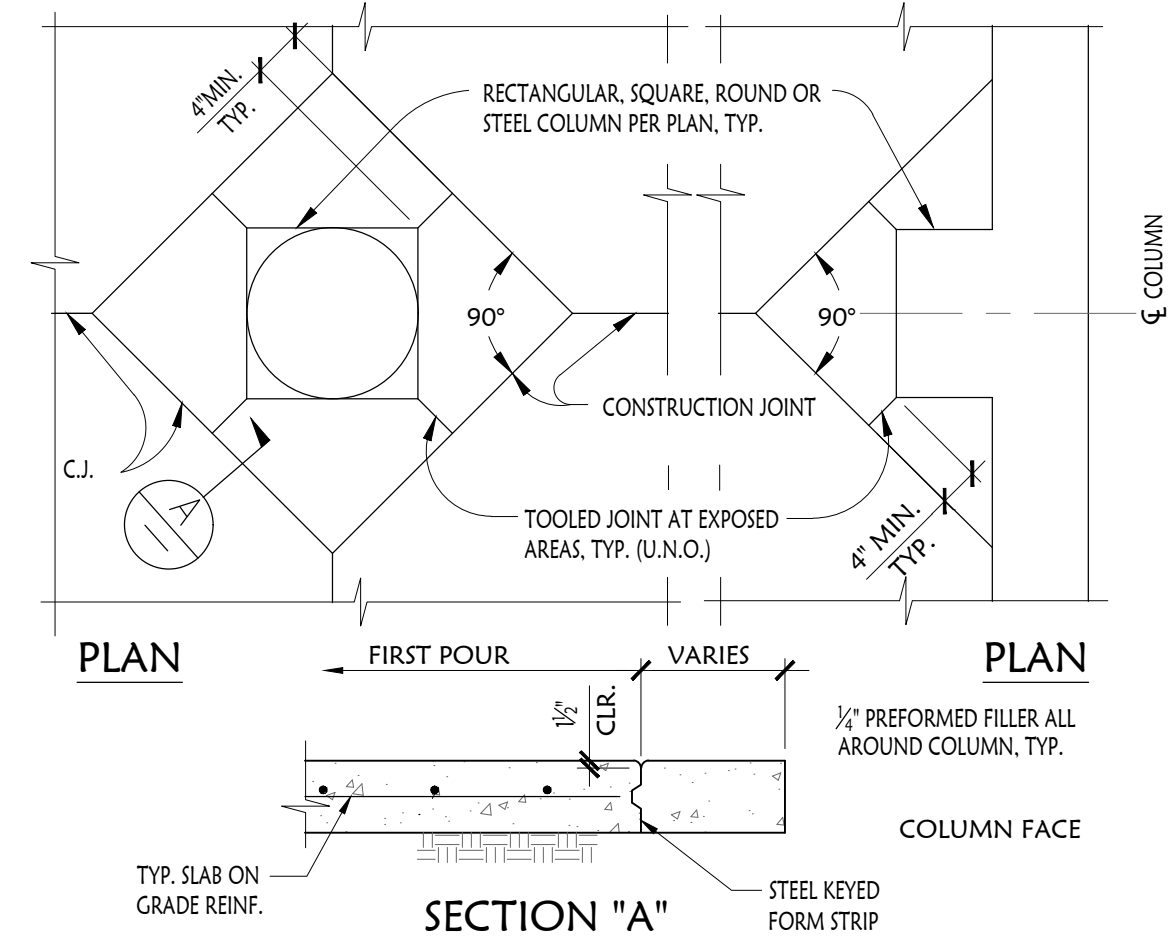
MARK	SIZE	DEPTH	REINFORCING			REMARKS	SOIL BEARING PRESSURE
			BOTTOM	TOP	TRANSVERSE		
SF-3.0	3'-0" X 3'-0"	1'-0"	(4) #5 EACH WAY	----	----	SPREAD FOOTING	3,000 PSF
SF-4.0	4'-0" X 4'-0"	1'-0"	(5) #5 EACH WAY	----	----	SPREAD FOOTING	3,000 PSF
SF-5.0	5'-0" X 5'-0"	1'-0"	(6) #5 EACH WAY	----	----	SPREAD FOOTING	3,000 PSF
SF-6.0	6'-0" X 6'-0"	1'-2"	(7) #6 EACH WAY	----	----	SPREAD FOOTING	3,000 PSF
TE-0.7	8" CONT.	1'-0"	(1) #4 CONT.	----	----	THICKENED EDGE	3,000 PSF
TE1.0	1'-0" CONT. (MIN.)	1'-8" (MIN.)	(2) #4 CONT.	(1) #4 CONT.	----	THICKENED EDGE	3,000 PSF
WF-2.0	2'-0" CONT. (MIN.)	1'-0"	(3) #5 CONT.	----	#4 @ 16" O.C.	STRIP FOOTING	3,000 PSF
WF-2.5	2'-6" CONT. (MIN.)	1'-0"	(4) #4 CONT.	----	#4 @ 12" O.C.	STRIP FOOTING	3,000 PSF
WF-3.0	3'-0" CONT. (MIN.)	1'-0"	(4) #5 CONT.	----	#5 @ 16" O.C.	STRIP FOOTING	3,000 PSF

- NOTES:
- ALL SPREAD FOOTINGS TO BE CENTERED UNDER COLUMNS & ALL STRIP FOOTINGS TO BE CENTERED UNDER WALLS, TYP. (UNLESS NOTED OR DETAILED OTHERWISE)
 - THE SIZE & REINFORCING FOR ISOLATED SPREAD FOOTINGS NOTED ON THE FOUNDATION PLANS MUST BE MAINTAINED & MAY NOT BE REDUCED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM SC&D.
 - ALL FOUNDATION DESIGNS MUST COMPLY w/ ALL APPLICABLE CODES AS WELL AS THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL ENGINEERING REPORT NOTED ON SHEET S0.01, TYP. ANY DEVIATIONS FROM THESE RECOMMENDATIONS MUST BE ACCOMPANIED BY A WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SUBMITTAL WILL BE REJECTED.

9 Reinforced Concrete Footing Schedule
SCALE: N.T.S.



10 Typical Concrete Curbs & Island @ Slab-On-Grade
SCALE: 3/4" = 1'-0"



11 Construction Joints @ Column Slab on Grade
SCALE: 3/4" = 1'-0"



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11/05/2025

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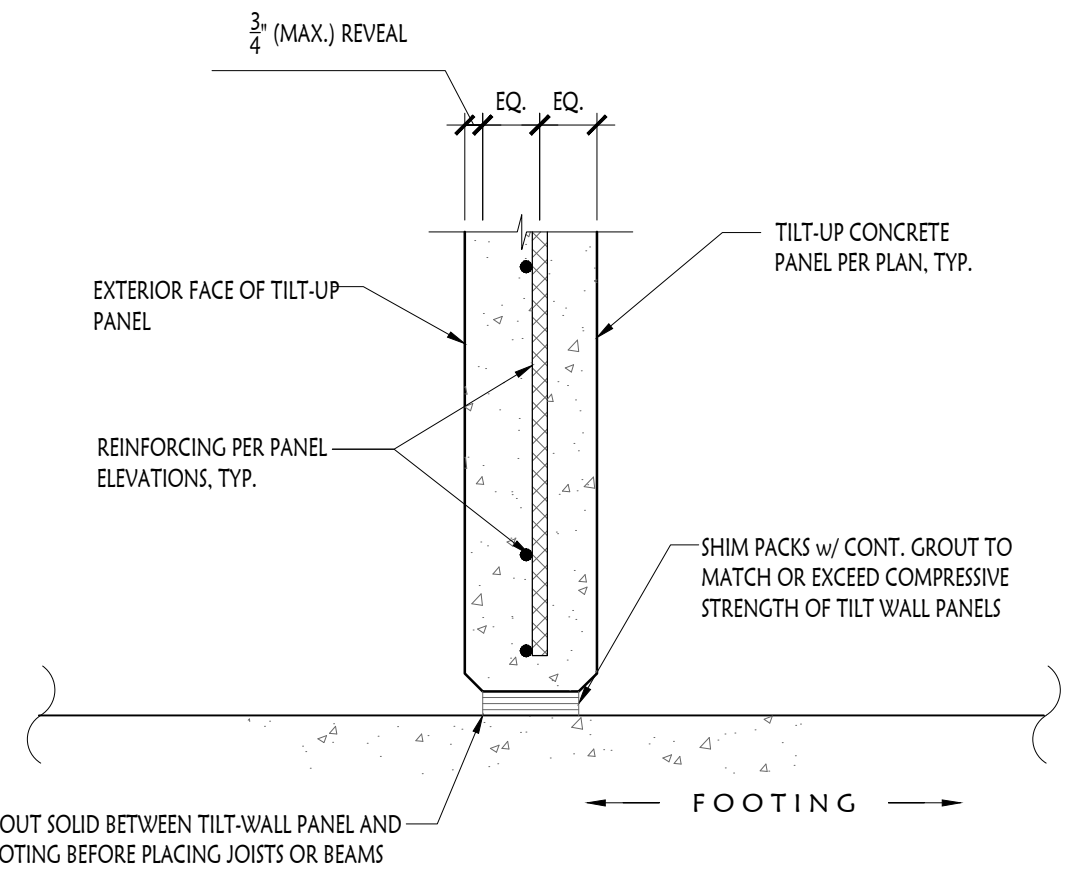
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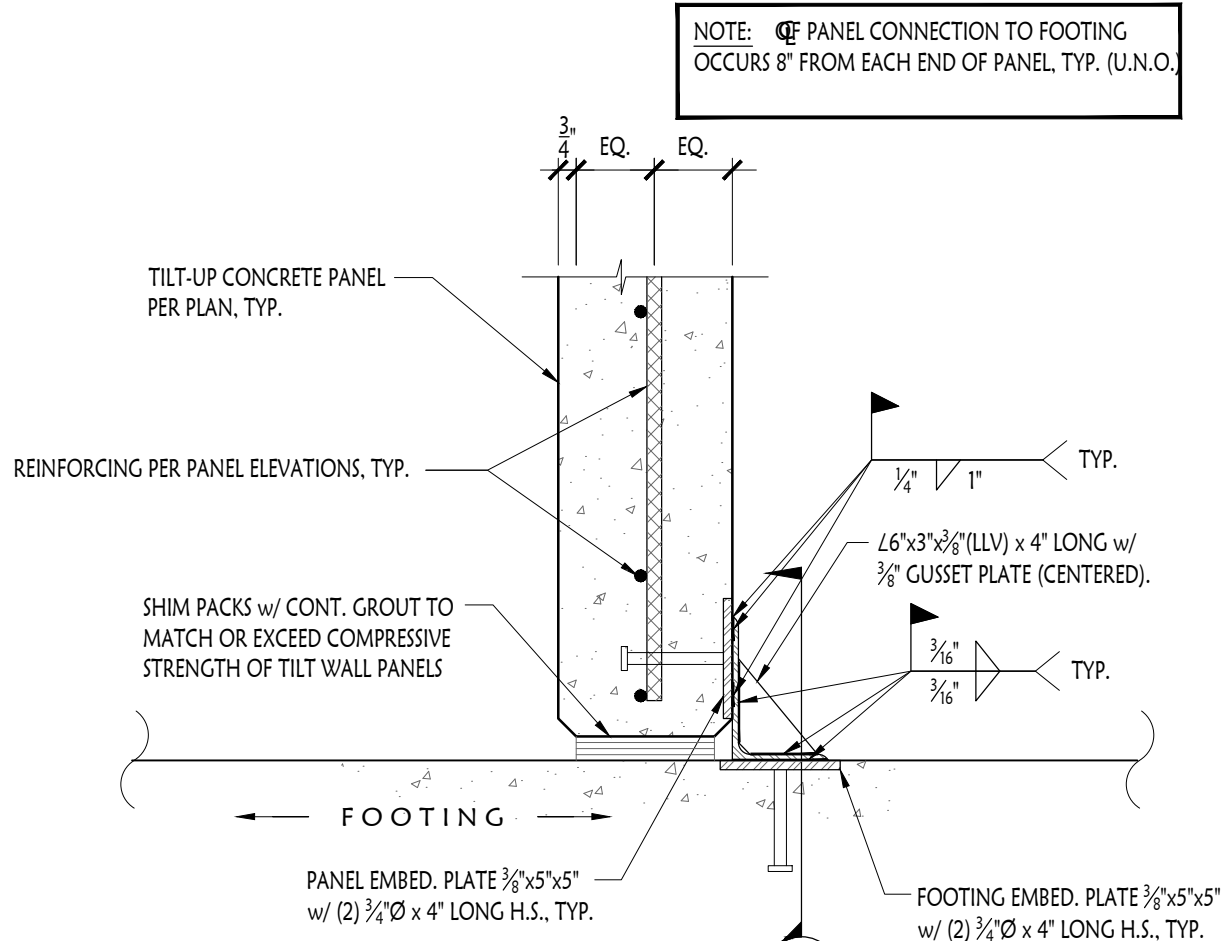
S0.02

Scale AS NOTED



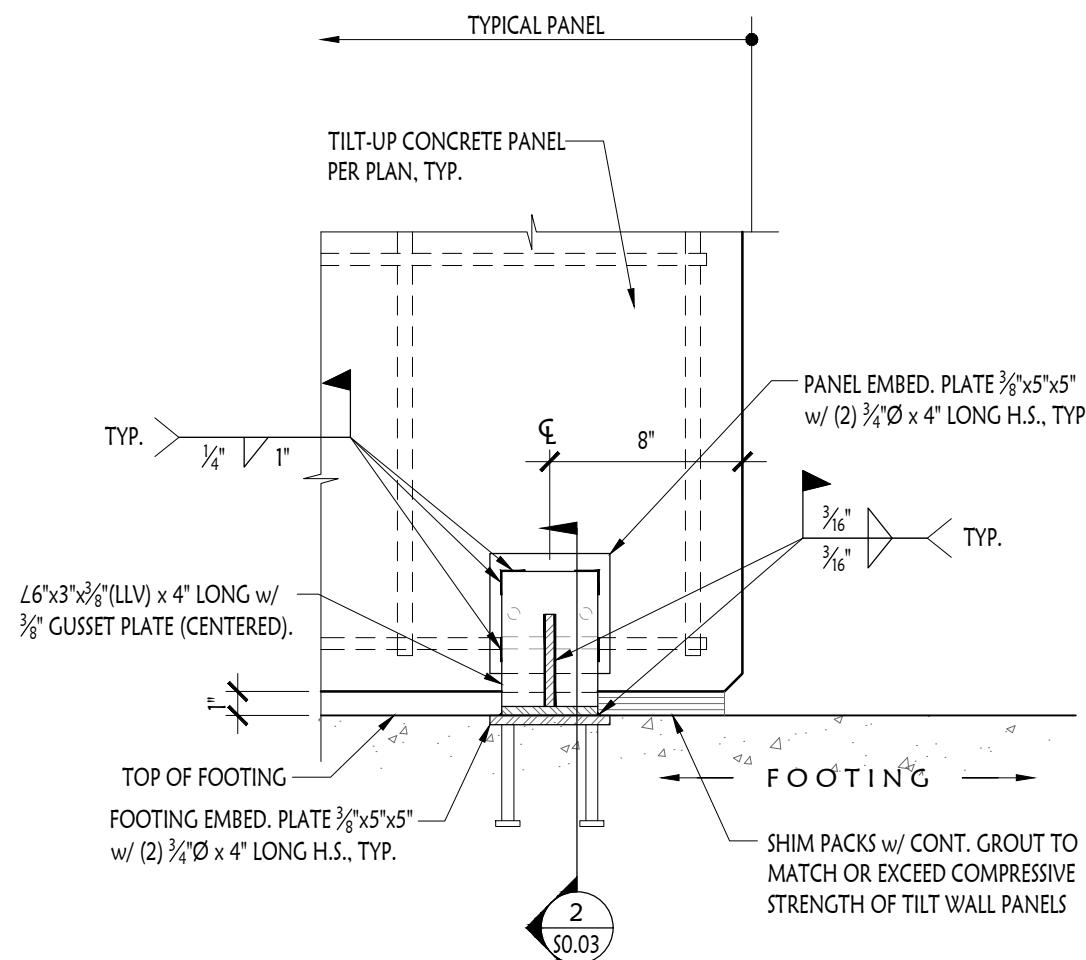
1 Typical Panel Bearing Detail

S0.03 SCALE: 1/2" = 1'-0"



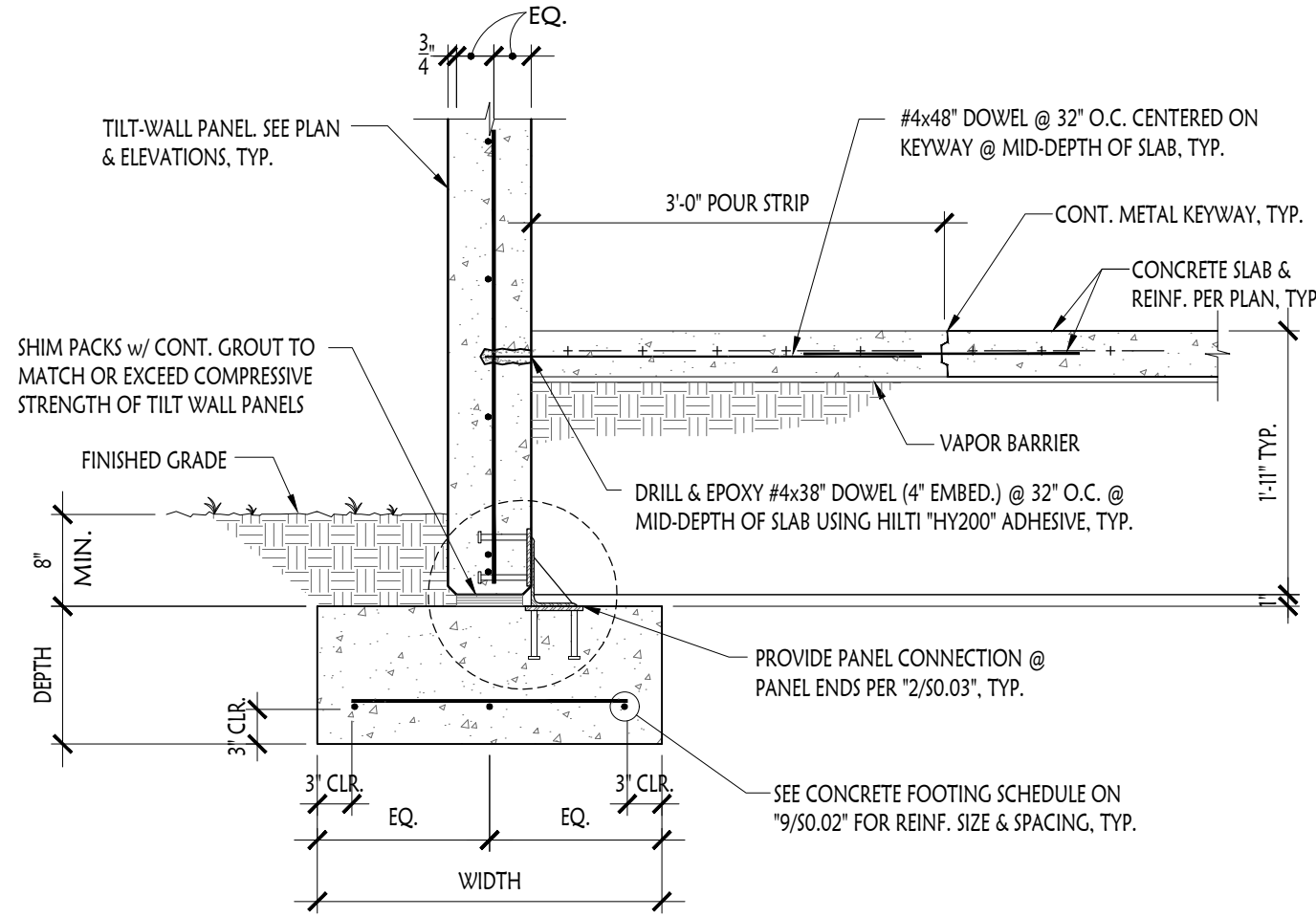
2 Typical Panel Anchorage To Footing

S0.03 SCALE: 1/2" = 1'-0"



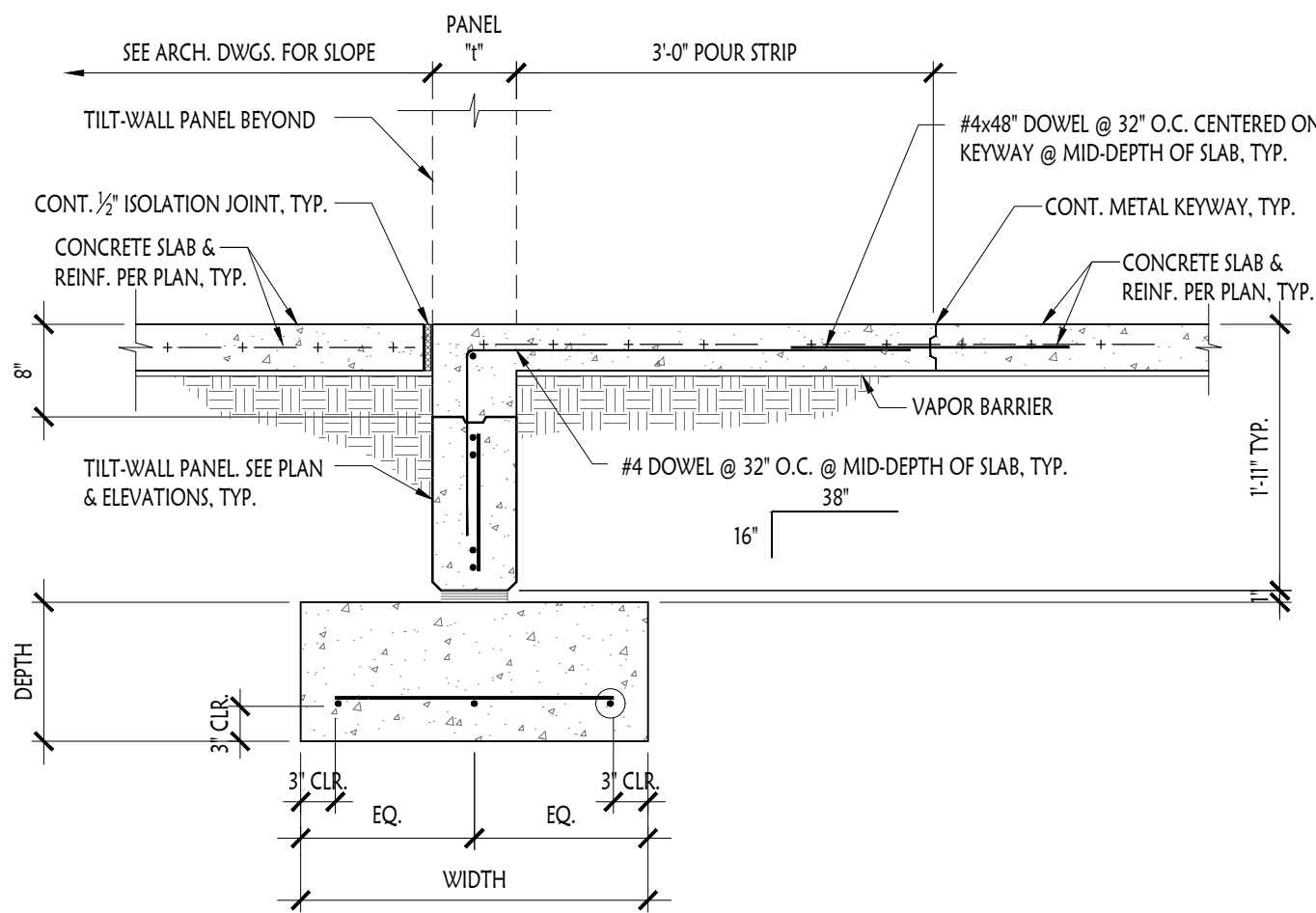
3 Panel Anchorage Elevation

S0.03 SCALE: 1/2" = 1'-0"



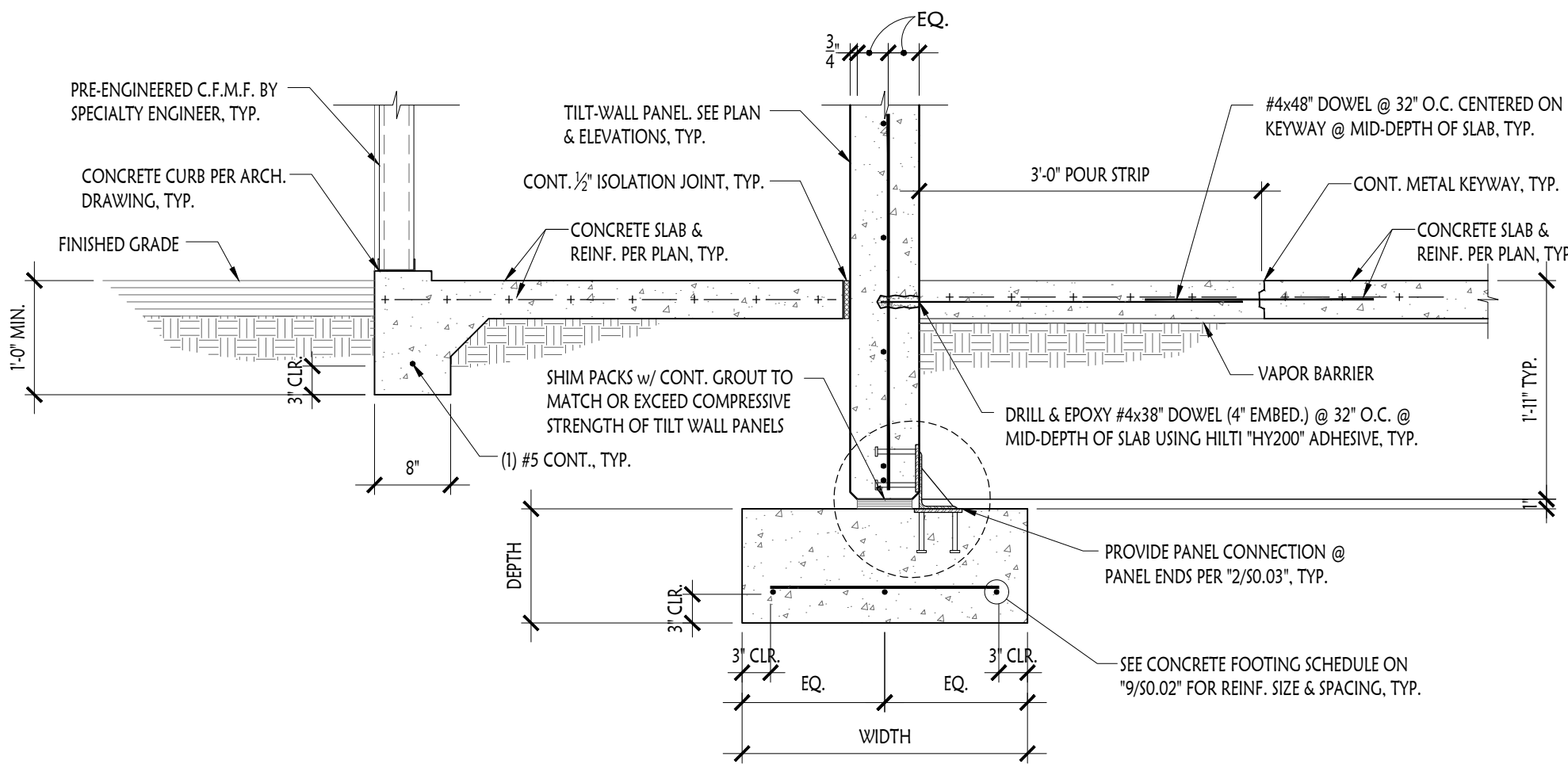
Typical Exterior Panel Bearing
@ Footing & Slab-On-Grade

S0.03 SCALE: 3/4" = 1'-0"



5 Typical Section @ Panel Opening

S0.03 SCALE: 3/4" = 1'-0"



Typical Exterior Panel Bearing w/
Pilaster @ Footing & Slab-On-Grade

S0.03 SCALE: 3/4" = 1'-0"

STRUCTURAL STEEL COLUMN SCHEDULE		
MARK	COLUMN SIZE	REMARKS
SC-3'0"	3'0" SCHEDULE 40 PIPE	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS
SC-3.5	HSS 3'0"x3'0"x4"	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS
SC-5.5	HSS 5'0"x3'0"x4"	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS
SC-6	HSS 6'0"x3'0"x4"	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS
SC-8'0"	8'0" SCHEDULE 80 PIPE	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS
SC-12'0"	12'0" SCHEDULE 80 PIPE	SEE "1/50.04" FOR BASE PLATE & ANCHOR BOLTS

7 Structural Steel Column Schedule

S0.03 SCALE: N.T.S.



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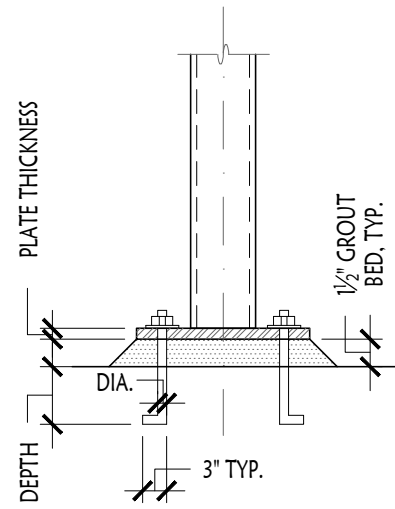
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S0.03

Scale AS NOTED



DETAIL "A"

BASE PLATE / ANCHOR BOLT SCHEDULE											
COLUMN SIZE	PLATE TYPE	BASE PLATE DIMS.					WELD SIZE	PLATE THICKNESS	ANCHOR BOLT DIMS.		
		A	B	C	D	E			DIA.	DEPTH	NUM.
HSS 3 1/2"x3 1/2" or 4"x4"	A	10"	10"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
HSS 3 1/2"x3 1/2" or 4"x4"	B	10"	10"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
HSS 5 1/2"x5 1/2"	A	12"	12"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
HSS 5 1/2"x5 1/2"	B	12"	12"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
HSS 6"x6"	A	14"	14"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
HSS 6"x6"	B	14"	14"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
3"Ø PIPE	C	12"	12"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
8"Ø PIPE	C	14"	14"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4
12"Ø PIPE	C	18"	18"	1 1/2"	----	----	3/16"	3/4"	3/4"	9"	4

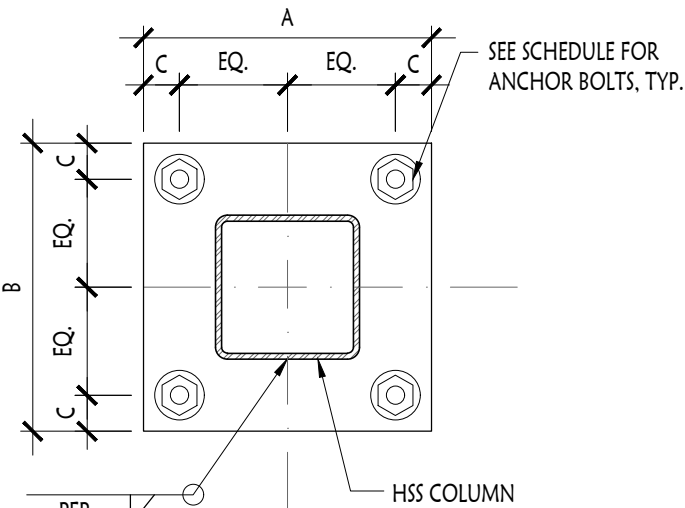
NOTE: ALL BASE PLATES SHALL BE SET IN NON-SHRINK GROUT BED (1 1/2") w/ 3/8" STEEL LEVELER PLATE OR LEVELER NUTS ON EACH BOLT, TYP.

1

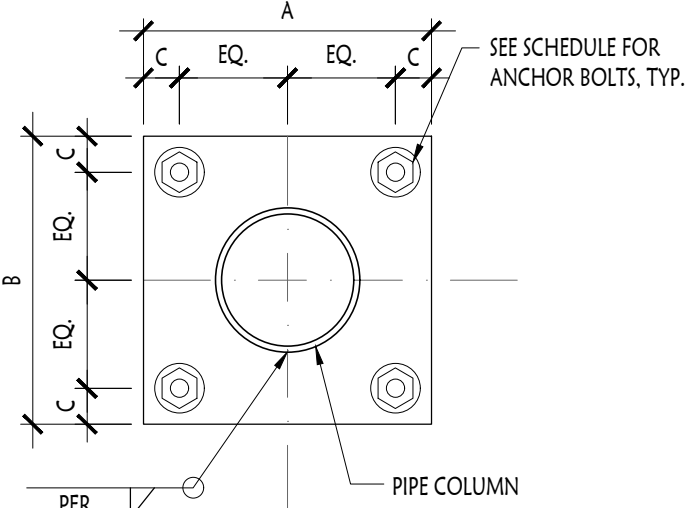
Base Plate & Anchor Bolt Schedule

S0.04

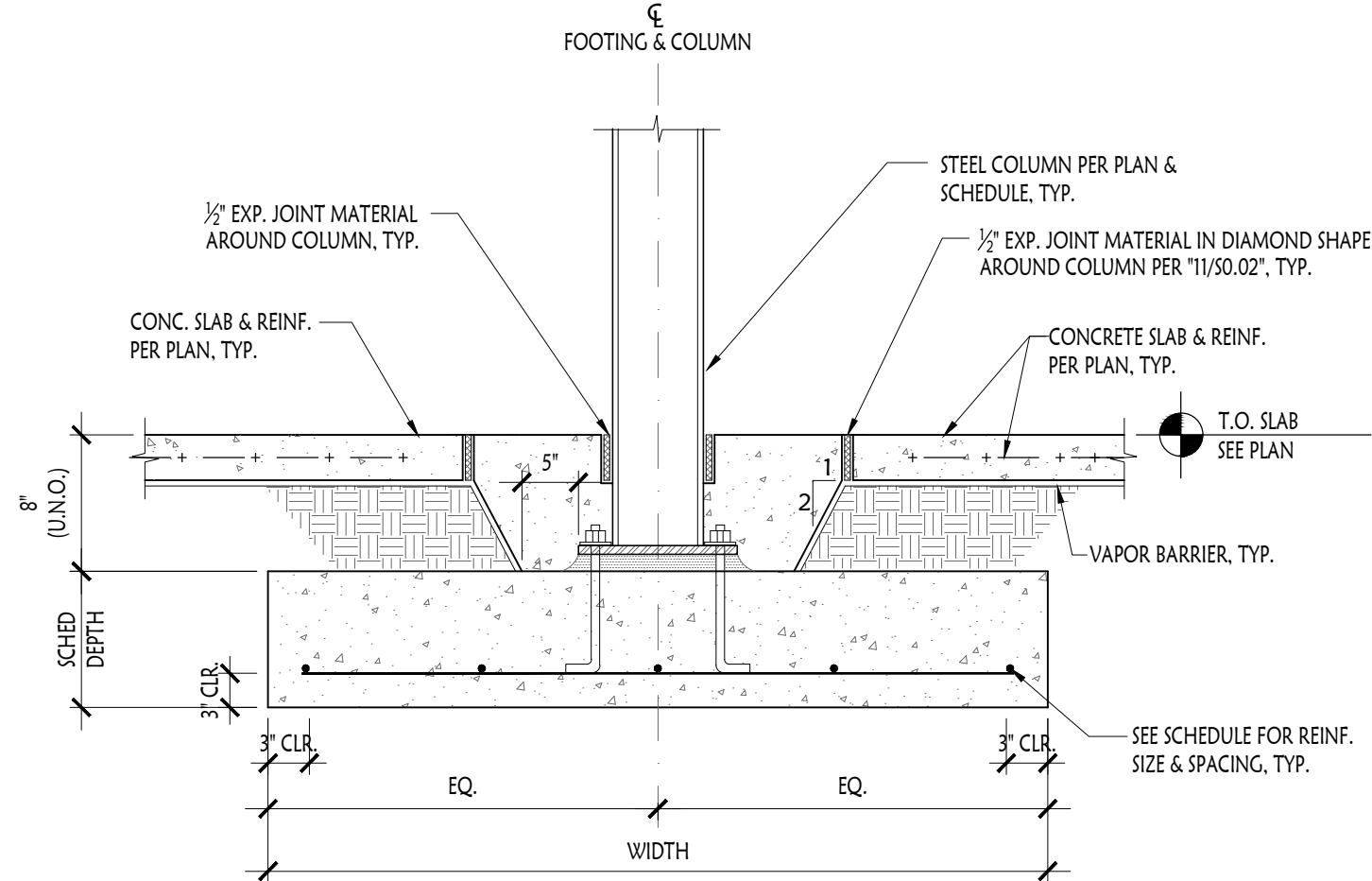
SCALE: 3/4" = 1'-0"



TYPE "A"



TYPE "B"

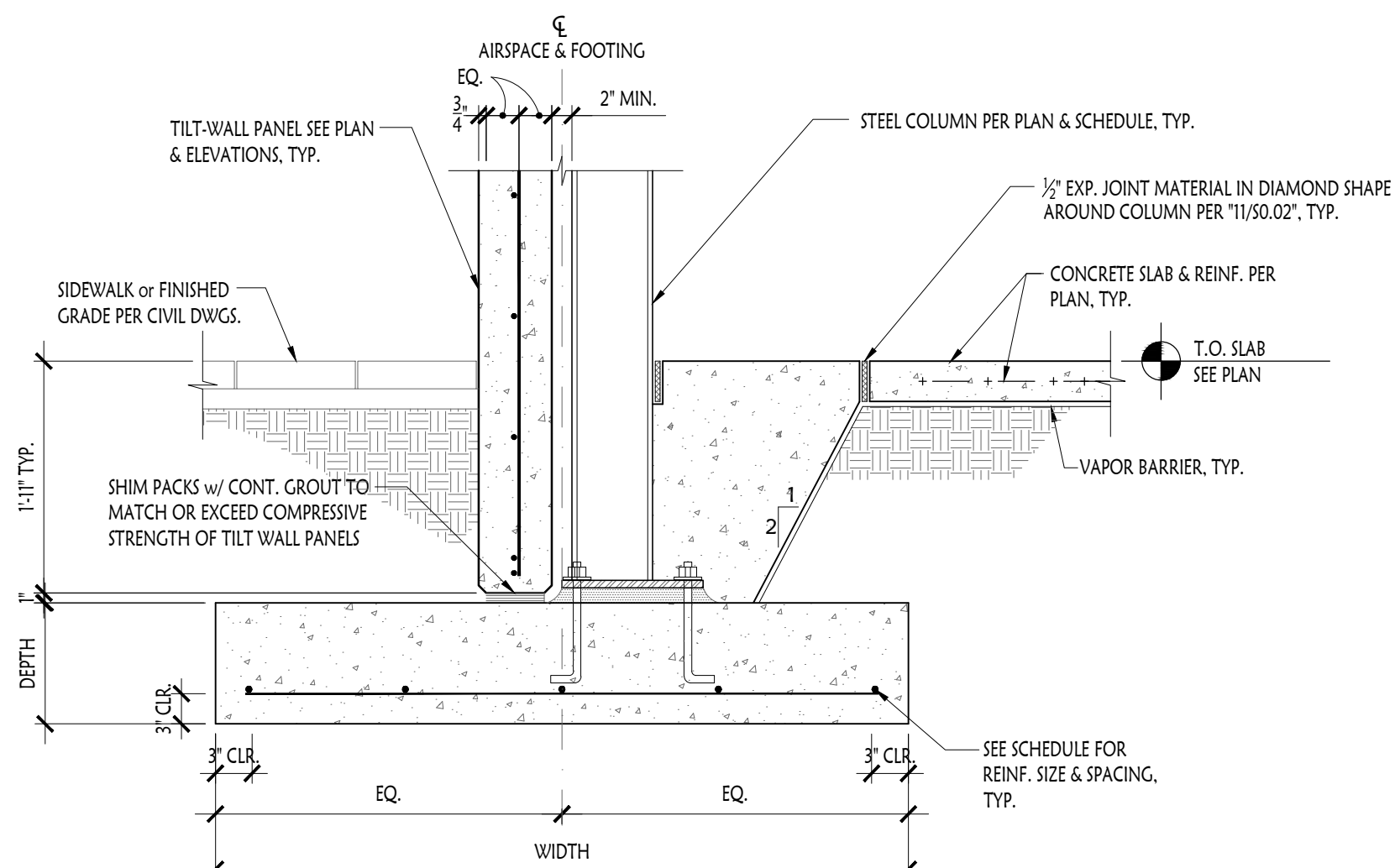


2

Interior Steel Column Spread Footing

S0.04

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

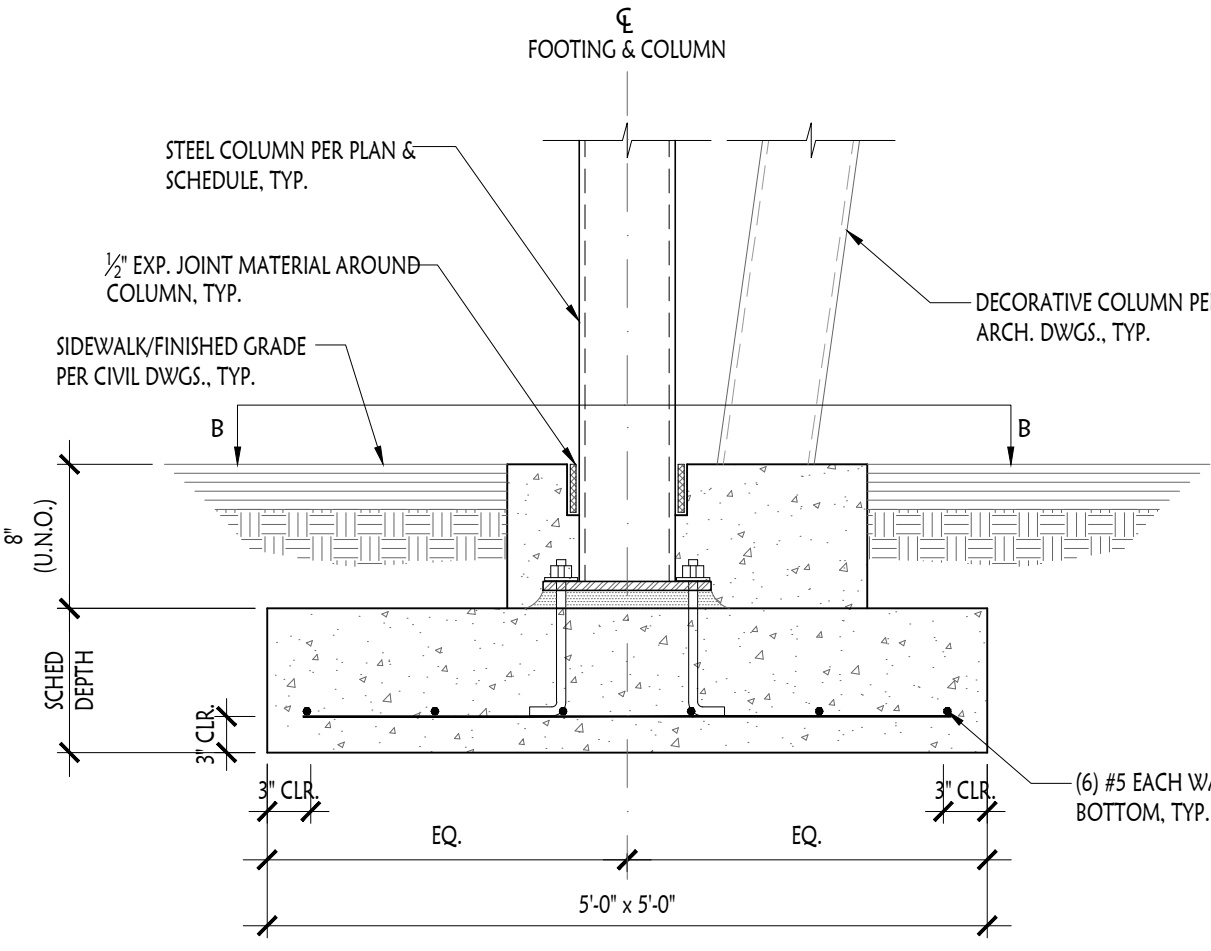


3

Exterior Panel/Interior Steel Column @ Spread Footing

S0.04

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

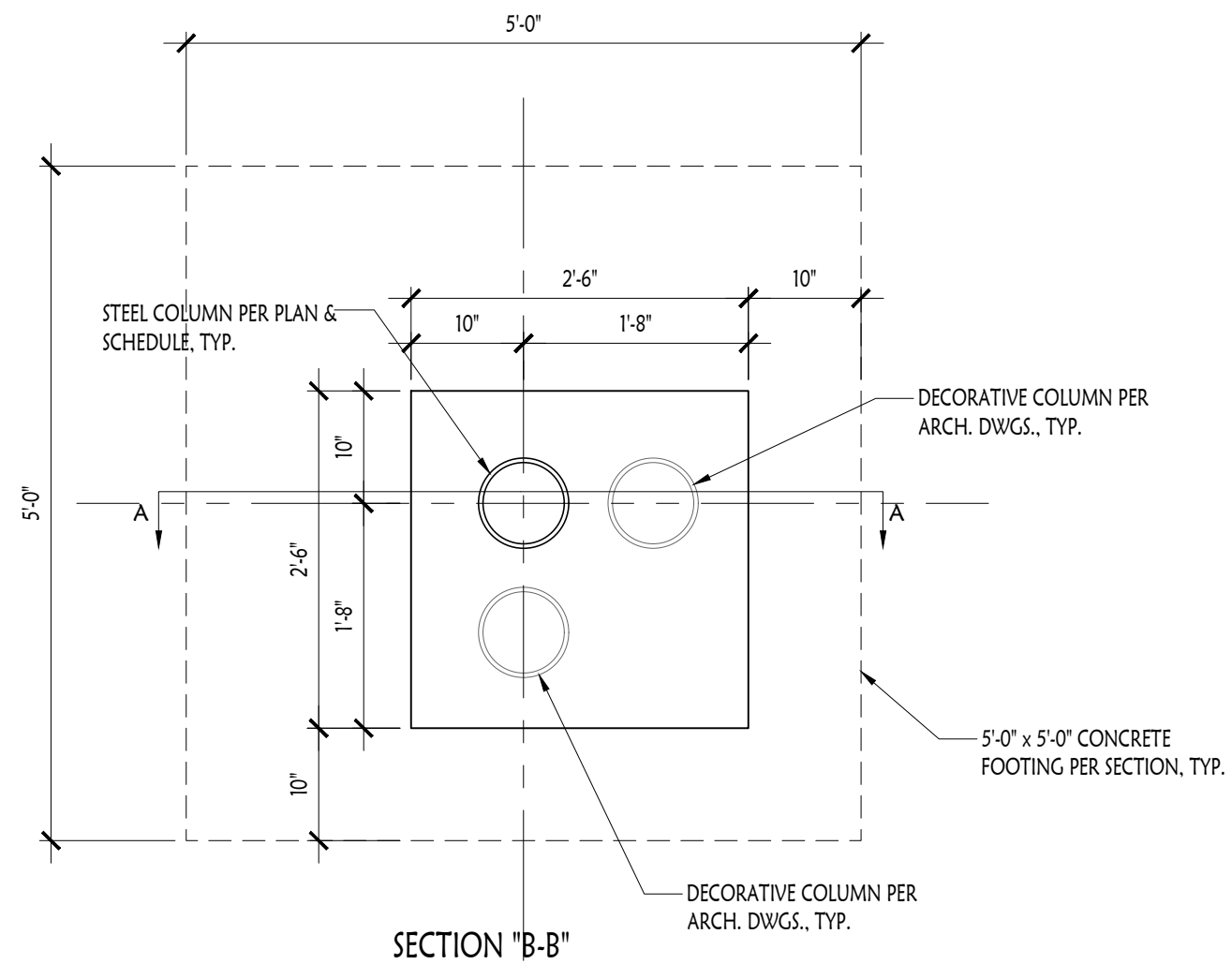


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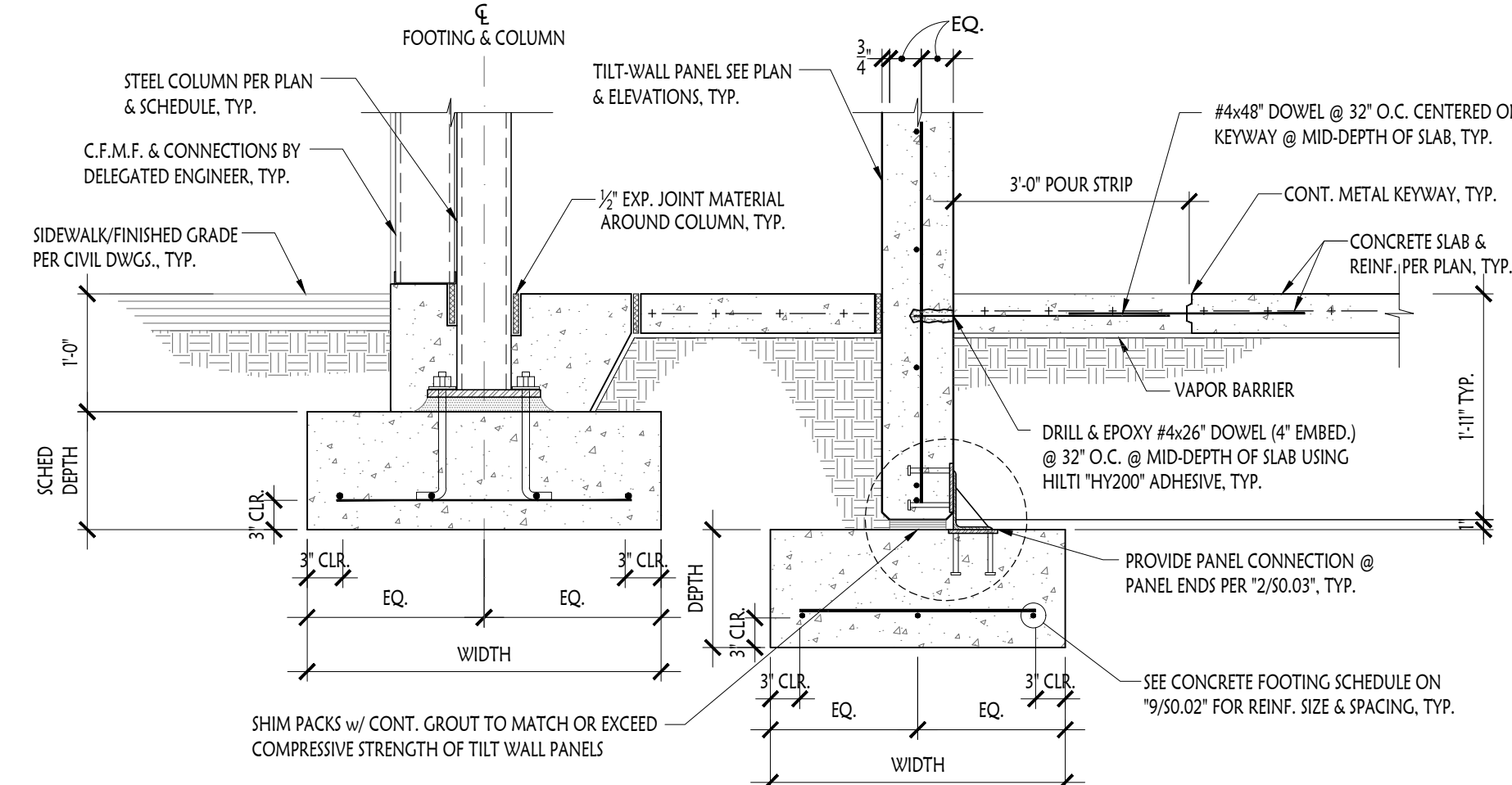
Exterior Steel Column Spread Footing

S0.04

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



SECTION "B-B"

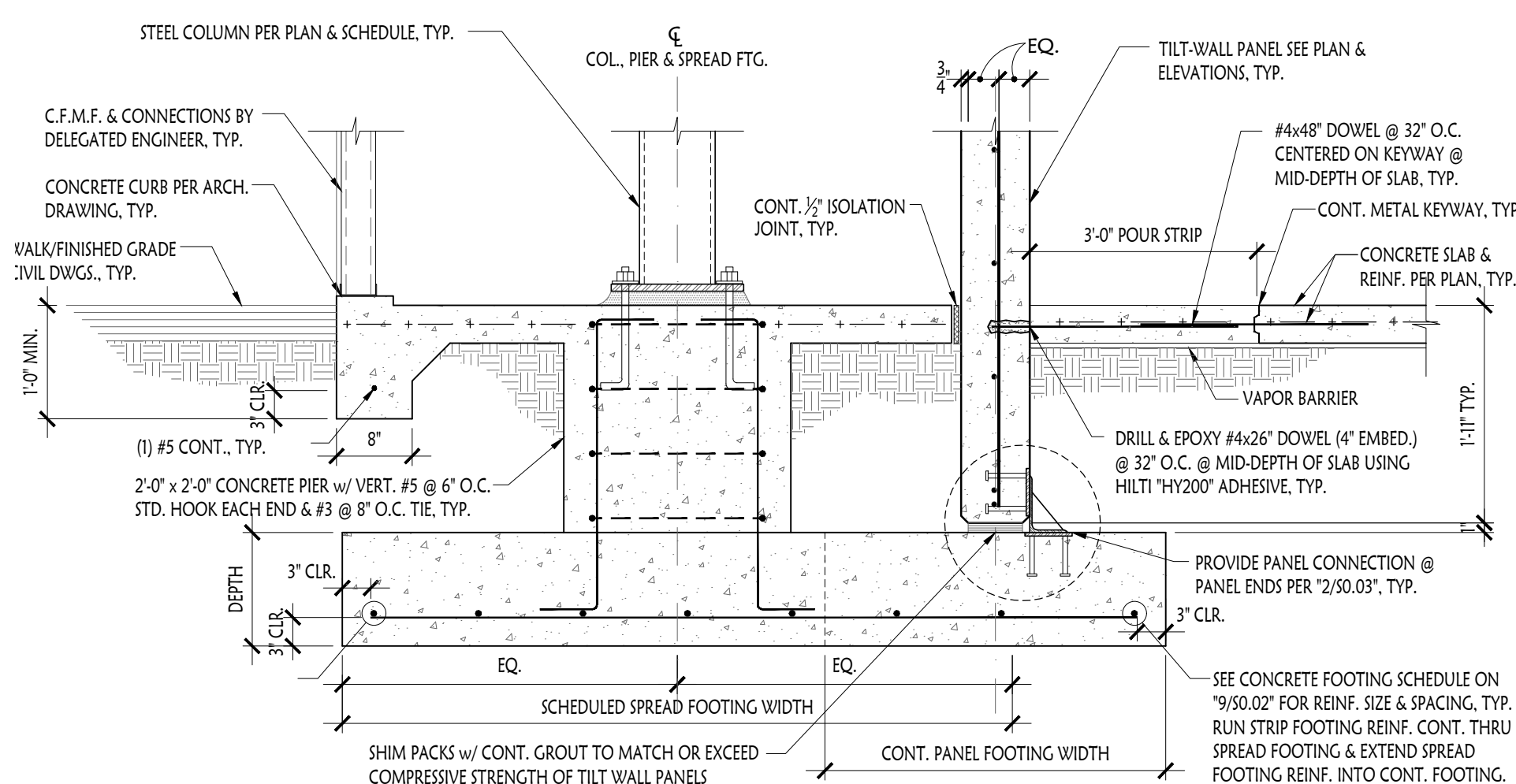


5

Typical Exterior Panel Bearing w/ Column @ Footing & Slab-On-Grade

S0.04

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

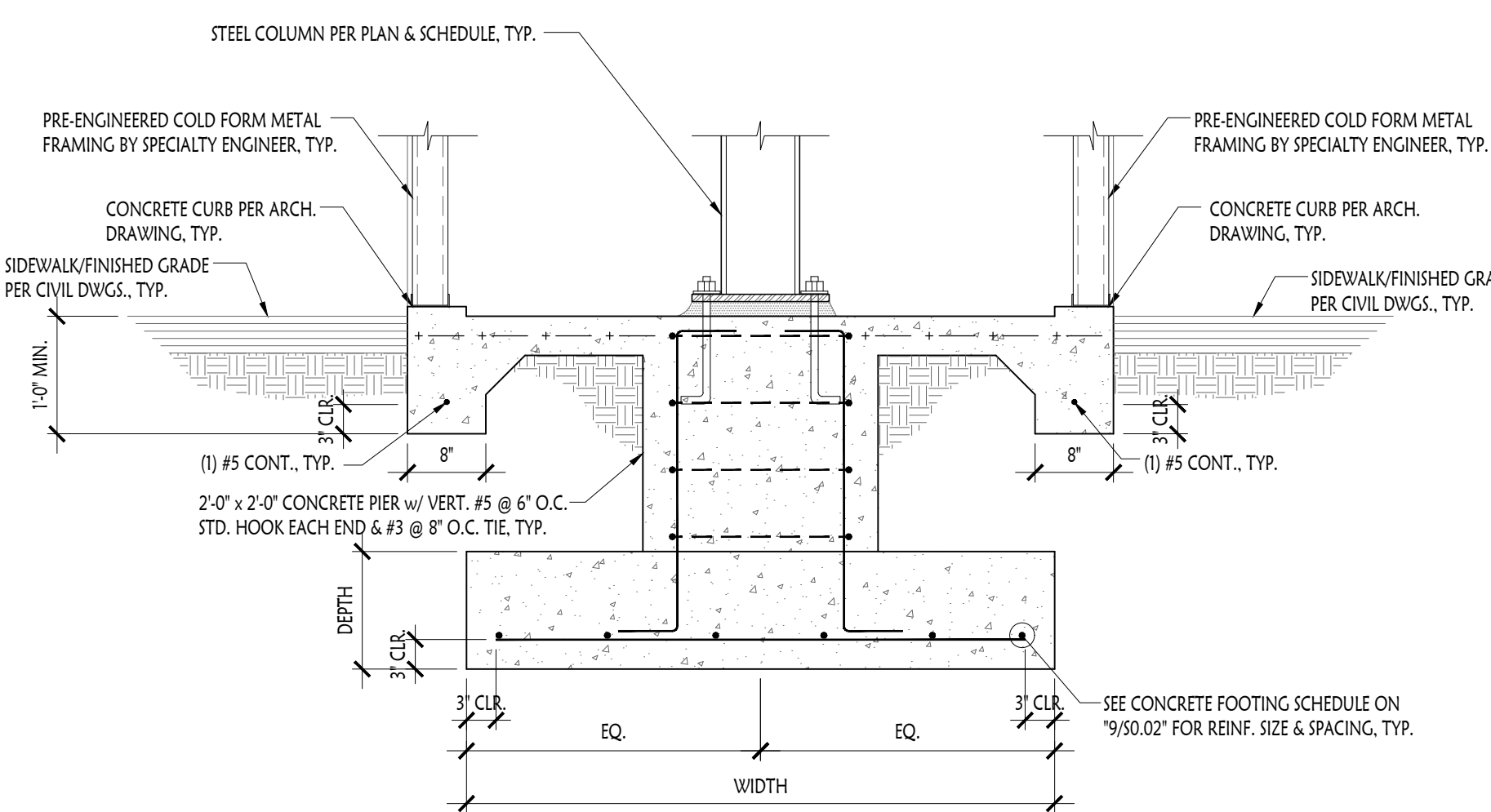


6

Exterior Steel Column/Panel @ Spread Footing

S0.04

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



7

Exterior Steel Column @ Spread Footing

S0.04

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



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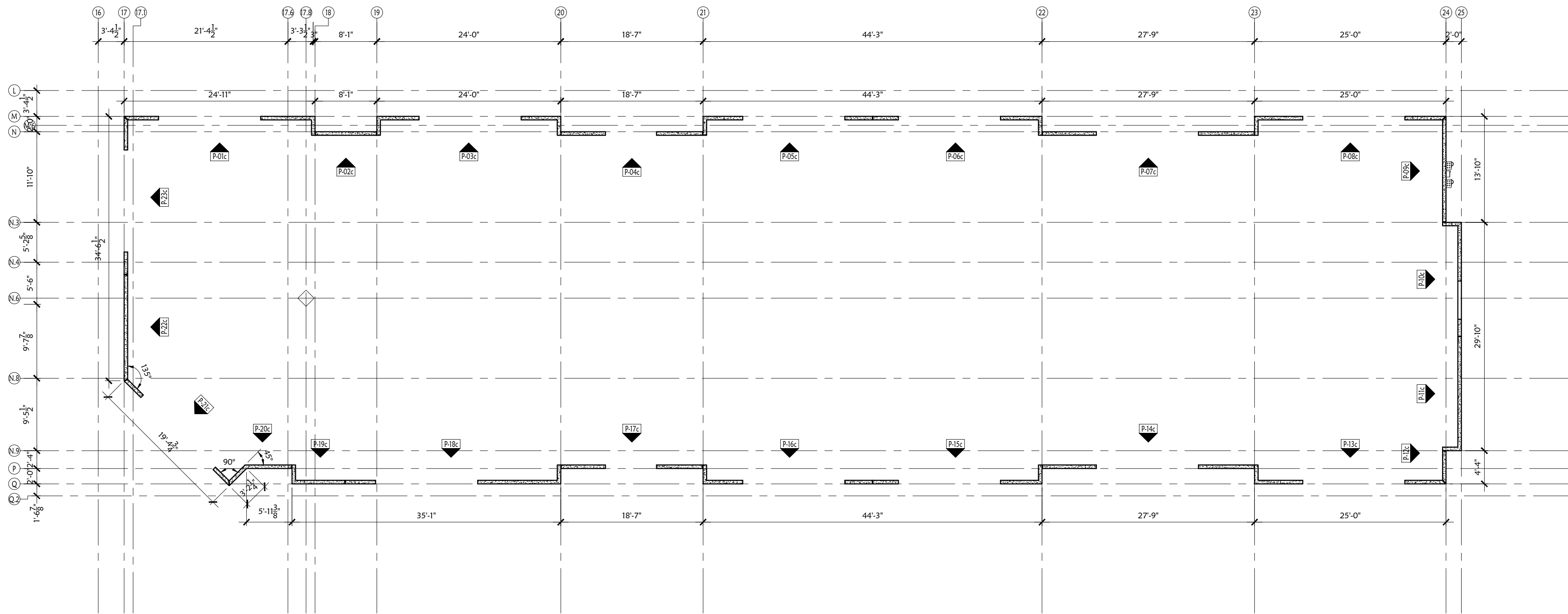
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S0.04

Scale AS NOTED



Key Notes

Wall Panel Layout & Dimension Plan

1. TOP OF SLAB ELEVATION = 0'-0". TYP. UNLESS NOTED OR DETAILED OTHERWISE. TYP.
TOP OF FOOTING ELEVATION = -2'-0". TYP. UNLESS NOTED OR DETAILED OTHERWISE. TYP.
2. SLAB-ON-GRADE SHALL BE 4" (MIN.) 3,000 PSI CONCRETE w/ 6x6-W1.4xW1.4 W.W.F. AT MID-DEPTH OF SLAB ON 10 MIL (MIN.) VAPOR BARRIER OVER TERMITES TREATED, WELL COMPACTED SOIL. TYP. U.N.O.
(FIBER-REINFORCED CONCRETE MAY BE USED ONLY @ SLAB-ON-GRADE @ CONTRACTOR'S OPTION. NOTE THAT CONTRACTOR MUST SUBMIT CONCRETE MIX DESIGN FOR APPROVAL.)
3. PANEL ELEVATIONS ARE SHOWN FROM THE INTERIOR OF THE BUILDING. TYP.
4. ALL PANELS ARE TO BE 6" THICK 4,000 PSI (MIN.) CONCRETE. TYP. (U.N.O.) NOTE THAT 5/8" THICKNESS (2x6 FORMS) IS NOT ACCEPTABLE. TYPICAL HORIZONTAL PANEL REINFORCING TO BE #5 @ 12" O.C. TYP. (U.N.O.) TYPICAL VERTICAL PANEL REINFORCING TO BE #5 @ 12" O.C. TYP. (U.N.O.)
5. ALL PANEL JOINTS ARE TO BE 3/4". TYP. (U.N.O.)
6. PROVIDE 3/4" CHAMFERS @ ALL EXPOSED EDGES. TYP. (U.N.O.)
7. PANEL REVEALS TO BE A MAXIMUM OF 3/4" DEEP ON THE EXTERIOR PANEL FACE. TYP. COORDINATE ALL PANEL REVEAL SIZES, LOCATIONS, & DETAILING w/ ARCH. DWGS., TYP.
8. CONTRACTOR TO VERIFY ALL OPENING DIMENSIONS & LOCATIONS w/ ARCHITECTURAL & M.E.P. DRAWINGS & ADJUST AS REQUIRED. TYP.
9. CONTRACTOR TO PROVIDE 666 ENGINEERED TILT-UP WALL PANEL LIFTING SHOP DRAWINGS & CALCULATIONS SHOWING PANEL LAYOUT WITH REINFORCEMENT, EMBEDS, OPENINGS, DIMENSIONS, JOINTS, ETC., AS REQUIRED TO PROPERLY CONSTRUCT THE WALL PANELS. THE SUBMITTAL SHALL INCLUDE DRAWINGS, DETAILS, & CALCULATIONS SHOWING LIFTING & HANDLING STRESSES, & BRACING REQUIREMENTS. SUBMITTED SHOP DRAWINGS & CALCULATIONS SHALL BE SIGNED & SEALED BY THE DELEGATED SPECIALTY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

Typical Sheet Notes

Wall Panel Layout & Dimension Plan

- A. SEE SHEET "S0.01" FOR GENERAL STRUCTURAL NOTES. TYP.
- B. COORDINATE w/ CIVIL DRAWINGS FOR CONTINUATION OF SIDEWALK & LOW GRADE CONDITIONS. TYP.
- C. SEE ARCH. DWGS. FOR SLOPES, DROPS & DRAINS LOCATED IN FLOOR SLAB. TYP.
- D. COORDINATE ALL CHASE & CONDUIT LOCATIONS w/ M.E.P. DWGS. IN RELATION TO STRUCTURAL ELEMENTS. ROUTE ALL CHASES & CONDUITS UNDER BOTTOM OF FOUNDATIONS 6" MIN. TYP.
- E. "F-F" INDICATES REINFORCED CONCRETE SPREAD FOOTING. REFER TO "9/50.02" FOR CONCRETE FOOTING SCHEDULE. TYP.
- F. "SF-F" INDICATES CONTINUOUS CONCRETE STRIP FOOTING. REFER TO "9/50.02" FOR CONCRETE FOOTING SCHEDULE. TYP.
- G. "SC-F" INDICATES STRUCTURAL STEEL COLUMN. REFER TO "2/51.11a" FOR STEEL COLUMN SCHEDULE. TYP.



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11/05/2025

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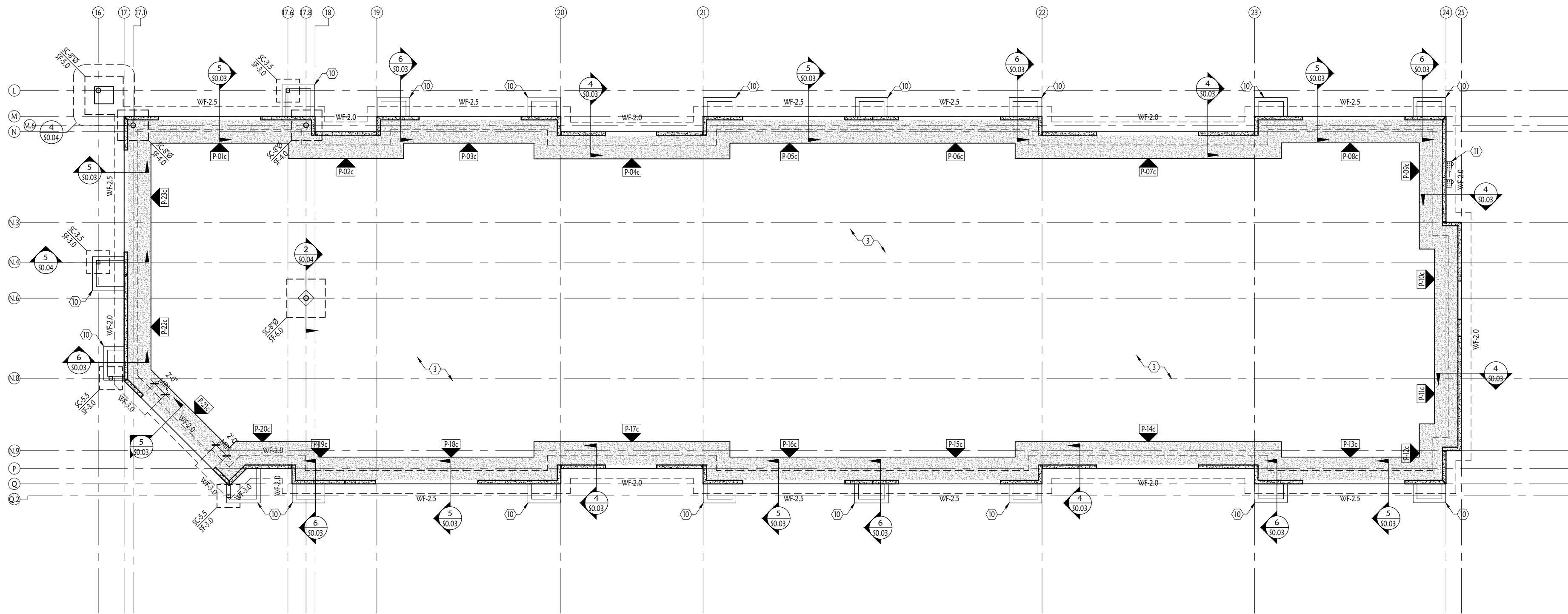
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TOWN PLACE at PORT ST LUCIE

Building C - Wall Panel
Layout & Dimension Plan

Project number	23-015
Date	11/05/2025
Drawn by	TLW
Checked by	RCS

S1.10c

Scale AS NOTED



1 Building C - Foundation Plan
S1.11c SCALE: 3/32" = 1'-0"

Key Notes

Foundation Plan

1. TOP OF SLAB DATUM ELEVATION = 0'-0", TYP.
2. TOP OF FOOTING ELEVATION = -2'-0", TYP. (UNLESS NOTED OR DETAILED OTHERWISE)
3. SLAB-ON-GRADE SHALL BE 4" (MIN.) 3,000 PSI CONCRETE w/ 6#6-W1.4/W1.4 W.W.F. AT MID-DEPTH OF SLAB ON 10 MIL (MIN.) VAPOR BARRIER OVER TERMITES TREATED, WELL COMPACTED SOIL, TYP. U.N.O. (FIBER-REINFORCED CONCRETE MAY BE USED ONLY @ SLAB-ON-GRADE @ CONTRACTOR'S OPTION. NOTE THAT CONTRACTOR MUST SUBMIT CONCRETE MIX DESIGN FOR APPROVAL.)
4. SEE ARCH. DWGS. FOR ALL DIMENSIONS, STEPS, SLOPES, DROPS, & DRAINS LOCATED IN FLOOR SLAB, TYP.
5. PLUMBING FIXTURES: GENERAL PLUMBING FIXTURE LOCATIONS ARE INDICATED ON THE FOUNDATION PLAN. REFER TO ARCH. FLOOR PLANS & M.E.P. DWGS. AND VERIFY SPECIFIC FIXTURE LOCATIONS w/ ACTUAL EQUIPMENT REQUIREMENTS, TYP.
6. CONTROL JOINTS (C.J.): PROVIDE SAWED CONTROL JOINTS ON SLAB SURFACE AS INDICATED ON PLANS. SEE CONTROL JOINT/ CONSTRUCTION JOINT DETAILS ON SHEET 'S0.02', TYP.
7. CORNER REINFORCEMENT: PROVIDE (2) #4 STEEL BARS x 4'-0" LONG @ 8" O.C. MID-DEPTH OF SLAB @ ALL RE-ENTRANT CORNERS, TYP. (U.N.O.)
8. EXPANSION JOINTS: PROVIDE 1/2" THICK x 4" WIDE CONTINUOUS BITUMINOUS MATERIAL WHERE CONCRETE SLABS ABUT EACH OTHER, TYP. (U.N.O.).
9. SLAB LEAVE-OUT/POURSTRIP: PROVIDE 4" THICK x 3'-0" WIDE CONTINUOUS SLAB LEAVE-OUT OF CONCRETE SLAB-ON-GRADE ADJACENT TO EXTERIOR WALL PANELS FOR PANEL CONNECTION TO FOOTING. POUR SLAB BACK PER SECTIONS AFTER PANEL ERECTION, TYP. (U.N.O.).
10. PRE-ENGINEERED COLD-FORMED METAL EXTERIOR FRAMING (CFMF): COORDINATE w/ ARCH. DWGS. FOR ALL EXTERIOR C.F.M.F. SECTIONS & DIMENSIONS. PROVIDE COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL. REFER TO 'SUBMITTALS' SECTION OF GENERAL STRUCTURAL NOTES ON 'S0.01' FOR SUBMITTAL REQUIREMENTS, TYP.
11. EXTERIOR ELECTRICAL METER: COORDINATE ELECTRICAL METER LOCATION & REQUIREMENTS w/ ARCH. & M.E.P. DWGS., TYP. ELECTRICAL CONDUIT MUST BE ROUTED A MINIMUM OF 6" UNDER THE FOOTING OR DIRECTLY THROUGH THE WALL PANEL, & MAY NOT BE RUN VERTICALLY OR HORIZONTALLY WITHIN THE CONCRETE TILT-UP WALL PANEL, TYP.

Typical Sheet Notes

Foundation Plan

- A. SEE SHEET 'S0.01' FOR GENERAL STRUCTURAL NOTES, TYP.
- B. COORDINATE w/ CIVIL DRAWINGS FOR CONTINUATION OF SIDEWALK & LOW GRADE CONDITIONS, TYP.
- C. SEE ARCH. DWGS. FOR SLOPES, DROPS & DRAINS LOCATED IN FLOOR SLAB, TYP.
- D. COORDINATE ALL CHASE & CONDUIT LOCATIONS w/ M.E.P. DWGS. IN RELATION TO STRUCTURAL ELEMENTS. ROUTE ALL CHASES & CONDUITS UNDER BOTTOM OF FOUNDATIONS 6" MIN., TYP.
- E. "F-#" INDICATES REINFORCED CONCRETE SPREAD FOOTING. REFER TO 'S0.02' FOR CONCRETE FOOTING SCHEDULE, TYP.
- F. "SF-#" INDICATES CONTINUOUS CONCRETE STRIP FOOTING. REFER TO 'S0.02' FOR CONCRETE FOOTING SCHEDULE, TYP.
- G. "SC-#" INDICATES STRUCTURAL STEEL COLUMN. REFER TO 'S0.03' FOR STEEL COLUMN SCHEDULE, TYP.



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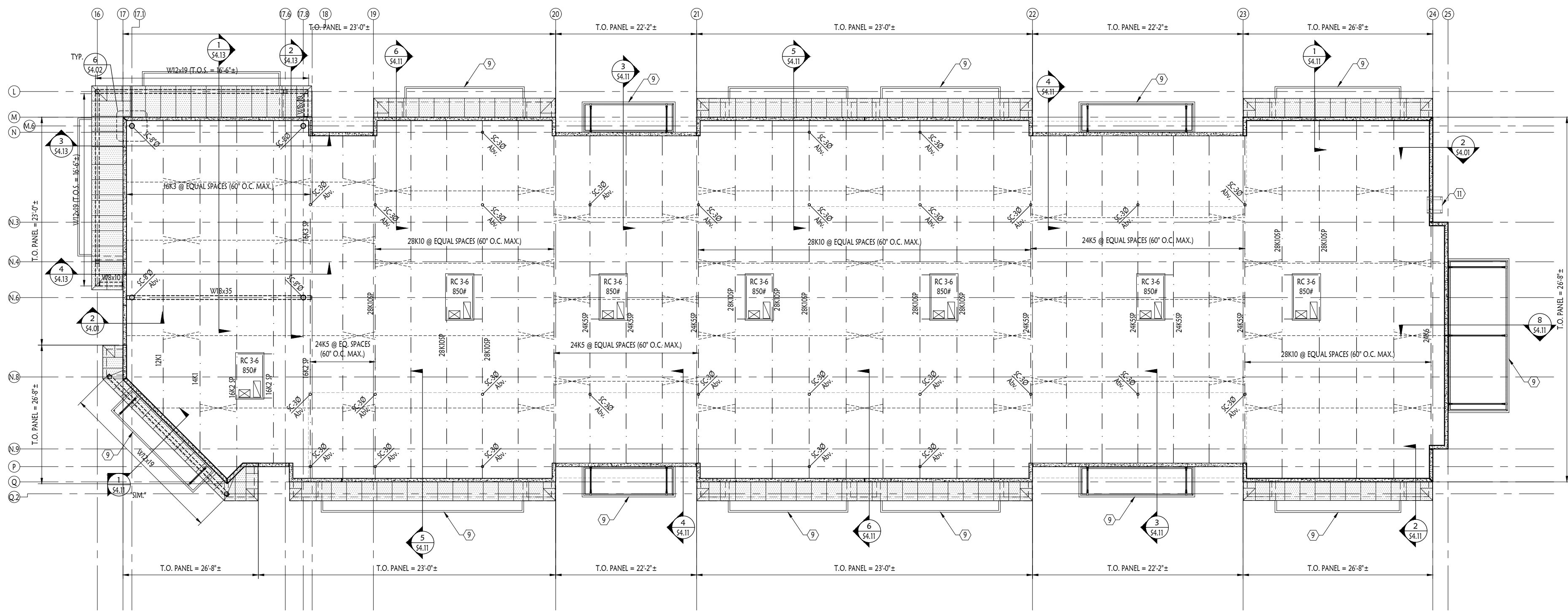
PLS Town Place Partners
TOWN PLACE at PORT ST
LUCIE

Building C
Foundation Plan

Project number	23-015
Date	11/05/2025
Drawn by	TLW
Checked by	RCS

S1.11c

Scale AS NOTED



1 Building C - Roof Framing Plan
S1.12c SCALE: 3/32" = 1'-0"

Key Notes

Roof Framing Plan

- METAL ROOF DECK: 1.5822 METAL DECK (3 SPAN MINIMUM) BY VULCRAFT OR APPROVED EQUAL.
- ROOF DECK FASTENER PATTERN REQUIREMENTS: HULTI "X-EDNK22" (OR "X-EDN19") OR 3/8" DIAMETER PUDDLE WELDS IN 36/4 PATTERN w/ (2) #10 TEK SCREW SIDE LAP FASTENERS, TYP.
- PROVIDE CONT. ANGLE 3"x3"x1/4" @ PERIMETER, TYP. (U.N.O.)
- JOIST MANUFACTURER TO PROVIDE STEEL JOIST BRIDGING & UPLIFT BRIDGING AS REQUIRED BY S.I.L. TYP. SEE 1/152.01" FOR G.C. GROSS UPLIFT PRESSURES. JOIST DESIGNER MAY USE 5 PSF DEAD LOAD (MAX.) TO RESIST UPLIFT TO DETERMINE NET UPLIFT PRESSURES.
- JOIST MANUFACTURER TO COORDINATE ROOF TOP UNIT WEIGHTS AND LOCATIONS w/ MECHANICAL DRAWINGS. ALL JOISTS SUPPORTING R.T.U.'S ARE TO BE "SP" JOISTS, TYP.
- JOIST MANUFACTURER TO COORDINATE ROOF TOP UNIT WEIGHTS AND LOCATIONS w/ MECHANICAL DRAWINGS. ALL JOISTS SUPPORTING R.T.U.'S ARE TO BE "SP" JOISTS, TYP.
- COORDINATE ALL CHASE & CONDUIT LOCATIONS w/ M.E.P. IN RELATION TO STRUCTURAL TILT-UP PANELS. ROUTE ALL CHASES & CONDUIT BETWEEN ROOF JOISTS & UNDER JOIST GIRDERS AS REQUIRED, TYP.
- PRE-ENGINEERED COLD-FORMED METAL EXTERIOR FRAMING (CFMF): COORDINATE w/ ARCH. DWGS. FOR ALL EXTERIOR C.F.M.F. SECTIONS & DIMENSIONS. PROVIDE COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL. REFER TO "SUBMITTALS" SECTION OF GENERAL STRUCTURAL NOTES ON "S0.01" FOR SUBMITTAL REQUIREMENTS, TYP.
- PRE-ENGINEERED ALUMINUM CANOPY SYSTEM: COORDINATE w/ ARCH. DWGS. FOR SPECIFIC CANOPY MEMBER SIZES, DIMENSIONS, & LOCATIONS. PROVIDE COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL. REFER TO "SUBMITTALS" SECTION OF GENERAL STRUCTURAL NOTES ON "S0.01" FOR SUBMITTAL REQUIREMENTS, TYP.
- PRE-ENGINEERED ALUMINUM TRELLIS SYSTEM: COORDINATE w/ ARCH. DWGS. FOR SPECIFIC TRELLIS MEMBER SIZES, SPACINGS, DIMENSIONS, & LOCATIONS. PROVIDE COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL. REFER TO "SUBMITTALS" SECTION OF GENERAL STRUCTURAL NOTES ON "S0.01" FOR SUBMITTAL REQUIREMENTS, TYP.
- PRE-ENGINEERED EXTERIOR ALUMINUM LADDER SYSTEM: COORDINATE w/ ARCH. DWGS. FOR SPECIFIC EXTERIOR LADDER REQUIREMENTS & LOCATIONS. PROVIDE COMPLETE SHOP DRAWINGS & CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL. REFER TO "SUBMITTALS" SECTION OF GENERAL STRUCTURAL NOTES ON "S0.01" FOR SUBMITTAL REQUIREMENTS, TYP.
- ALL STRUCTURAL STEEL EXPOSED TO WEATHER TO BE HOT DIPPED GALVANIZED, TYP. (U.N.O.)

Typical Sheet Notes

Roof Framing Plan

- SEE SHEET "S0.01" FOR GENERAL STRUCTURAL NOTES, TYP.
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, SLOPES, & FINISHES, TYPICALLY.
- SEE SHEETS "S2.02" FOR TRUSS FRAMING DESIGN CRITERIA, COMPONENT & CLADDING WIND PRESSURE TABLE, & GENERAL TRUSS DETAILING, TYP.



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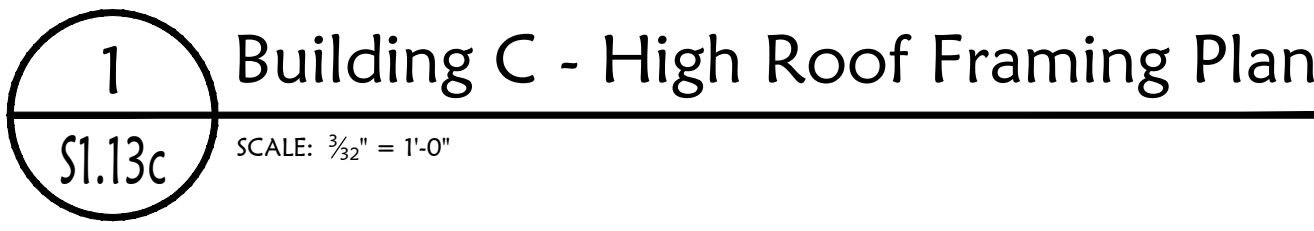
PLS Town Place Partners
TOWN PLACE at PORT ST LUCIE

Building C
Roof Framing Plan

Project number	23-015
Date	11/05/2025
Drawn by	TLW
Checked by	RCS

S1.12c

Scale AS NOTED

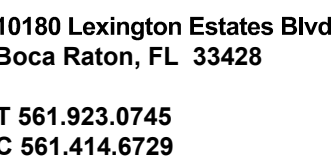


High Roof Framing Plan

1. HIGH ROOF TRUSS BEARING ELEVATION = 20'-0"±, TYP. (U.N.O.)
2. HIGH ROOF TRUSS BEARING ELEVATION = 22'-2"±, TYP.
3. ALL ROOF SLOPES ARE 4:12, TYP. (U.N.O.). COORD. w/ ARCH. DWGS., TYP.
4. COORDINATE ALL CHASE & CONDUIT LOCATIONS w/ M.E.P. IN RELATION TO STRUCTURAL ELEMENTS, TYP.
5. ALL STU WALL SILL PLATES & OTHER WOOD MEMBERS IN CONTACT w/ CONCRETE OR MASONRY SHALL BE PRESSURE TREATED, TYP.
6. TRUSS SHOP DRAWINGS: PROVIDE SHOP DRAWINGS SHOWING TRUSS LAYOUT, PROFILES, CONNECTIONS, LOAD DIAGRAMS, & TRUSS ENGINEERING CALCULATIONS FOR THE WOOD ROOF TRUSS SYSTEM SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA. REFER TO "SUBMITTALS" SECTION OF GENERAL STRUCTURAL NOTES ON "0.01" FOR SUBMITTAL REQUIREMENTS, TYP.
7. TRUSS TRUSSES: PROVIDE ENRICHED, PRE-FABRICATED CMF TRUSSES FOR LOADS, SPANS, & CONDITIONS SHOWN. SPACE TRUSSES @ 24" O.C. MAX. & AS REQUIRED BY TRUSS MANUF. PROVIDE ALL REQUIRED INFILL FRAMING, BLOCKING, & BRACING AS REQ'D. TO FRAME ENTIRE ROOF ASSEMBLY. PROVIDE ALL NECESSARY SUPPORT CONDITIONS FOR FRAMING ATTACHED TO CFM TRUSSES. PROVIDE ALL TRUSS TO TRUSS CONNECTIONS & CONNECTION OF TRUSSES TO STRUCTURE, TYP.
8. TRUSS SHEATHING: PROVIDE 1½" EXTERIOR GRADE, SPAN RATED, CODE CERTIFIED PLYWOOD @ 0.5.8. SHEATHING w/ HCLIPS AS REQ'D., TYP. COORD. w/ ARCH. DWGS. & PROVIDE ¾" FIRE RATED, EXTERIOR GRADE, SPAN RATED, CODE CERTIFIED PLYWOOD SHEATHING WHERE REQ'D., TYP.
9. ROOF SHEATHING NAILING SCHEDULE:
 - NAIL @ 4" O.C. AT DIAPHRAGM BOUNDARIES, OVER PERIMETER WALLS, AND AT ALL RIDGES, HIPPS, & VALLEYS, TYP. (U.N.O.)
 - NAIL @ 6" O.C. ALL INTERIOR SUPPORTS AND ALL OTHER PANEL EDGES, TYP. (U.N.O.)
 - UNBLOCKED DIAPHRAGM, USE ASTM F1667 SRS5-03 (2½"x10.13") NAILS @ ASTM F1667 SRS5-04 (3"x10.12") NAILS, TYP. (U.N.O.)
10. TYPICAL TRUSS TO HAVE SIMPSON "HETA20" @ EACH CMU SUPPORT, TYP. (U.N.O.)
11. TYPICAL 2-PLY GIRDER TRUSS TO HAVE (2) SIMPSON "HETA20" STRAPS FOR REACTIONS UP TO 3.500 LB. @ EACH BEARING POINT, & TYPICAL 1-PLY GIRDER TRUSS TO HAVE SIMPSON (2) SIMPSON "HETA20" STRAPS & (2) SIMPSON "HETW20" STRAPS @ EACH BEARING POINT FOR REACTIONS UP TO 3.900 LB., TYP. (U.N.O.)
12. TRUSS MANUF. NOTE: ALL TRUSS OVERFRAMING MEMBERS & ALL TRUSS TO TRUSS CONNECTIONS TO BE DESIGNED & DETAILED BY TRUSS ENGINEER, COORD. TRUSS PROFILES w/ ARCH. DWGS., TYP.

Roof Framing Plan

- A. SEE SHEET "S0.01" FOR GENERAL STRUCTURAL NOTES, TYP.
- B. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, SLOPES, & FINISHES, TYPICALLY.
- C. SEE SHEETS "S2.02" FOR TRUSS FRAMING DESIGN CRITERIA, COMPONENT & CLADDING WIND PRESSURE TABLE, & GENERAL TRUSS DETAILING, TYP.



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REVISION SCHEDULE

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PLS Town Place Partners
**TOWN PLACE at PORT ST
LUCIE**

Building C
High Roof Framing Plan

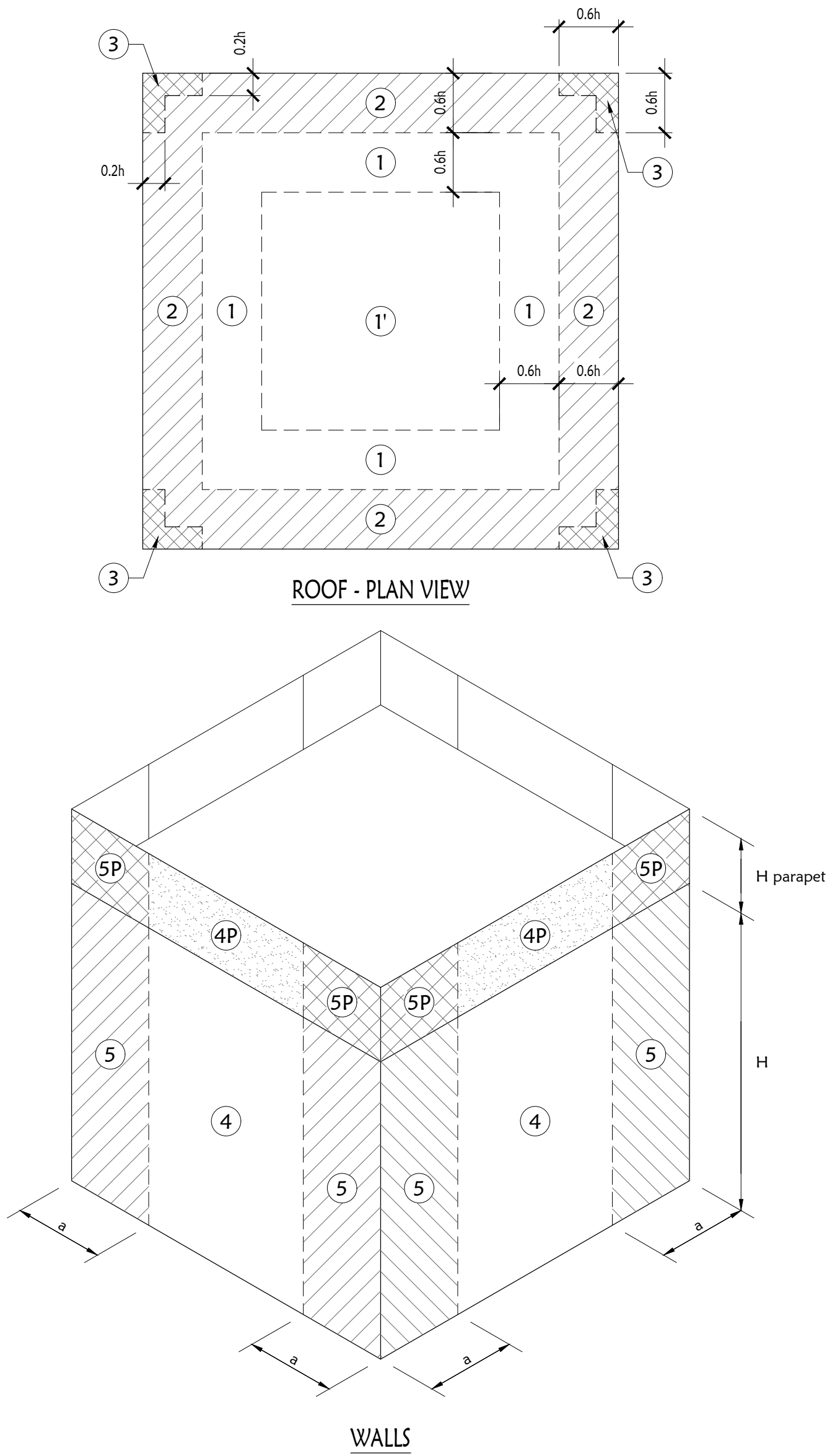
project number	23-01
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ate 11/05/202

Drawn by	TLV
Checked by	RC

S1.13c

cale	AS NOTE
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Component & Cladding Wind Pressures for 1-Story Buildings (Flat Roof)						
Ultimate Wind Speed Vult = 160 MPH (VASD = 124 MPH) Exp C				Mean Roof Height = 20.0 Feet		
Zone	Tributary Area (SF)	Ultimate Design Wind Pressure (LRFD)		Nominal Design Wind Pressure (ASD)		
		Positive Pressure	Negative Pressures	Positive Pressure	Negative Pressures	
Roof	1	10	+ 23.8 PSF	- 93.6 PSF	+ 14.3 PSF	- 56.1 PSF
	1	20	+ 22.3 PSF	- 87.4 PSF	+ 13.4 PSF	- 52.4 PSF
	1	50	+ 20.3 PSF	- 79.2 PSF	+ 12.2 PSF	- 47.5 PSF
	1	100	+ 18.8 PSF	- 70.5 PSF	+ 11.3 PSF	- 42.3 PSF
	1'	10	+ 23.8 PSF	- 123.4 PSF	+ 14.3 PSF	- 74.0 PSF
	1'	20	+ 22.3 PSF	- 115.5 PSF	+ 13.4 PSF	- 69.3 PSF
	1'	50	+ 20.3 PSF	- 105.0 PSF	+ 12.2 PSF	- 63.0 PSF
	1'	100	+ 18.8 PSF	- 93.8 PSF	+ 11.3 PSF	- 56.3 PSF
	2*	10	+ 23.8 PSF	- 123.4 PSF	+ 14.3 PSF	- 74.0 PSF
	2*	20	+ 22.3 PSF	- 115.5 PSF	+ 13.4 PSF	- 69.3 PSF
	2*	50	+ 20.3 PSF	- 105.0 PSF	+ 12.2 PSF	- 63.0 PSF
	2*	100	+ 18.8 PSF	- 93.8 PSF	+ 11.3 PSF	- 56.3 PSF
	3*	10	+ 53.4 PSF	- 167.2 PSF	+ 32.1 PSF	- 100.3 PSF
	3*	20	+ 51.1 PSF	- 151.4 PSF	+ 30.6 PSF	- 90.9 PSF
	3*	50	+ 47.9 PSF	- 130.6 PSF	+ 28.8 PSF	- 78.4 PSF
	3*	100	+ 44.6 PSF	- 108.3 PSF	+ 26.8 PSF	- 65.0 PSF

* END ZONE a = 6.0 FT

Walls	4	10	+ 53.7 PSF	- 58.2 PSF	+ 32.2 PSF	- 34.9 PSF
	4	20	+ 51.4 PSF	- 55.8 PSF	+ 30.8 PSF	- 33.5 PSF
	4	50	+ 48.2 PSF	- 52.2 PSF	+ 28.9 PSF	- 31.3 PSF
	4	100	+ 44.9 PSF	- 49.3 PSF	+ 26.9 PSF	- 29.6 PSF
	5*	10	+ 53.7 PSF	- 71.7 PSF	+ 32.2 PSF	- 43.0 PSF
	5*	20	+ 51.4 PSF	- 66.9 PSF	+ 30.8 PSF	- 40.1 PSF
	5*	50	+ 48.2 PSF	- 60.6 PSF	+ 28.9 PSF	- 36.4 PSF
	5*	100	+ 44.9 PSF	- 53.9 PSF	+ 26.9 PSF	- 32.3 PSF

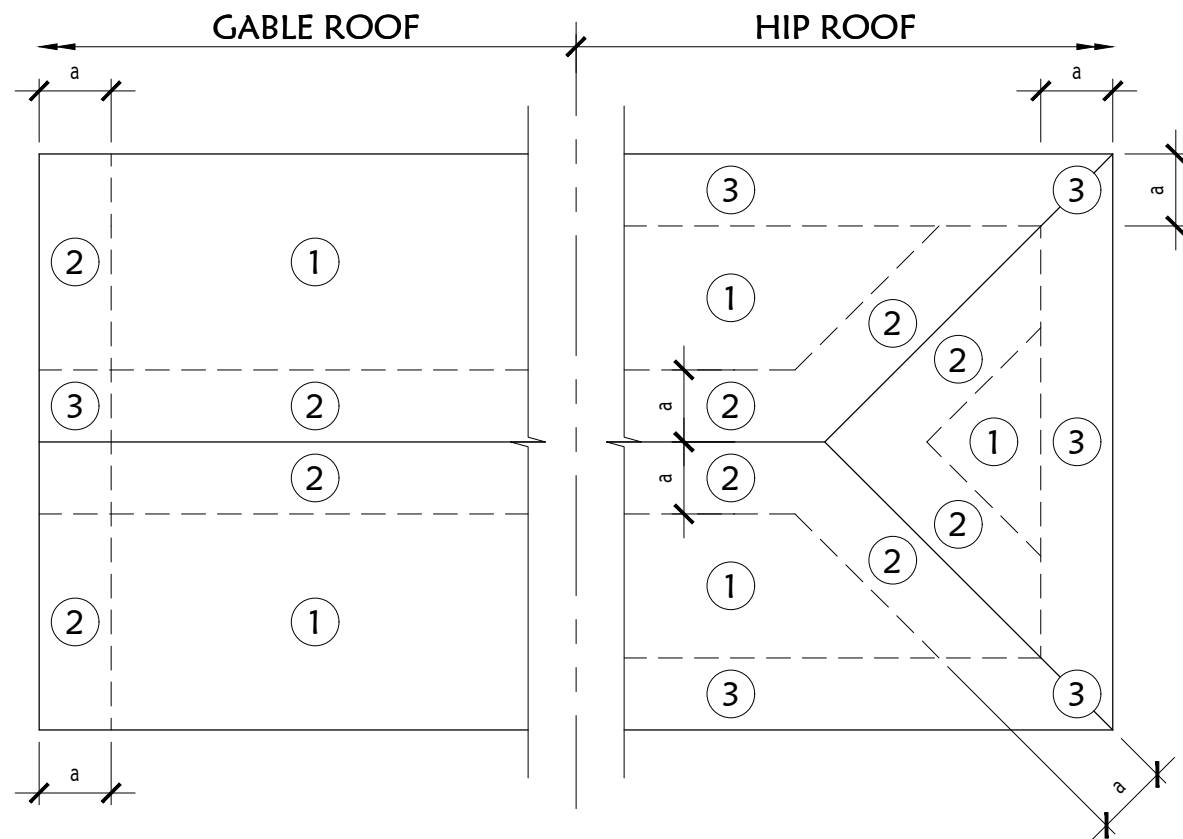
* END ZONE a = 6 FT

Zone	Wind Load Case	Ultimate Design Wind Pressure (LRFD)		Nominal Design Wind Pressure (ASD)	
		Positive Pressure	Negative Pressures	Positive Pressure	Negative Pressures
Parapets	4P Load Case A	+ 45.1 PSF	- 49.9 PSF	+ 27.1 PSF	- 29.9 PSF
	5P Load Case A	+ 45.1 PSF	- 61.6 PSF	+ 27.1 PSF	- 37.0 PSF
	4P Load Case B	+ 45.1 PSF	- 113.3 PSF	+ 27.1 PSF	- 68.0 PSF
	5P Load Case B	+ 45.1 PSF	- 113.3 PSF	+ 27.1 PSF	- 68.0 PSF

* END ZONE a = 6 FT

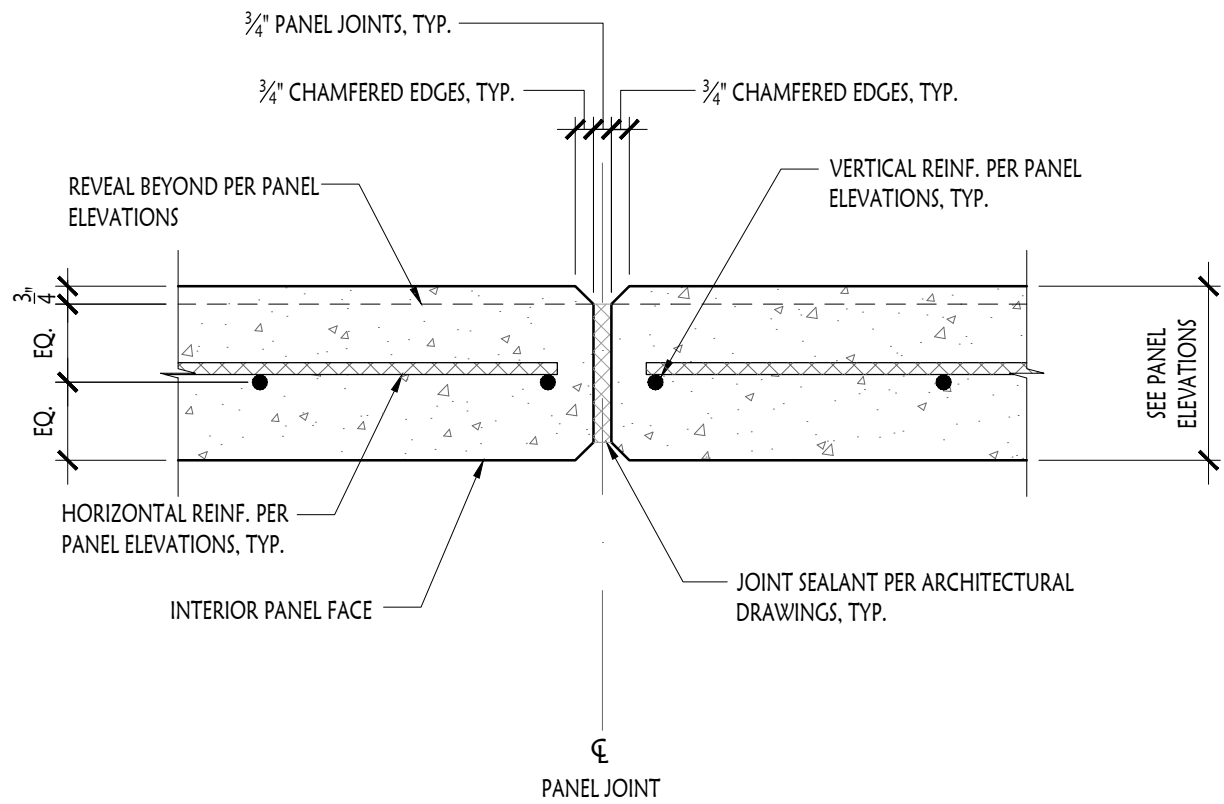
Component & Cladding Wind Pressures for 1-Story Building (High Roof)						
Ultimate Wind Speed Vult - 160 MPH/Nominal Wind Speed: VASD = 124 MPH				Mean Roof Height = 32.5 Feet		
Zone		Tributary Area (SF)	Ultimate Design Wind Pressure (LRFD)		Nominal Design Wind Pressure (ASD)	
			Positive Pressure	Negative Pressures	Positive Pressure	Negative Pressures
Sloped Roof	1	10	+ 48.8 PSF	- 109.9 PSF	+ 29.3 PSF	- 65.9 PSF
	1	20	+ 42.2 PSF	- 97.0 PSF	+ 25.3 PSF	- 58.2 PSF
	1	50	+ 33.3 PSF	- 80.1 PSF	+ 20.0 PSF	- 48.0 PSF
	1	100	+ 26.6 PSF	- 61.9 PSF	+ 16.0 PSF	- 37.1 PSF
	2*	10	+ 48.8 PSF	- 143.2 PSF	+ 29.3 PSF	- 85.9 PSF
	2*	20	+ 42.2 PSF	- 129.0 PSF	+ 25.3 PSF	- 77.4 PSF
	2*	50	+ 33.3 PSF	- 110.4 PSF	+ 20.0 PSF	- 66.2 PSF
	2*	100	+ 26.6 PSF	- 90.4 PSF	+ 16.0 PSF	- 54.2 PSF
	3*	10	+ 48.8 PSF	- 154.3 PSF	+ 29.3 PSF	- 92.6 PSF
	3*	20	+ 42.2 PSF	- 138.9 PSF	+ 25.3 PSF	- 83.3 PSF
	3*	50	+ 33.3 PSF	- 118.5 PSF	+ 20.0 PSF	- 71.1 PSF
	3*	100	+ 26.6 PSF	- 96.7 PSF	+ 16.0 PSF	- 58.0 PSF

* END ZONE a = 5.0 FT

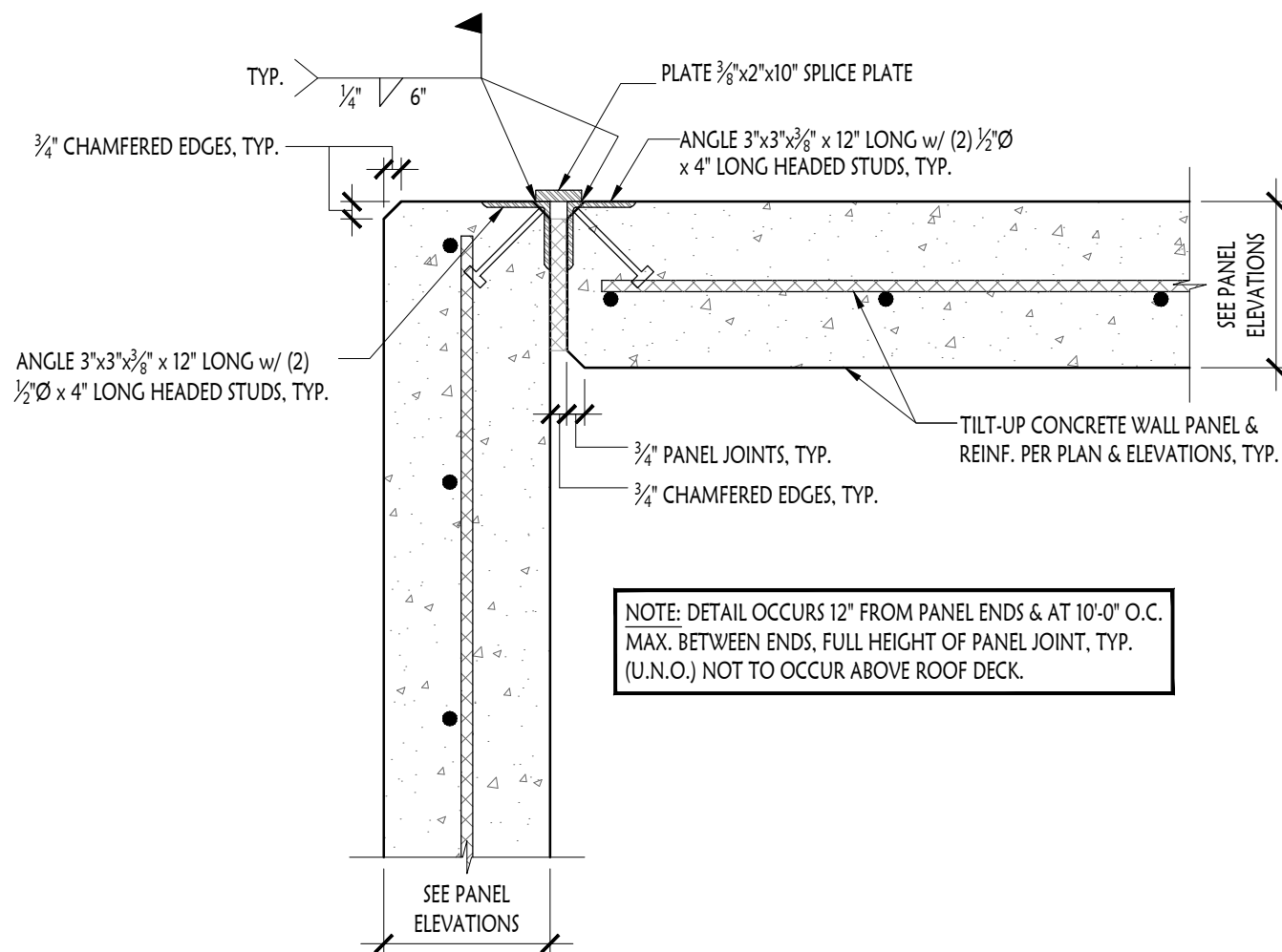


Revision Number	Revision Description	Revision Date
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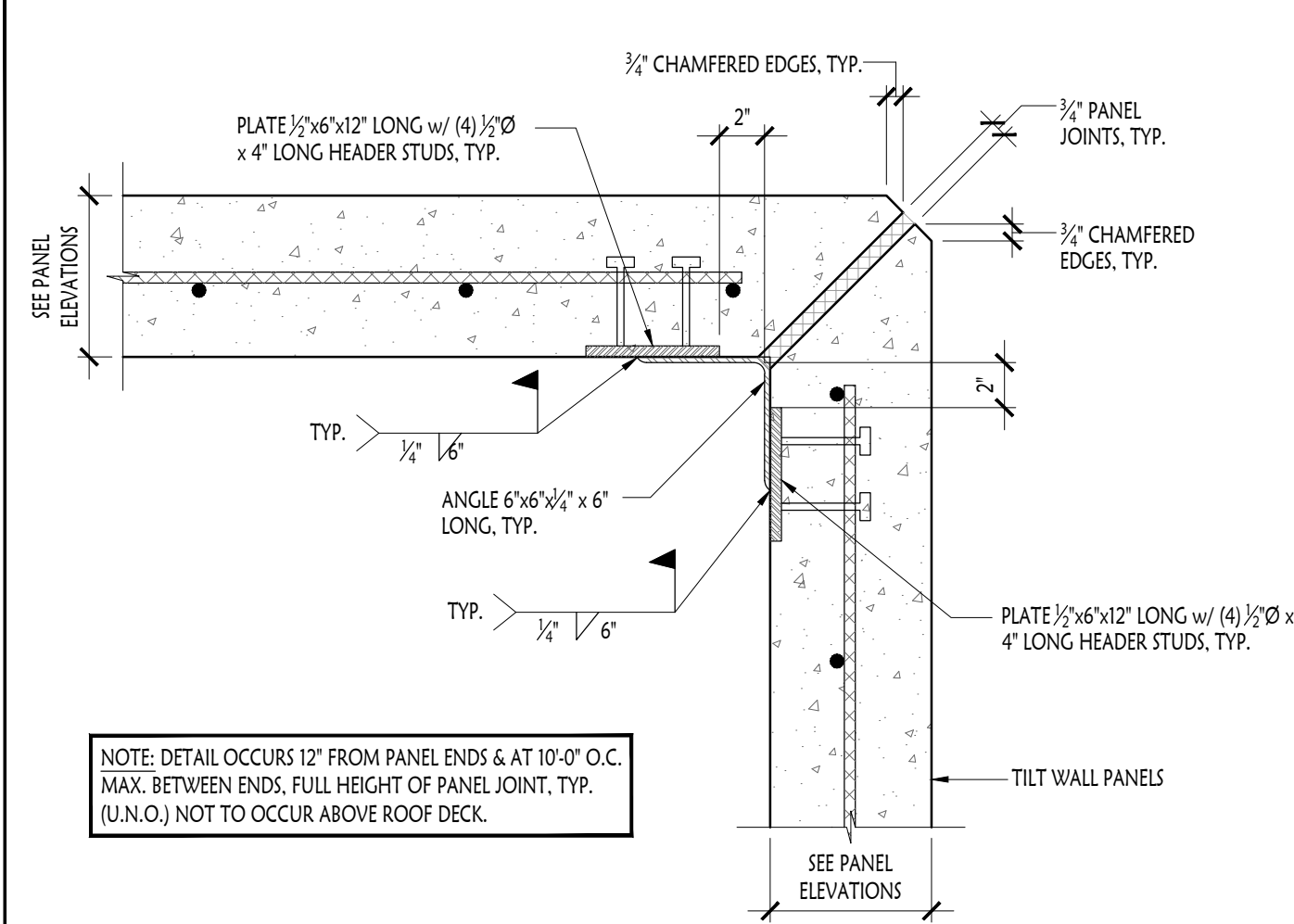
Project number	23-015
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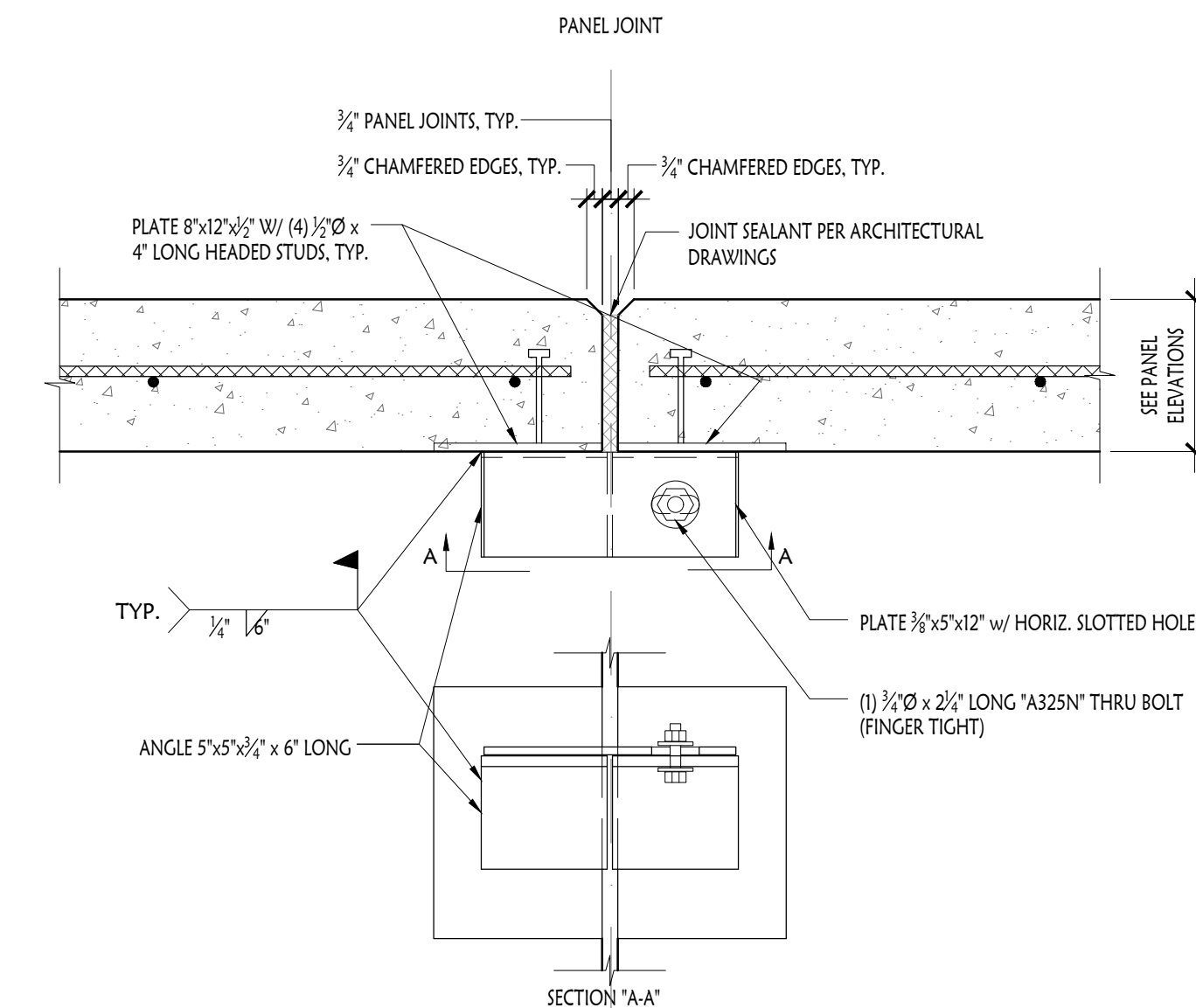
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S3.01 SCALE: 1/2" = 1'-0"



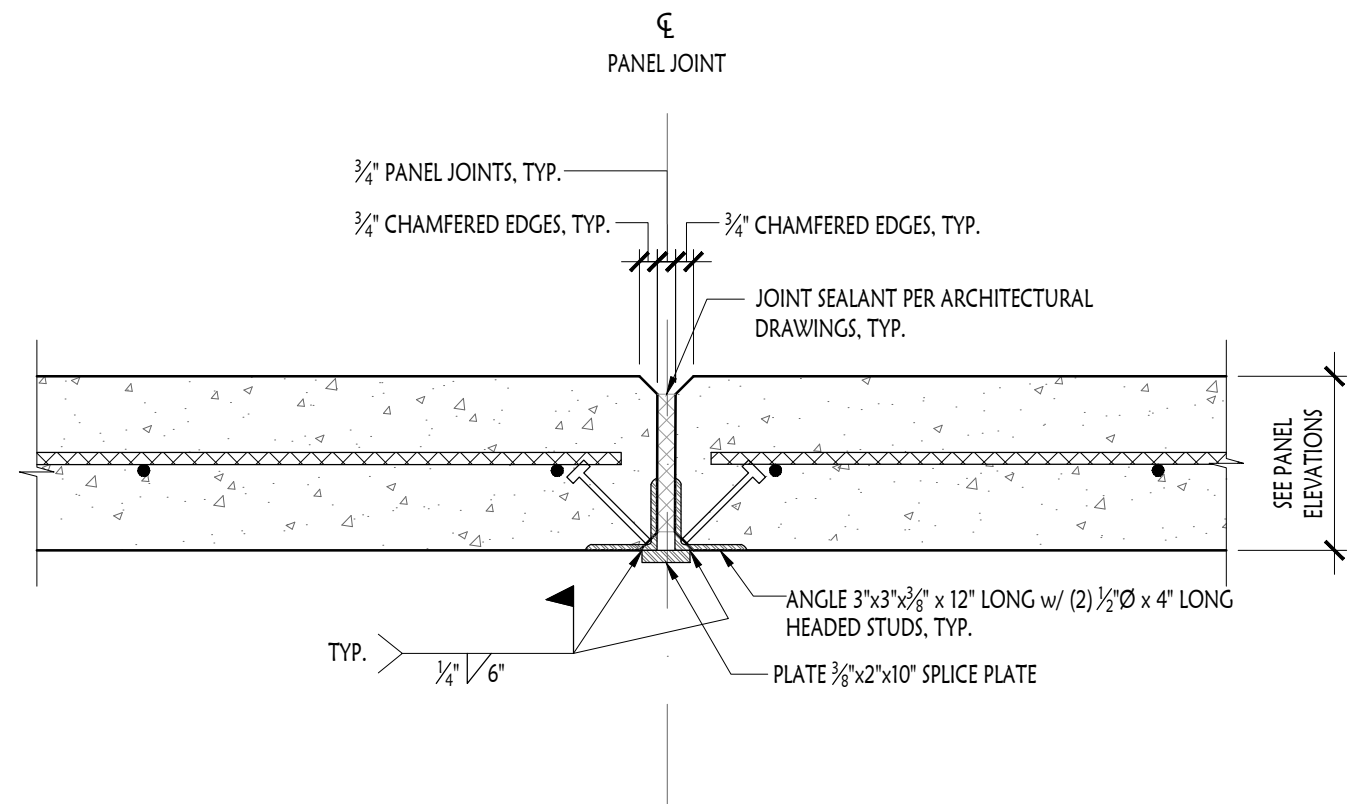
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S3.01 SCALE: 1/2" = 1'-0"



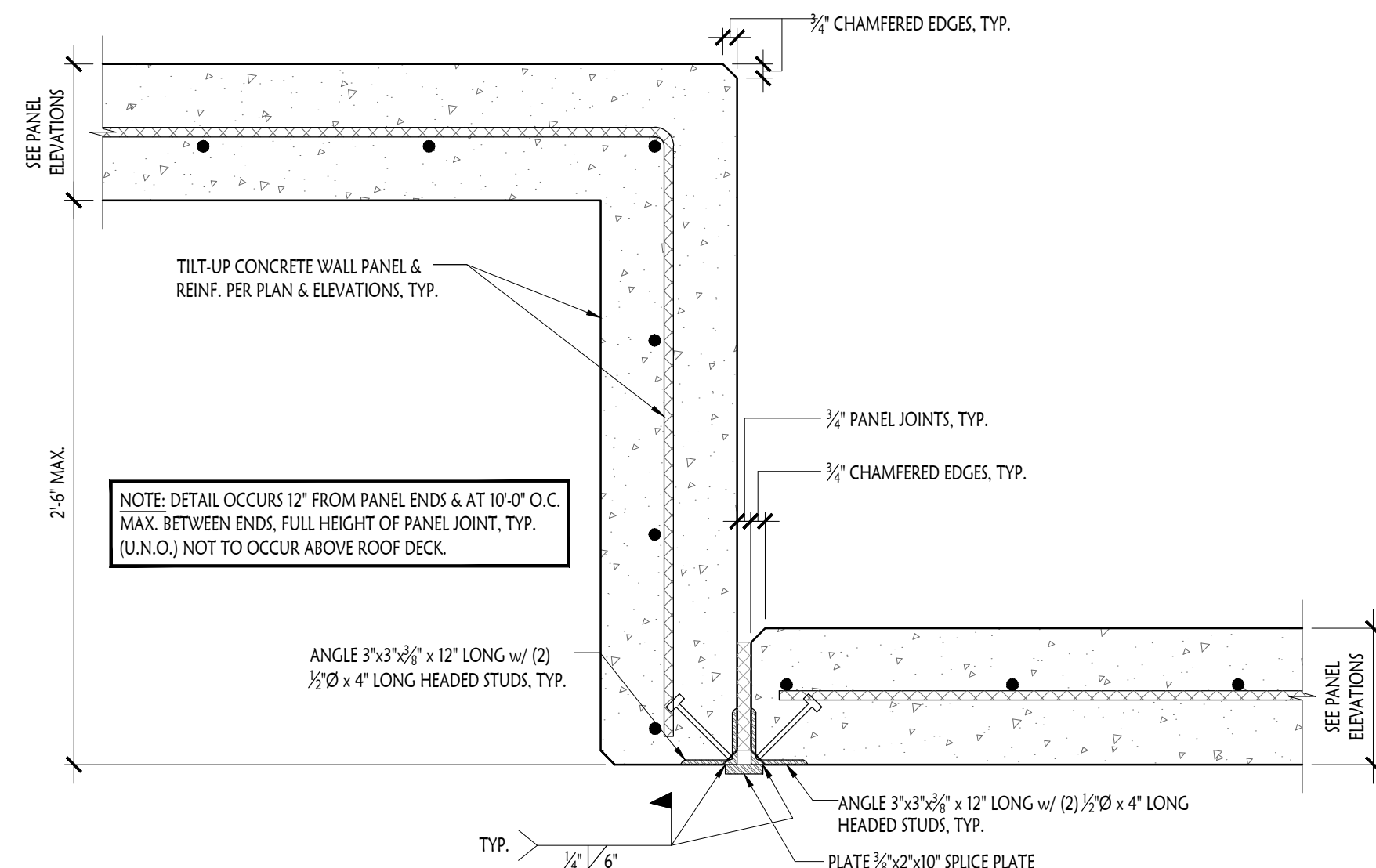
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S3.01 SCALE: 1/2" = 1'-0"



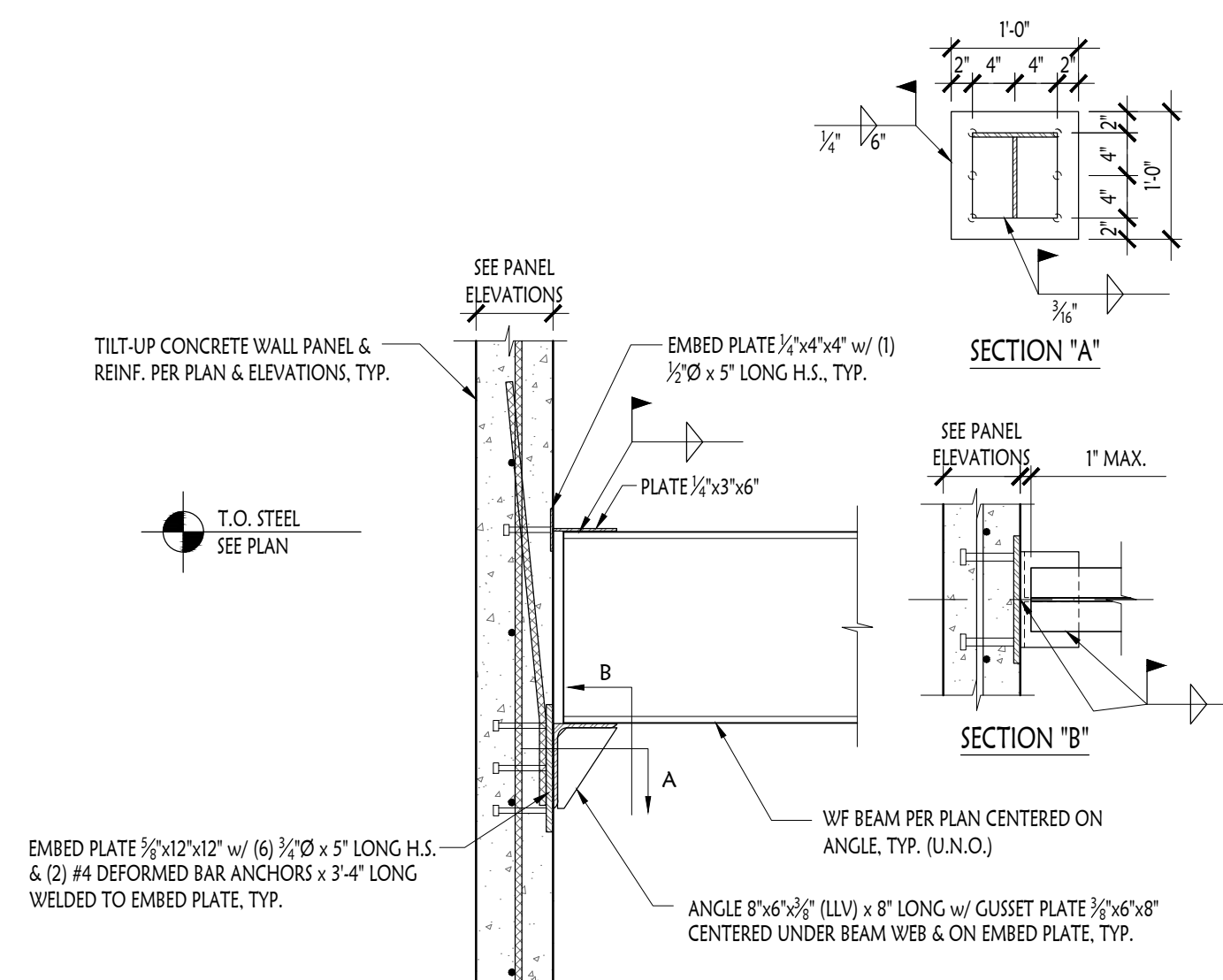
4 Panel Connections @ Joist Bearing
S3.01 SCALE: 1/2" = 1'-0"



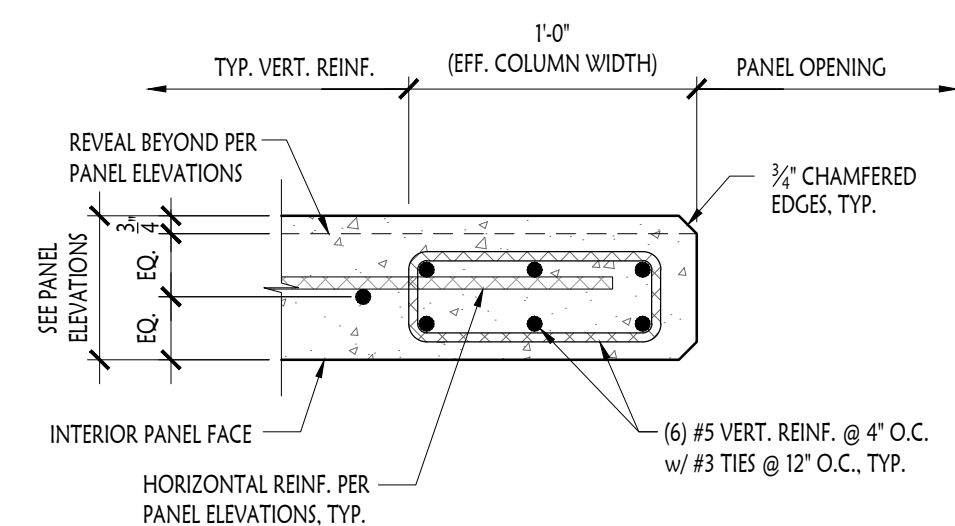
5 Typical Panel to Panel Connection
S3.01 SCALE: 1/2" = 1'-0"



6 Outside Panel to Panel Connection @ Corner
S3.01 SCALE: 1/2" = 1'-0"



7 Typical WF Beam Bearing @ Panel
S3.01 SCALE: 3/4" = 1'-0"



8 Panel Column Reinforcing Section
S3.01 SCALE: 1/2" = 1'-0"



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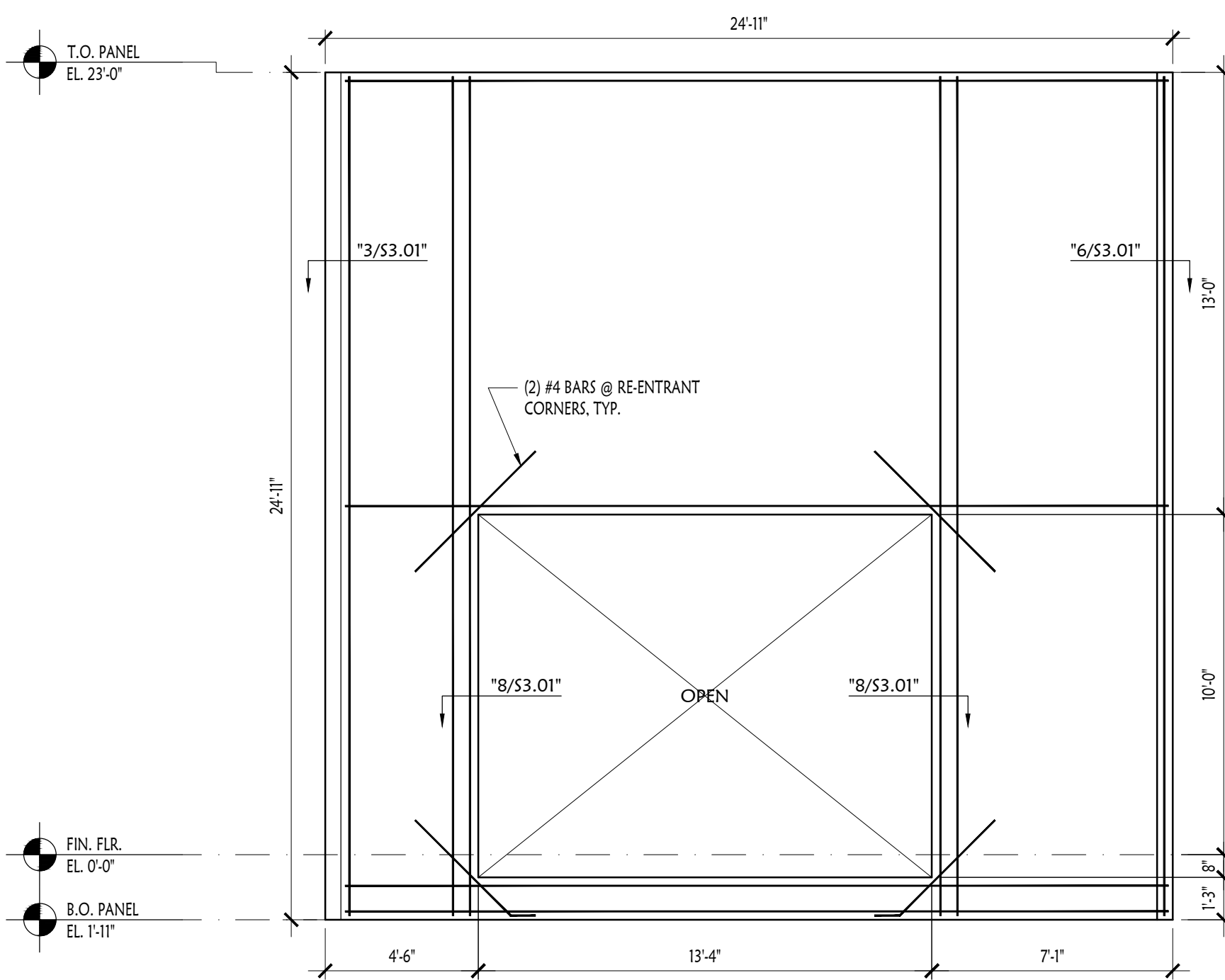
REVISION SCHEDULE		
Revision Number	Revision Description	Revision Date

PLS Town Place Partners
TOWN PLACE at PORT ST LUCIE

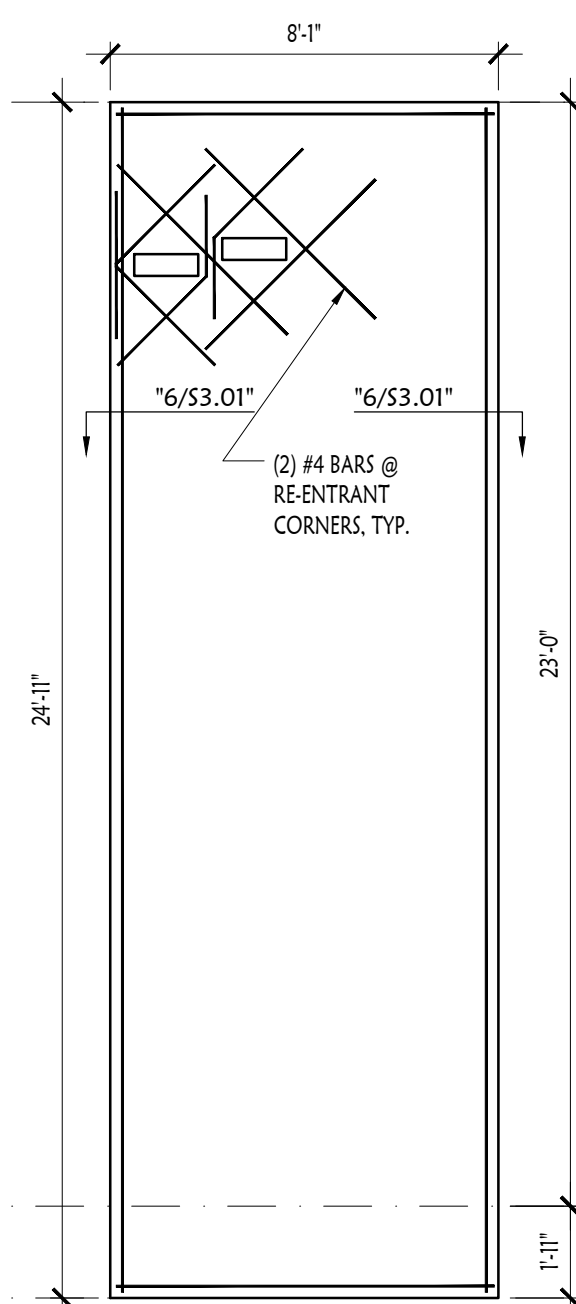
Structural Sections & Details

Project number	23-015
Date	11/05/2025
Drawn by	TLW
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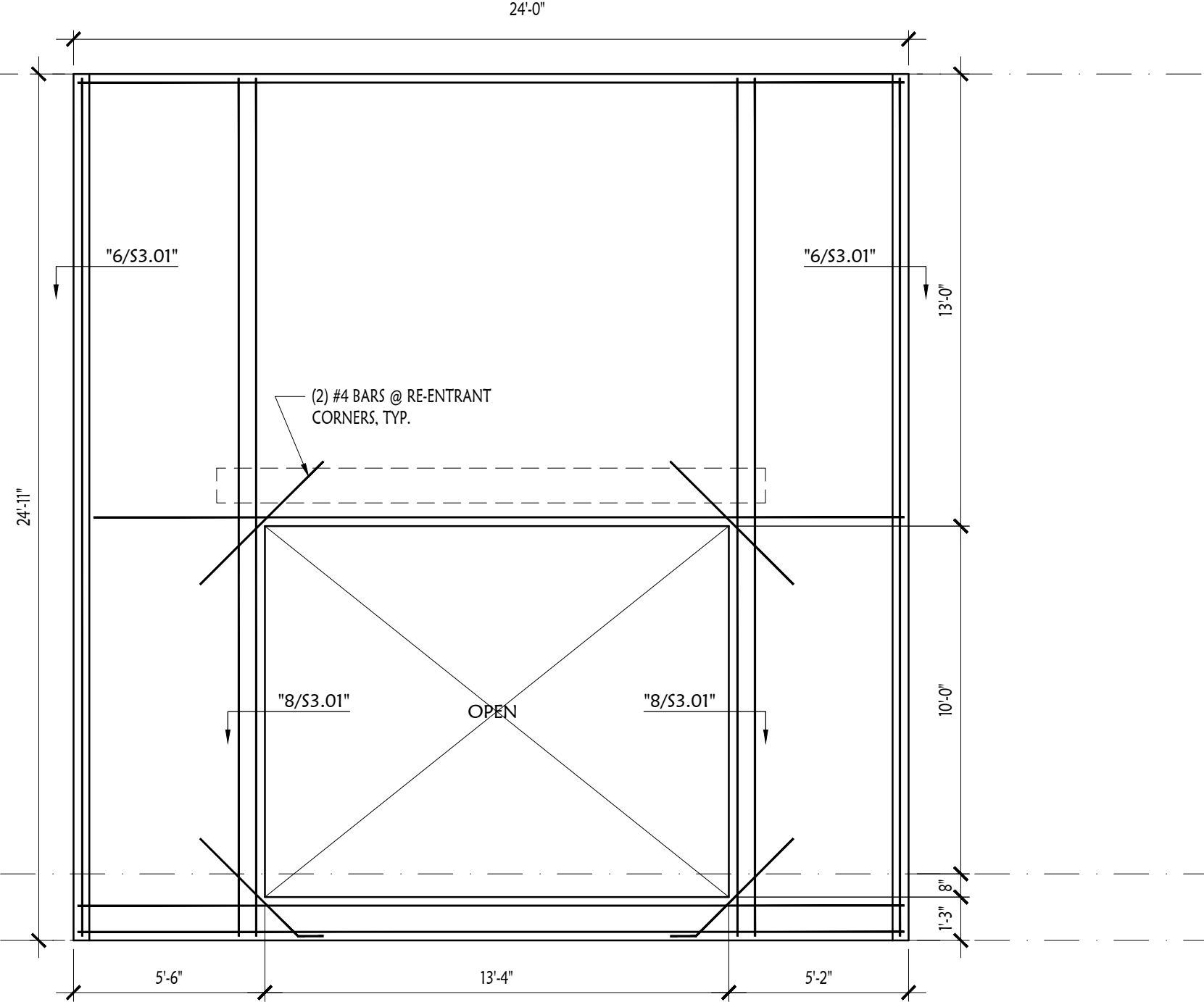
S3.01
Scale AS NOTED



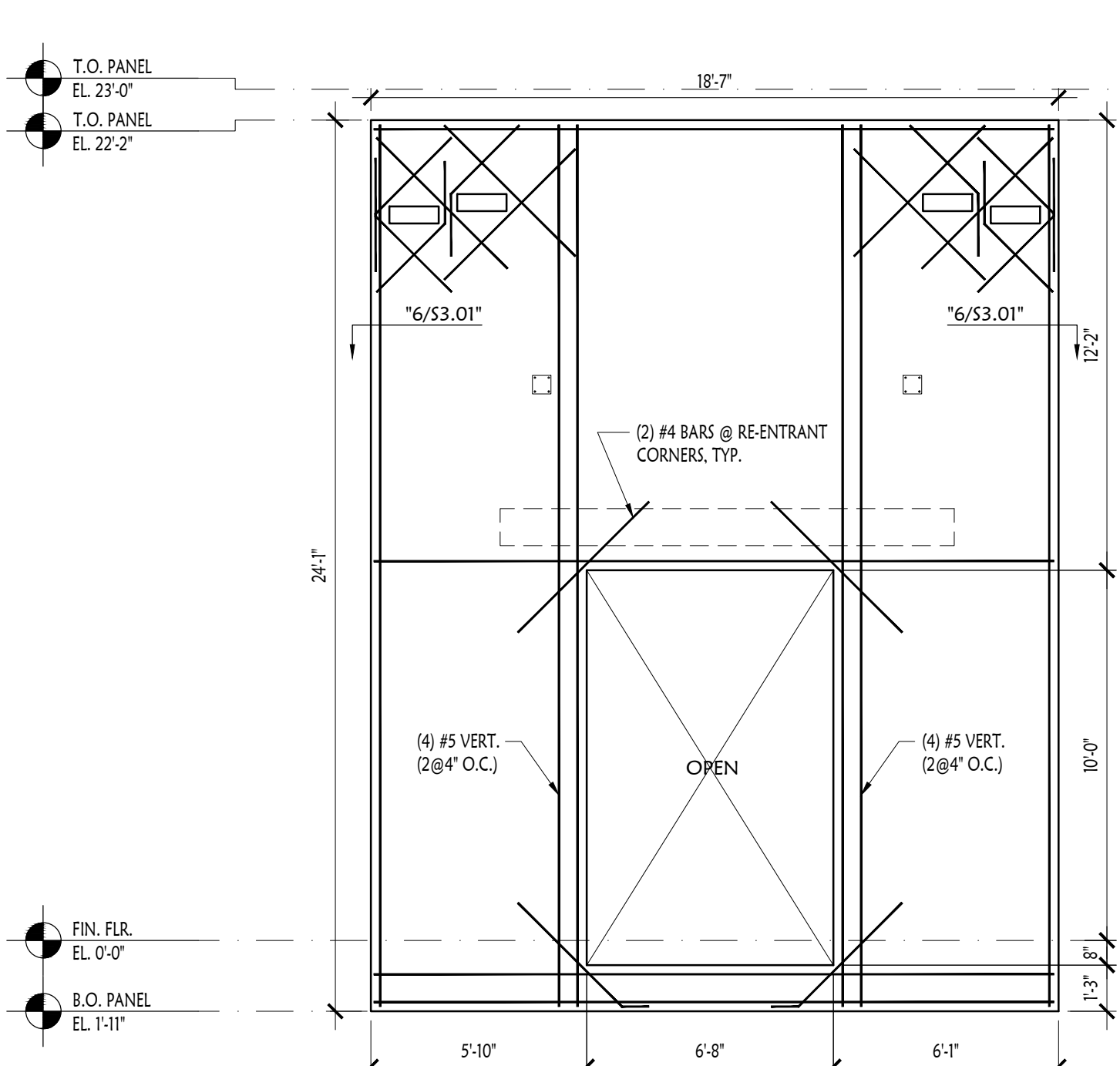
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S3.11c SCALE: 1/4" = 1'-0"



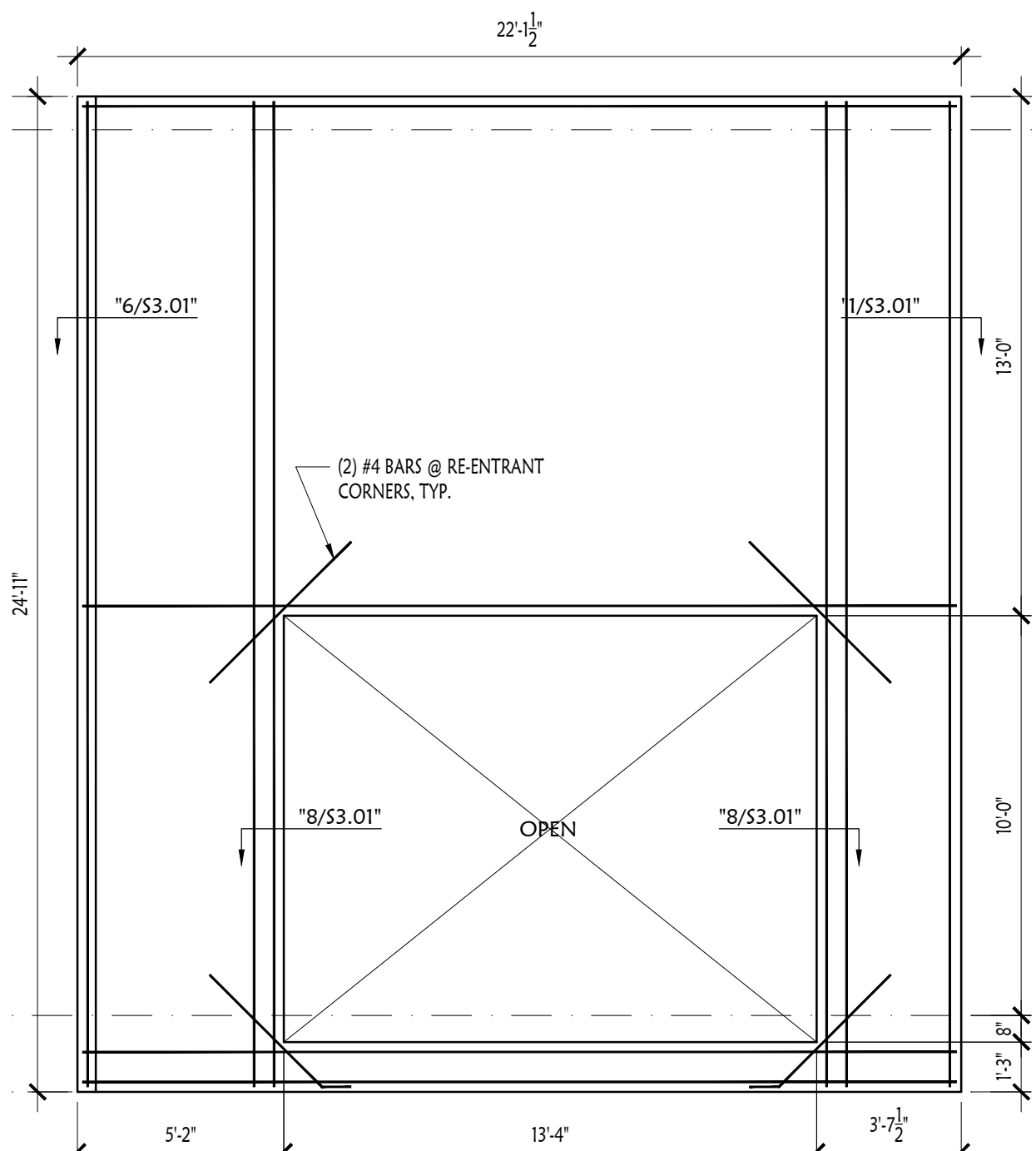
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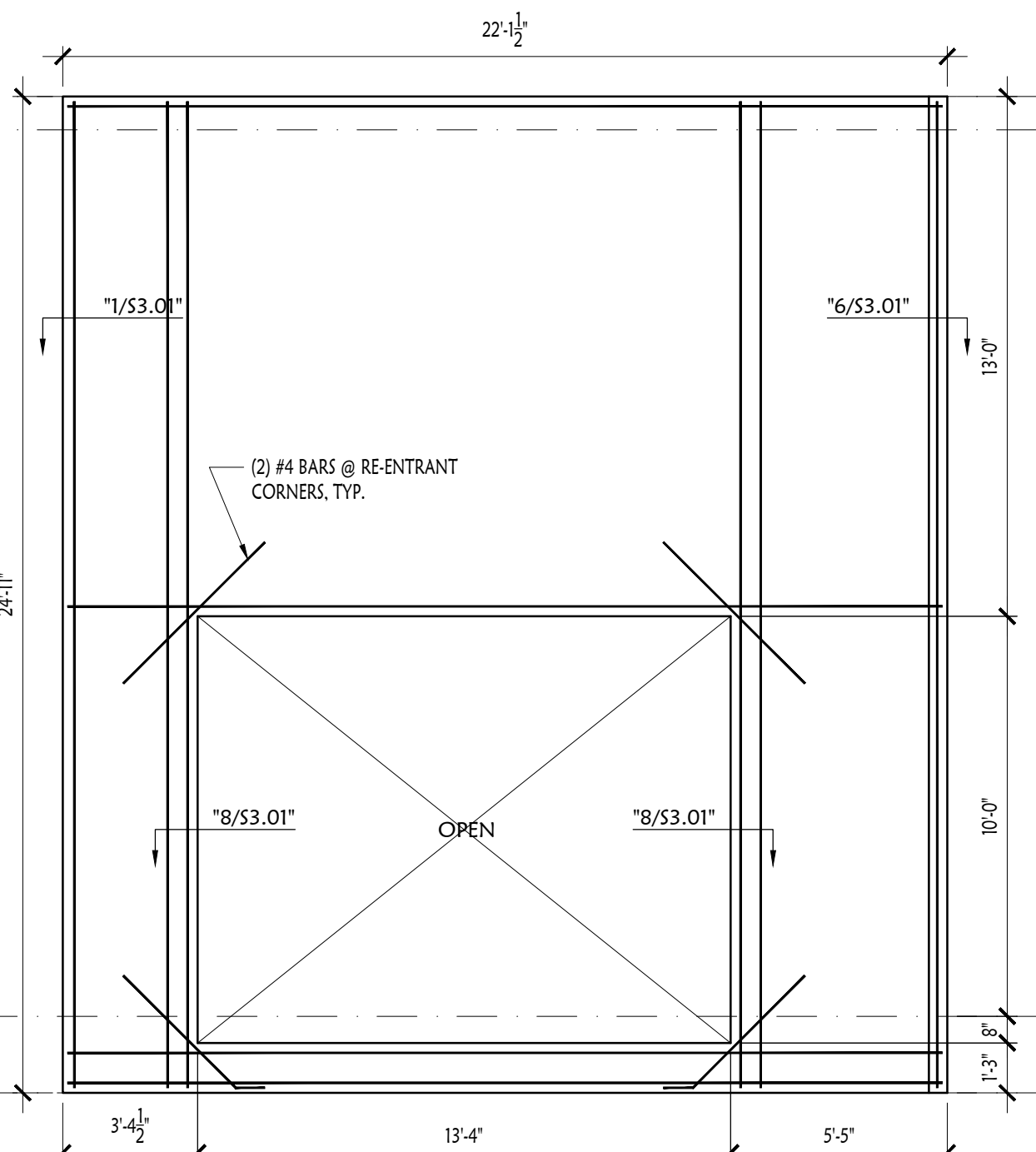
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S3.11c SCALE: 1/4" = 1'-0"



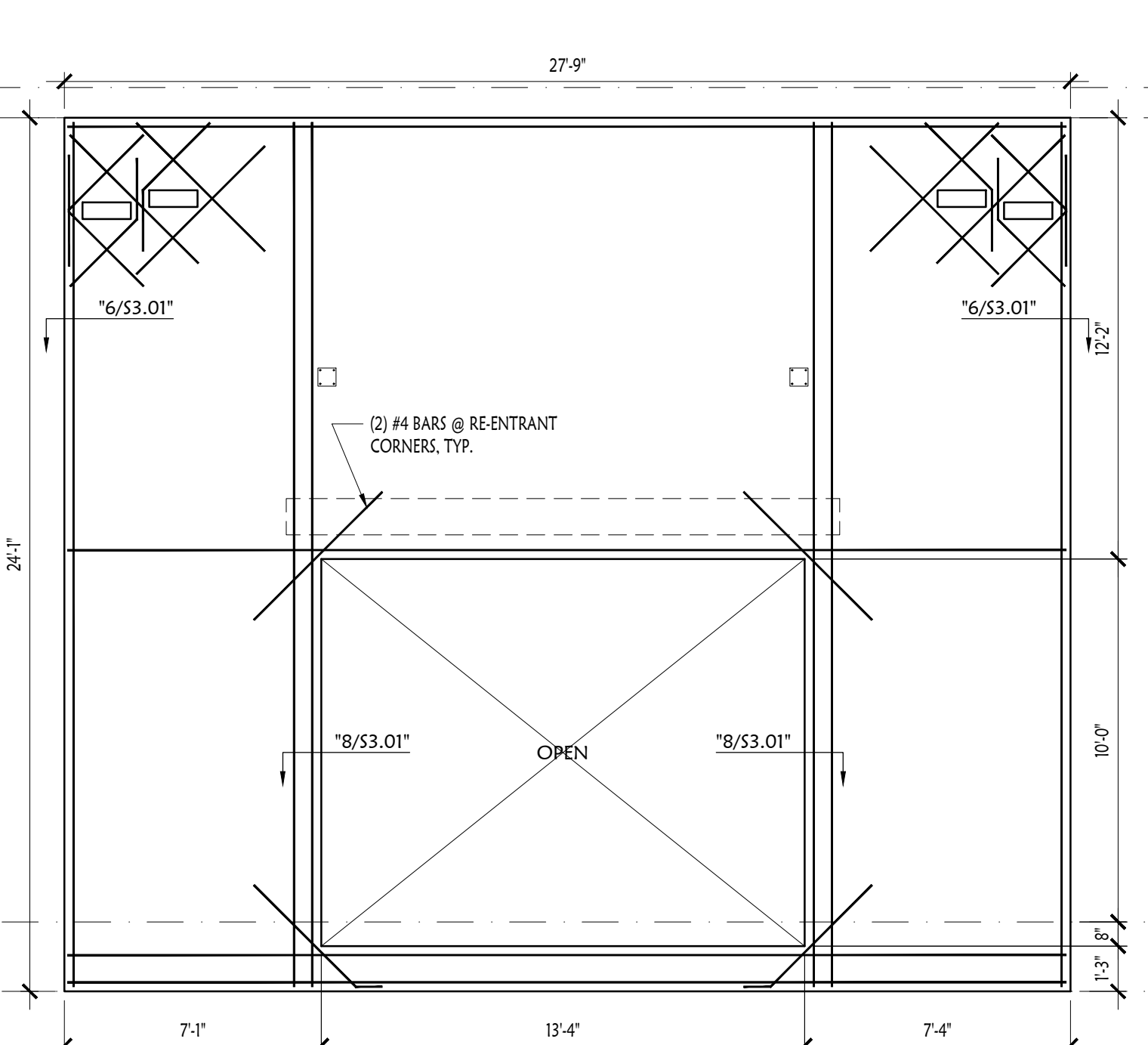
4 Panel Elevation "P-04c"
S3.11c SCALE: 1/4" = 1'-0"



5 Panel Elevation "P-05c"
S3.11c SCALE: 1/4" = 1'-0"



6 Panel Elevation "P-06c"
S3.11c SCALE: 1/4" = 1'-0"



7 Panel Elevation "P-07c"
S3.11c SCALE: 1/4" = 1'-0"

Typical Panel Elevation & Reinforcing Notes

- PANEL ELEVATIONS ARE SHOWN FROM THE INTERIOR OF THE BUILDING, TYP.
- ALL PANELS ARE TO BE 6" THICK 4,000 PSI (MIN.) CONCRETE, TYP. (U.N.O.) NOTE THAT 5/2" THICKNESS (2x6 FORMS) IS NOT ACCEPTABLE.
- ALL REINFORCING STEEL TO BE GRADE 60 KSI, TYP. (U.N.O.)
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- TYPICAL VERTICAL PANEL REINFORCING TO BE #5 @ 12" O.C. TYP. (U.N.O.)
- PROVIDE (2) #5 BARS @ 4" O.C. CONT. ALONG PANEL EDGES (TOP, BOTTOM, & SIDES) w/ CORNER BARS AS REQUIRED, TYP.
- PROVIDE (2) #5 BARS @ 4" O.C. AROUND ALL OPENINGS, EXTENDING 30" MIN. PAST EDGE OF OPENING, TYP.
- SLT-WALL PANELS TO BE 4,000 PSI (MIN.) CONCRETE, TYP. (U.N.O.)
- ALL PANEL JOINTS ARE TO BE 3/4" TYP. (U.N.O.)
- PROVIDE 3/4" CHAMFERS @ ALL EXPOSED EDGES, TYP. (U.N.O.)
- PANEL REVEALS TO BE A MAXIMUM OF 3/4" DEEP. COORD. ALL REVEAL LOCATIONS & DETAILING w/ ARCH. DWGS., TYP.
- AT STEEL BEAM EMBED LOCATIONS, PROVIDE (8) #4 VERTICAL BARS x 48" LONG @ 4" O.C. CENTERED ON EMBED PLATE IN 2 LAYERS OF 4 BARS (ONE EACH FACE), TYP.
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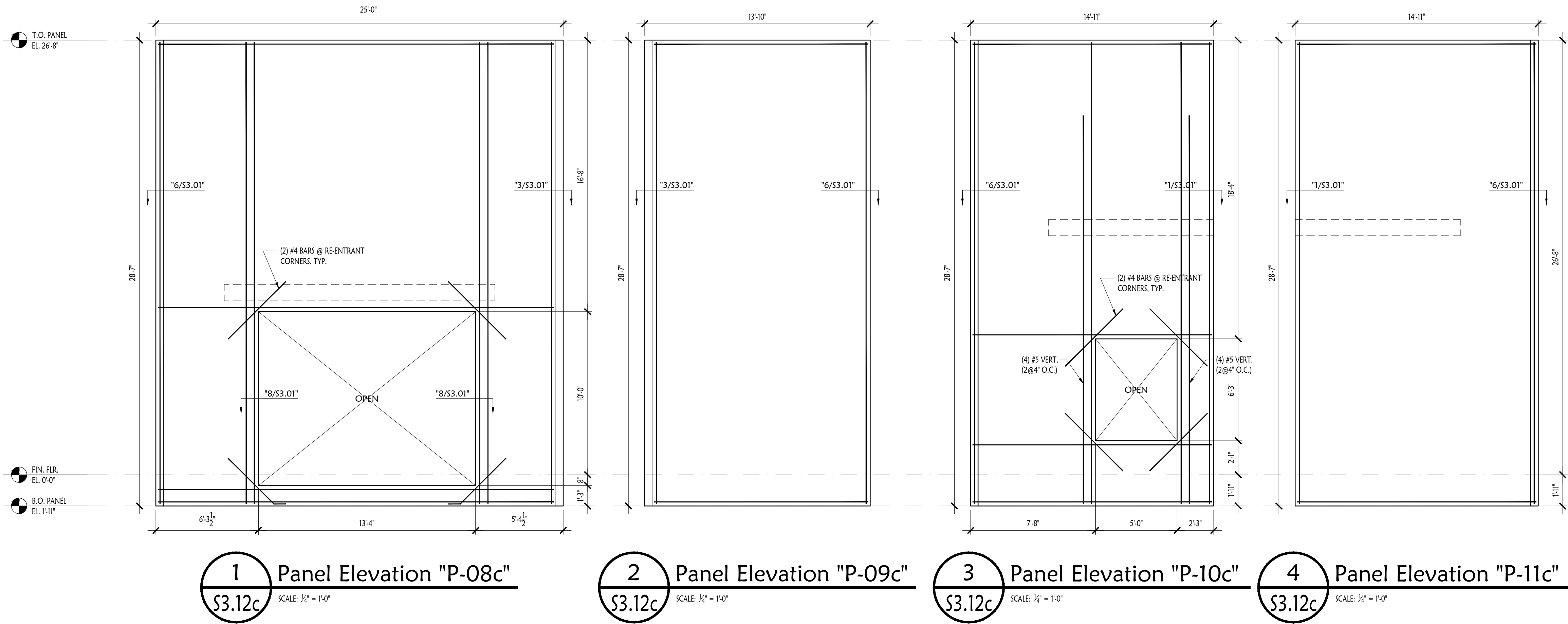
PLS Town Place Partners
TOWN PLACE at PORT ST LUCIE

Building C
Panel Elevations

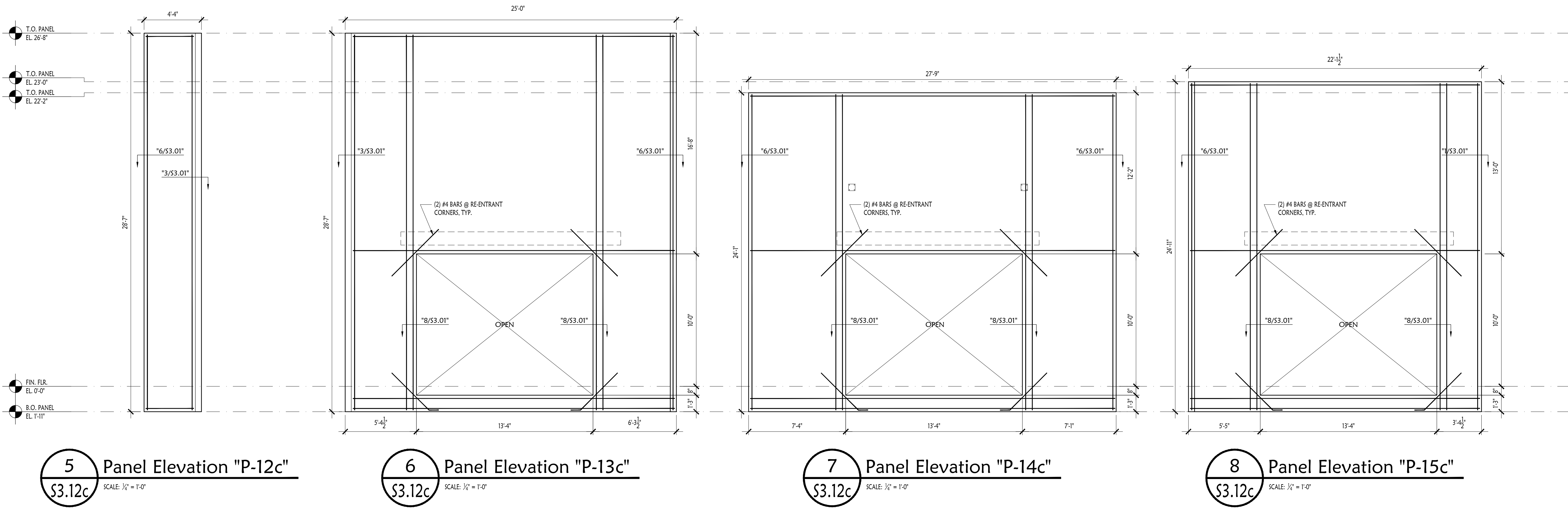
Project number	23-015
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Drawn by	TLW
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S3.11c

Scale AS NOTED



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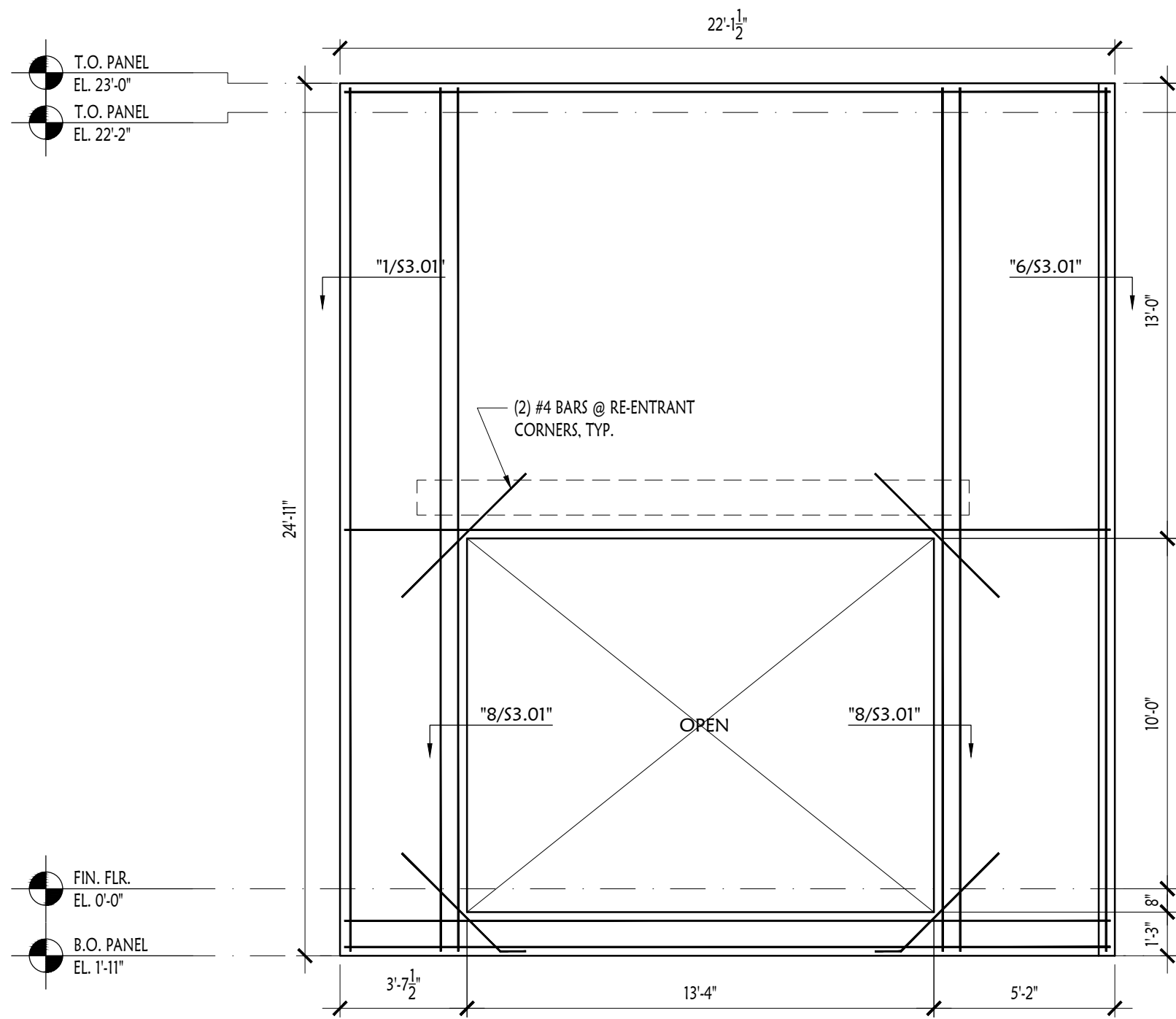
PLS Town Place Partners
TOWN PLACE at PORT ST LUCIE

Building C
Panel Elevations

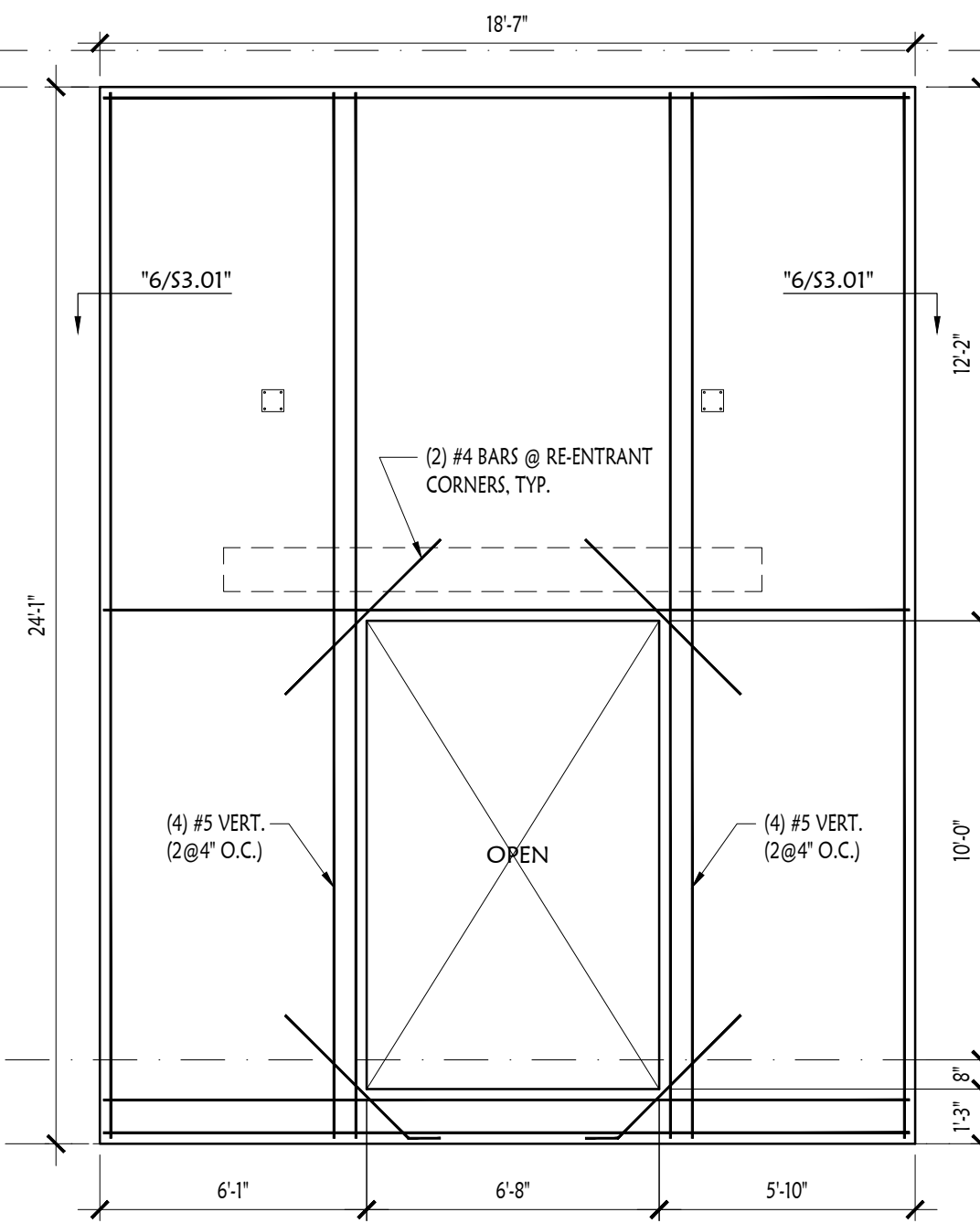
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S3.12c

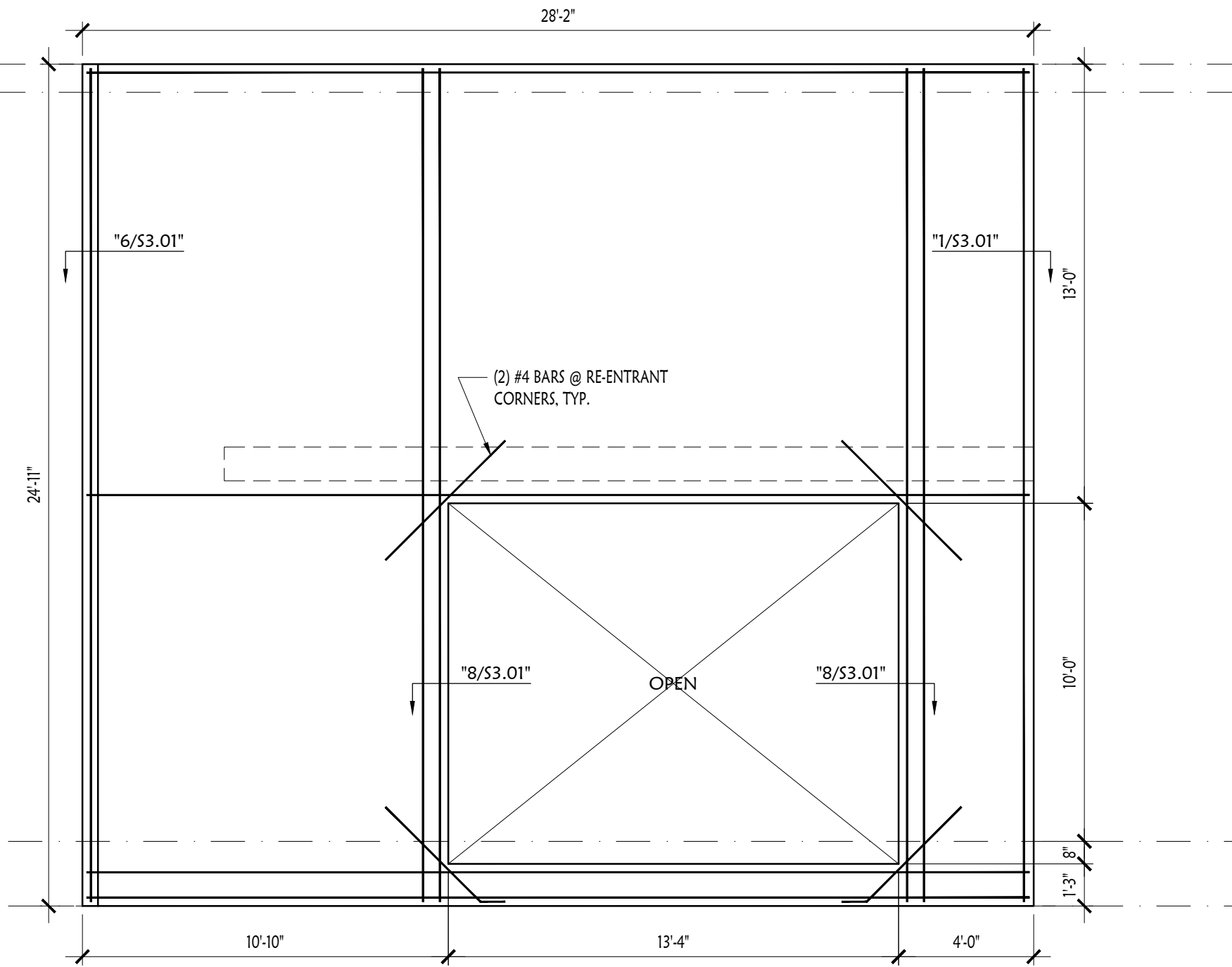
Scale AS NOTED



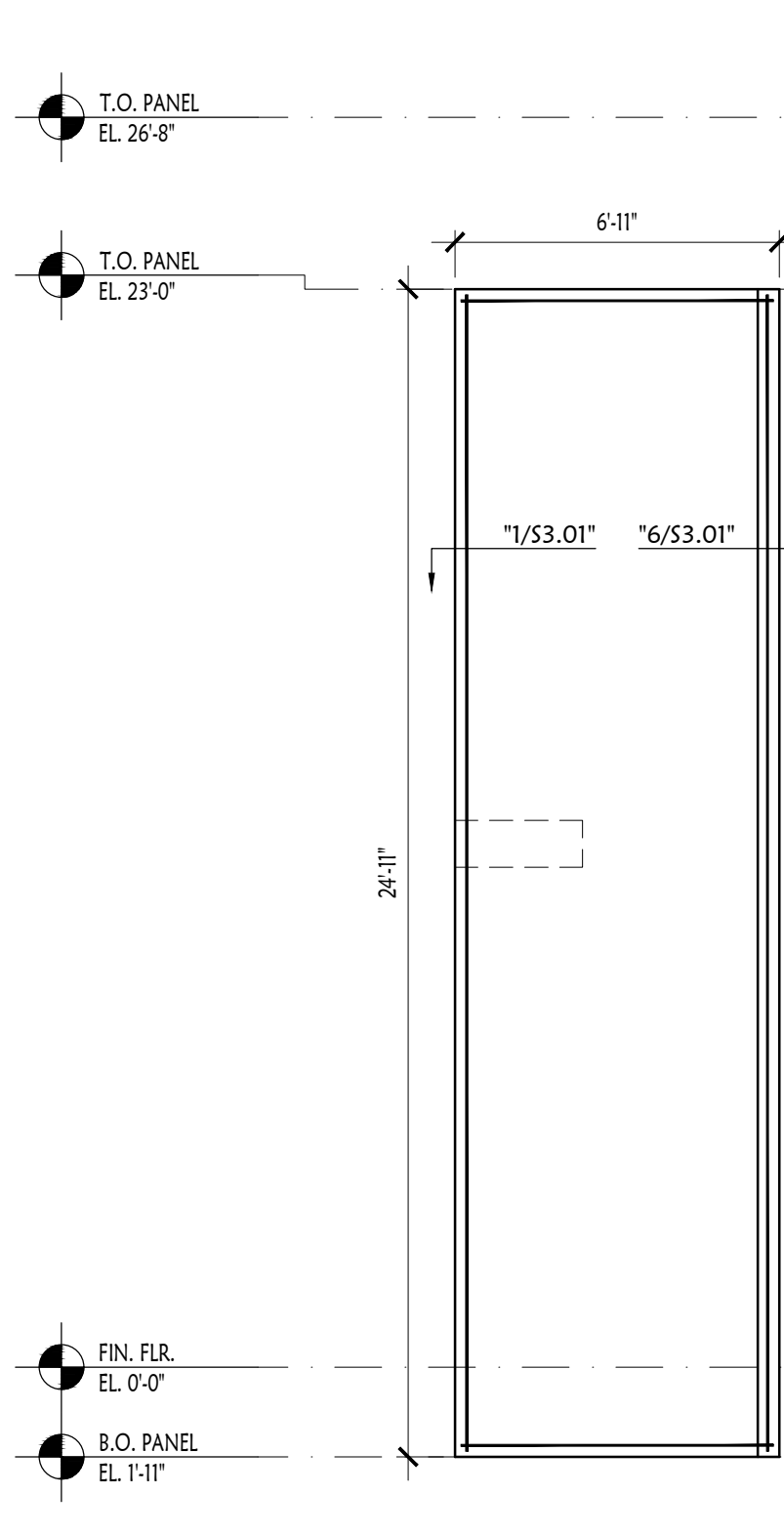
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S3.13c SCALE: 1/2" = 1'-0"



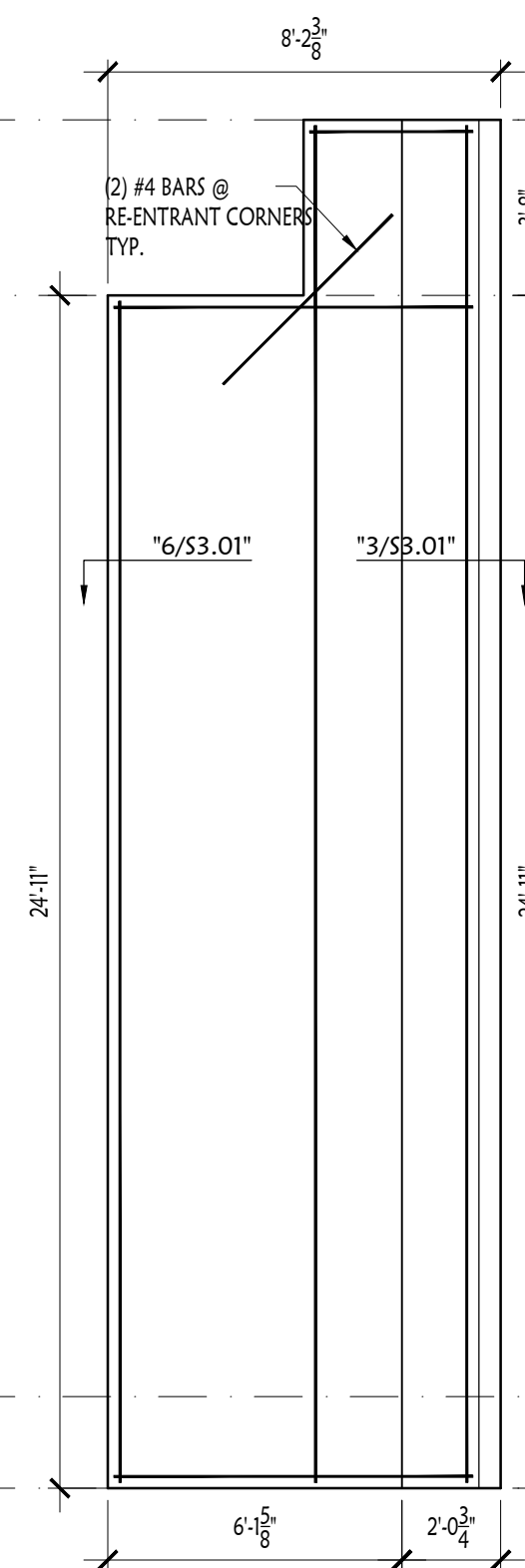
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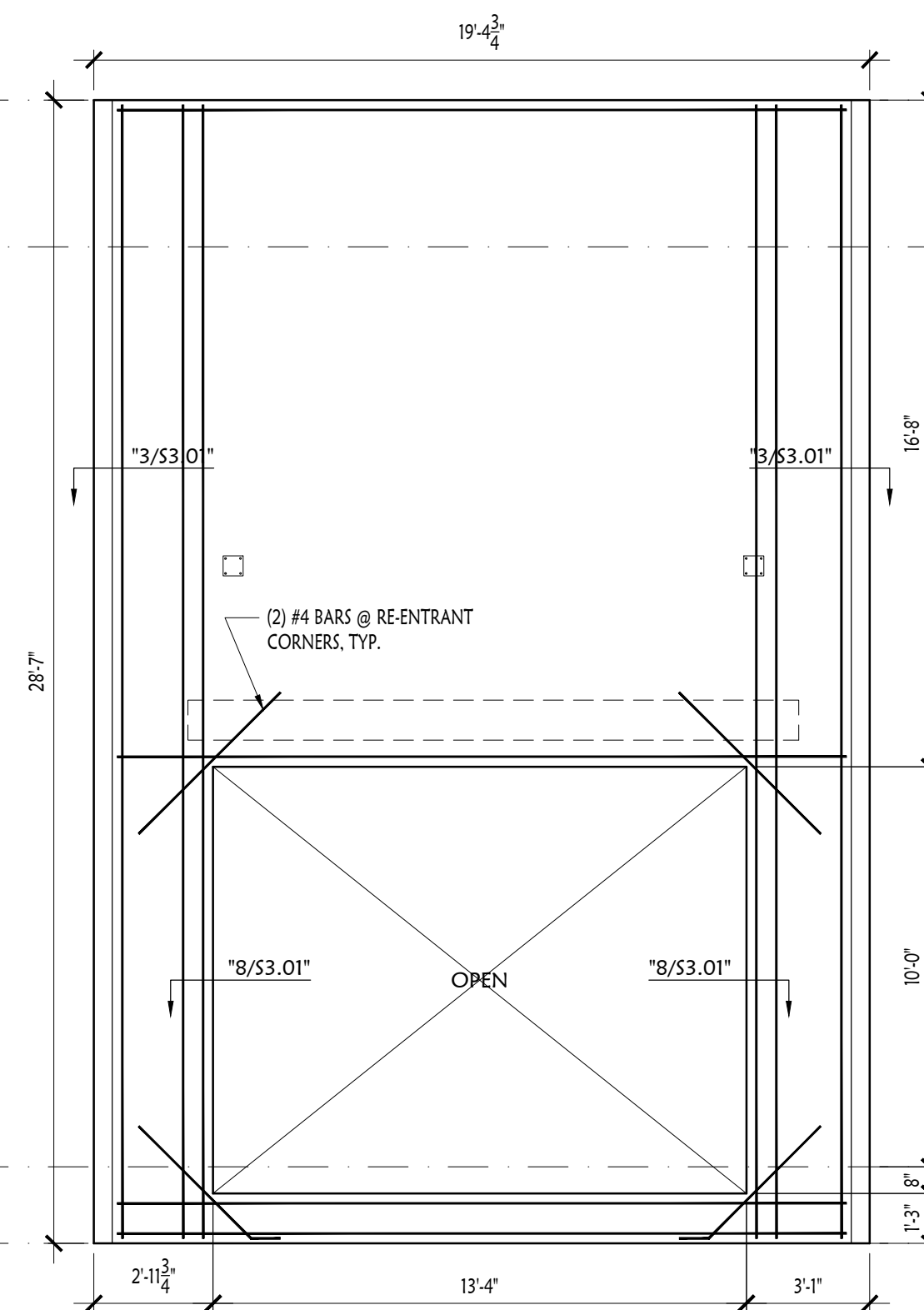
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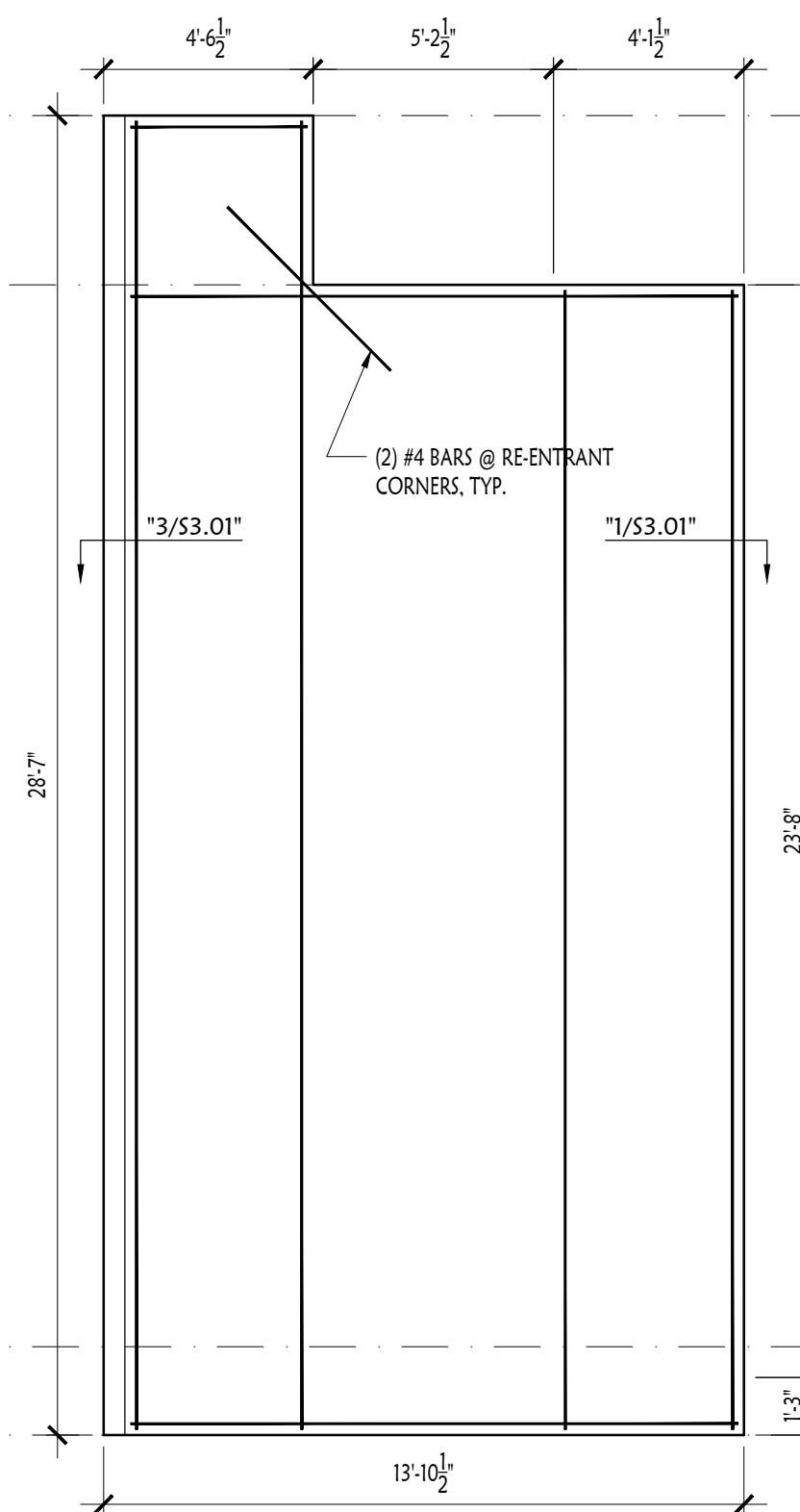
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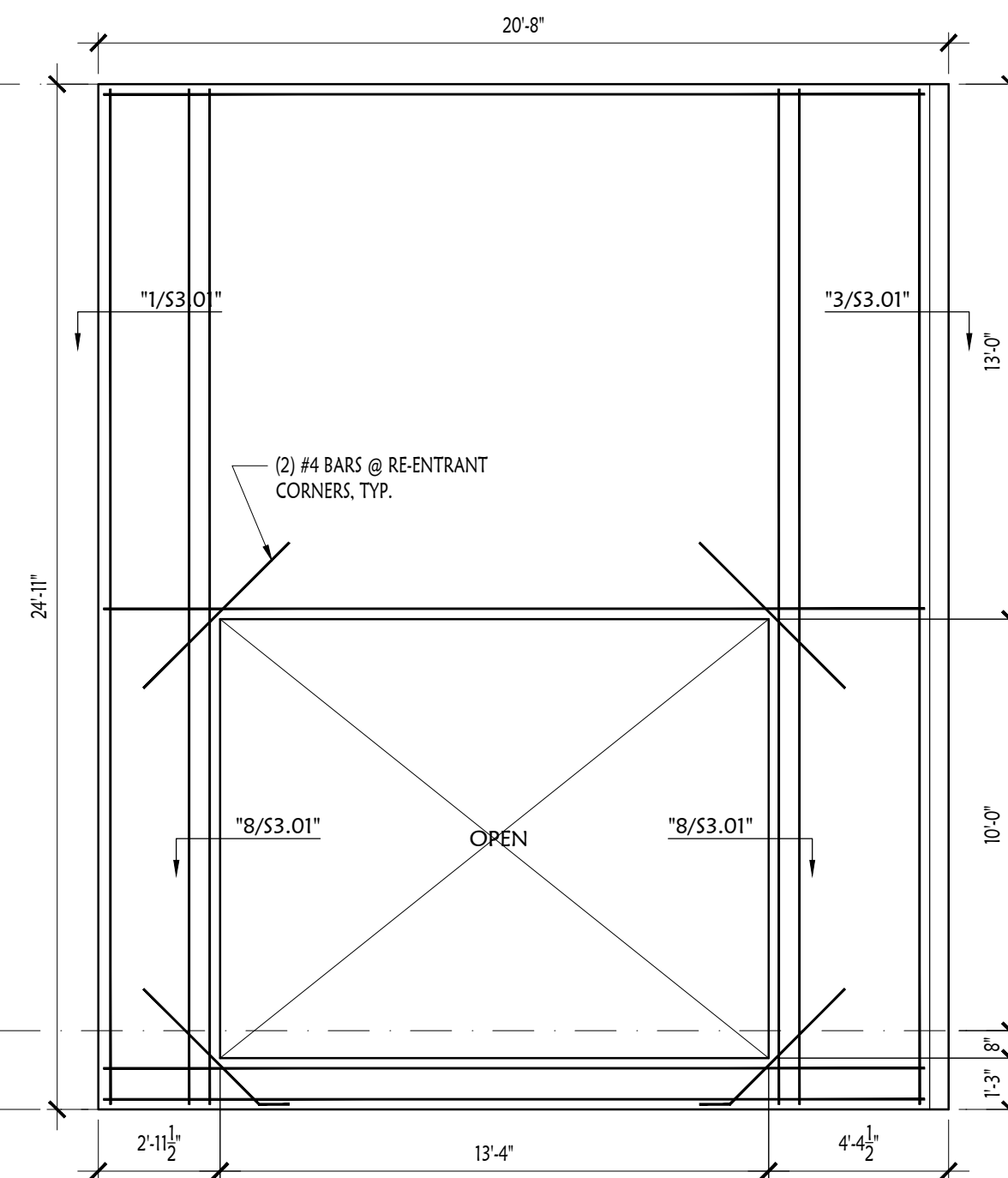
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S3.13c SCALE: 1/2" = 1'-0"



6 Panel Elevation "P-21c"
S3.13c SCALE: 1/2" = 1'-0"



7 Panel Elevation "P-22c"
S3.13c SCALE: 1/2" = 1'-0"



8 Panel Elevation "P-23c"
S3.13c SCALE: 1/2" = 1'-0"

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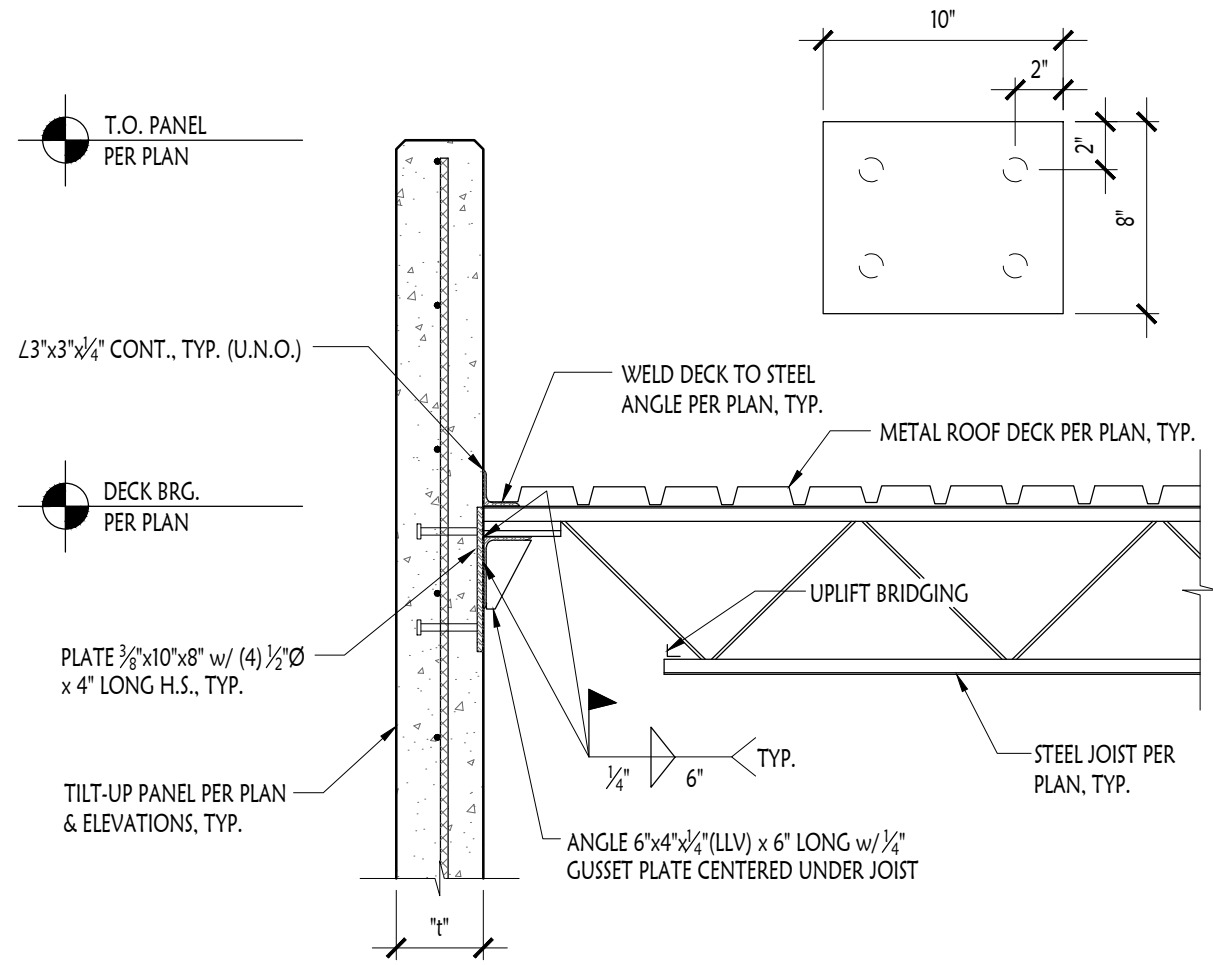
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**Building C
Panel Elevations**

Project number	23-015
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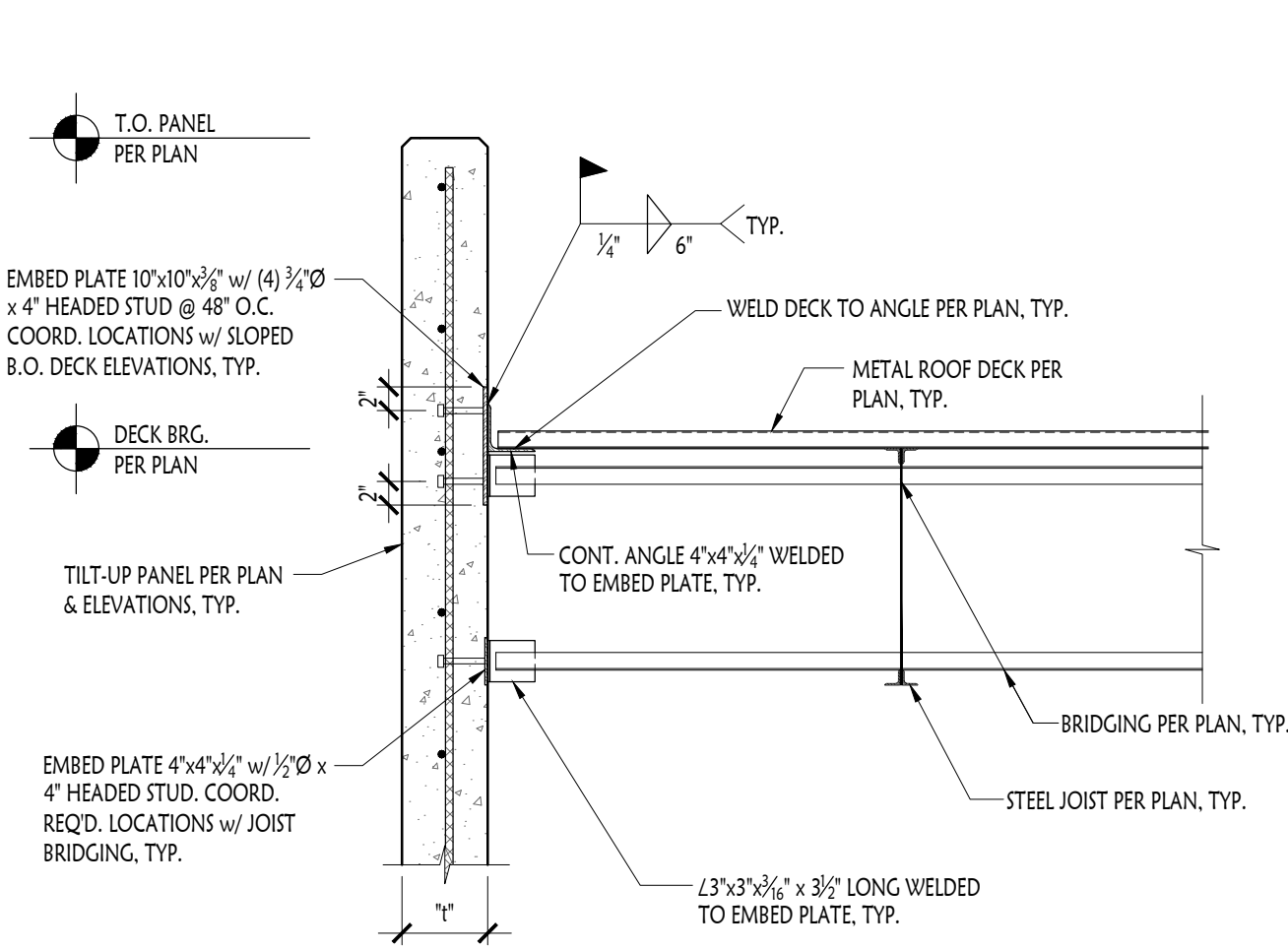
S3.13c

Scale AS NOTED



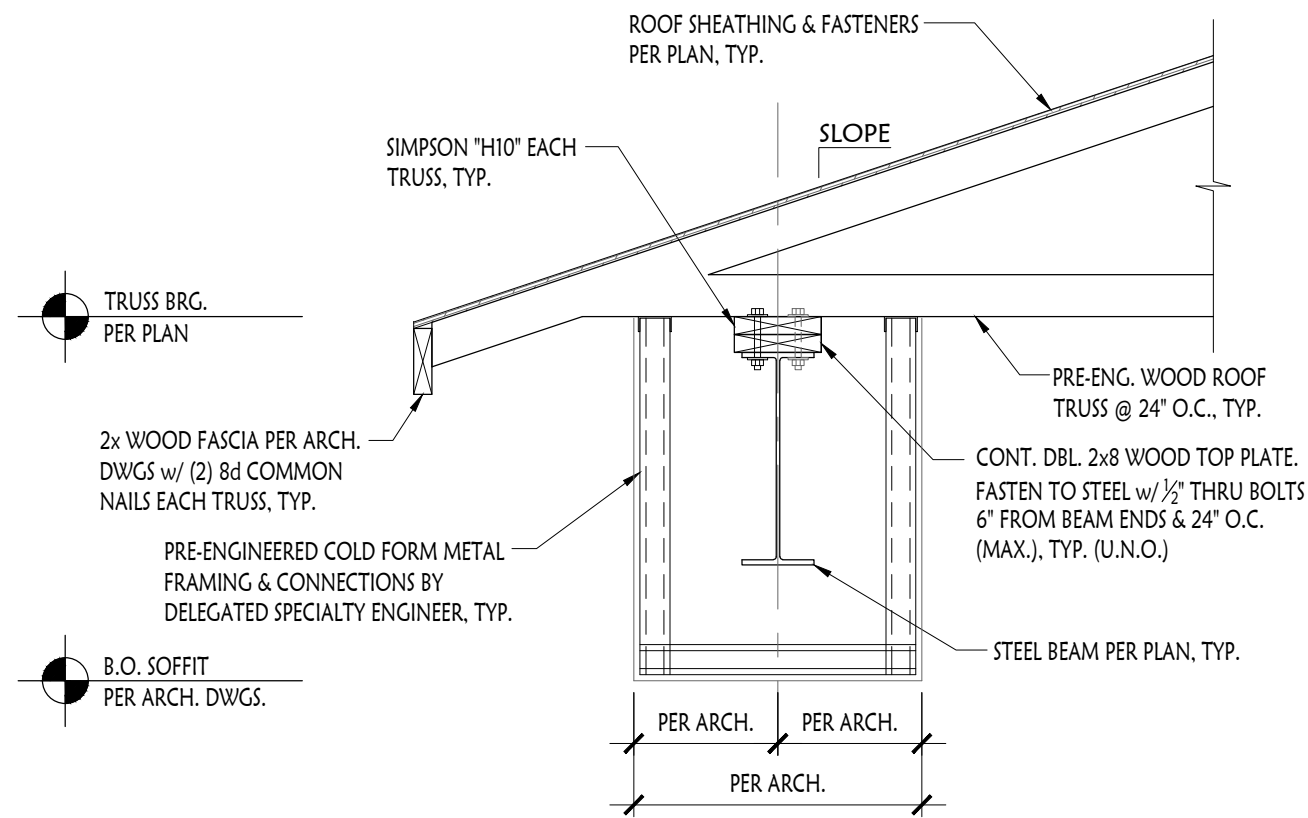
1 Roof Joist Bearing @ Panel

S4.01 SCALE: 3/4" = 1'-0"



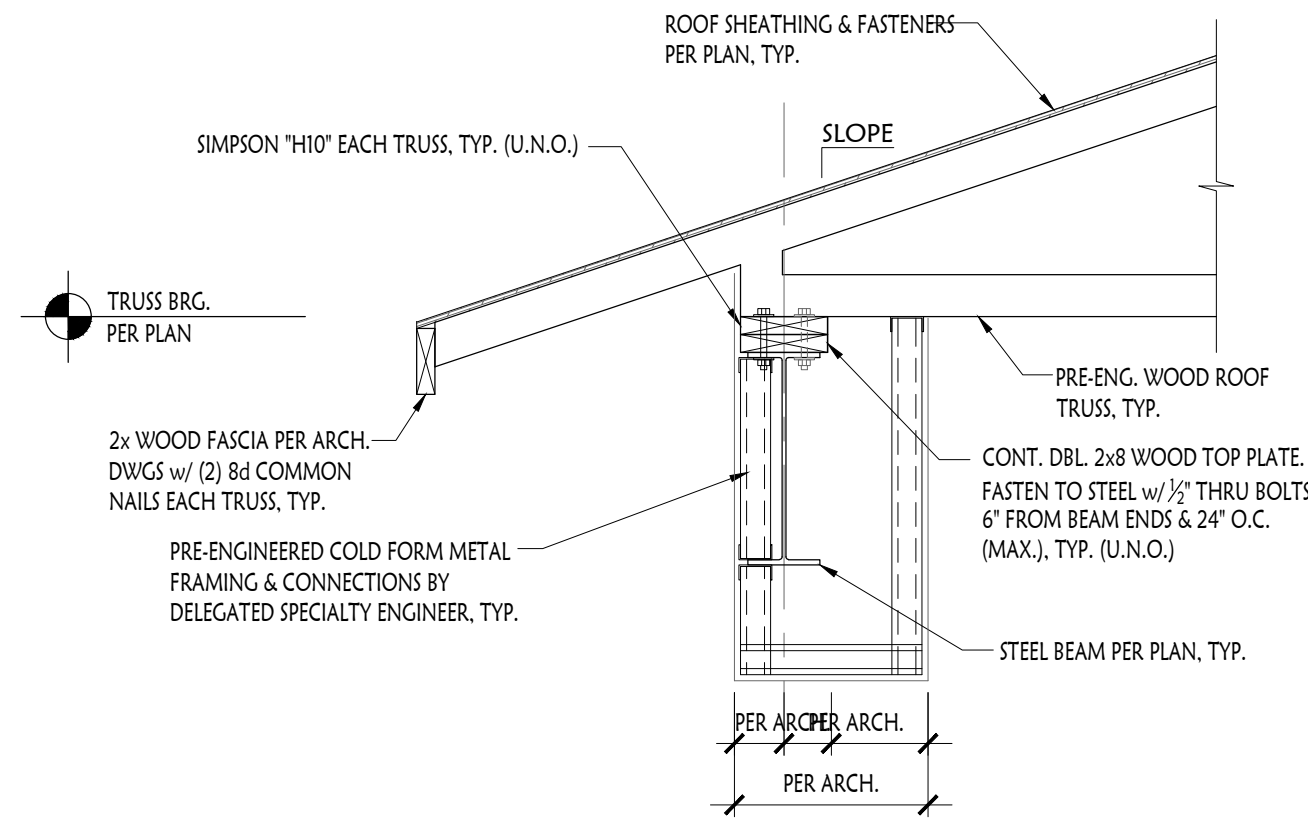
2 Edge of Deck Bearing @ Panel

S4.01 SCALE: 3/4" = 1'-0"



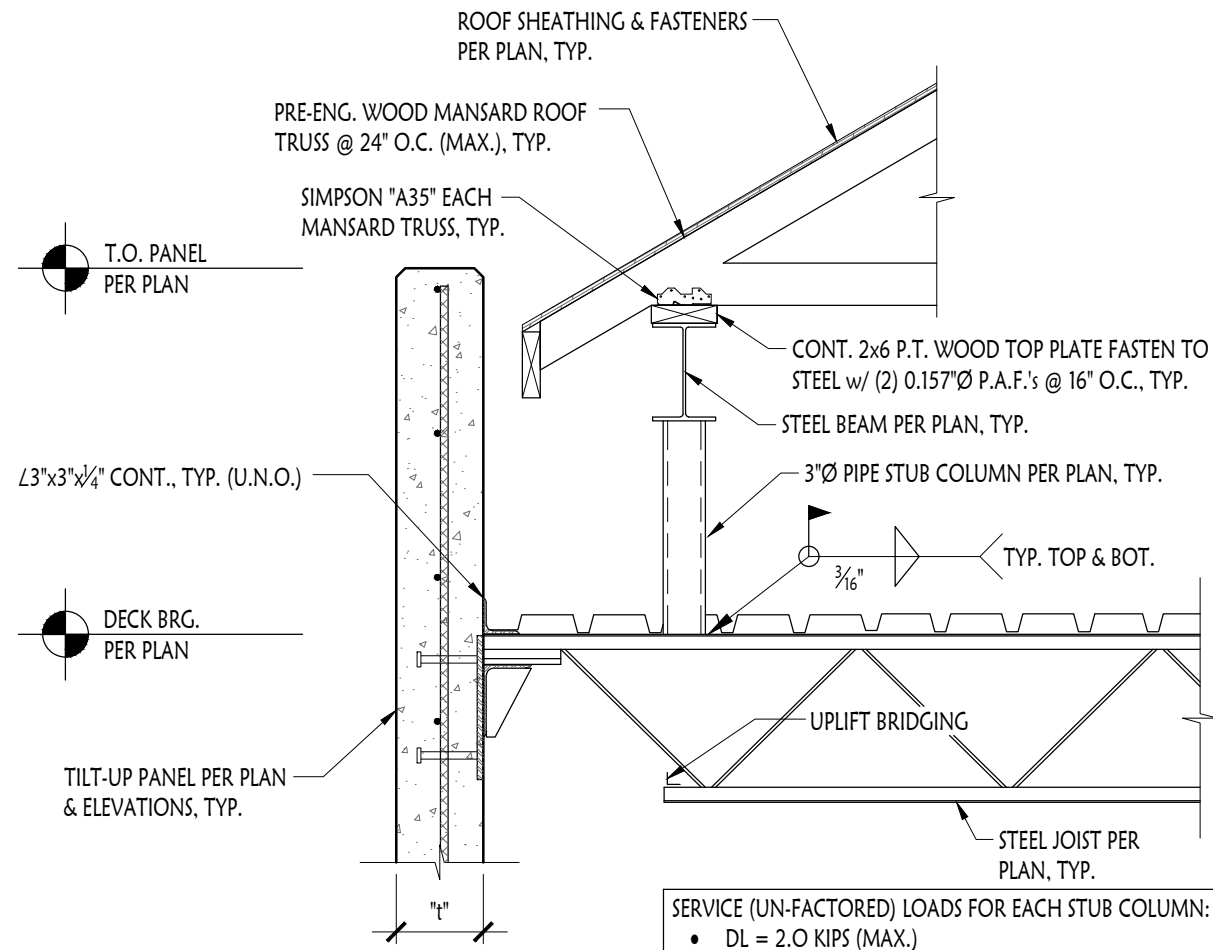
3 Wood Truss Bearing @ Steel Beam

S4.01 SCALE: 1" = 1'-0"



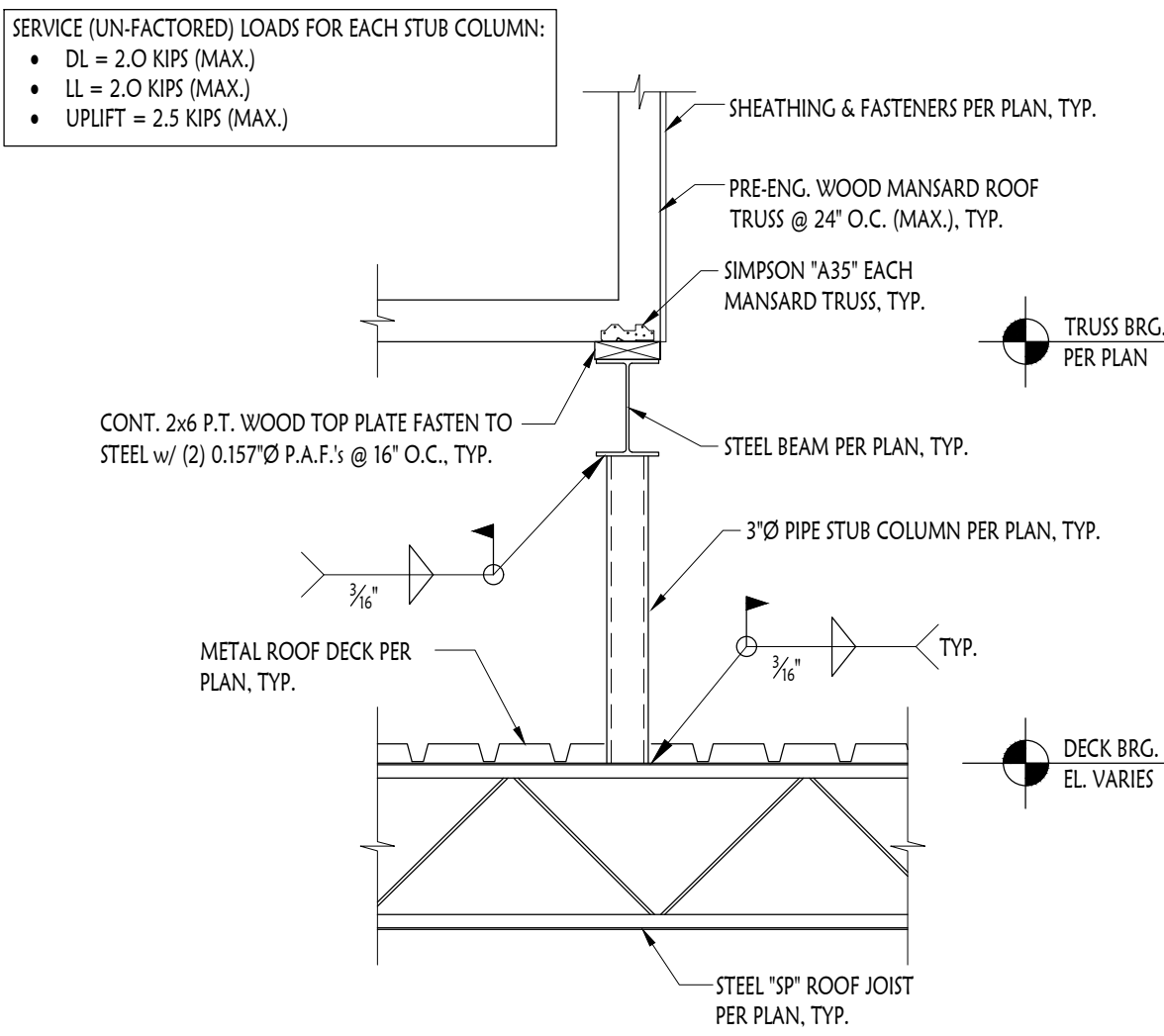
4 Wood Truss Bearing @ Steel Beam

S4.01 SCALE: 3/4" = 1'-0"



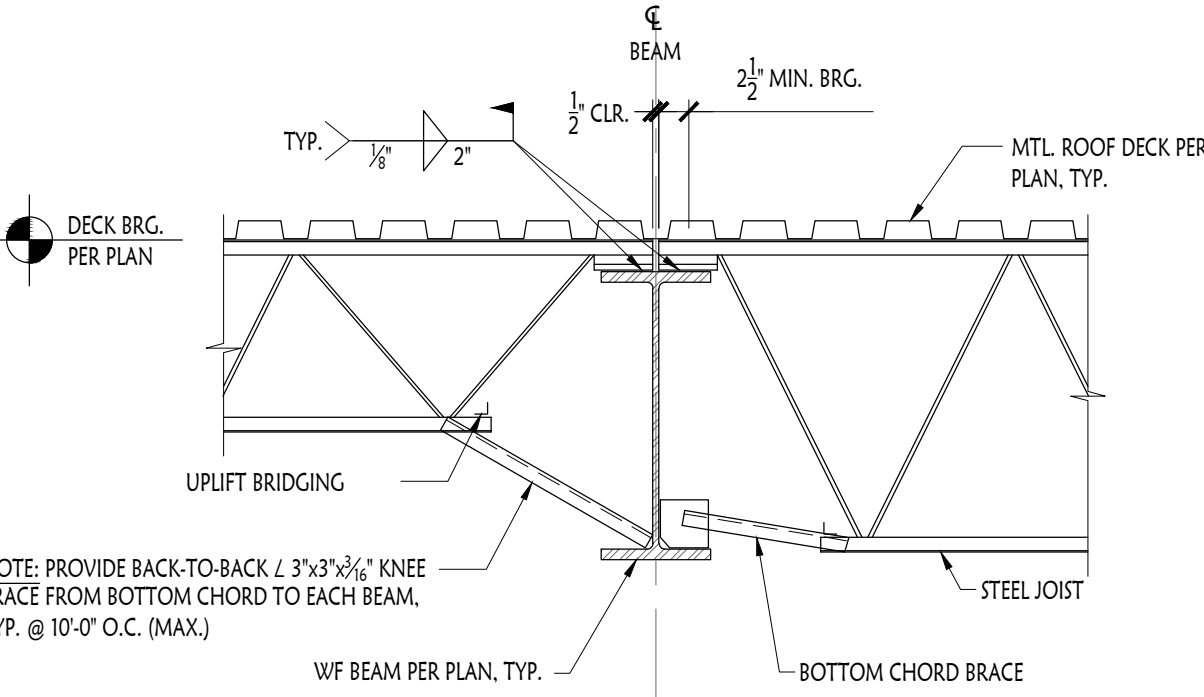
5 Stub Column @ Roof Joist

S4.01 SCALE: 3/4" = 1'-0"



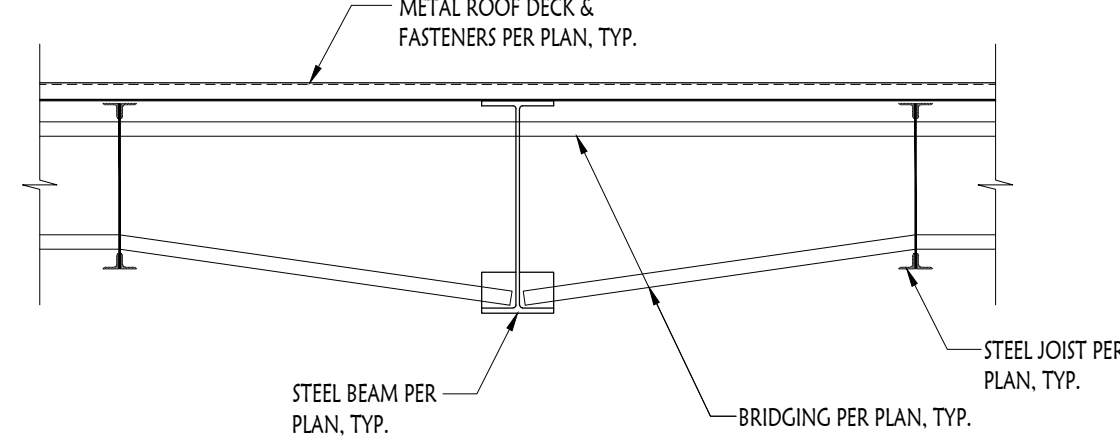
6 Stub Column @ Roof Joist

S4.01 SCALE: 3/4" = 1'-0"



7 Roof Joist Bearing @ Steel Beam

S4.01 SCALE: 3/4" = 1'-0"



8 Roof Deck Bearing @ WF Beam

S4.01 SCALE: 3/4" = 1'-0"



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REVISION SCHEDULE

Revision Number	Revision Description	Revision Date
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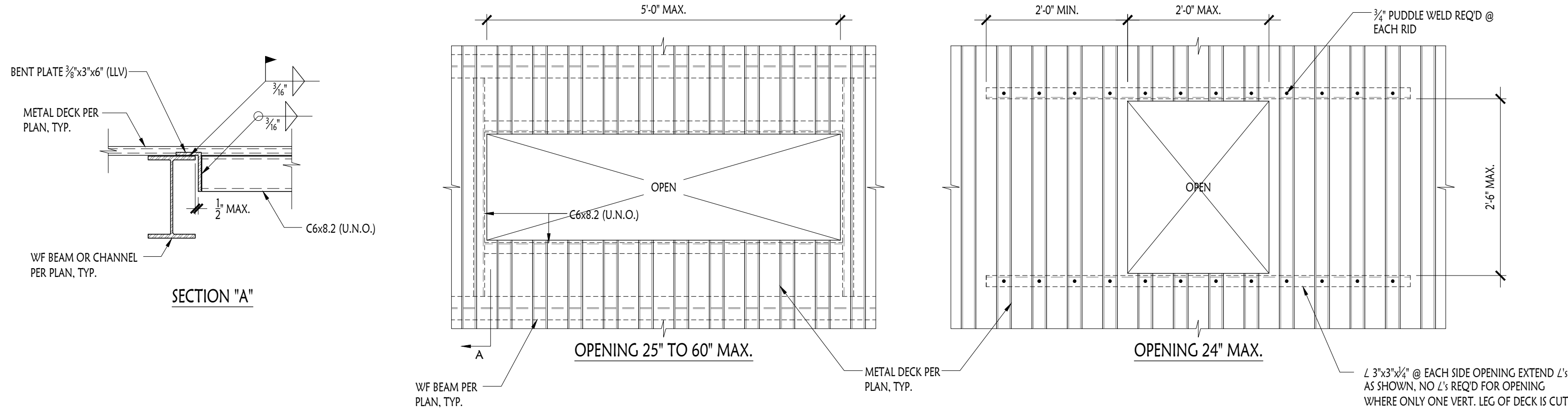
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Structural
Sections & Details

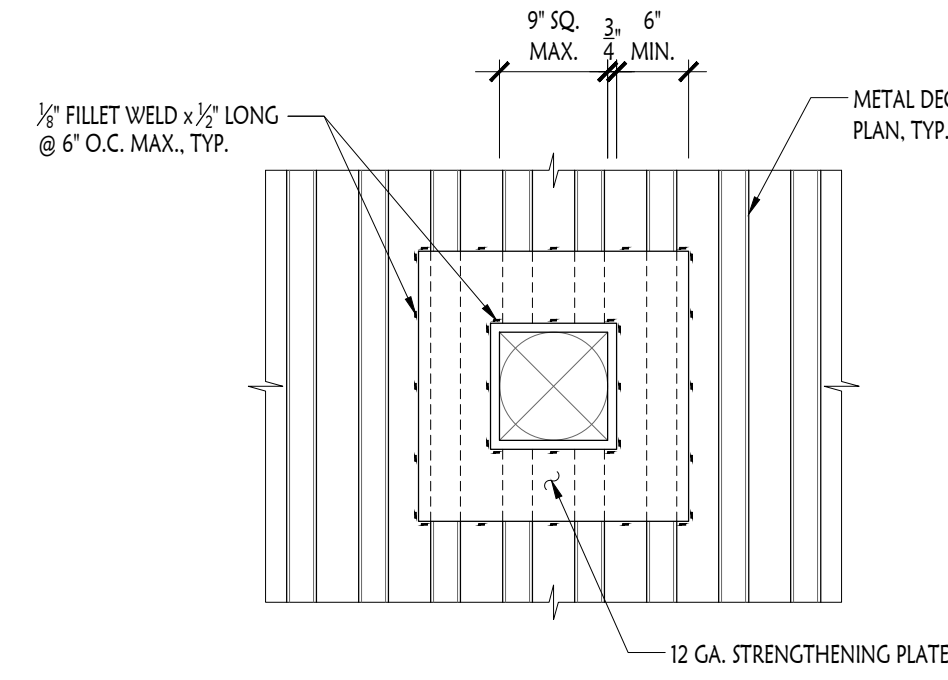
Project number	23-015
Date	11/05/2025
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S4.01

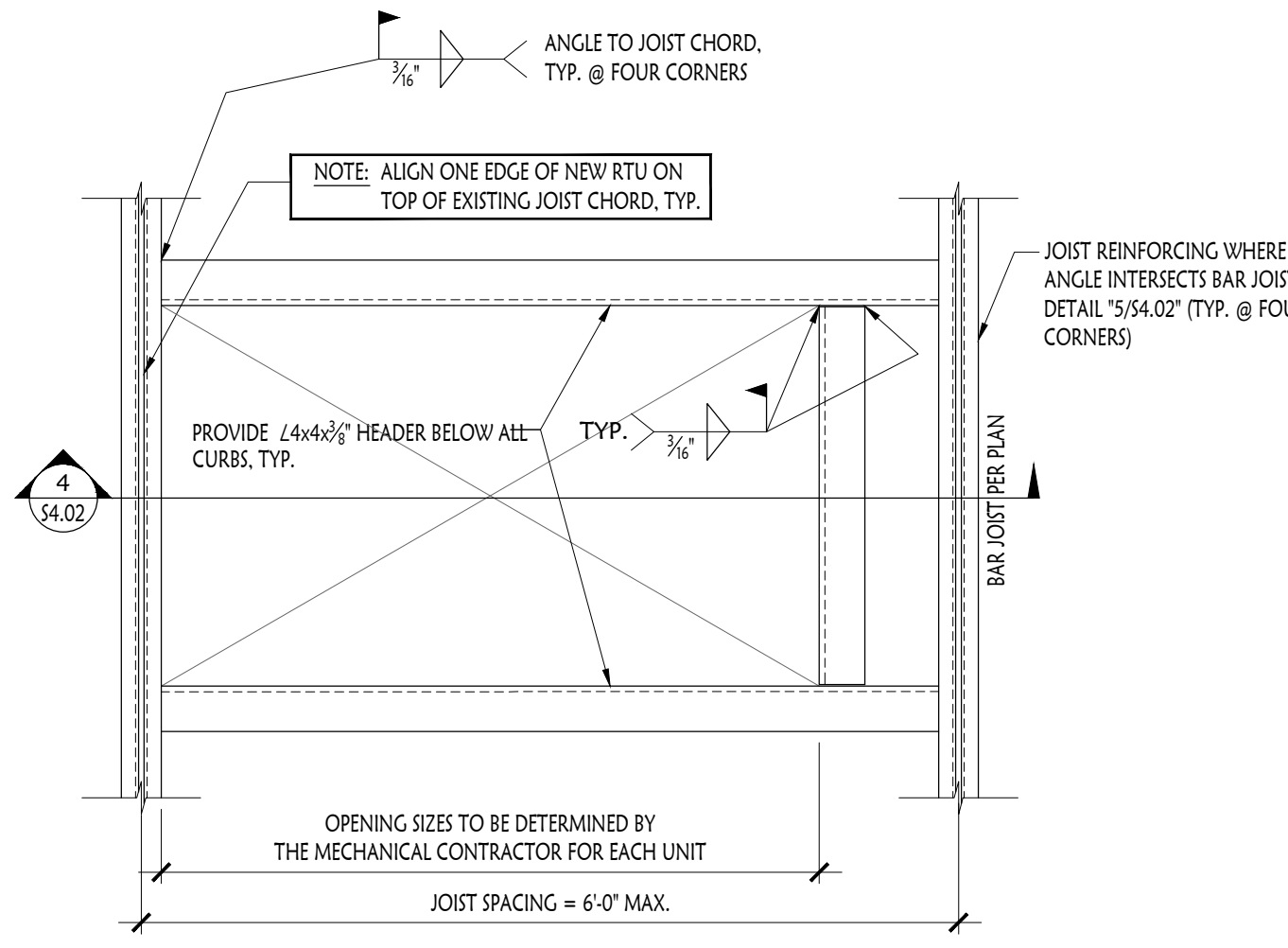
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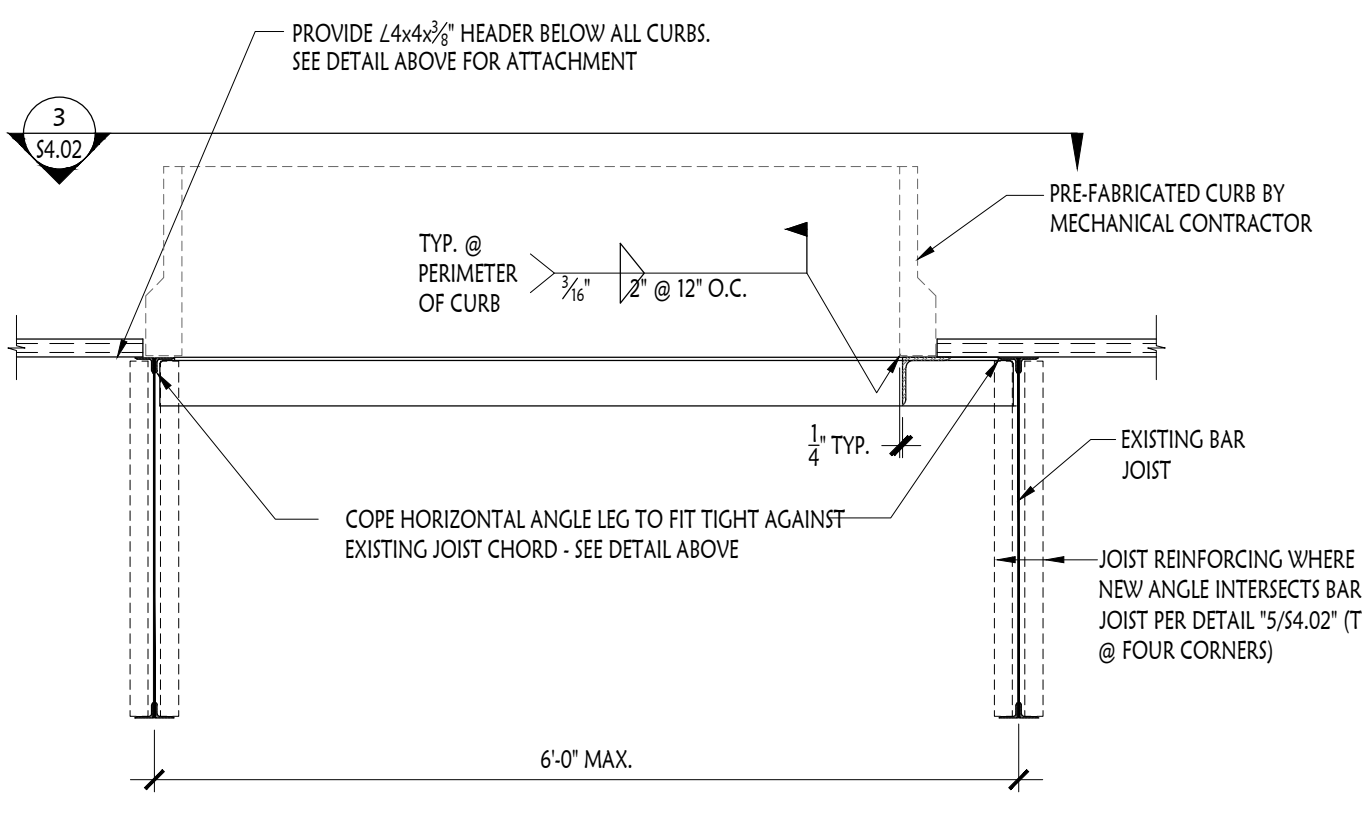
1 Large Reinforce Deck Opening Details
\$4.02 SCALE: 3/4" = 1'-0"



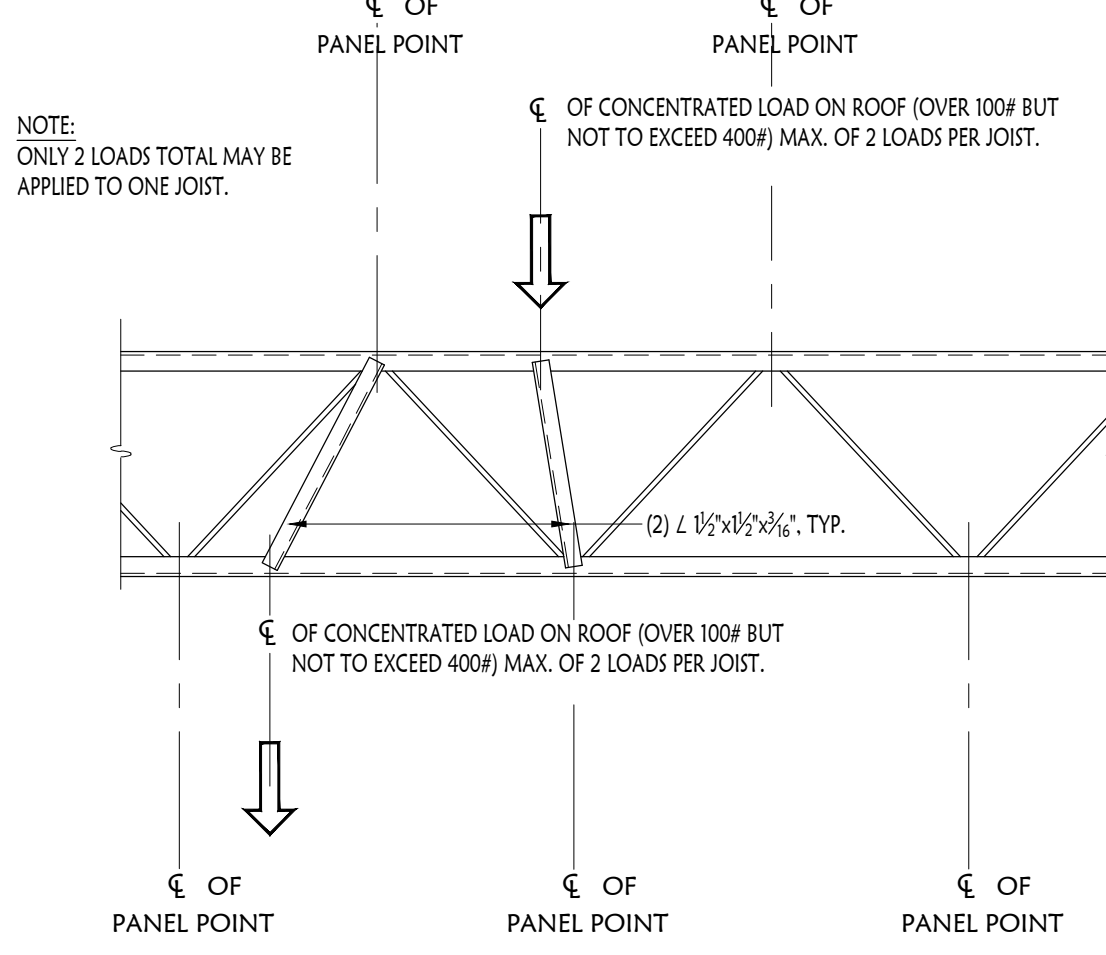
2 Small Reinforced Opening Detail
\$4.02 SCALE: 3/4" = 1'-0"



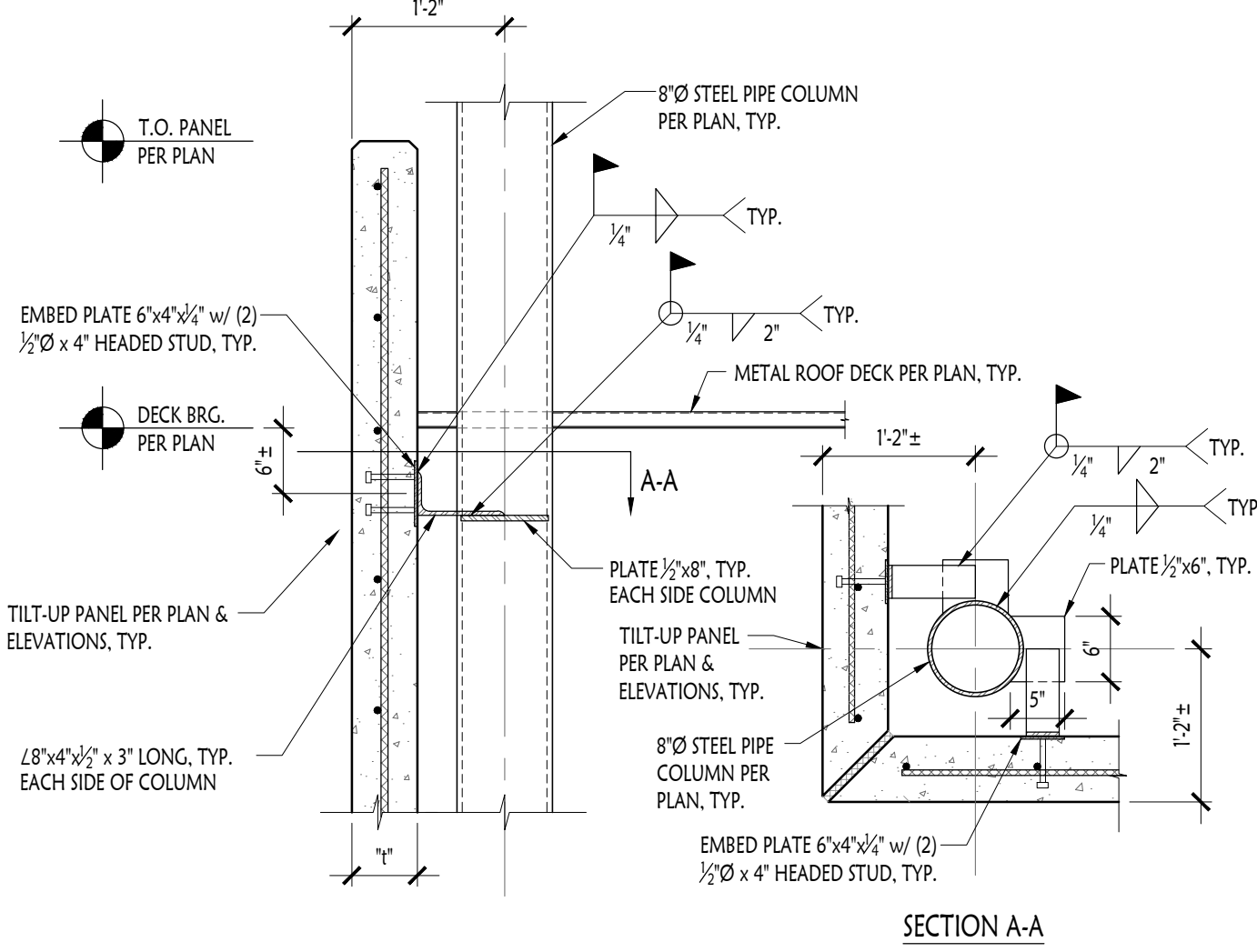
3 Plan View @ R.T.U. Support Framing
\$4.02 SCALE: 3/4" = 1'-0"



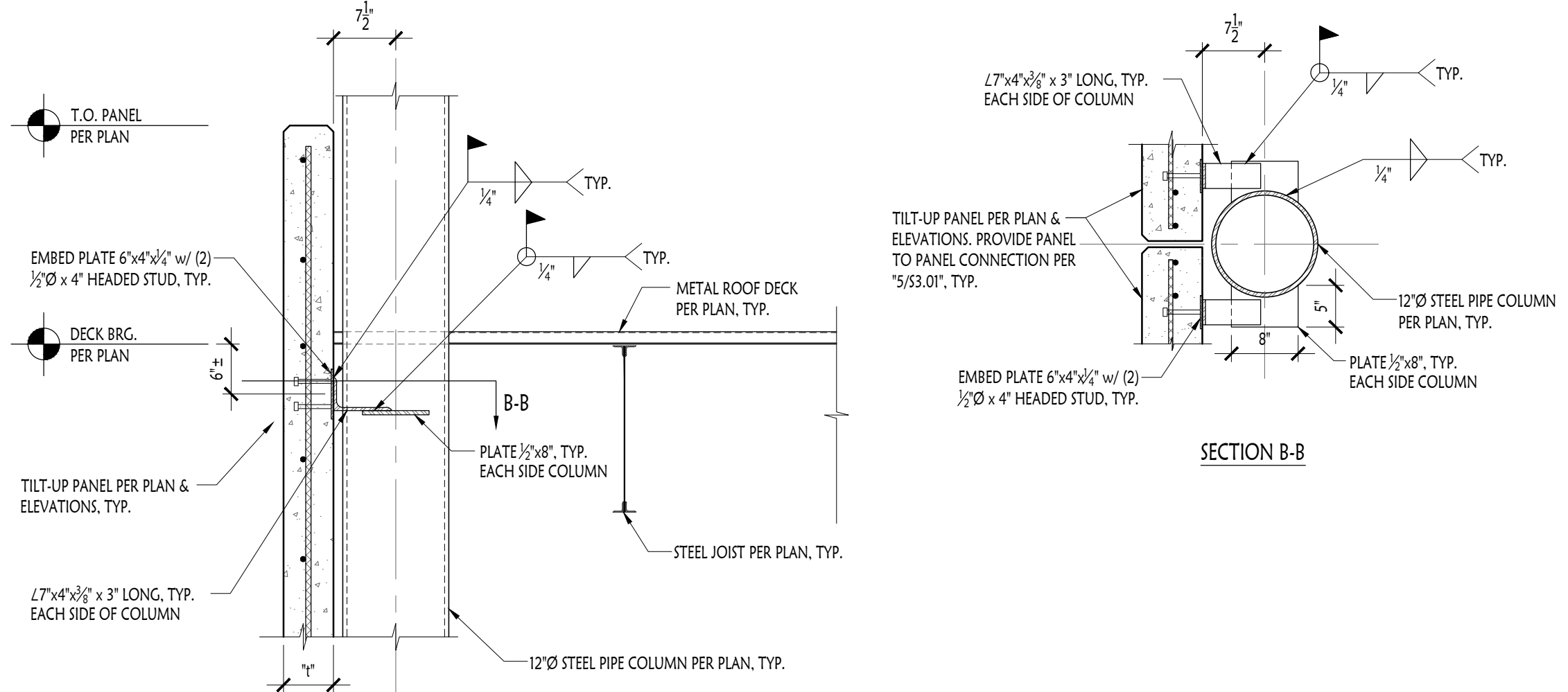
4 Section @ R.T.U. Support Framing
\$4.02 SCALE: 3/4" = 1'-0"



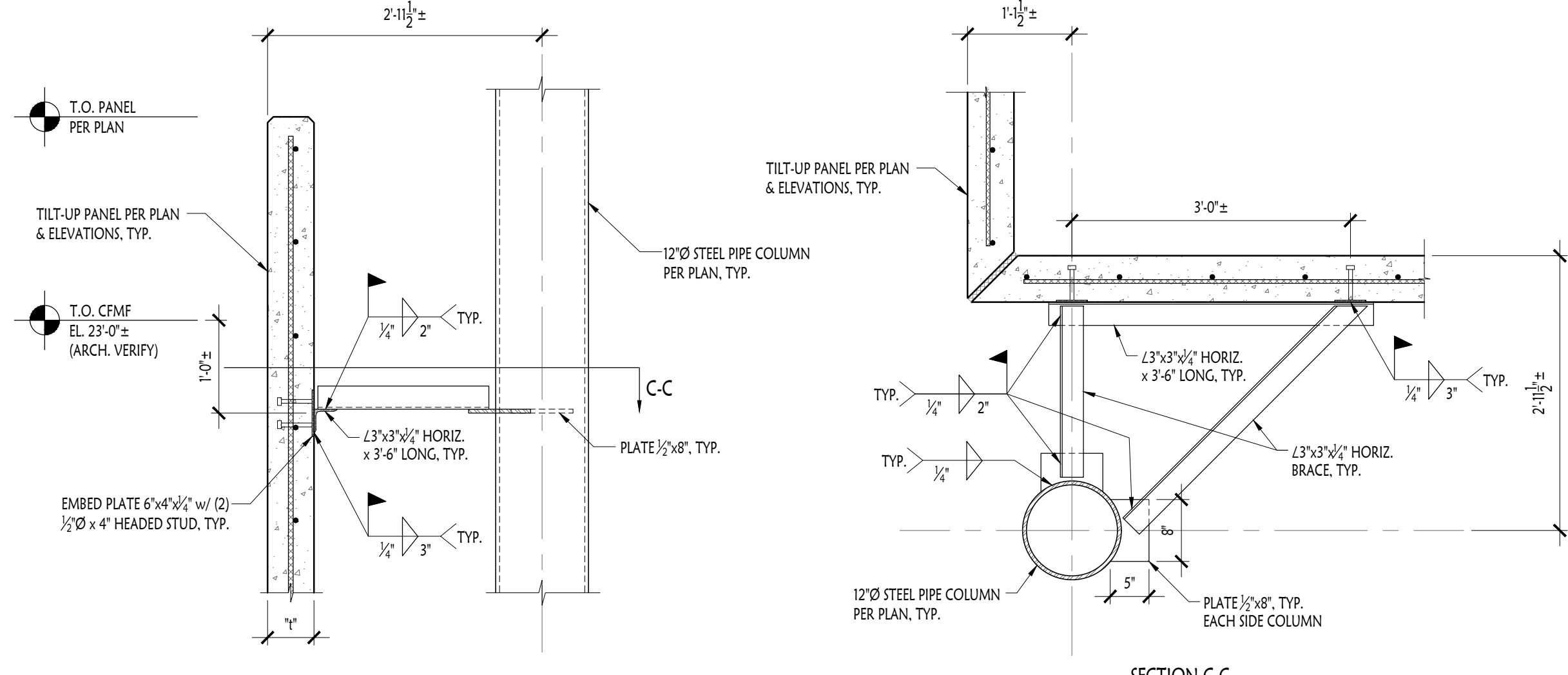
5 Joist Reinforcing
\$4.02 SCALE: 3/4" = 1'-0"



6 Steel Column Bracing @ Wall Panel
\$4.02 SCALE: 3/4" = 1'-0"



7 Column Bracing @ Deck Bearing/Panel Joint
\$4.02 SCALE: 3/4" = 1'-0"



8 Exterior Steel Column Bracing @ Wall Panel
\$4.02 SCALE: 3/4" = 1'-0"



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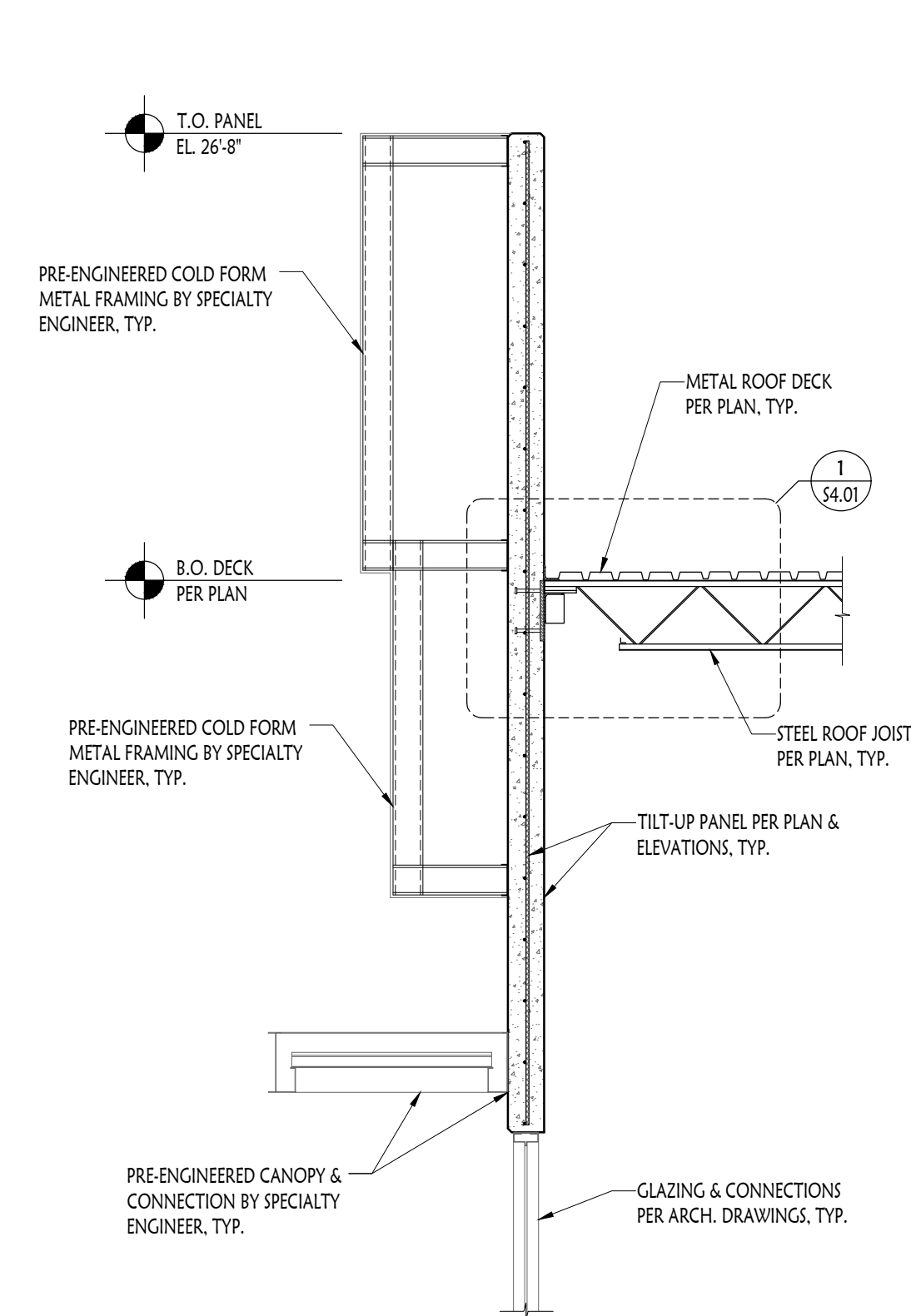
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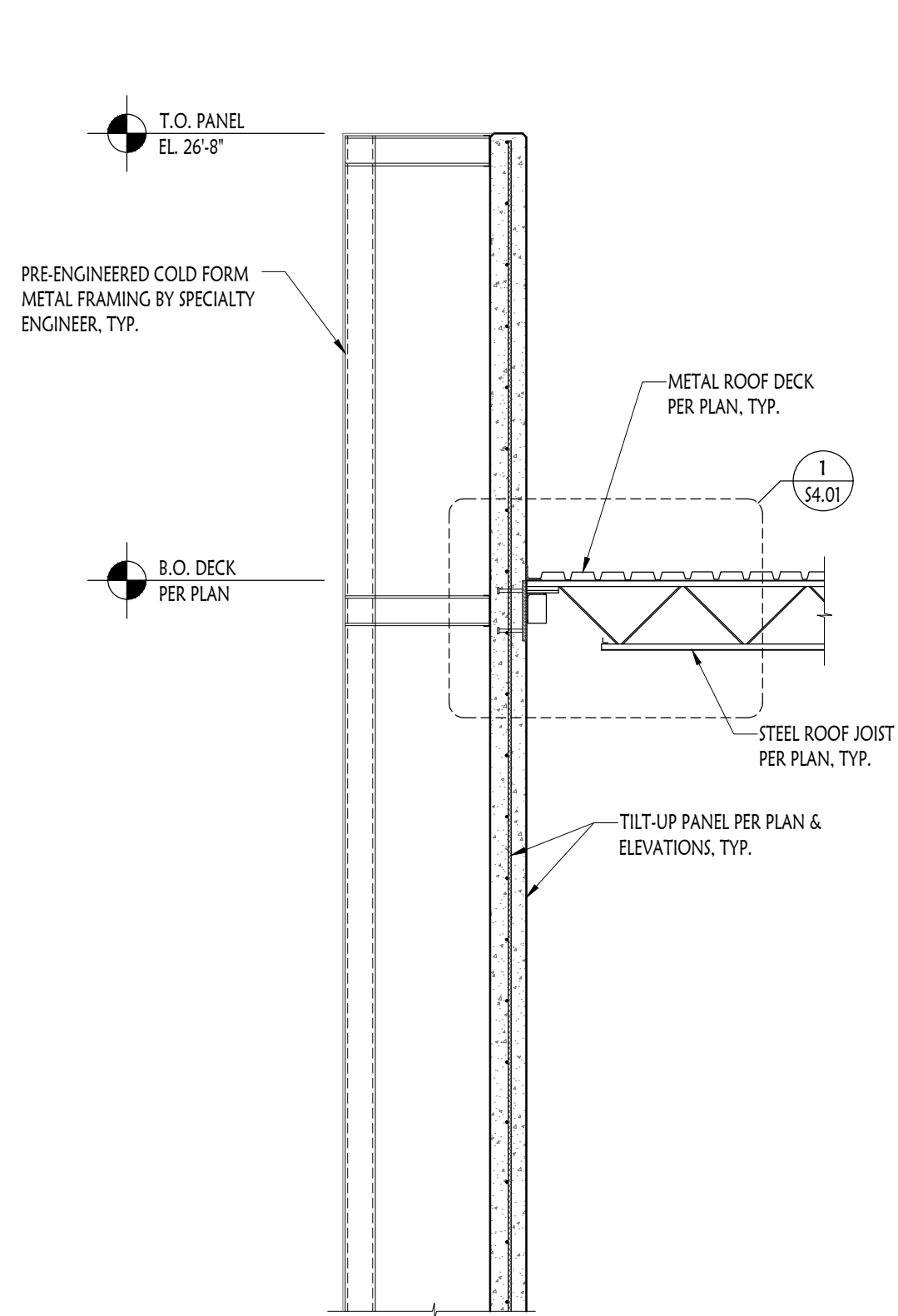
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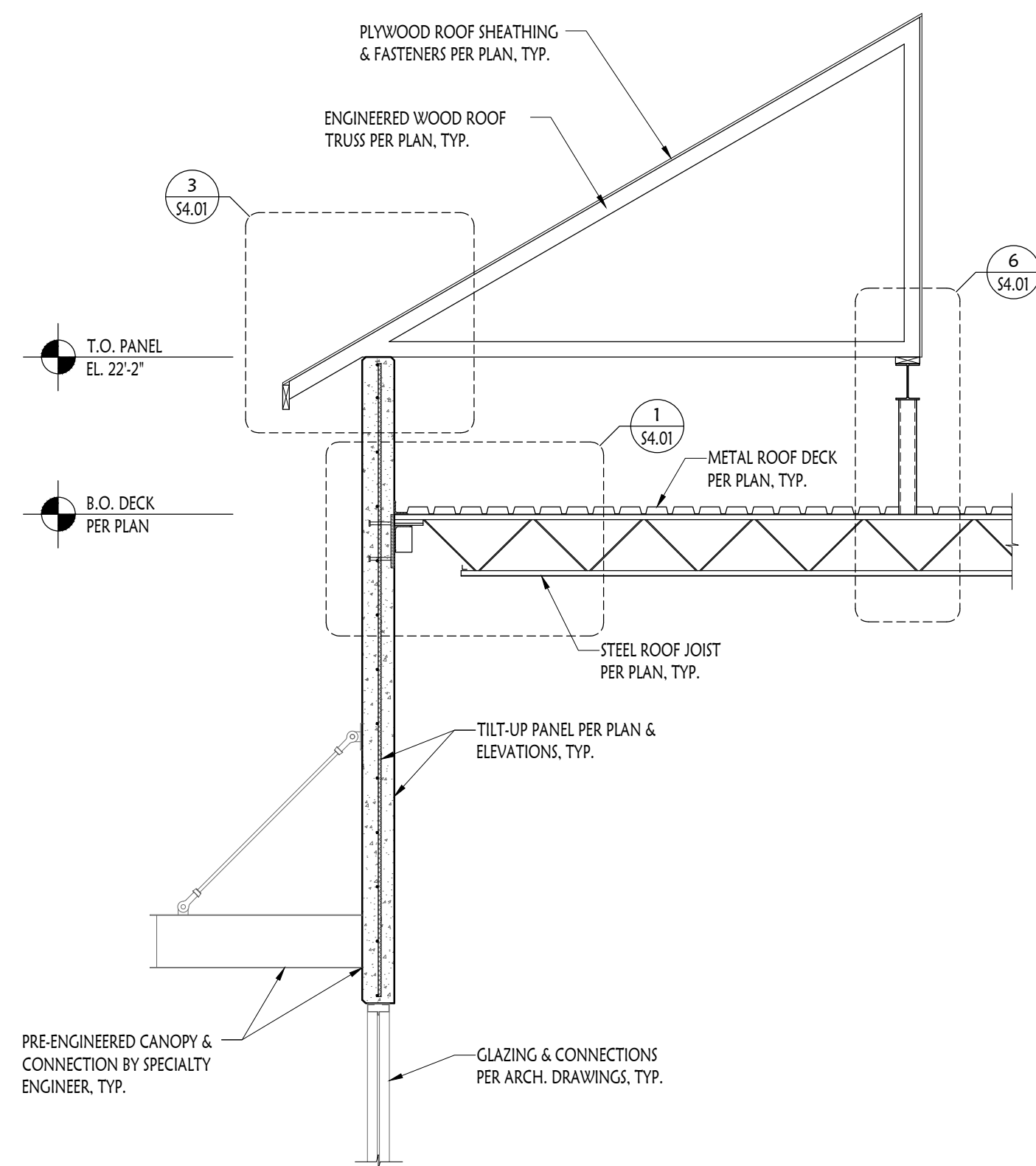
Scale	AS NOTED
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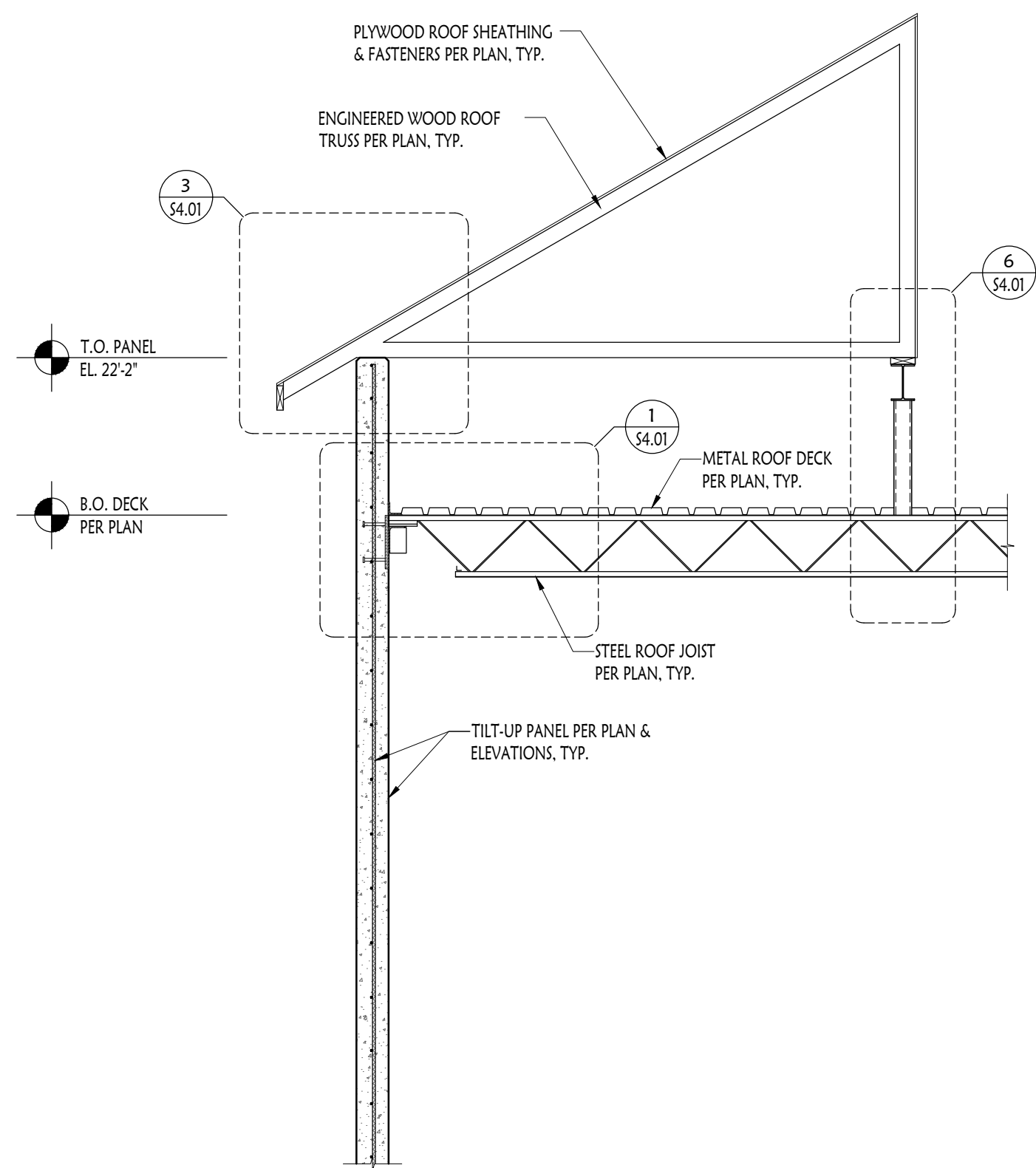
1 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



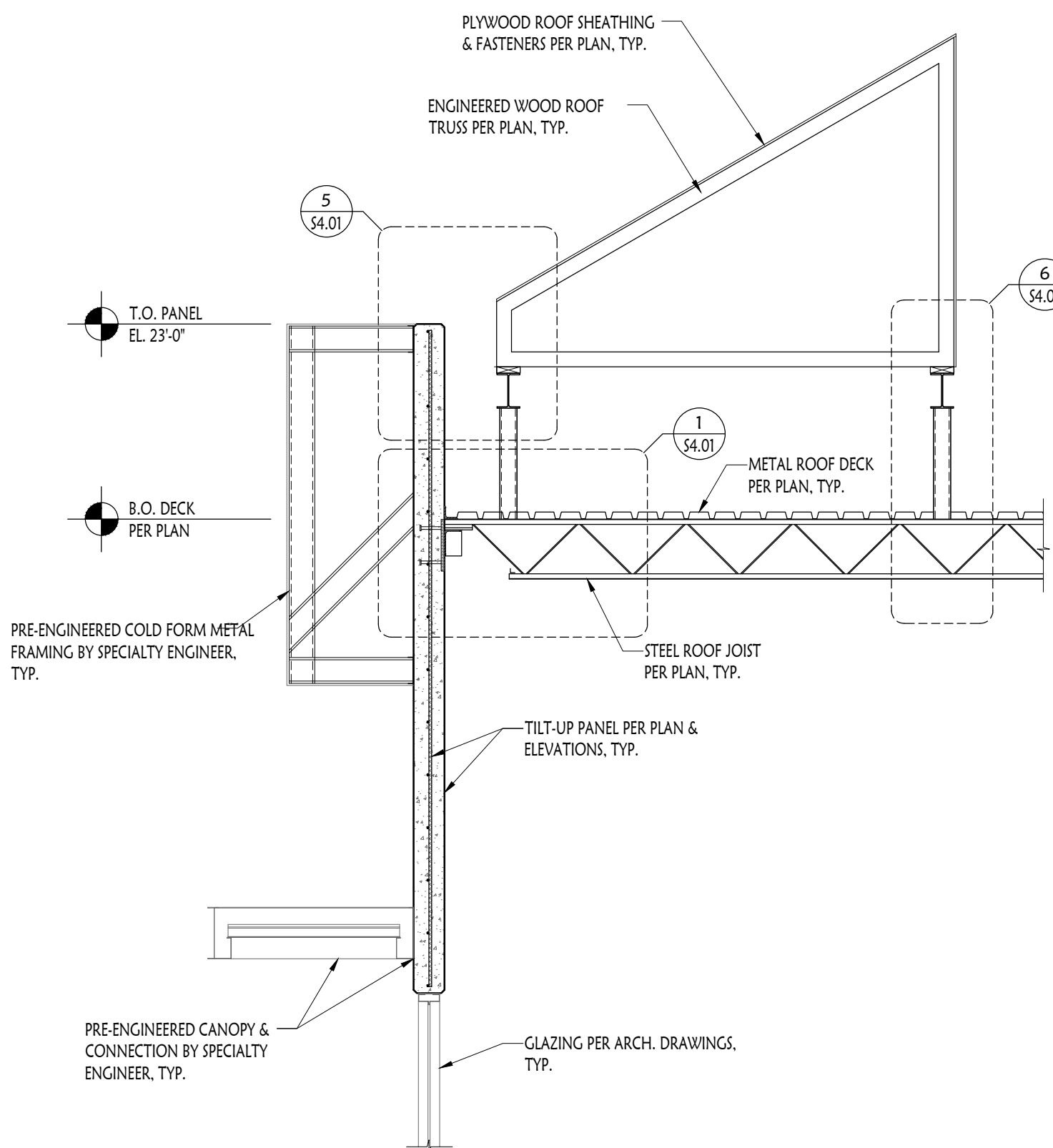
2 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



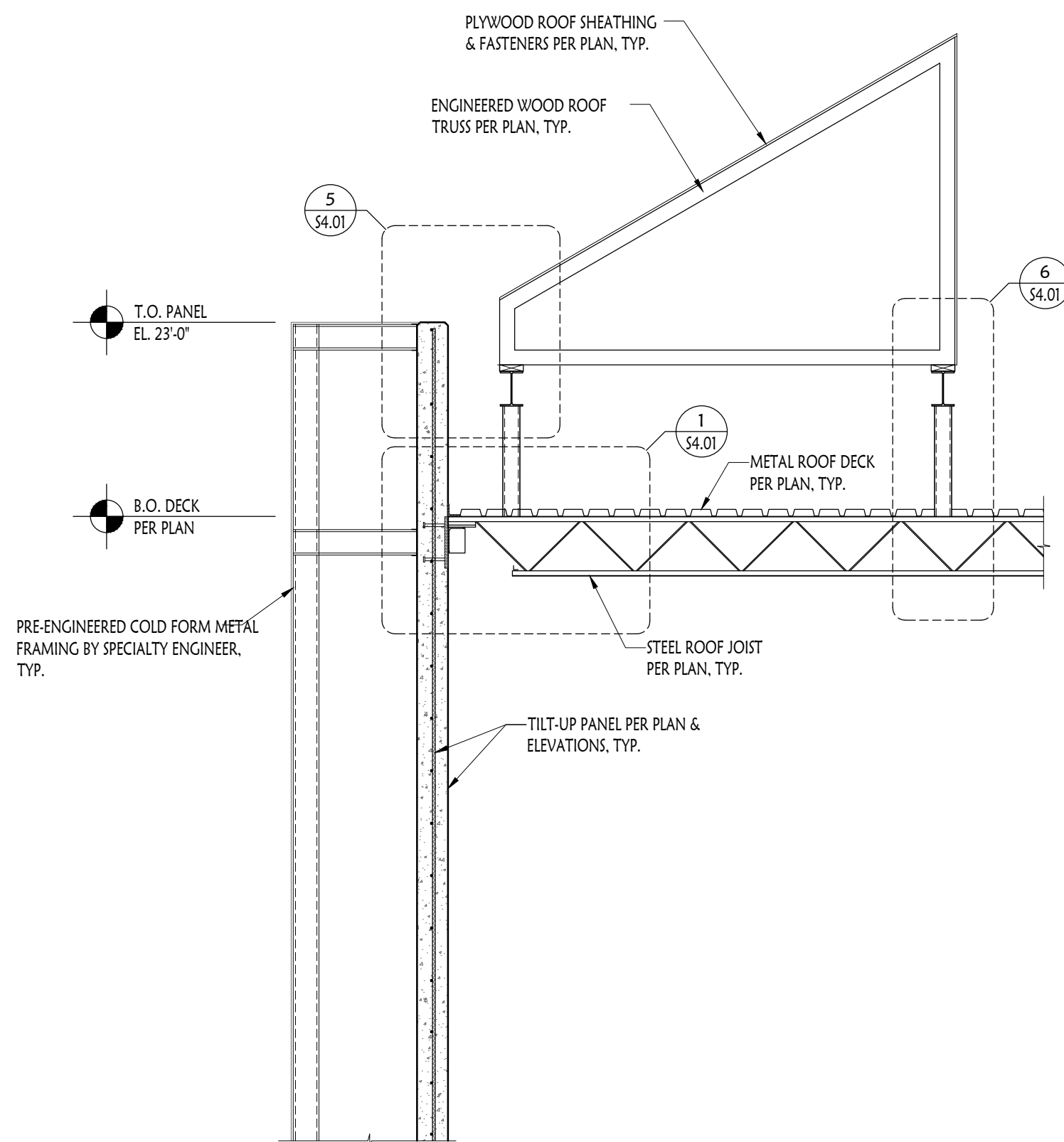
3 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



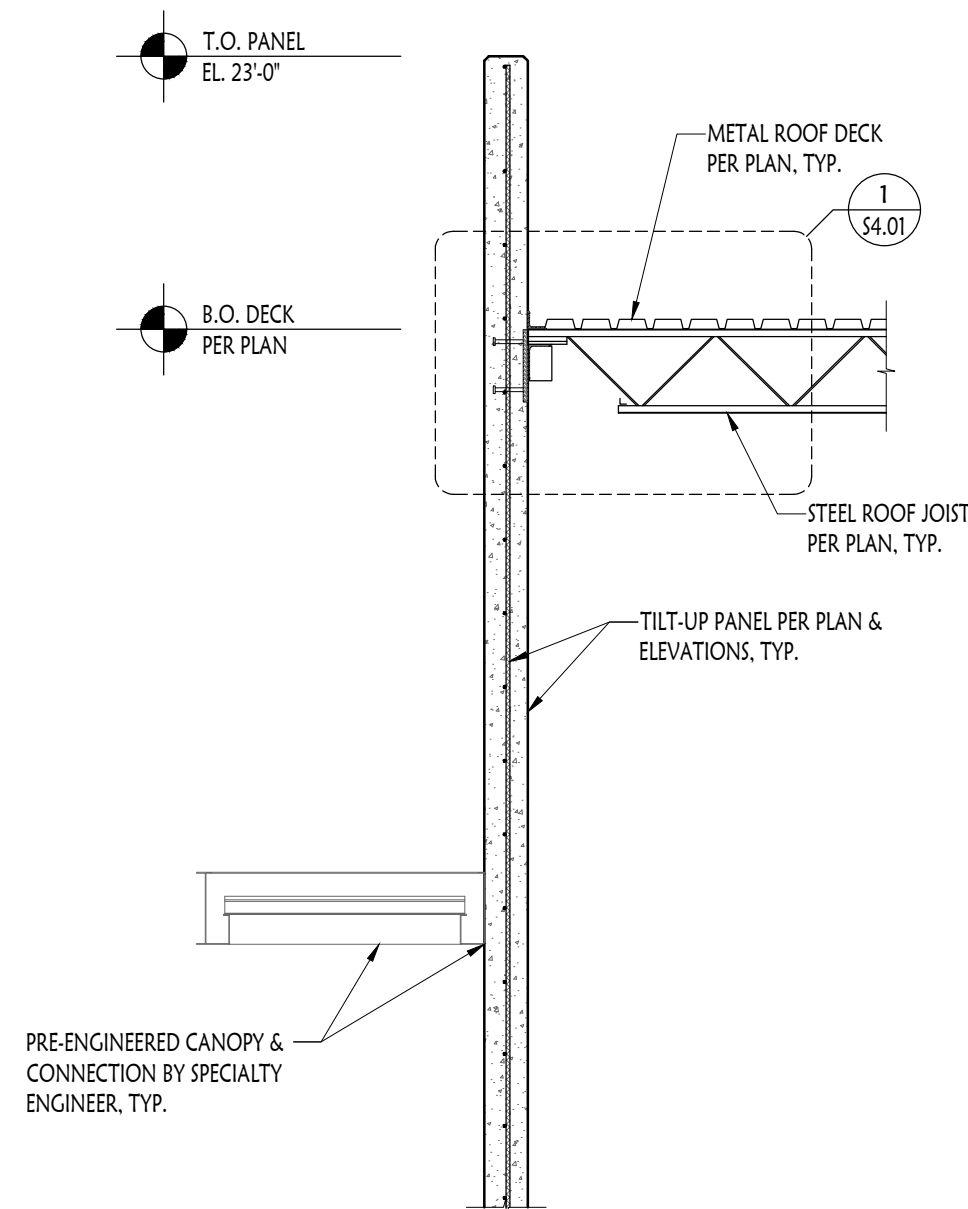
4 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



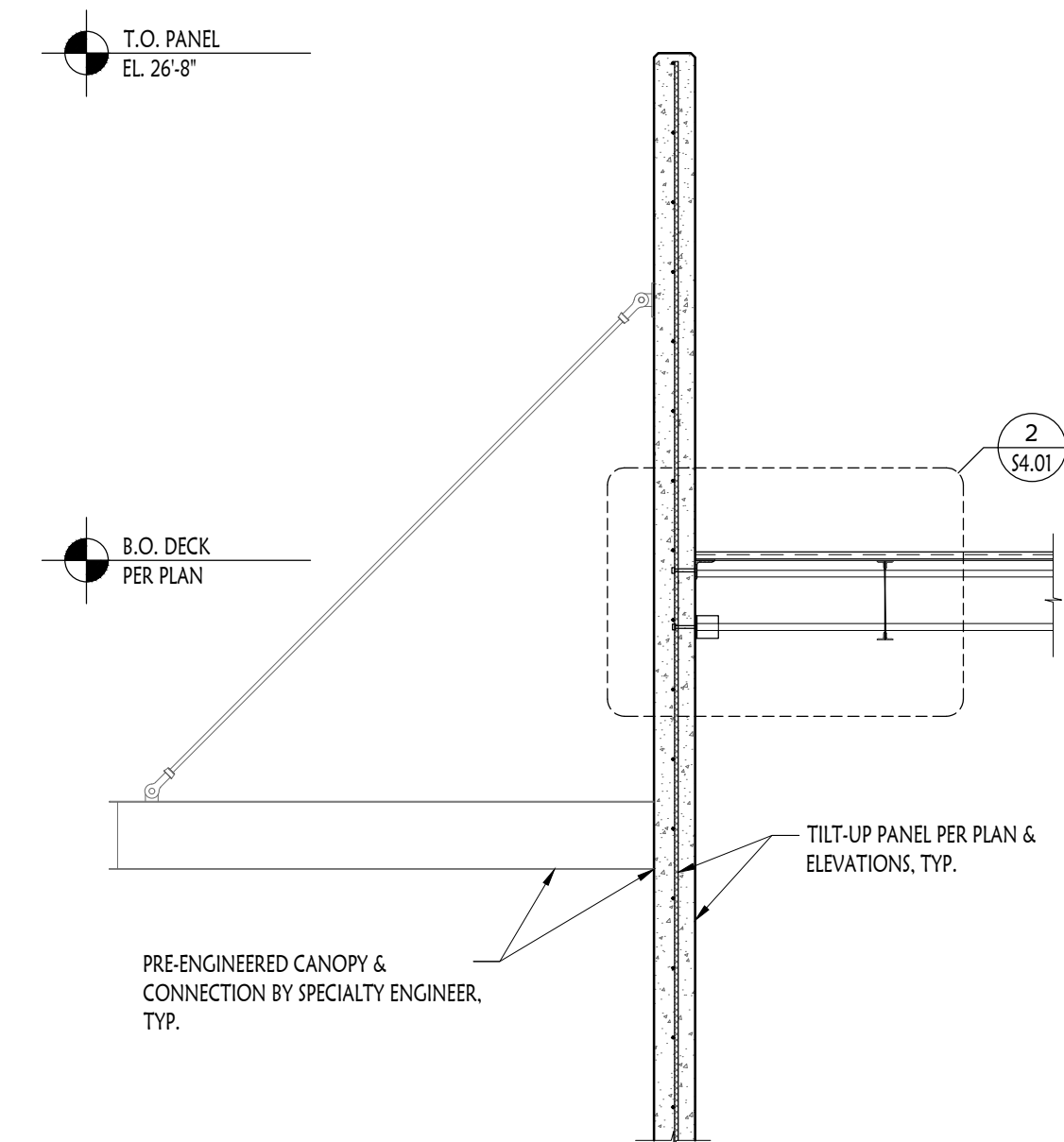
5 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



6 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



7 Roof Joist Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



8 Canopy / Deck Bearing @ Panel
S4.11 SCALE: 3/8" = 1'-0"



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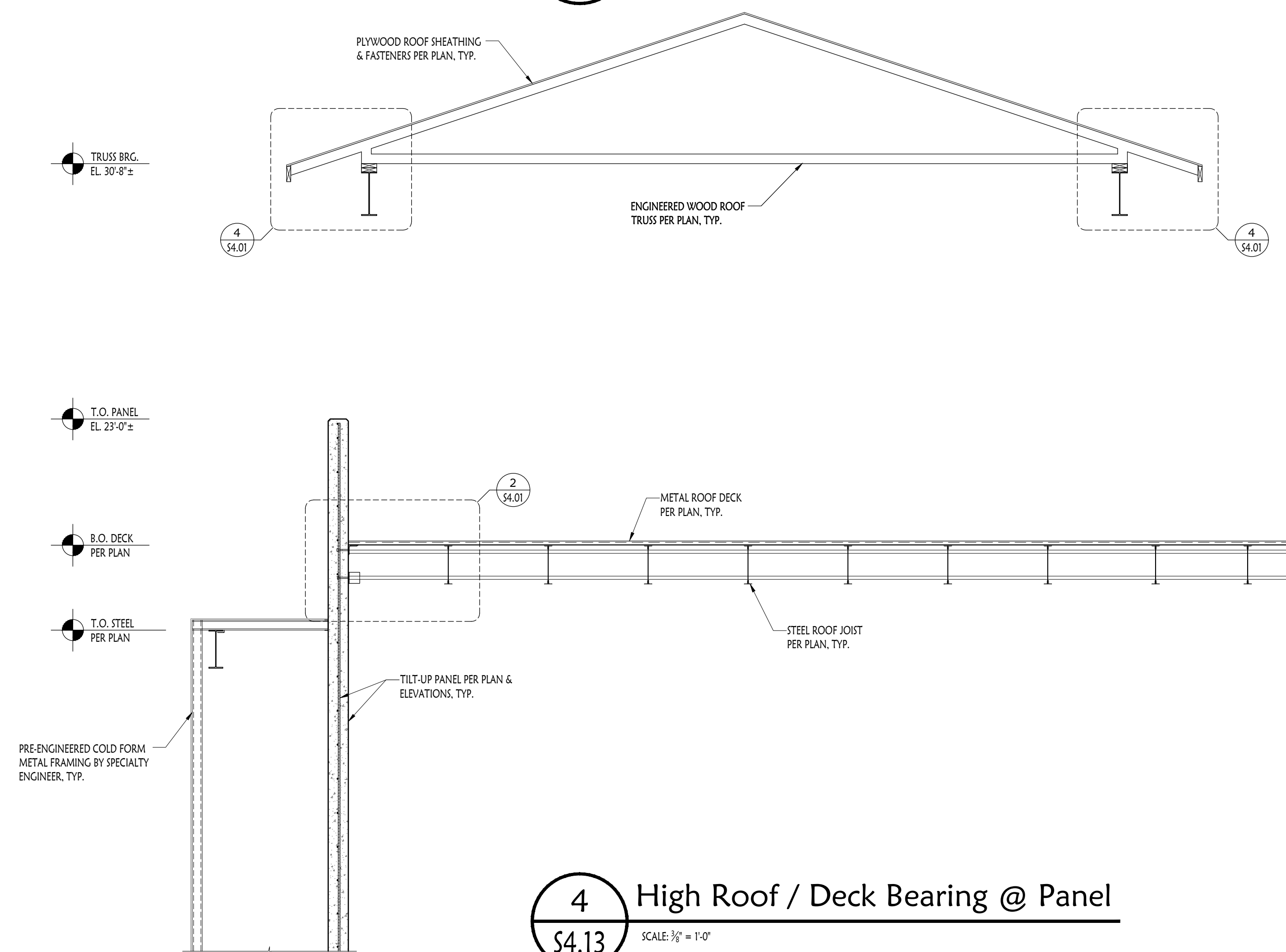
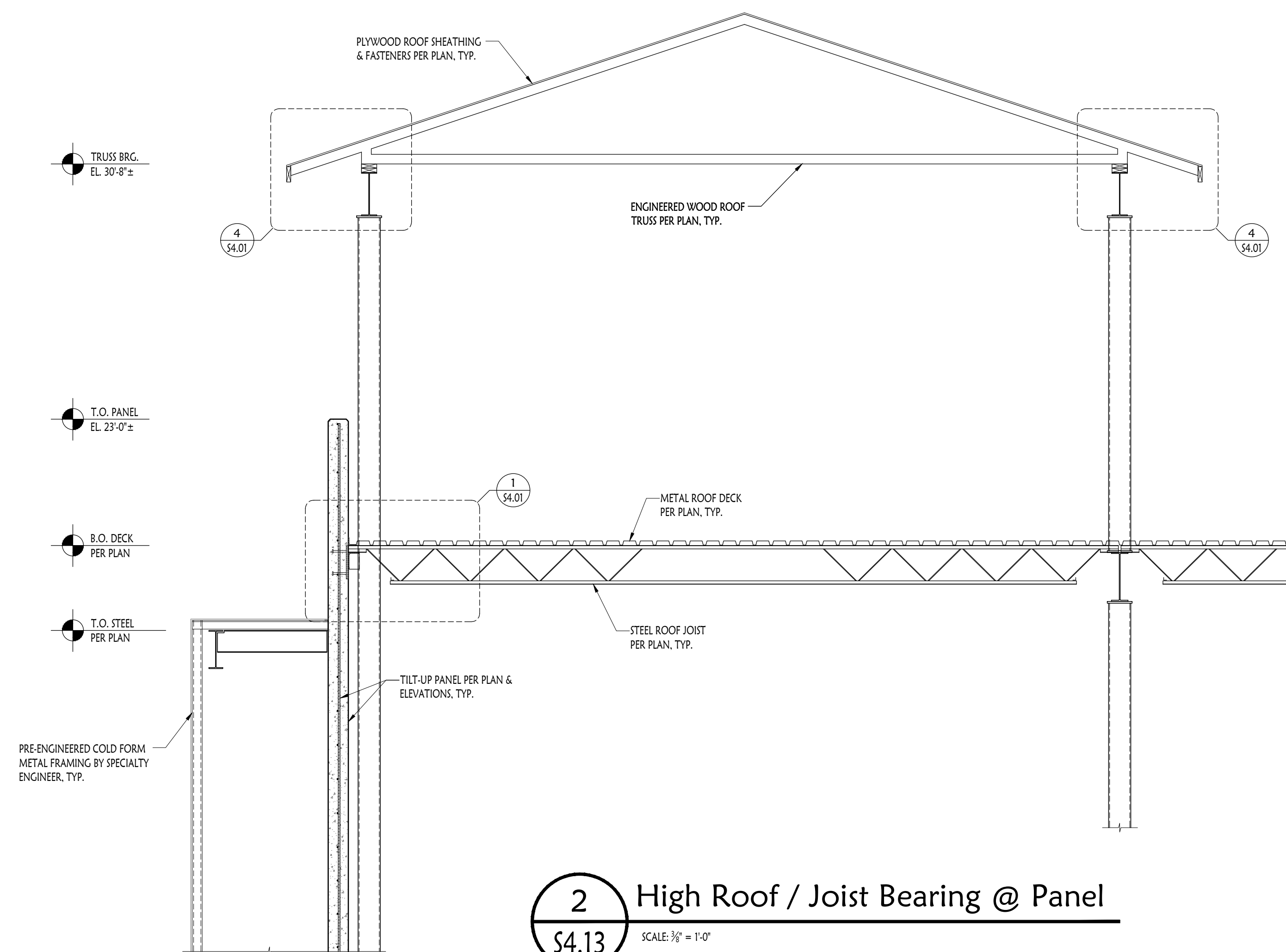
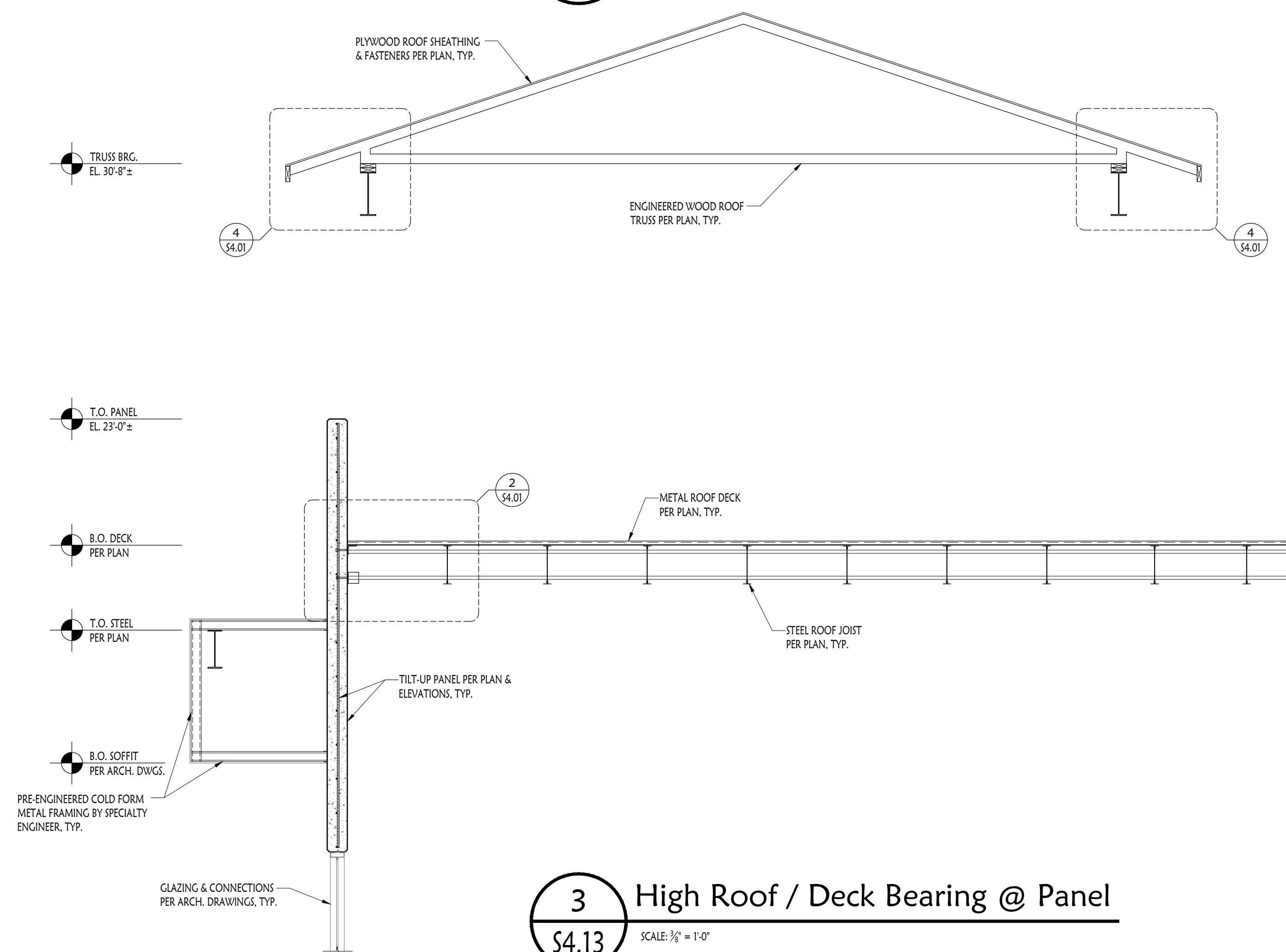
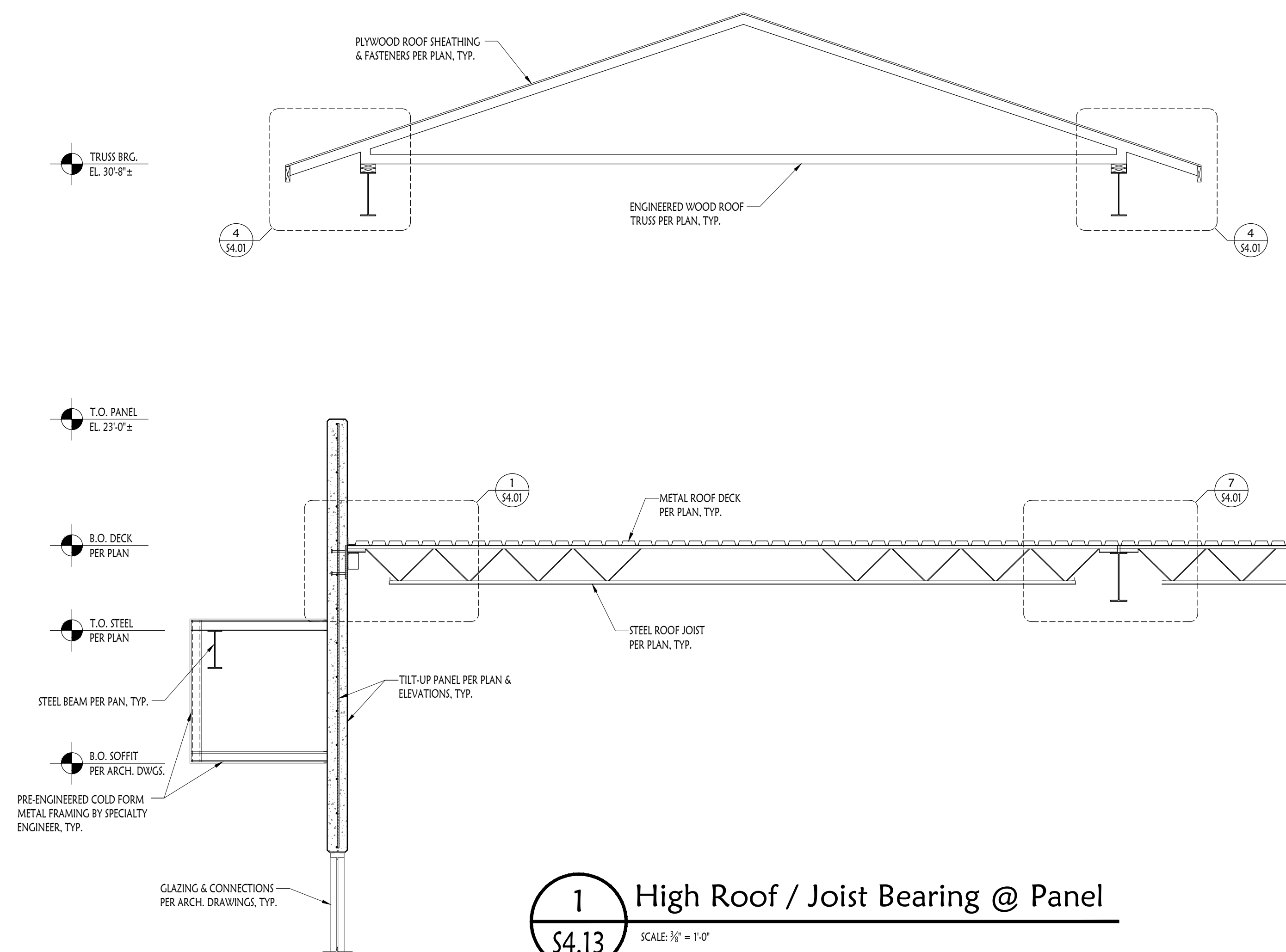
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	DATE: _____	BY: _____

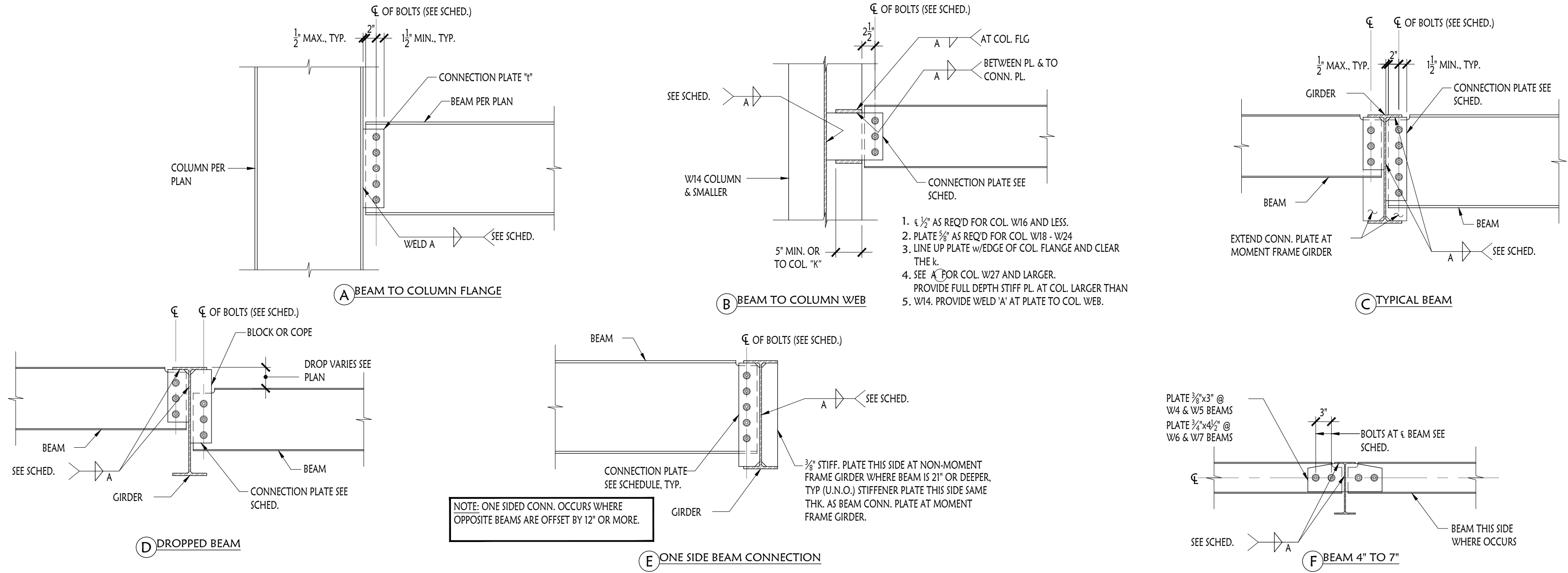
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S4.13

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SIMPLE BEAM CONNECTION SCHEDULE			
SHEAR PL CONNECTION			
MEMBER (DEPTH)	# OF BOLTS 1/2" A325	CONN. PLATE	WELD SIZE A
8" - 10"	2	5/16"	1/4"
12" - 14"	3	5/16"	1/4"
16"	4	3/8"	5/16"
18"	5	3/8"	5/16"
21"	5	1/2"	3/8"
24"	6	1/2"	3/8"
27"	7	1/2"	3/8"
30" & 33"	8	5/8"	3/8"
36"	10	5/8"	3/8"

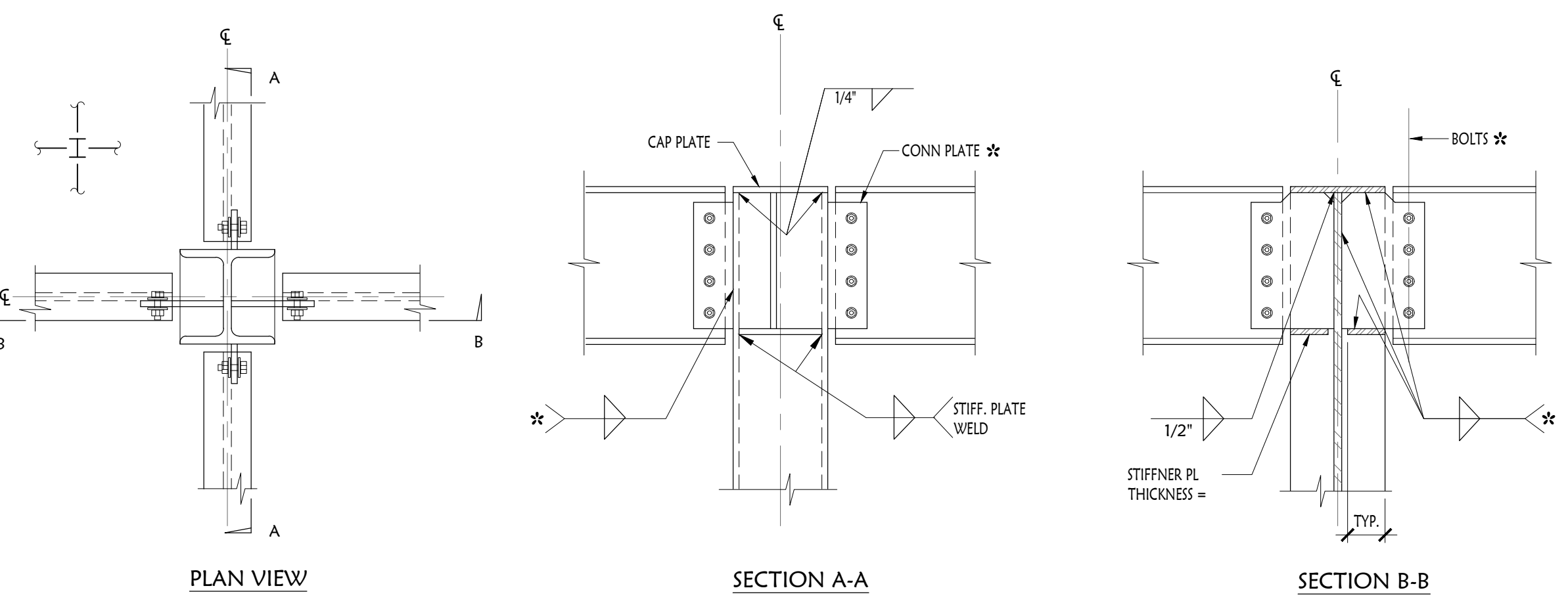
- NOTES:
- FILLET WELD SIZE SHALL BE AS SHOWN UNLESS A GREATER SIZE IS REQUIRED BY A.I.S.C. TABLE J2.4
 - ALL BOLTS ARE 3/4\"/>
 - DOUBLE ANGLES MAY BE SUBSTITUTED FOR CONNECTOR PLATES, PROVIDED THEY MEET OR EXCEED THE REQUIREMENTS OF THE A.I.S.C.
 - ALL CONNECTIONS TO COLUMNS AND ALL CONNECTIONS AT VIBRATION LOAD AREAS TO BE NON SLIP (A325 SC). ALL OTHER CONNECTION MAY BE BEARING TYPE (A325 N)

1

S5.01

Simple Beam Connection Details

SCALE: 3/4\"/>



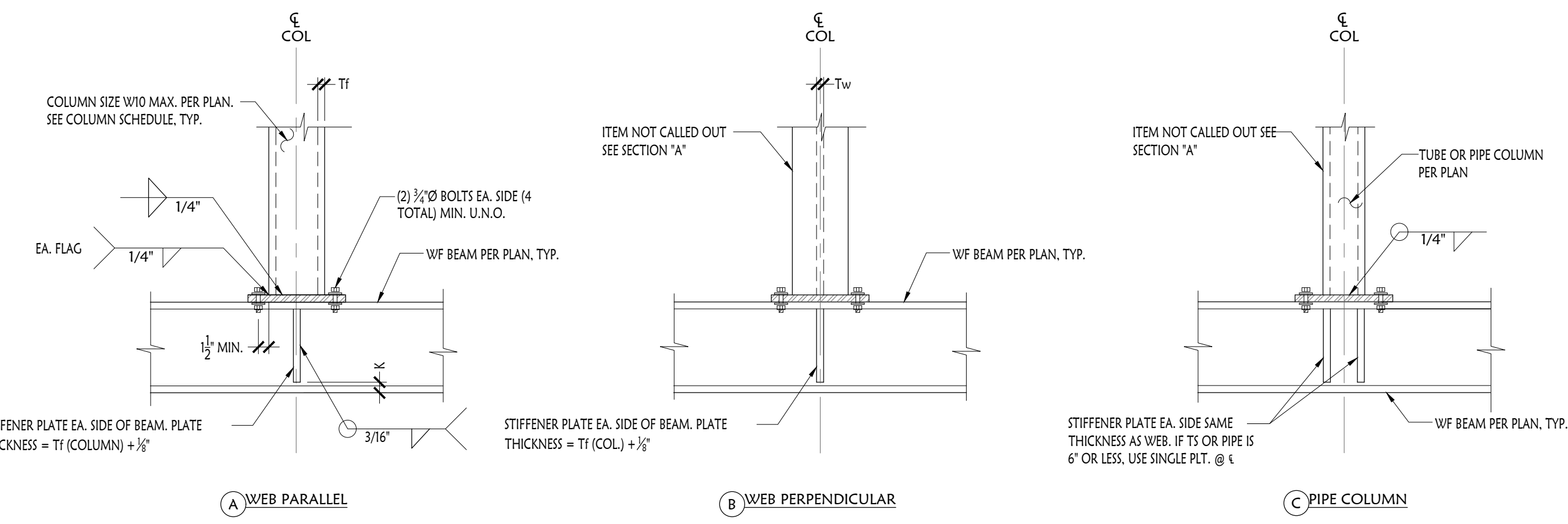
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S5.01

Typical Beam To Column Simple Connections @ Roof

SCALE: 3/4\"/>

NOTE: SEE CONNECTION SCHEDULE FOR INFORMATION NOT SHOWN, TYP.



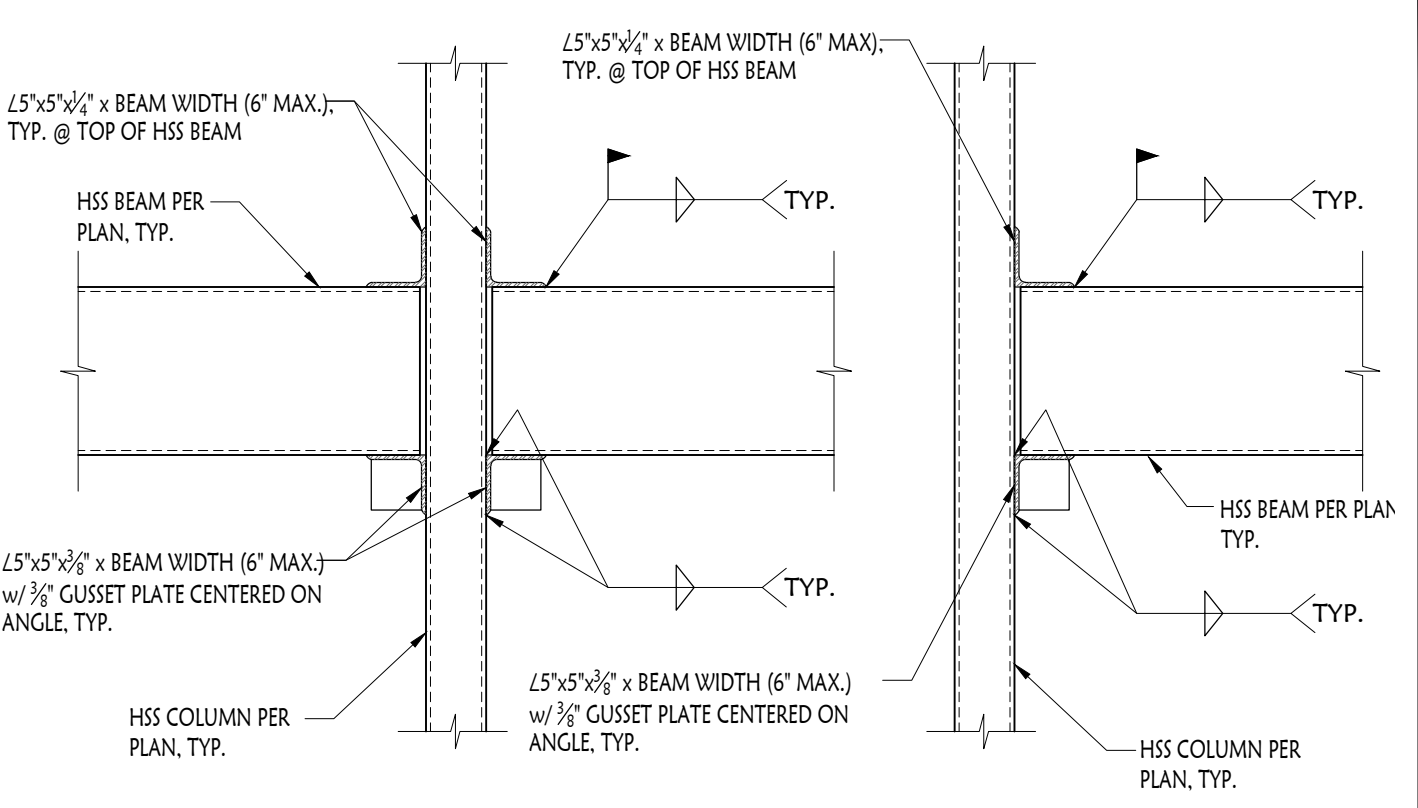
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S5.01

Typical Carried Column On WF Beam

SCALE: 3/4\"/>

NOTE: BASE PLATE WIDTH = COL WIDTH PLUS 1/2\"/>

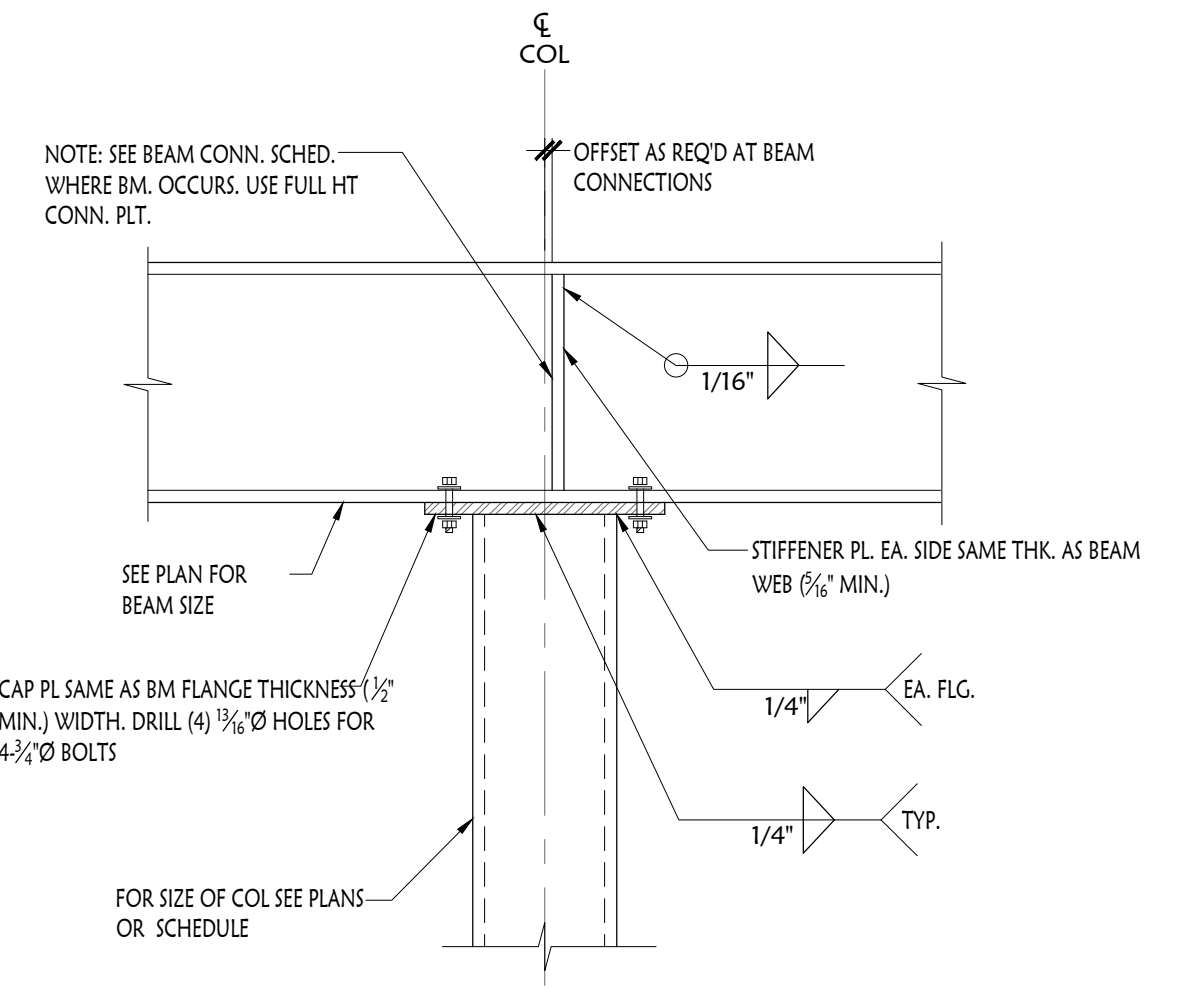


4

S5.01

Typical HSS Beam To HSS Column Connections

SCALE: 3/4\"/>



5

S5.01

WF Beam Bearing @ Steel Column

SCALE: 3/4\"/>



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