

1. MEANS, METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
2. IMPLEMENTATION OF JOB SITE SAFETY INCLUDING ALL OSHA REGULATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. TEMPORARY BRACING, SHEETING, SHORING, ETC. REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY OF THE FOUNDATION AND ANY EXISTING STRUCTURES, SIDEWALKS, UTILITIES, ETC. DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR'S CONSTRUCTION AND ERECTION SEQUENCES SHALL CONSIDER THE EFFECTS OF THERMAL EXPANSION AND CONTRACTION ON THE STRUCTURE DURING CONSTRUCTION.
5. HOLES AND NOTCHES SHALL NOT BE CUT OR DRILLED INTO ANY STRUCTURAL MEMBER IN THE FIELD WITHOUT THE APPROVAL OF THE ENGINEER.
6. STRUCTURAL DRAWINGS ARE TO BE STAND ALONE DOCUMENTS. CONTRACTOR SHALL COORDINATE STRUCTURAL, ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND OTHER DISCIPLINES AND INCORPORATE ALL REQUIREMENTS INTO SHOP DRAWINGS AND FIELD WORK.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THE STRUCTURAL DRAWINGS AND THE DRAWINGS OR REQUIREMENTS OF ANY OTHER DISCIPLINE.
8. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THE GENERAL STRUCTURAL NOTES, SPECIFICATIONS, AND DRAWINGS. THE ENGINEER WILL DETERMINE WHICH REQUIREMENTS WILL GOVERN.
9. CONTRACTOR'S RESPONSIBILITY FOR COORDINATING DIMENSIONS AND INSTALLATION DETAILS OF PURCHASED EQUIPMENT WITH THE SUPPORTING STRUCTURE. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE ITEMS AND THE STRUCTURE.
10. DETAILS DESIGNATED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE SHOWN IN THE DETAILS. CONTACT ENGINEER FOR INTERPRETATION OF THE APPLICABILITY OF TYPICAL DETAILS.
11. EXISTING BUILDING INFORMATION SHOWN IS BASED UPON EXISTING BUILDING DRAWINGS AND/OR FIELD OBSERVATION. THIS INFORMATION MAY NOT CONFORM EXACTLY TO THE CONDITIONS IN THE FIELD. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BUILDING INFORMATION SHOWN AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE FABRICATION OR INSTALLATION OF ANY STRUCTURAL COMPONENT.

SEE ARCHITECTURAL OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATION ABOVE SEA LEVEL.
REFERENCE FINISH FLOOR ELEVATION OF 100'-0" IS USED ON THE STRUCTURAL DRAWINGS.

2021 INTERNATIONAL BUILDING CODE

EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER TO ASSURE COMPLIANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY SCI ENGINEERING, INC., PROJECT NO. 2006-0208.1N, DATED MAY 12, 2025. GEOTECHNICAL ENGINEER SHALL VERIFY THAT SOIL ON WHICH FOUNDATIONS BEAR MEET THE SOIL BEARING CAPACITY LISTED IN THE DESIGN DATA.

1. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.
2. HORIZONTAL REINFORCING IN FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND INTERSECTIONS. CORNER BARS SHALL BE PROVIDED TO MATCH HORIZONTAL STEEL. REINFORCING STEEL SHALL BE LAPPED AS FOLLOWS WHERE SPLICES ARE REQUIRED:

BAR SIZE	LAP DIMENSION
#4	2'-0"
#5	2'-0"
#6	3'-0"
3. CONCRETE SHALL NOT BE PLACED WHERE WATER OR FROST EXISTS IN THE BOTTOM OF THE FOUNDATION EXCAVATION.
4. WHERE BACKFILL OCCURS ON BOTH SIDES OF A WALL, BACKFILL BOTH SIDES SIMULTANEOUSLY.
5. EQUIPMENT AND/OR MATERIALS WITH WEIGHT GREATER THAN THE DESIGN SURCHARGE SHALL BE KEPT A SAFE HORIZONTAL CLEAR DISTANCE FROM ANY BASEMENT OR RETAINING WALLS. THE SAFE HORIZONTAL CLEAR DISTANCE EQUALS THE HEIGHT FROM THE BASE OF THE RETAINING WALL TO FINISHED GRADE. THE DESIGN SURCHARGE LOAD EQUALS 250 PSF.

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATION FOR HOT WEATHER CONCRETING, ACI 306 SPECIFICATION FOR COLD WEATHER CONCRETING, AND ACI 117 SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. PRIOR TO CONCRETE PLACEMENT, THE CONTRACTOR SHALL SUBMIT FOR THE ENGINEER TO REVIEW A CONCRETE MIX DESIGN FOR EACH TYPE OF CONCRETE TO BE USED. CONCRETE MIXES SHALL MEET THE REQUIREMENTS SPECIFIED BELOW.

	28-DAY COMPRESSIVE STRENGTH (fc)	MAX AGGREGATE SIZE	MAX. W/C RATIO	AIR ENTRAINMENT	UNIT WEIGHT	NOTES:
CONCRETE USE						
FOUNDATIONS	3,000 PSI	1 1/2"	0.55	NONE	145-150 PCF	1a.
RETAINING WALLS	4,500 PSI	1 1/2"	0.45	4%-6%	145-150 PCF	
FLOOR SLABS	4,000 PSI	1 1/2"	0.50	NONE	145-150 PCF	1a.
WALL PANELS	5,000 PSI (U.N.O.)	3/4"	0.50	NONE	145-150 PCF	
EXTERIOR EQUIPMENT PADS	4,000 PSI	1 1/2"	0.45	4%-6%	145-150 PCF	

- a. MINIMUM COMPRESSIVE STRENGTH NOT REQUIRED UNTIL 56 DAYS FOR FINAL IN-PLACE CONDITIONS, WHERE NOTED IN THE TABLE. GENERAL CONTRACTOR TO COORDINATE IF HIGHER EARLY STRENGTH IS REQUIRED FOR CONSTRUCTION.
2. CEMENTITIOUS MATERIALS SHALL CONFORM THE FOLLOWING:
 - a. PORTLAND CEMENT: ASTM C150 TYPE I, II, III
 - b. BLENDED HYDRAULIC CEMENT: ASTM C595 TYPE II, IP, IS (<70)
 - c. HYDRAULIC CEMENT: ASTM C1517 TYPE G-UE
 - d. FLY ASH OR NATURAL POZZOLAN: ASTM C618
 - e. SLAG CEMENT: ASTM C989
 - f. SILICA FUME: ASTM C1240
 - g. GROUND GLASS POZZOLAN: ASTM C1866
3. CONTRACTOR SHALL PROVIDE SPACERS, CHAIRS, STIRRUPS, TIES, ETC. AS NECESSARY TO SECURELY HOLD REINFORCING IN PLACE WHILE PLACING CONCRETE.
- a. CHLORIDE-BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A706, OR A996, GRADE 60.
5. PLAIN WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A1064 WITH A YIELD STRENGTH OF 65 KSI. DEFORMED WIRE REINFORCEMENT FOR SLABS SHALL CONFORM TO ASTM A1064 WITH A YIELD STRENGTH OF 70 KSI. DEFORMED WELDED WIRE REINFORCEMENT FOR WALL PANELS SHALL CONFORM TO ASTM A1064 WITH A YIELD STRENGTH OF 80 KSI AT 0.35% STRAIN.
6. NON-SHRINK, NON-METALLIC, FACTORY PACKAGED GROUT SHALL BE USED BENEATH STEEL BASE PLATES. GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI AND SHALL CONFORM TO ASTM C1107.
7. NON-METALLIC, FLOWABLE GROUT SHALL BE USED BENEATH WALL PANELS. GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 3/8".
- WHERE REINFORCING OR ANCHORS ARE SPECIFIED ON THE STRUCTURAL DRAWINGS TO BE DRILLED & SET IN EXISTING CONCRETE, ACCEPTABLE ADHESIVES INCLUDE HILTI HIT-HY 200 V3, HILTI HIT-RE 500 V3, DEWALT AC308+, DEWALT PURE-LOK+, SIMPSON AT-3G, SIMPSON SET-3G. IF A SPECIFIC TYPE OF ADHESIVE IS SPECIFIED ON THE STRUCTURAL DRAWINGS, IT MUST BE USED UNLESS AN ALTERNATIVE IS APPROVED BY THE ENGINEER.
10. WHERE CONCRETE EXPANSION ANCHORS ARE SPECIFIED ON THE STRUCTURAL DRAWINGS, ACCEPTABLE ANCHORS INCLUDE: HILTI KWIK BOLT 1, HILTI KWIK BOLT T22, POWERS POWER-STD+ SD1, POWERS POWER-STD- SD2, AND SIMPSON STRONG BOLT 2. WHERE CONCRETE SCREW ANCHORS ARE SPECIFIED ON THE STRUCTURAL DRAWINGS, ACCEPTABLE ANCHORS INCLUDE HILTI KWIK HUS-EZ, POWERS WEDGE BOLT+, AND SIMPSON TITEN HD. BEFORE USING ANY POST INSTALLED CONCRETE ANCHOR NOT LISTED ABOVE, APPROVAL FROM THE ENGINEER IS REQUIRED. IF A SPECIFIC TYPE OF CONCRETE ANCHOR IS SHOWN ON THE STRUCTURAL DRAWINGS, IT MUST BE USED UNLESS AN ALTERNATIVE IS APPROVED BY THE ENGINEER. FOR THE CONCRETE ANCHORS LISTED ABOVE, MINIMUM EMBEDMENT DEPTHS FOR VARIOUS ANCHOR DIAMETERS ARE SHOWN IN THE TABLES BELOW. IF A SPECIFIC EMBEDMENT DEPTH IS SHOWN ON THE STRUCTURAL DRAWINGS, THAT DEPTH MUST BE USED UNLESS AN ALTERNATE IS APPROVED BY THE ENGINEER.

EXPANSION ANCHOR MINIMUM EMBEDMENT DEPTHS					
ANCHOR SIZE	HILT		DEWALT		SIMPSON
	KWIK BOLT T1	KWIK BOLT T22	POWER-STUD • SD1	POWER-STUD • SD2	
3/8" Ø	2 3/8"	2 1/2"	2 3/8"	2 3/8"	1 7/8"
1/2" Ø	2 3/8"	2 1/2"	2 1/2"	2 1/2"	2 3/4"
5/8" Ø	3 1/4"	3 1/4"	3 3/8"	3 7/8"	3 3/8"
3/4" Ø	4"	4"	4"	4 1/2"	4 1/8"

SCREW ANCHOR MINIMUM EMBEDMENT DEPTHS			
ANCHOR SIZE	HILTI	DEWALT	SIMPSON
	KWIK HUS-EZ	SCREW-BOLT+	TITEN HD
3/8" Ø	1 5/8"	2"	2 1/2"
1/2" Ø	2 1/4"	2 1/2"	3 1/4"
5/8" Ø	3 1/4"	3 1/4"	4"
3/4" Ø	4"	4 1/4"	5 1/2"

12. FOR PROJECTS THAT HAVE A GOAL OF REDUCING THE EMBODIED CARBON FOOTPRINT OF THE STRUCTURE AS COMPARED TO TYPICAL CONSTRUCTION, THE DESIGN TEAM IS OPEN TO THE USE OF INNOVATIVE PRODUCTS AND PROCESSES FOR CONCRETE. LJB WILL CONSIDER ANY MIX DESIGN THAT CAN DEMONSTRATE THAT IT WILL MEET ALL OF THE PERFORMANCE CRITERIA LISTED ABOVE IN ADDITION TO REDUCING THE CONCRETE'S CARBON FOOTPRINT.

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AND CURRENT OSHA STANDARDS.
2. WELD FLANGE SHAPES AND CHANNELS SHALL CONFORM TO ASTM A992. STRUCTURAL TUBES SHALL CONFORM TO ASTM A500 GRADE C OR ASTM A501. GUSSET PLATES SHALL CONFORM TO ASTM A572 GRADE 50. ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A572 GRADE 50.
3. BOLTS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM F1554 GRADE A325-N, SIZE AS PER PLAN.
4. ANCHOR RODS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM F1554 GRADE 36 STEEL WITH COMPOSITIONAL LIMITS OF ASTM A36 STEEL TO ENSURE WELDABILITY.
5. HEADED WELD STUDS SHALL CONFORM TO ASTM A29 TYPE B.
6. ERECTION OF STRUCTURAL STEEL IS PROHIBITED UNTIL THE FOLLOWING IS DETAILED:
 - a. ALL STRUCTURAL AND MISCELLANEOUS STEEL ITEMS SHALL RECEIVE ONE COAT OF FABRICATOR'S STANDARD RUST INHIBITING PRIMER UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS. ALL STEEL SURFACES TO BE EMBEDDED IN CONCRETE, FIREPROOFED, OR GALVANIZED SHALL NOT BE PAINTED. ALL STEEL SURFACES AT FIELD WELD AREAS SHALL NOT BE PAINTED OR SHALL HAVE PRIMER REMOVED PRIOR TO WELDING. PREPARATION OF STEEL SURFACES SHALL MEET THE REQUIREMENTS OF THE STEEL STRUCTURES PAINTING COUNCIL (SSPC). THESE INCLUDE THE REMOVAL OF GREASE, OIL, DIRT, RUST, AND SCALE BY HAND TOOLS (SSPC-SF1), BY POWER TOOL SCALE, RUST, WELD FLUX AND SLAG BY HAND TOOL CLEANING (SSPC-SF2), AND BY POWER TOOL CLEANING (SSPC-SF3). PRIMER SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE. ANY SCARRED AREAS SHALL BE TOUCHED UP WITH THE SAME PAINT AFTER ERECTION.
 - b. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS IN ACCORDANCE WITH THE CURRENT EDITION OF THE AWS STRUCTURAL WELDING CODE. WELDING ELECTRODES SHALL BE E70XX. EXCEPT FOR THE WELDING OF DEFORMED BAR ANCHORS WHICH SHALL USE E80XX WELDING ELECTRODES.
7. ALL SKID PLATES SHALL BE FRAMED WITH LATEX-PAINTED 2" X 4" STEEL JOISTS. THE LOCATION AND SIZE OF ROOF OPENINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
8. TEMPORARY BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR, BUT AT A MINIMUM THE FOLLOWING BRACING SHALL BE MAINTAINED. TEMPORARY VERTICAL CROSS BRACING PER AISC (1/2" CABLES) IS REQUIRED ALONG EVERY COLUMN LINE IN EACH DIRECTION IN EVERY 3RD BAY FOR BAYS 50' OR LESS AND IN EVERY OTHER BAY FOR BAYS GREATER THAN 50' PER AISI DESIGN GUIDE. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL THE STRUCTURAL STEEL IS CONNECTED TO THE MAIN PANELS.
9. STAIR DESIGN AND DETAILING IS NOT PROVIDED BY L.B. STAIR FABRICATOR SHALL SUBMIT DESIGN CALCULATIONS AND STAIR SHOP DRAWINGS BEARING THE SEAL AND SIGNATURE OF THE STAIR FABRICATOR'S REGISTERED DESIGN PROFESSIONAL TO THE ENGINEER OF RECORD. STAIRS SHALL BE DESIGNED FOR THE LIVE LOADS AS NOTED IN THE LATEST VERSION OF THE ASCE 7. STAIR SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO FABRICATION.
10. STAIR AND STAIR CASE DESIGN SHALL BE SUBMITTED BY THE STAIR FABRICATOR. SHOP DRAWINGS AND CONNECTION DETAILS TO THE ENGINEER OR SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION.

1. THE DESIGN, FABRICATION AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS AND RECOMMENDED CODE OF STANDARD PRACTICE FOR OPEN WEB JOISTS AND JOIST GIRDERS ADOPTED BY THE STEEL JOIST INSTITUTE AND CURRENT OSHA STANDARDS.
2. NO CONSTRUCTION LOADS SHALL BE PLACED ON JOISTS OR JOIST GIRDERS UNTIL BRIDGING IS INSTALLED AND BEARING CONNECTIONS HAVE BEEN BOLTED OR WELDED.
3. JOIST BRIDGING BUNDLES SHALL NOT EXCEED 1,000 LBS.
4. JOISTS AND JOIST GIRDERS SHALL RECEIVE ONE (1) COPY OF MANUFACTURER'S STANDARD PRIMER.
5. MANUFACTURER'S DESIGN, CALCULATIONS, SECTION CUTS AND SHOP DRAWINGS TO THE ENGINEER OF RECORD, CALCULATIONS SHALL BEAR THE SEAL AND SIGNATURE OF THE MANUFACTURER'S REGISTERED DESIGN PROFESSIONAL. SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO FABRICATION. CALCULATIONS NEED NOT BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION. CALCULATIONS ARE FOR RECORD PURPOSES ONLY.

1. THE DESIGN, FABRICATION AND ERECTION OF THE STEEL ROOF DECK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE SDI SPECIFICATIONS AND COMMENTARY FOR STEEL ROOF DECK DESIGN AND THE SDI DIAPHRAGM DESIGN MANUAL.
2. PAINTED DECK SHALL CONFORM TO ASTM A1008. GALVANIZED DECK SHALL CONFORM TO ASTM A653.
3. MINIMUM END LAP SHALL BE 3".
4. THE STEEL ROOF DECK FUNCTIONS AS A STRUCTURAL ELEMENT IN RESISTING LATERAL LOADS AND PROVIDES OVERHEAD PROTECTION FOR THE BUILDING. THEREFORE THE WALL PANEL ERECTION BRACE SHALL BE REMOVED UNTIL THE STEEL DECK IS COMPLETELY FASTENED IN PLACE UNLESS PERMISSION TO REMOVE THE BRACES IS SPECIFICALLY GRANTED BY THE ENGINEER OF RECORD.
5. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS IN ACCORDANCE WITH THE CURRENT EDITION OF THE AWS SPECIFICATIONS FOR WELDED STEEL AND ITS COMMENTARY. WELDING ELECTRODES SHALL BE E6022. HOBART #1139, 5/32" DIA. WELDING ELECTRODES MEET THIS REQUIREMENT.
6. ROOF DECK SHALL RECEIVE ONE COAT OF MANUFACTURER'S STANDARD PRIMER UNLESS GALVANIZED. COORDINATE PRIMER COLOR WITH ARCHITECTURAL DRAWINGS. ALL DECK WELDS SHALL BE PAINTED WITH RUST PROHIBITIVE METAL PRIMER PRIOR TO ROOFING.
7. ROOF DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS.
8. ROOF DECK BUNDLES SHALL BE PLACED ON JOISTS WITH EXTREME CAUTION, FOLLOWING THE JOIST MANUFACTURER'S RECOMMENDATIONS FOR PROPER PLACEMENT.
9. DECKING OR DECK ACCESSORY BUNDLES SHALL NOT EXCEED 4,000 LBS.
10. ALL FASTENERS AND DECK COMPONENTS SHALL BE FASTENED TO THE DECK PER THE ROOFING MANUFACTURER'S REQUIREMENTS; HOWEVER, THE FASTENER SPACING IN EITHER DIRECTION SHALL NOT EXCEED THE JOIST SPACING. WHEN FM GLOBAL REQUIREMENTS ARE APPLICABLE ON A PROJECT, FASTENING OF THE ABOVE-DECK ROOFING COMPONENTS TO THE DECK SHALL FOLLOW THE FASTENING REQUIREMENTS OF FM GLOBAL DATA SHEET 1-29, BUT THE FASTENER SPACING SHALL NOT EXCEED THE REQUIREMENTS STATED ABOVE.
11. WHEN THE TYPE OF POWDER DRYER OR PNEUMATIC FASTENER IS NOT GIVEN ON THE STRUCTURAL DRAWINGS, ACCEPTABLE FASTENER TYPES ARE PNEUTEK K AND SDK SERIES AND HILTI X-ENP-19 AND X-HSN24. OTHER FASTENER TYPES MAY BE APPROVED BY LJB IF FASTENER DESIGN INFORMATION IS PROVIDED. CONTRACTOR SHALL COORDINATE THE FASTENER TYPE WITH THE THICKNESS OF STEEL SUBSTRATE THAT THE FASTENER WILL BE ATTACHED TO.
12. WHERE SIDE LAP FASTENER SCREWS ARE SPECIFIED ON THE STRUCTURAL DRAWINGS ACCEPTABLE MANUFACTURERS ARE BUILDEX, ELCO, HILTI, SIMPSON STRONG-TIE, OR TRIANGLE. NO SUBSTITUTION WILL BE APPROVED. IF A #13 TYPE OF SIDE LAP SCREW IS SHOWN ON THE STRUCTURAL DRAWINGS, IT MUST BE USED UNLESS AN ALTERNATE IS APPROVED BY THE ENGINEER.
13. CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL DECK FASTENERS TO THE ENGINEER. SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO THE START OF DECK ERECTION.
14. MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER. SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION.

1. RIGID BOARD INSULATION FOR CONCRETE SANDWICH WALL PANELS SHALL BE EXTRUDED POLYSTYRENE (XPS), CELLULAR POLYISOCYANURATE (PIR), OR APPROVED EQUAL.
2. STRUCTURALLY NON-COMPOSITE WYTHE THE CONNECTORS FOR CONCRETE SANDWICH WALL PANELS SHALL BE NON-CONDUCTIVE, NON-CORROSIVE CONNECTORS. CONNECTORS SHALL BE SPACED AT A MINIMUM OF 4" ON CENTER AND SHALL BE PLACED AT THE MID-THICKNESS OF THE PC CENTER ADJACENT TO ALL PANEL EDGES, UNLESS A LESSER SPACING IS REQUIRED BY THE MANUFACTURER.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY PANEL ENGINEER OF RECORD SHOWING PLACEMENT OF INDIVIDUAL SHEETS OF RIGID BOARD INSULATION WITH PRE-DETERMINED HOLE LOCATIONS. HOLES FOR THE CONNECTORS SHALL BE PRE-FORMED PRIOR TO PLACING THE INSULATION IN THE PANEL. SUBMITTAL SHALL INCLUDE ENGINEERING DATA FROM THE CONNECTOR MANUFACTURER DEMONSTRATING THAT THE CONNECTORS HAVE SUFFICIENT SHEAR AND TENSION CAPACITIES TO RESIST THE APPLIED LOADS.
4. SUBMIT ICC-ES EVALUATION SERVICE REPORT DOCUMENTING PHYSICAL, MECHANICAL, ENVIRONMENTAL AND STRUCTURAL PROPERTIES OF THE CONNECTORS. THE ICC-ES REPORT SHALL BE BASED UPON DATA SUBMITTED IN ACCORDANCE WITH ICC-ES ACCEPTANCE CRITERIA 320 AND SHALL INDICATE COMPLIANCE WITH APPLICABLE BUILDING CODES.
5. INSTALL RIGID INSULATION AND CONNECTORS THROUGH PRE-FORMED HOLES PER MANUFACTURER'S WRITTEN INSTRUCTIONS WITH PARTICULAR ATTENTION TO PROPER CONCRETE CONSOLIDATION. ALL CONNECTORS SHALL BE PLACED TO THE PROPER EMBEDMENT DEPTH.
6. CONFIRM THE TENSILE STRENGTH OF THE CONNECTORS PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS. IN THE ABSENCE OF SUCH INSTRUCTIONS, A MINIMUM OF 25% OF THE CONNECTORS SPREAD ACROSS THE ENTIRE PANEL AREA SHALL BE TESTED PRIOR TO PLACING UPON WYTHE OF CONCRETE.

1. SPRINKLER LINE SUPPORTS SHALL CONFORM TO THE LATEST EDITION OF NFPA 13.
2. SPRINKLER LINES UP TO 1" DIAMETER MAY BE HUNG DIRECTLY FROM THE ROOF DECK ONLY IF APPROVED BY THE STRUCTURAL ENGINEER.
3. LINES GREATER THAN 1" DIAMETER SHALL BE SUPPORTED BY FRAMING MEMBERS.
4. SPRINKLER MAINS (4" DIAMETER AND LARGER) SHALL BE SUPPORTED BY THE STRUCTURE ONLY AT LOCATIONS IDENTIFIED BY THE STRUCTURAL ENGINEER.
5. DIAMETER (SCHEDULE 10) SPRINKLER MAINS RUNNING PARALLEL TO THE JOISTS SHALL BE CENTERED BETWEEN TWO JOISTS AND HUNG SO THAT THE LOAD IS EVENLY SHARED BETWEEN THE TWO JOISTS.
6. NO ALLOWANCE HAS BEEN MADE FOR JOISTS THAT SUPPORT MORE THAN ONE SPRINKLER MAIN OR FOR SPRINKLER MAINS LARGER THAN 6" DIAMETER OR HEAVIER THAN SCHEDULE 10.

THE DESIGNS AND SPECIFICATIONS CONTAINED HEREIN ARE INTENDED SOLELY FOR USE ON THE SPECIFIC PROJECT FOR WHICH THEY ARE PREPARED. ANY USE OF THESE DESIGNS AND SPECIFICATIONS ON OTHER PROJECTS, OR WITHOUT THE DIRECT INVOLVEMENT OF LJB, IS STRICTLY PROHIBITED. LJB SHALL NOT BE HELD RESPONSIBLE FOR ANY CLAIMS, DAMAGES, OR LIABILITIES ARISING FROM SUCH UNAUTHORIZED USE.

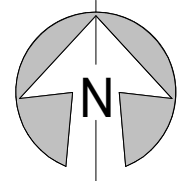
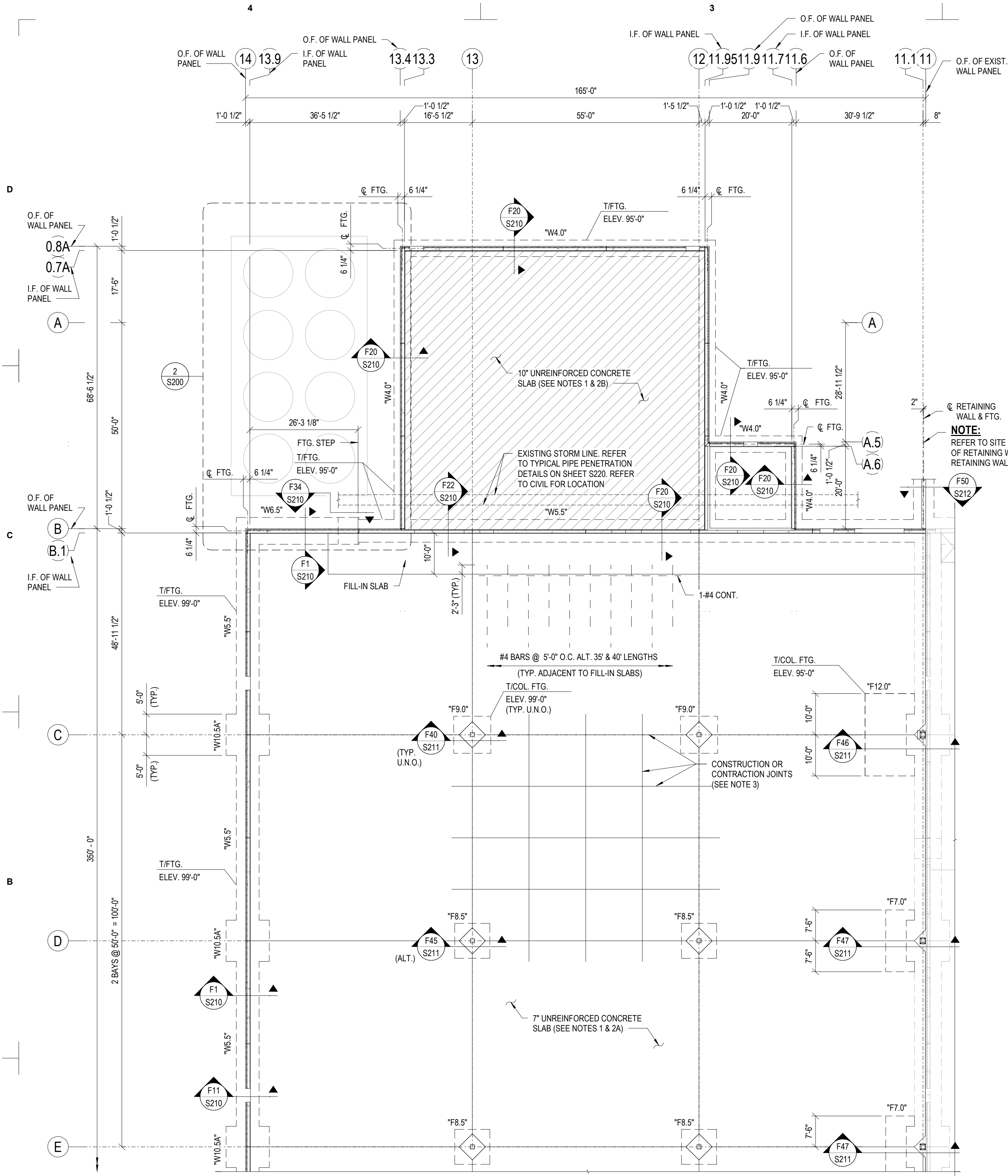
1. THE GENERAL CONTRACTOR SHALL REVIEW ALL SUBMITTALS PRIOR TO SUBMITTING THEM TO LIB.
2. LIB SHALL HAVE A MINIMUM OF 10 BUSINESS DAYS FROM RECEIPT TO REVIEW ALL SUBMITTALS.
3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING CONSTRUCTION ACTIVITIES TO ENSURE ADEQUATE TIME FOR SHOP DRAWING REVIEW.
4. DUPLICATION OR REPRODUCTION OF ANY PART OF THE STRUCTURAL DRAWINGS OR USE OF ELECTRONIC FILES PROVIDED BY LIB DOES NOT ELIMINATE THE RESPONSIBILITY OF THE DETAILER/CONTRACTOR TO PRODUCE ACCURATE SUBMITTALS.
5. SHOP DRAWINGS AND MATERIAL SUBMITTALS SHALL BE REVIEWED BY LIB PRIOR TO THE START OF THE ERECTION OF THE RAMMED AGGREGATE PIER IN THE SUBMITTALS.
6. SHOP DRAWINGS OR MATERIAL SUBMITTALS THAT HAVE BEEN RESUBMITTED TO LIB SHALL CLEARLY INDICATE ANY CHANGES OR ADDITIONS MADE FROM THE PREVIOUS SUBMITTAL. LIB SHALL HAVE A MINIMUM OF 10 BUSINESS DAYS TO REVIEW THE MODIFIED SUBMITTAL. LIB'S REVIEW OF THE MODIFIED SUBMITTAL SHALL BE LIMITED TO THE ITEMS THAT HAVE BEEN CHANGED OR ADDED.
6. REFER TO OTHER NOTES ON SHEET S100 FOR ADDITIONAL INFORMATION WITH REGARDS TO SUBMITTALS OF SPECIFIC MATERIALS AND MEMBER TYPES.
7. THE PROJECT SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS BEING CONSTRUCTED. THESE SUBMITTALS INCLUDE: JOISTS, JOIST-GIRDERS, COLD-FORMED METAL FRAMING, STAIRS, LADDERS, WALL PANEL LIFTING, WALL PANEL BRACING, RAMMED AGGREGATE PIERS.

WHERE SPECIAL INSPECTION IS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, IT SHALL BE PERFORMED BY A REGISTERED DEPUTY INSPECTOR, EMPLOYED BY THE OWNER AND APPROVED BY THE GOVERNING JURISDICTION. COPIES OF THE INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND LJB. A LICENSED ENGINEER OR ARCHITECT SHALL SIGN EACH REPORT. LJB SHALL BE NOTIFIED IMMEDIATELY OF ANY TEST WHICH INDICATES NON COMPLIANCE WITH APPLICABLE CODES OR REQUIREMENTS OF THESE PLANS UNLESS NOTED OTHERWISE. UNLESS NOTED OTHERWISE, PROVIDE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1705 OF THE 2021 INTERNATIONAL BUILDING CODE ON THE FOLLOWING:

- STEEL CONSTRUCTION PER SECTION 1705.2.
- CONCRETE CONSTRUCTION PER SECTION 1705.3
- SOILS PER SECTION 1705.6.

BTS EXPANSION - INDEX OF SHEETS	
SHEET NAME	SHEET NUMBER
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GENERAL STRUCTURAL DATA	S101
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FOUNDATION PLAN - AREA B	S201
FOUNDATION DETAILS	S210
FOUNDATION DETAILS	S211
FOUNDATION DETAILS	S212
TYPICAL FOUNDATION DETAILS	S220
ROOF FRAMING PLAN - AREA A	S300
ROOF FRAMING PLAN - AREA B	S301
FRAMING DETAILS	S310
FRAMING DETAILS	S311
FRAMING DETAILS	S312
TYPICAL ROOF FRAMING DETAILS	S330
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WALL PANEL LAYOUTS	S411
WALL PANEL LAYOUTS	S412
WALL PANEL LAYOUTS	S413
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WALL PANEL LAYOUTS	S415
WALL PANEL LAYOUTS	S416
STANDARD FABRICATION DETAILS	S700
STANDARD FABRICATION DETAILS	S701

powers brown archi ecture	18W140 Butterfield Road, Suite 1560 Oakbrook Terrace, IL 60181 312.967.4530 www.powersbrown.com																														
PROJECT TITLE																															
AXIUM BTS EXPANSION - ST. PETERS																															
4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301																															
A PROJECT FOR PEAK CONSTRUCTION																															
GENERAL NOTES																															
LJB Engineering <i>Building Partnerships</i> LJBInc.com (866) 552-3536 info@LJBInc.com © 1985-2026 LJB Inc. This drawing contains information that is proprietary to and property of LJB Inc. and shall be kept confidential. No publication or distribution of this drawing may be made without the express written consent of LJB Inc. except for the limited purposes set forth in the contract between LJB Inc. and party for whom this drawing was made. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"><thead><tr><th style="width: 10%; text-align: center;">△</th><th style="width: 40%; text-align: center;">DATE</th><th style="width: 50%; text-align: center;">REVISION</th></tr></thead><tbody><tr><td></td><td style="text-align: center;">2026-04-17</td><td style="text-align: center;">ISSUE FOR PERMIT</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table> PROJECT NO: 0129388A.00 DRAWN BY: RMS CHECKED BY: OWJ		△	DATE	REVISION		2026-04-17	ISSUE FOR PERMIT																								
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SHEET NAME																															
GENERAL STRUCTURAL DATA																															
SEAL	SHEET NUMBER																														
STATE OF MISSOURI JEREMY E. FALCONE 2023033627 PROFESSIONAL ENGINEER	S100																														

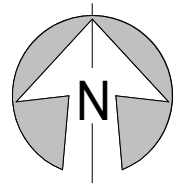
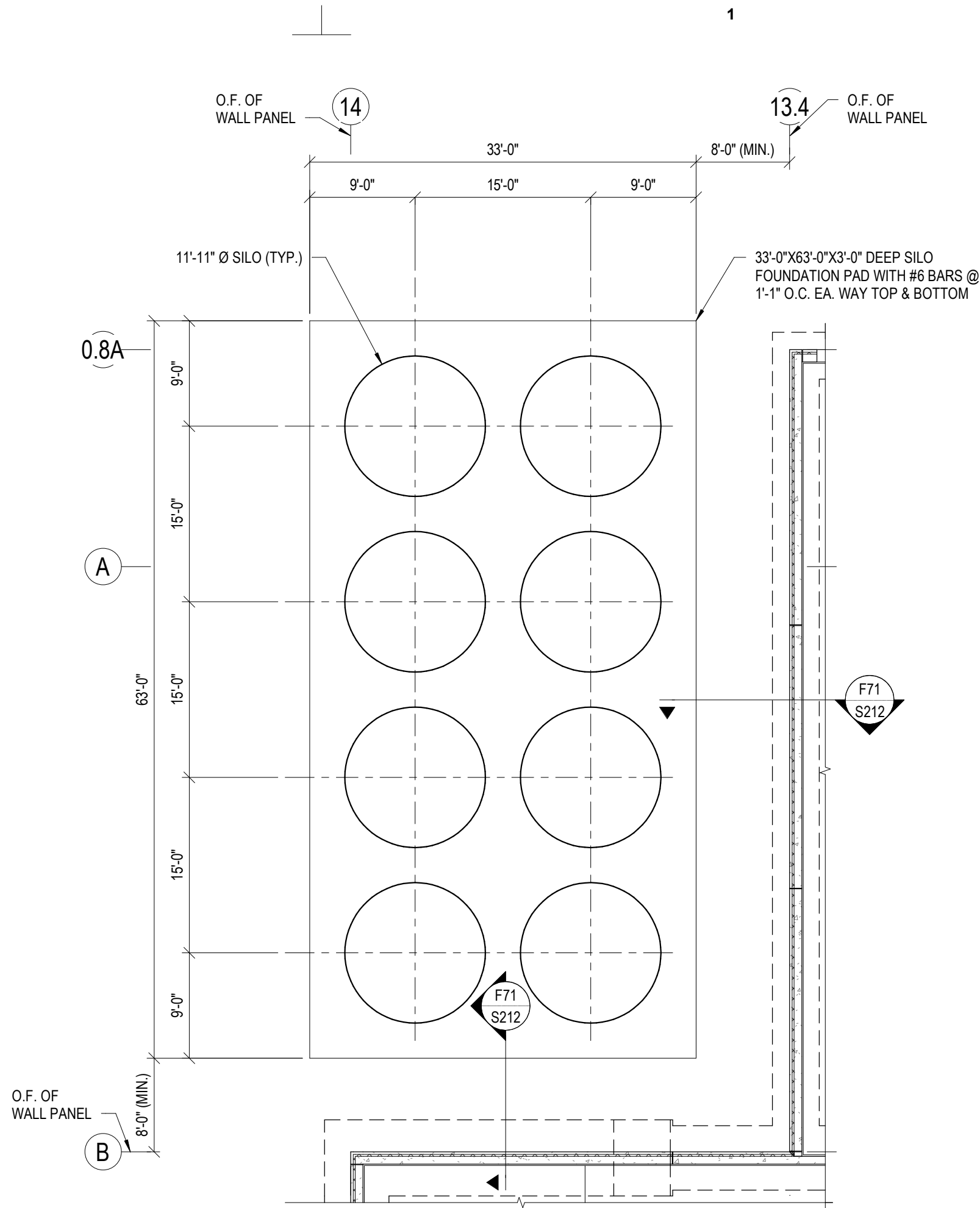


FOUNDATION PLAN

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

FOOTING SCHEDULE - BTS EXP

MARK	WIDTH (W)	LENGTH (L)	DEPTH (D)	REINFORCING
"F7.0"	7'-0"	15'-0"	2'-0"	9-#6X8'-6" & 6-#6X14'-6" TOP & BOTTOM
"F8.5"	8'-6"	8'-6"	1'-8"	9-#6 EACH WAY BOTTOM
"F9.0"	9'-0"	9'-0"	1'-8"	9-#6 EACH WAY BOTTOM
"F12.0"	12'-0"	20'-0"	2'-0"	12-#6X11'-6" & 9-#6X19'-6" TOP & BOTTOM
"W4.0"	4'-0"	CONT.	2'-0"	4-#6 CONT. TOP & BOTTOM
"W5.5"	5'-6"	CONT.	2'-0"	5-#6 CONT. TOP & BOTTOM
"W6.5"	6'-6"	CONT.	2'-0"	6-#6 CONT. TOP & BOTTOM
"W10.5A"	10'-6"	SEE PLAN	2'-0"	8-#6 CONT. TOP & BOTTOM; #5X10'-0" @ 1'-0" TRANSVERSE T&B
"W10.5B"	10'-6"	SEE PLAN	2'-0"	8-#6 CONT. TOP & BOTTOM

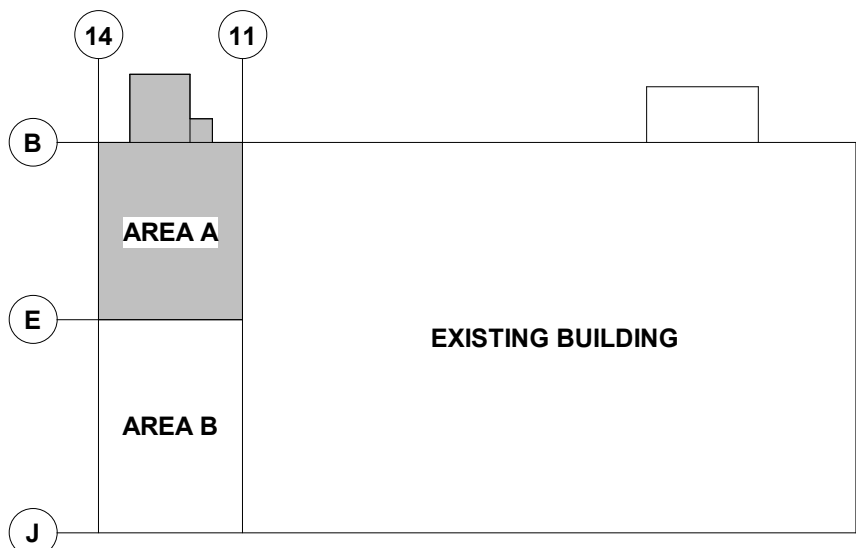


ENLARGED SILO FOUNDATION PLAN

SCALE: 1" = 10'-0"

FOUNDATION PLAN NOTES

- REFER TO ARCHITECTURAL OR CIVIL DRAWINGS FOR FINISHED FLOOR ELEVATION ABOVE SEA LEVEL. REFERENCE FINISH FLOOR ELEVATION OF 100'-0" IS USED ON THE STRUCTURAL DRAWINGS. ALL ELEVATIONS ARE REFERENCED FROM THIS ELEVATION.
- A. 7" UNREINFORCED CONCRETE SLAB-ON-GRADE. REFER TO GEOTECHNICAL REPORT FOR SUBGRADE RECOMMENDATIONS.
- B. 10" UNREINFORCED CONCRETE SLAB-ON-GRADE. REFER TO GEOTECHNICAL REPORT FOR SUBGRADE RECOMMENDATIONS.
- CONSTRUCTION OR CONTRACTION JOINTS SPACED EQUALLY BETWEEN COLUMNS AT 15'-0" O.C. MAX. REFER TO JOINT DETAILS ON SHEET S220.
- PROVIDE SLAB REINFORCEMENT AT ALL RE-ENTRANT CORNERS PER DETAIL ON SHEET S220.
- *** DENOTES FOOTING MARK. SEE FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCING.
- COLUMN SIZES ARE SHOWN ON THE FRAMING PLAN CORRESPONDING TO THE HIGHEST ELEVATION OF THE COLUMN.
- COORDINATE FOUNDATION PLAN(S) AND DETAILS WITH WALL PANEL LAYOUTS AND DETAILS.
- COORDINATE LOCATIONS AND SIZES OF ALL DEPRESSED SLAB AREAS, FLOOR SLOPES, CURBS, AND DRAINS WITH THE ARCHITECTURAL DRAWINGS.
- WHEN CONTINUOUS FOOTINGS CHANGE WIDTH, LONGITUDINAL REINFORCING IN THE NARROWER FOOTING SHALL EXTEND 2'-6" MINIMUM PAST CHANGE IN WIDTH.
- LJB IS NOT RESPONSIBLE FOR THE DESIGN THICKNESS OF VAPOR BARRIERS UNDER FLOOR SLABS OR LOCATIONS WHERE VAPOR BARRIERS ARE REQUIRED. THE CONTRACTOR SHALL VERIFY PLACEMENT LOCATION AND DESIGN THICKNESS OF VAPOR BARRIERS WITH ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- FLOOR SLAB SHALL MEET SPECIFIED OVERALL VALUES (SOV) OF FF = 50, FL = 45 AND MINIMUM LOCAL VALUES (MLV) OF FF = 33, FL = 21 AS MEASURED ACCORDING TO ASTM E1155.



KEY PLAN

powers
brown
archi
ecture

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PROJECT TITLE

AXIUM BTS EXPANSION - ST.
PETERS

4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301

A PROJECT FOR

PEAK CONSTRUCTION

GENERAL NOTES



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DATE	REVISION
2026-04-17	ISSUE FOR PERMIT

PROJECT NO: 0129388A.00

DRAWN BY: RMS

CHECKED BY: OWJ

SHEET NAME

FOUNDATION PLAN -
AREA A

SEAL

SHEET NUMBER

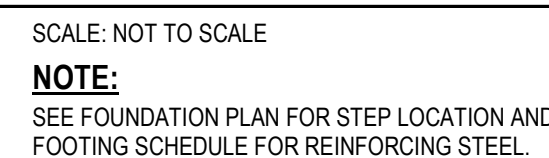
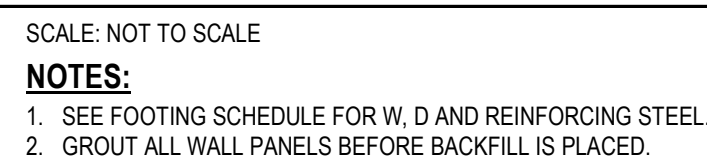
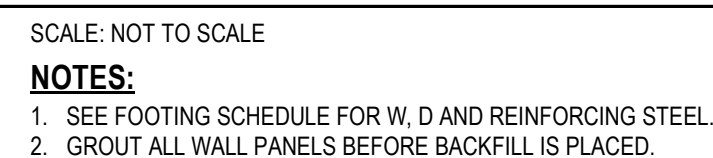
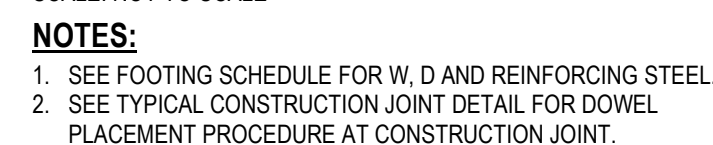
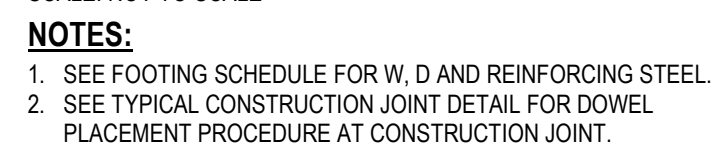
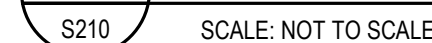
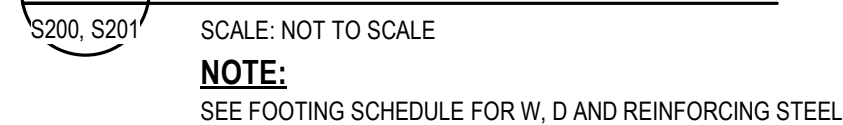


S200

AXIUM BTS EXPANSION - ST. PETERS

A PROJECT FOR
PEAK CONSTRUCTION

GENERAL NOTES

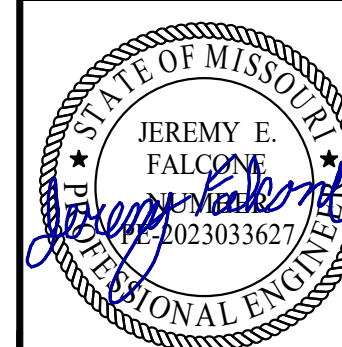


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PROJECT NO:	0129388A.00
DRAWN BY:	RMS
CHECKED BY:	OWJ
SHEET NAME	

FOUNDATION DETAILS

SHEET NUMBER



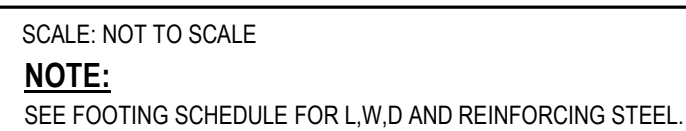
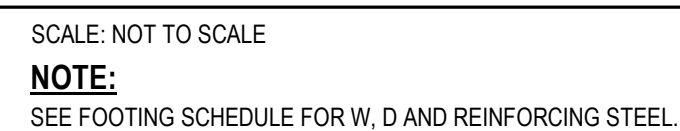
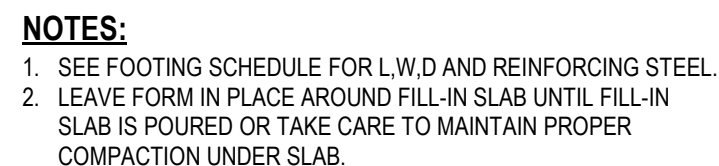
S210

AXIUM BTS EXPANSION - ST.
PETERS

A PROJECT FOR

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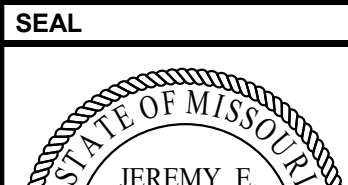
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PROJECT NO:	0129388A.00
DRAWN BY:	RMS
CHECKED BY:	OWJ
SHEET NAME	

FOUNDATION DETAILS

SEAL	SHEET NUMBER
 The seal of the State of Missouri is circular. It features a central shield with a plow and a sheaf of wheat. Above the shield is an eagle with wings spread. The shield is flanked by two stars. The words "STATE OF MISSOURI" are written in a circle around the shield. Below the shield, the date "JANUARY 1820" is inscribed. The entire seal is surrounded by a decorative border.	S211

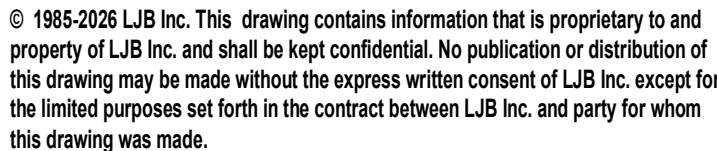


AXIUM BTS EXPANSION - ST.
PETERS

~~PEAK CONSTRUCTION~~

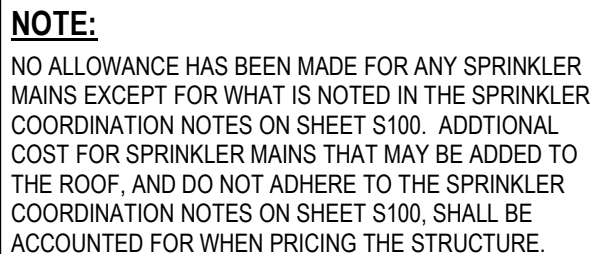
GENERAL NOTES

1. REFERENCE FINISH FLOOR ELEVATION OF '100'-0" IS USED ON THE STRUCTURAL DRAWINGS. ALL ELEVATIONS ARE REFERENCED FROM THIS ELEVATION.
2. INSTALL CORNER ANGLE "L" TYPE WITH 4-5/8" DIA. EXPANSION OR SCREW ANCHORS, WITH MIN. EMBEDMENT PER SHEET S100, JUST BELOW ROOF DECK AND 1/2" BELOW FACE OF PANELS. TYPICAL ALL 90° CORNERS AS SHOWN.
3. PERIMETER ANGLE 2 1/2 X 2 1/2 X 3/16 VERTICAL LEG UP AT JOIST BEARING WALLS AND VERTICAL LEG DOWN AT JOIST GIRDER/BEAM/DECK BEARING WALLS. WELD CORNERS AND BUTT WELD SPLICES TO MAKE CONTINUOUS.
4. WALL BRACE ANGLE 2 1/2 X 2 1/2 X 3/16X20"0" TYPICAL EACH END EACH BAY.
5. JOISTS AND JOIST GIRDERS SHALL BE DESIGNED FOR THE NET UPLIFT AS SHOWN IN THE DIAGRAMS (ON SHEET S310).
6. *X DENOTES LOCATION OF BOTTOM CHORD EXTENSIONS.
7. ~~WELDED DIAGONAL BRIDGING REQUIRED BY SJI~~
8. WELDED DIAGONAL BRIDGING IN ADDITION TO HORIZONTAL BRIDGING IS REQUIRED WHERE SHOWN BY ~~— — —~~
9. VERIFICATION OF EXACT BRIDGING AND BOTTOM CHORD EXTENSION REQUIREMENTS IS THE RESPONSIBILITY OF THE MANUFACTURER. DESIGN OF THE FRAMING SHALL BE COORDINATED WITH THE SPRINKLER DRAWINGS SO THAT JOISTS, GIRDERS, BOTTOM CHORD EXTENSIONS, AND BRIDGING DO NOT INTERFERE WITH SPRINKLER HEADS.
10. JOIST SEATS AT BEARING WALLS SHALL BE DESIGNED FOR A LATERAL ROLL-OVER SEISMIC FORCE (0.7E) OF 1990 LB. OR WIND FORCE (0.6W) OF 1140 LB. APPLIED AT THE TOP OF THE JOIST AND TRANSFERRED TO THE BEARING SURFACE.
11. JOISTS BEARING ON WALL PANELS SHALL BE DESIGNED FOR AN AXIAL SEISMIC FORCE (0.7E) OF 1550 LB. OR WIND FORCE (0.6W) OF 4300 LB. THAT SHALL BE TRANSFERRED FROM THE WALL PANEL INTO THE JOISTS.
12. JOIST JOINTS ALONG GRID 111 SHALL BE DESIGNED FOR AN AXIAL TENSION OR COMPRESSION SEISMIC FORCE (0.7E) OF 48,300 LBS. AND WIND FORCE (0.6W) OF 39,000 LB. IN COMBINATION WITH DEAD AND ROOF LIVE LOAD.
13. JOISTS WITH A SPAN LESS THAN 45'-10" SHALL BE DESIGNED FOR A DOWNWARD WIND PRESSURE (0.6W) OF 9.6 PSF. THE TLLD DESIGNATION SHOWN ON JOISTS DOES NOT INCLUDE ANY DOWNWARD WIND PRESSURE.
14. ALL JOIST SHOES ARE 2 1/2" DEEP.
15. ALL LH JOIST SHOES ARE 2 1/2" DEEP.
16. ALL JOIST GIRDER SHOES ARE 7 1/2" DEEP.
17. ALL ELEVATIONS ARE TO JOIST BEARING UNLESS NOTED OTHERWISE.
18. COORDINATE FRAMING PLAN(S) AND DETAILS WITH WALL PANEL LAYOUTS AND DETAILS.
19. JOISTS AND JOIST GIRDERS SHALL BE DESIGNED FOR A DEFLECTION OF L/360 FOR LIVE LOAD AND L/240 FOR TOTAL LOAD IN OFFICE AREAS AND FOR A DEFLECTION OF L/240 FOR LIVE LOAD AND L/180 FOR TOTAL LOAD FOR THE REMAINDER OF THE BUILDING. JOIST DESIGNATION REPRESENTS TOTAL LOAD/LIVE LOAD.
20. SPECIAL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED FOR THE LOADS SHOWN IN THE LOADING DIAGRAMS ON SHEET S310.
21. DO NOT WELD ACROSS EXPANSION JOINTS.
22. ALL JOISTS SHALL BE DESIGNED FOR A TOP CHORD AXIAL SEISMIC FORCE (0.7E) OF 1550 LB. JOIST SHOES AT BEARING WALLS SHALL BE DESIGNED WITH THE LOAD APPLIED AT BOTTOM OF THE SHOE AND TRANSFERRED TO THE TOP CHORD.
23. *X DENOTES LOCATION WHERE JOIST SEISMIC CONTINUITY PLATE CONNECTION REQUIRED PER S55/S312.



ROOF FRAMING PLAN - AREA A

S300



AXIUM BTS EXPANSION - ST.
PETERS

A PROJECT FOR

~~PEAK CONSTRUCTION~~

GENERAL NOTES



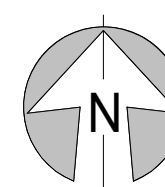
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PROJECT NO: 0129388A.00
DRAWN BY: RMS
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SHEET NAME

ROOF FRAMING PLAN -
AREA B

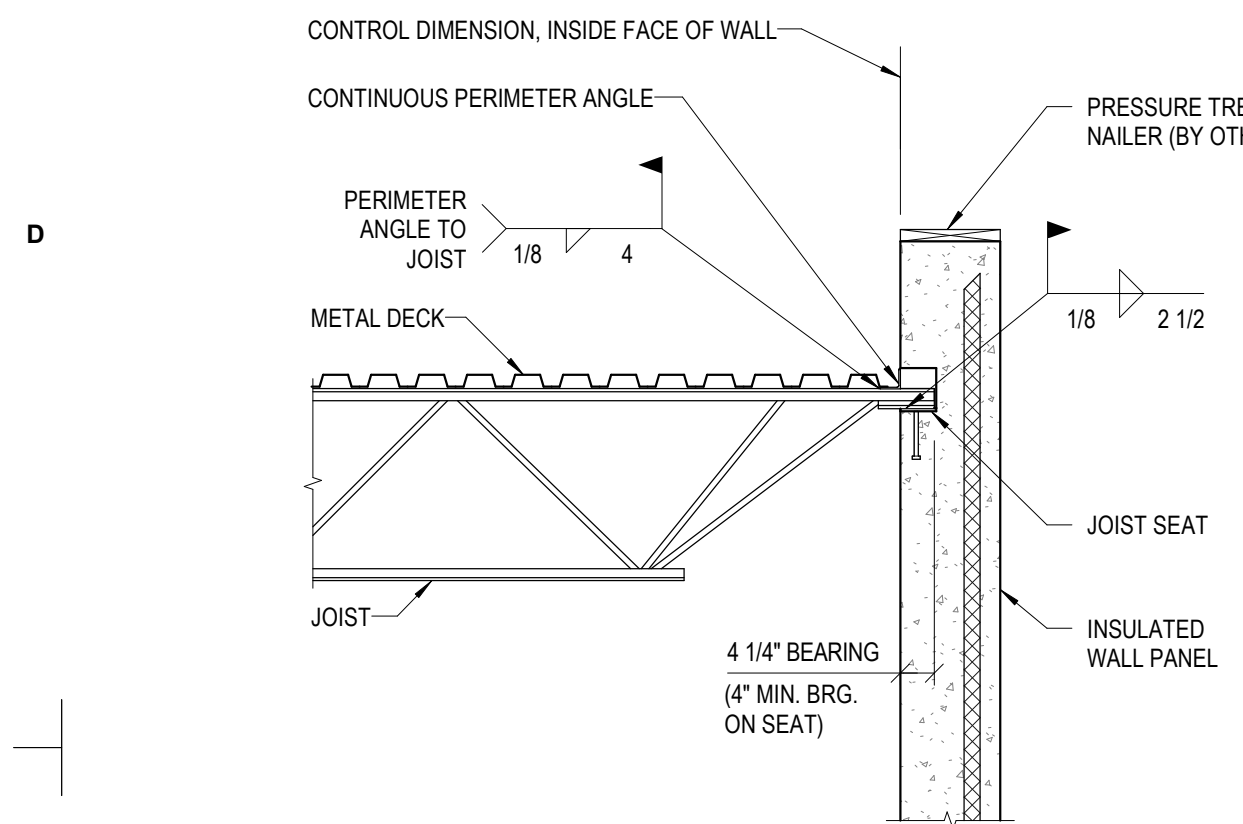
SEAL	SHEET NUMBER
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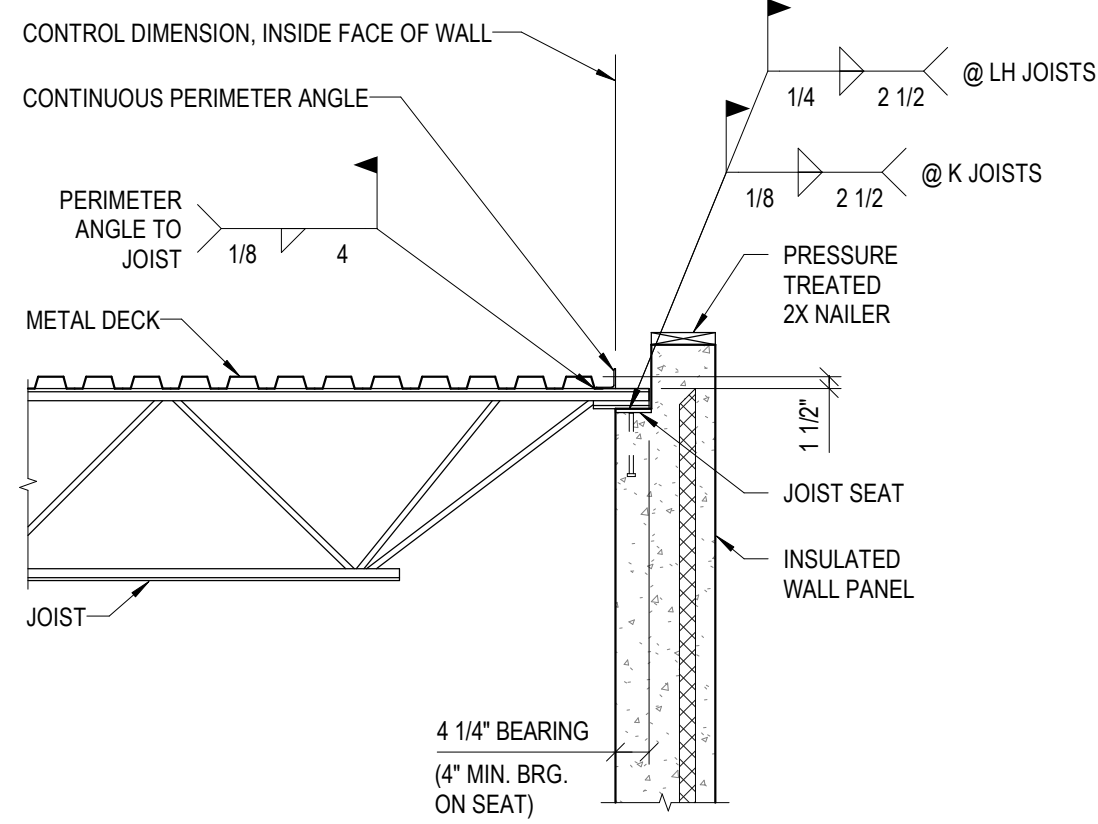
ROOF FRAMING PLAN - AREA B

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

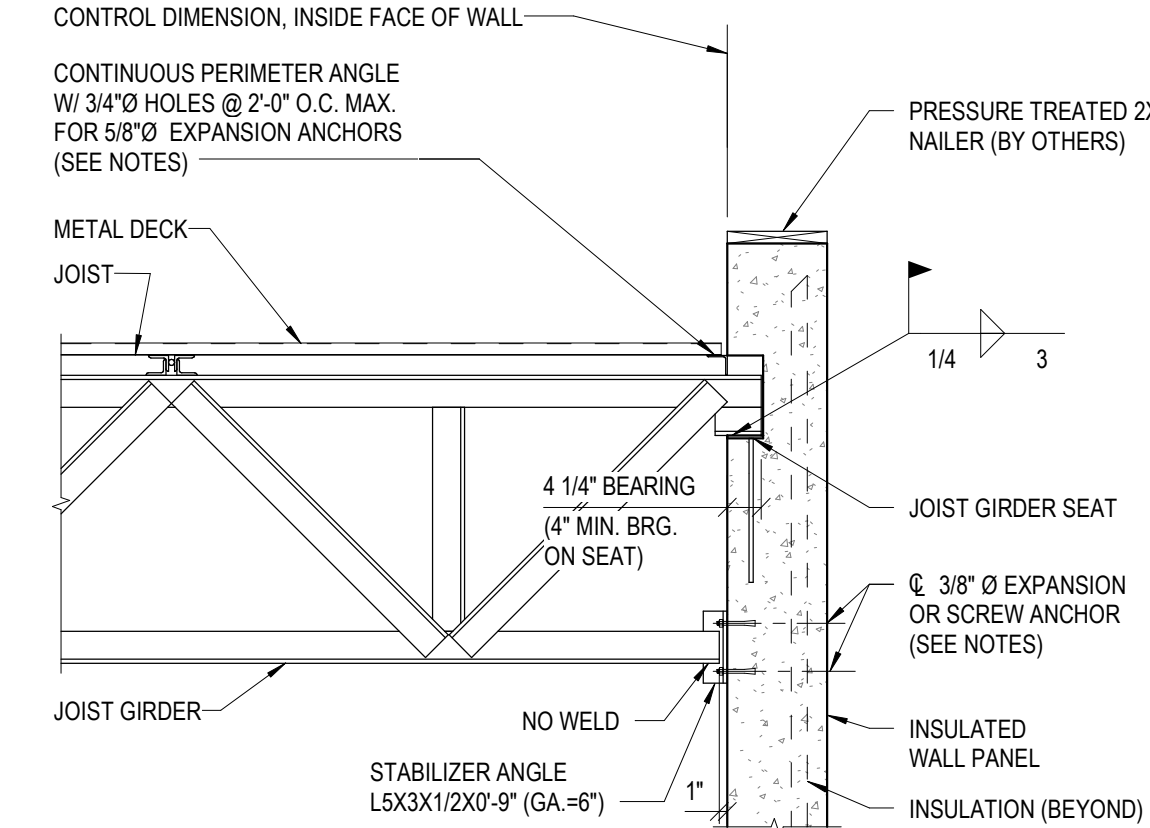
NOTE:
SEE SHEET S300 FOR ROOF FRAMING NOTES



S1 JOIST WALL BEARING SECTION
S300, S301 SCALE: NOT TO SCALE



S2 JOIST WALL BEARING SECTION
S300 SCALE: NOT TO SCALE



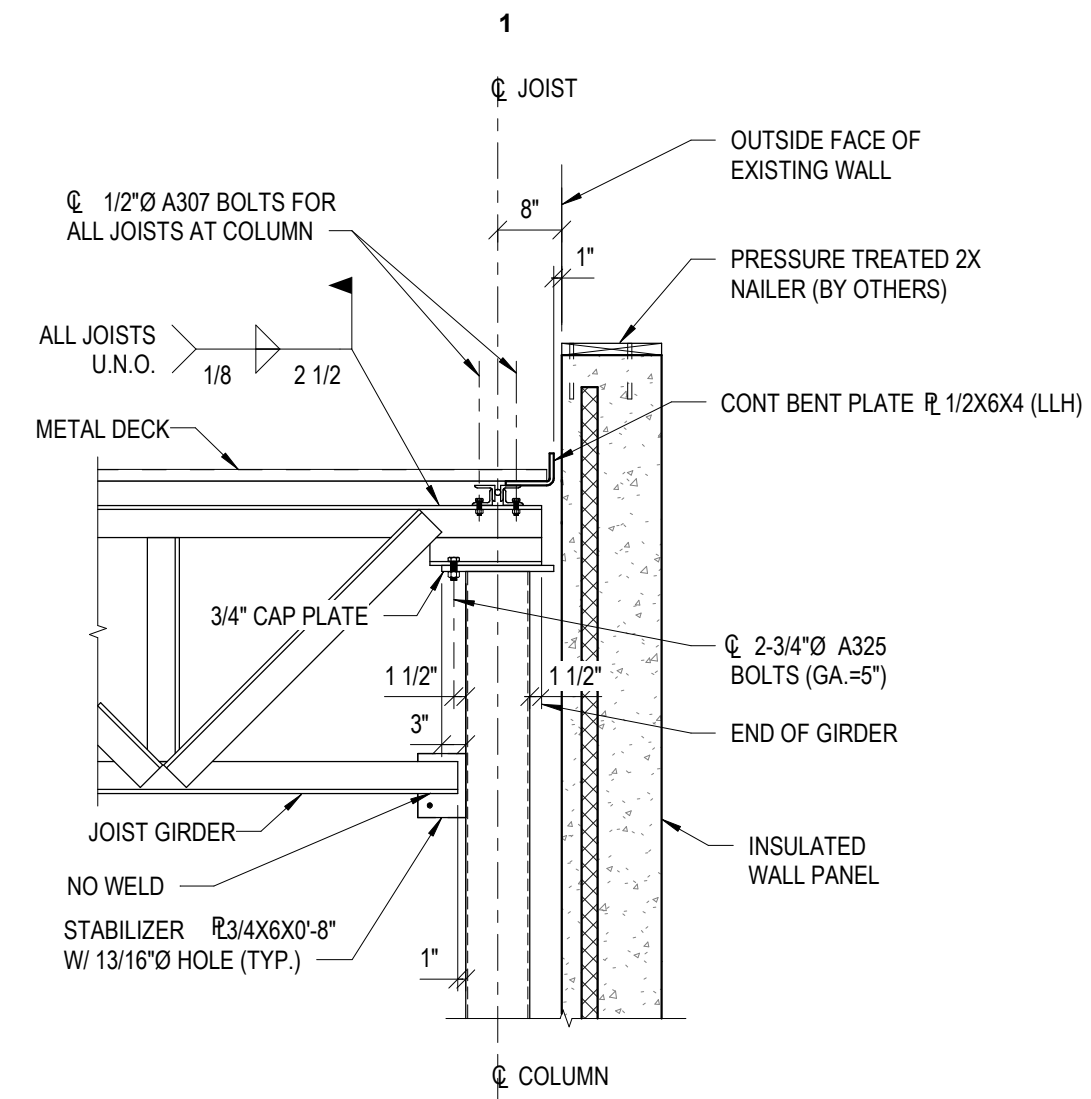
S15
S300, S301

JOIST GIRDER WALL BEARING SECTION

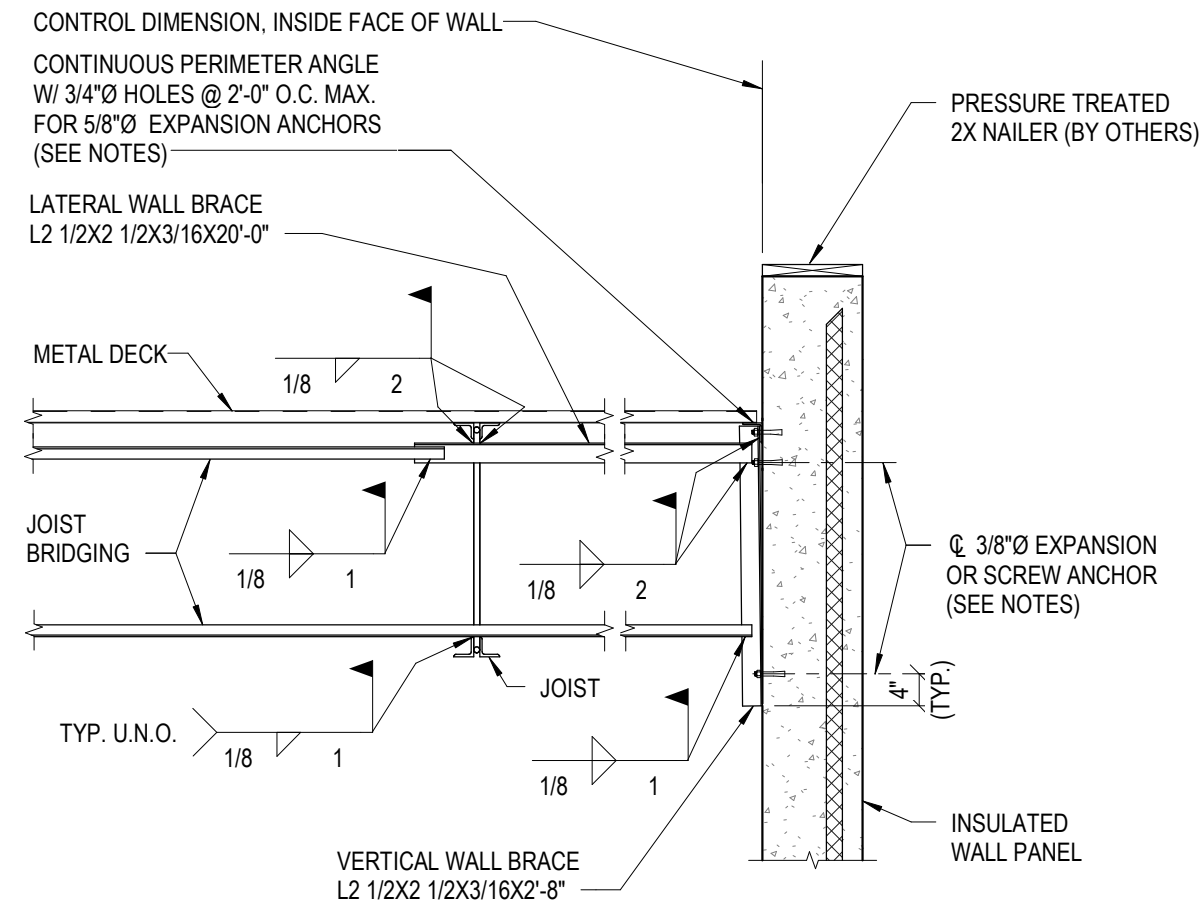
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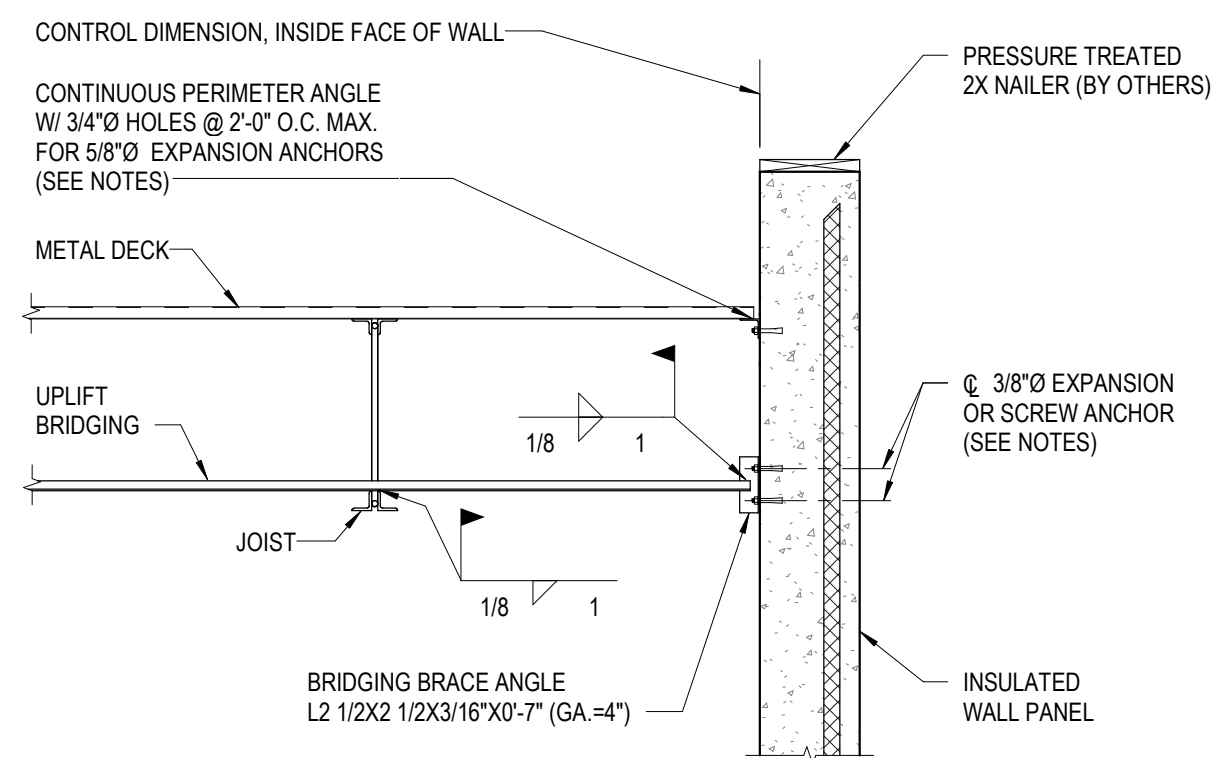
1. SEE TABLES ON SHEET S100 FOR MINIMUM ANCHOR EMBEDMENT DEPTHS.
2. LOCATE ANCHORS A MINIMUM OF 7" FROM WALL PANEL EDGES.
3. WALL PANELS AND GIRDER SEATS SHALL BE DESIGNED FOR THE BEARING LENGTH SHOWN.
4. ANCHORS SHALL BE CENTERED IN 5" LEG OF STABILIZER ANGLE.



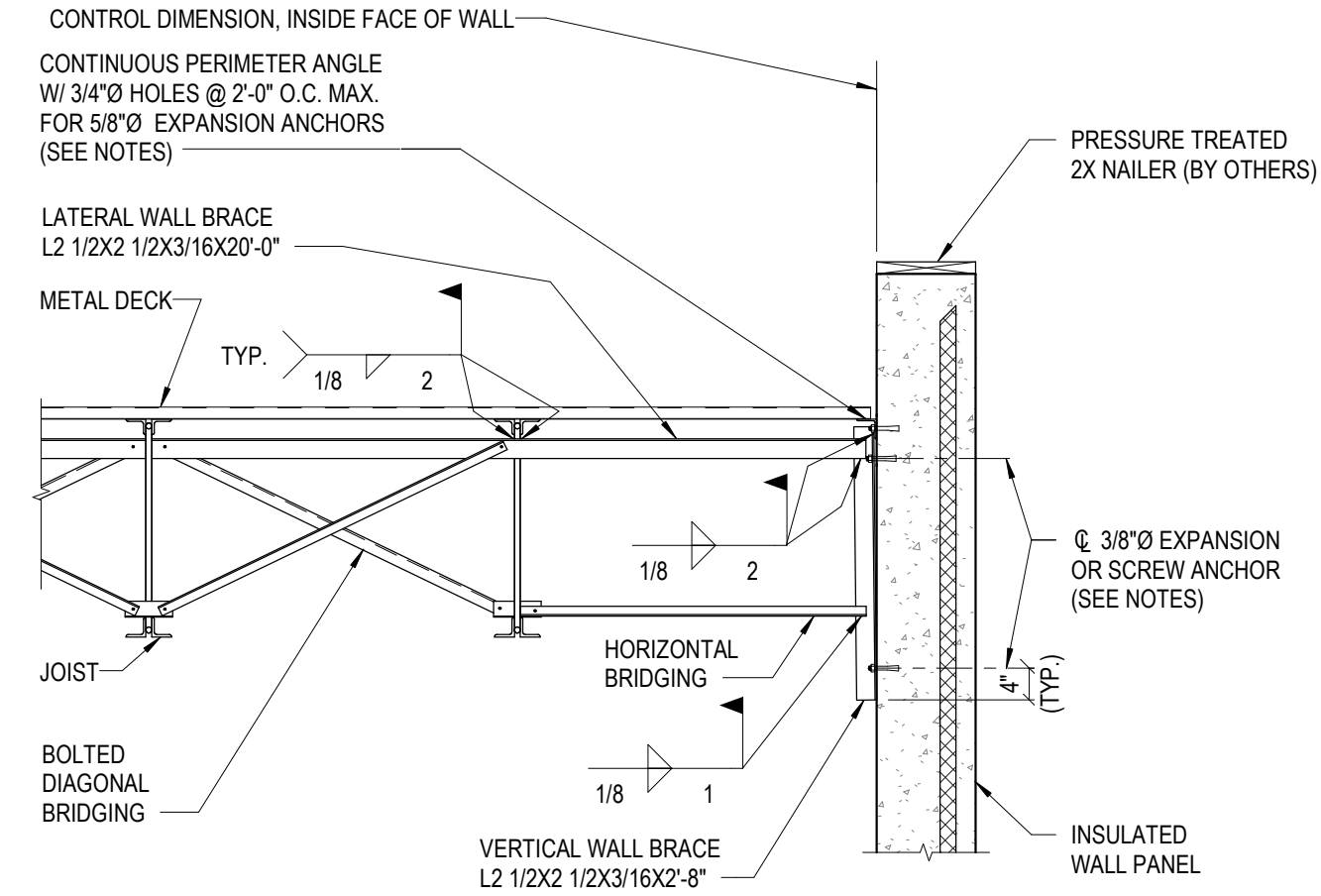
S16 S300, S301 COLUMN-JOIST GIRDER-JOIST CONNECTION SCALE: NOT TO SCALE **NOTES:** 1. SEE TABLES ON SHEET S100 FOR MINIMUM ANCHOR EMBEDMENT DEPTHS. 2. LOCATE ANCHORS A MINIMUM OF 7" FROM WALL PANEL EDGES. 3. PROVIDE SLOTTED HOLES IN JOIST AND JOIST GIRDER SHOES AT COLUMN.



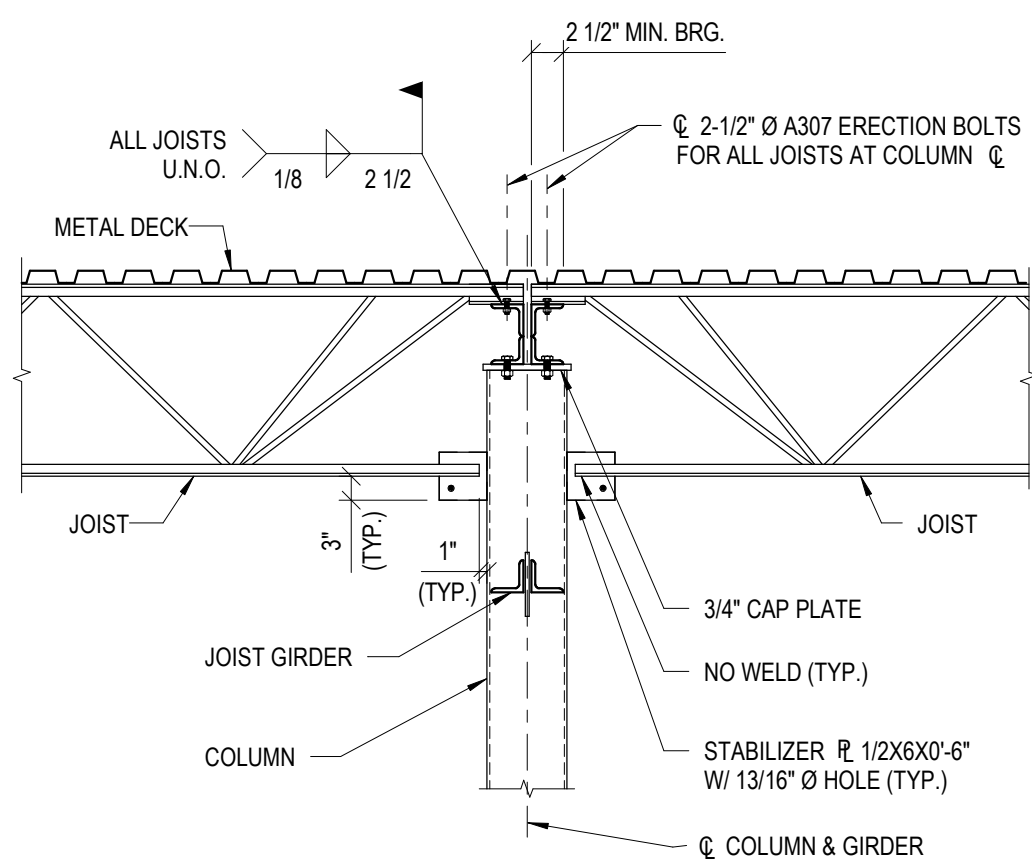
S20 WALL BRACE SECTION
S300, S301 SCALE: NOT TO SCALE



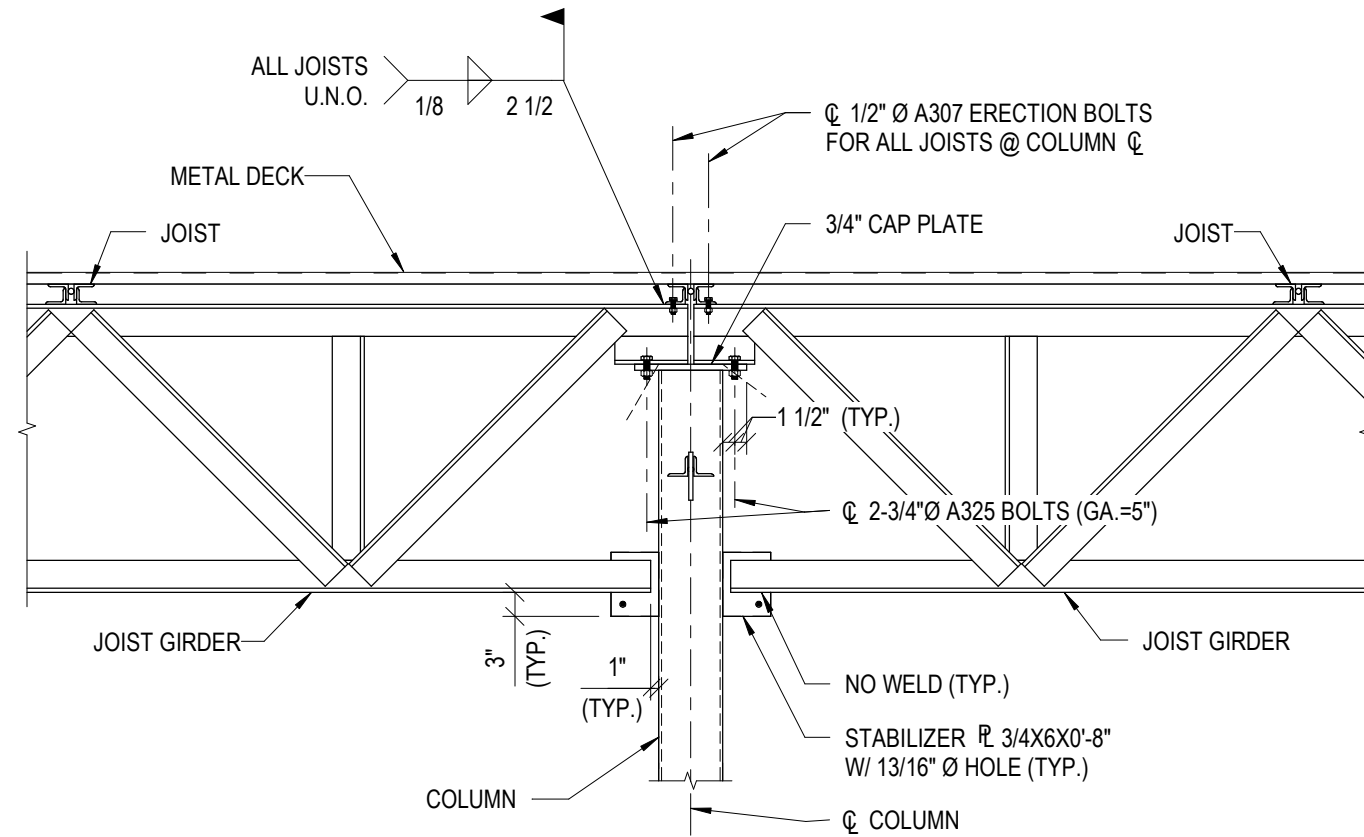
S21 UPLIFT BRIDGING SECTION
S300, S301 SCALE: NOT TO SCALE



S22 S300, S301 **BOLTED DIAGONAL BRIDGING SECTION** SCALE: NOT TO SCALE



S32 COLUMN-JOIST-JOIST GIRDER CONNECTION



S35 S300, S301 COLUMN-JOIST GIRDER-JOIST CONNECTION --- SCALE: NOT TO SCALE **NOTE:** PROVIDE SLOTTED HOLES IN JOIST & JOIST GIRDER SHOES @ COLUMN

PROJECT TITLE

AXIUM BTS EXPANSION - ST. PETERS

4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301

~~A PROJECT FOR
PEAK CONSTRUCTION~~

GENERAL NOTES



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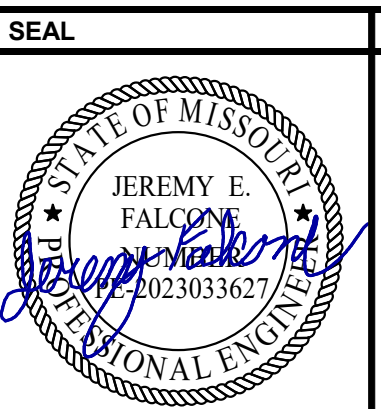
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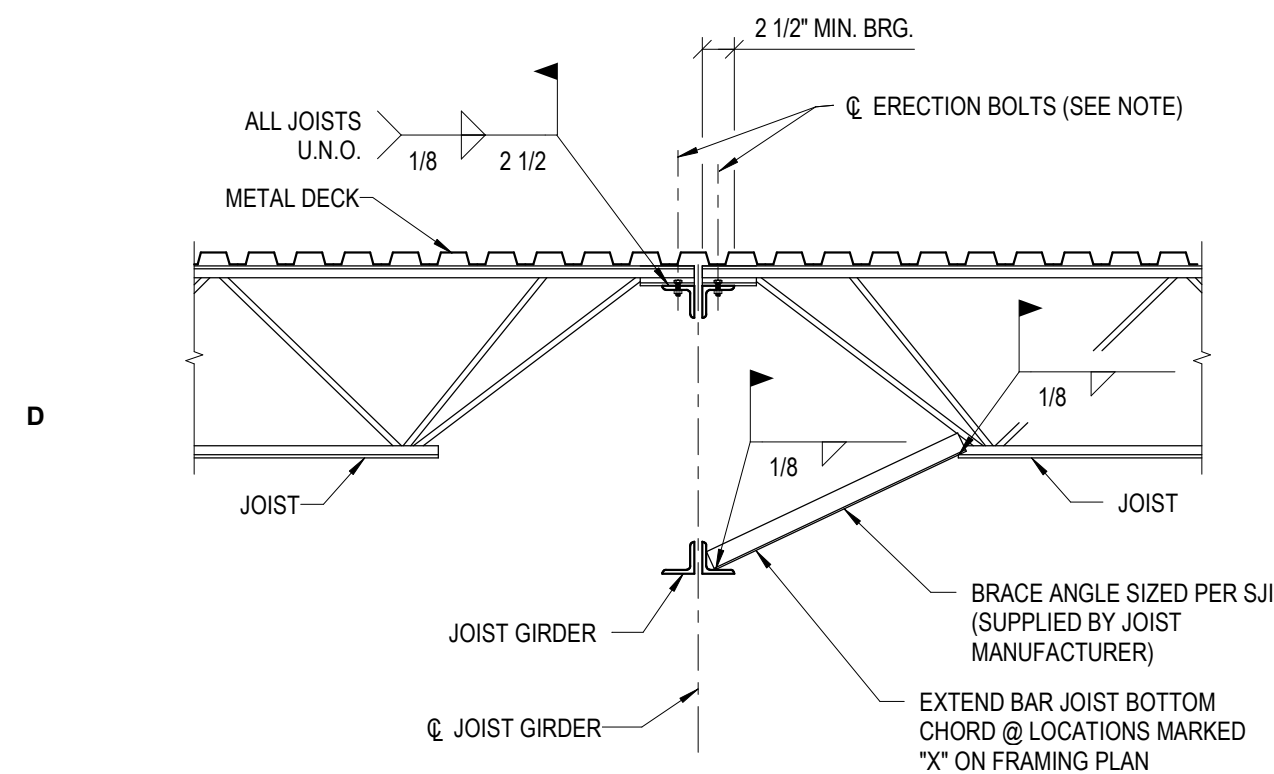
SHEET NAME

FRAMING DETAILS



ET NUMBER

S311



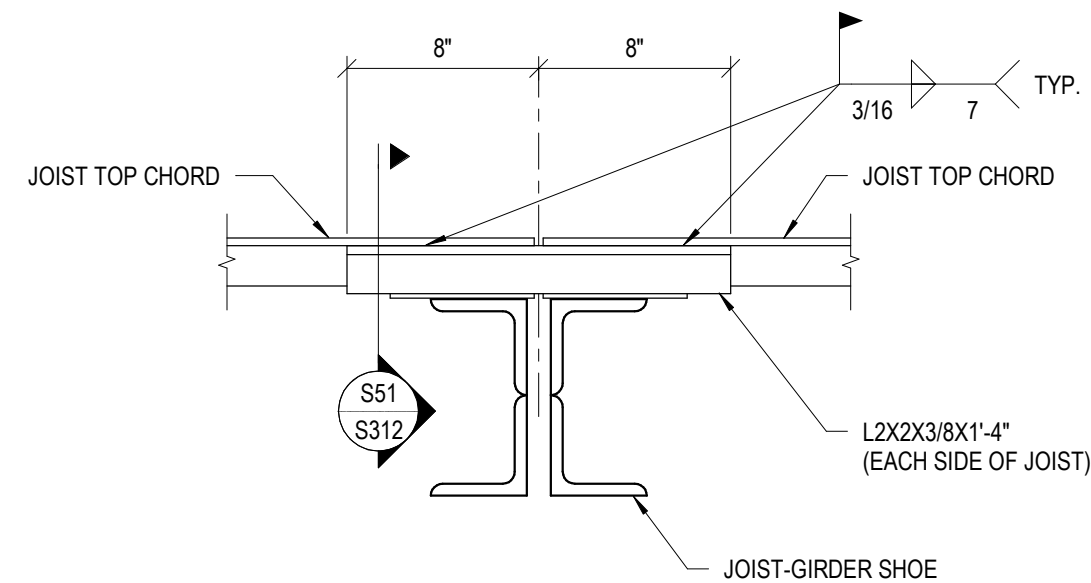
S41 JOIST GIRDER BOTTOM CHORD BRACE

S300, S301'

SCALE: NOT TO SCALE

NOTE:

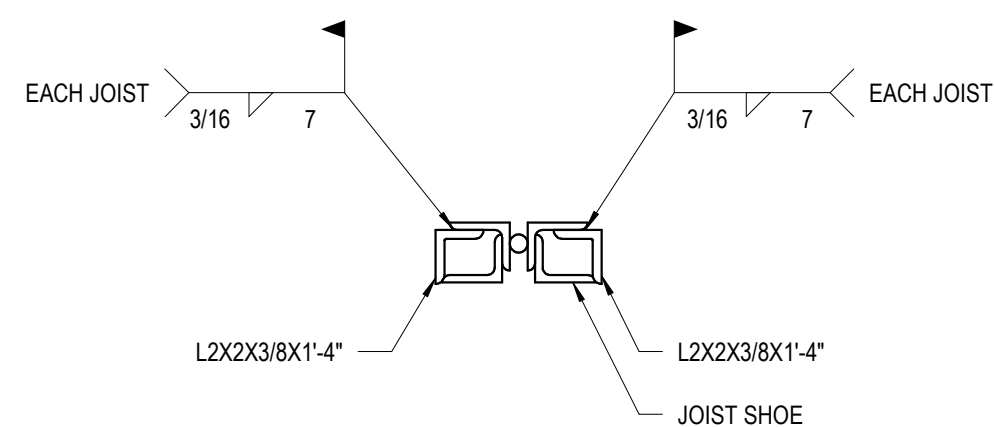
PROVIDE 1/2" Ø A307 ERECTION BOLTS FOR ALL JOISTS IN BAYS 40 FEET OR MORE. GIRDER DESIGN SHALL ACCOUNT FOR BOLT HOLES ASSUMING BOLTS WILL NOT BE INSTALLED.



S50 JOIST TO JOIST TOP CHORD CONNECTION

S300, S301

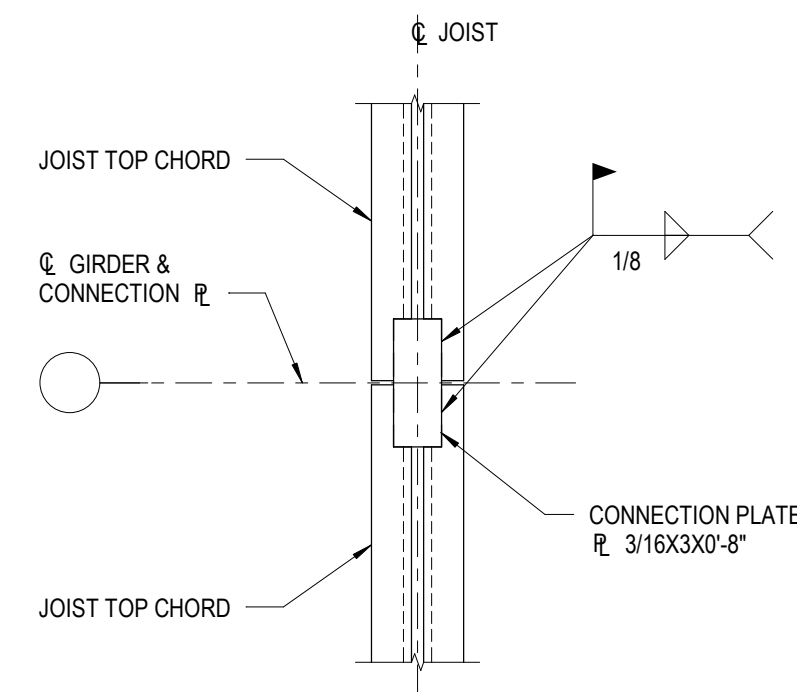
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S51 SECTION

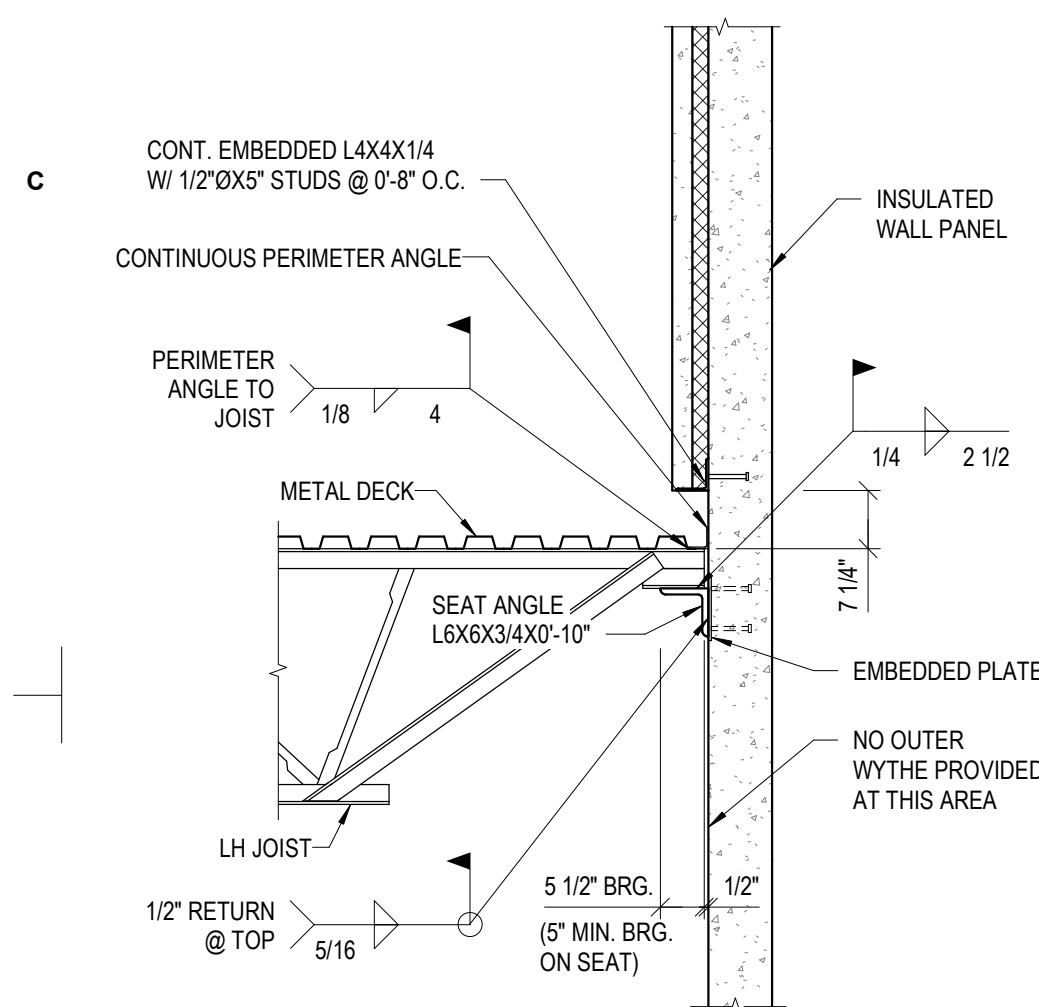
S312

SCALE: NOT TO SCALE



S55 JOIST SEISMIC CONTINUITY CONNECTION

SCALE: NOT TO SCALE



S62 JOIST WALL BEARING SECTION

S300

SCALE: NOT TO SCALE

PROJECT TITLE

AXIUM BTS EXPANSION - ST. PETERS

4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301

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SHEET NAME

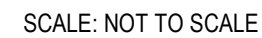
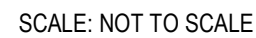
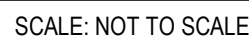
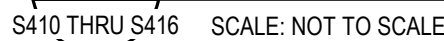
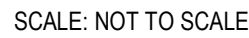
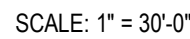
FRAMING DETAILS

SEAL

SHEET NUMBER	
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S312

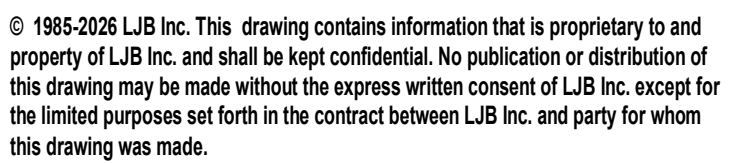


1. ALL PANELS SHOWN OUTSIDE FACE DOWN.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR FINISH REQUIREMENTS, CHAMFERS, ETC. THERE IS A 3/4-INCH DEEP ALLOWANCE FOR ALL ARCHITECTURAL FINISHES.
3. PANELS SHALL NOT BE LIFTED UNTIL CONCRETE HAS ATTAINED THE MINIMUM MODULUS OF RUPTURE AND COMPRESSIVE STRENGTH AS REQUIRED BY LIFTING ENGINEER. SEE CONCRETE NOTES ON SHEET S100 FOR REQUIRED PANEL 28-DAY CONCRETE COMPRESSIVE STRENGTH UNLESS NOTED OTHERWISE.
4. CHLORIDE BASED ADMIXTURES ARE PROHIBITED IN CONCRETE.
5. THE CONTRACTOR SHALL HIRE A SPECIALTY ENGINEER TO PROVIDE DESIGN OF THE LIFTING AND BRACING OF THE WALL PANELS. THE ENGINEERING SHALL INCLUDE LIFTING INSERTS, BRACING DESIGN, BRACE CONNECTIONS, VERIFICATION OF ADJOINING SURFACES TO WHICH BRACES ATTACH AND ANY ADDITIONAL REINFORCING STEEL REQUIRED FOR LIFTING OR TEMPORARY CONSTRUCTION LOADS. PROVIDE SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA. NO ADDITIONAL REINFORCING SHALL BE ADDED WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD. THE DESIGN OF THE LIFTING INSERTS MUST COMBINE THE REINFORCING ALREADY PRESENT IN THE PANELS AS INDICATED IN THIS SET OF CONSTRUCTION DRAWINGS. IN NO INSTANCE DOES THE ENGINEER OF RECORD IMPLY OR ACCEPT ANY RESPONSIBILITY FOR ANY MEANS, METHODS OR ADDITIONAL REQUIREMENTS AS RELATED TO TECHNIQUE, OR SAFETY OF THE PANEL LIFTING OPERATION.
6. THE TILT-UP CONTRACTOR SHALL PROVIDE TEMPORARY SHIMS BETWEEN THE WALL PANELS AND TOP OF FOOTING UNDER EACH WALL PANEL LEG. GROUT SHALL BE PLACED UNDER THE FULL PANEL LENGTH SO THERE IS NO VOID OR DISTRIBUTION OF STRESS UNIFORMLY TO THE FOOTING.
7. WALL PANELS ERECTION BRACES SHALL NOT BE REMOVED UNTIL ALL STEEL ROOF DECK IS COMPLETELY FASTENED IN PLACE UNLESS PERMISSION TO REMOVE THE BRACES IS SPECIFICALLY GRANTED BY THE ENGINEER OF RECORD.
8. CONSTRUCTION OF WALL PANELS SHALL NOT START UNTIL THE ENGINEER OF RECORD HAS REVIEWED THE PANEL SHOP DRAWINGS.
9. WHEN CUTTING FUTURE OPENINGS AT THE LOCATIONS SHOWN, THE MAXIMUM OVERCUT PERMITTED AT THE CORNERS IS 2". THESE OVERCUTS MUST BE GROUTED SOLID WITH NON-SHRINK, NON-BEADABLE GROUT UNDER THE CUT OUT SECTION. FIELD CUTTINGS OPENINGS NOT SHOWN ON THE DRAWINGS IS NOT PERMITTED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD.
10. SEE ARCHITECTURAL DRAWINGS FOR EMBEDDED ANGLES CAST ON OUTSIDE FACE OF PANELS AT SIDES & TOP OF DOCK DOOR OPENINGS.

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~~PEAK CONSTRUCTION~~

GENERAL NOTES



WALL PANEL KEY PLAN

SHEET NUMBER



AXIUM BTS EXPANSION - ST. PETERS

A PROJECT FOR

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GENERAL NOTES



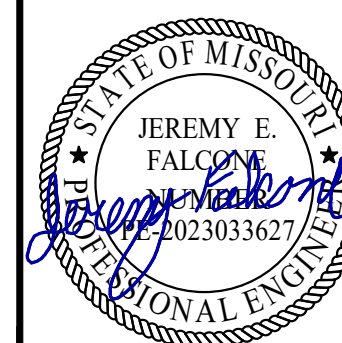
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SHEET NAME

WALL PANEL DETAILS

SHEET NUMBER	
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S401

AXIUM BTS EXPANSION - ST. PETERS

~~PEAK CONSTRUCTION~~

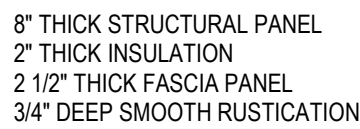
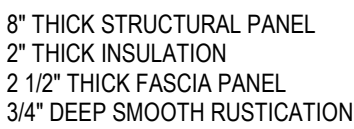
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SHEET NAME

SEAL	SHEET NUMBER
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AXIUM BTS EXPANSION - ST. PETERS

~~PEAK CONSTRUCTION~~

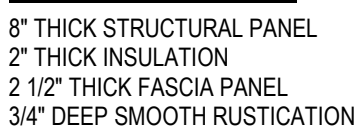
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WALL PANEL LAYOUTS

S411



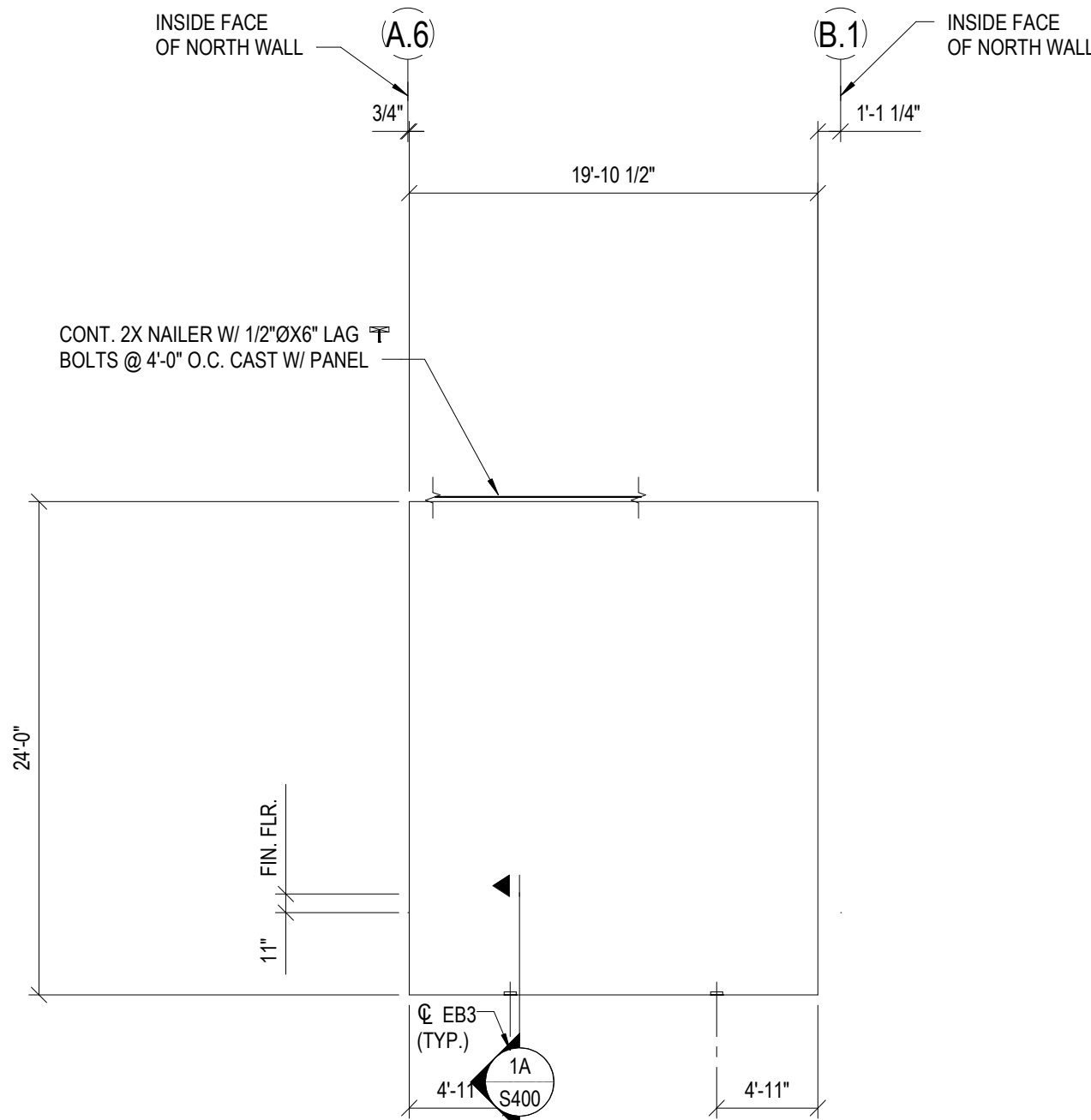
AXIUM BTS EXPANSION - ST.
PETERS

~~PEAK CONSTRUCTION~~

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(866) 552-3536
info@LJBInc.com

WALL PANEL LAYOUTS

S412

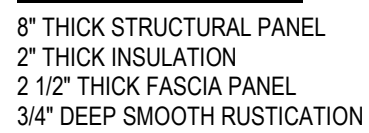


8" THICK STRUCTURAL PANEL
2" THICK INSULATION
2 1/2" THICK FASCIA PANEL
3/4" DEEP SMOOTH RUSTICATION

AXIUM BTS EXPANSION - ST. PETERS

~~PEAK CONSTRUCTION~~

S413



AXIUM BTS EXPANSION - ST. PETERS

A PROJECT FOR

~~PEAK CONSTRUCTION~~

GENERAL NOTES

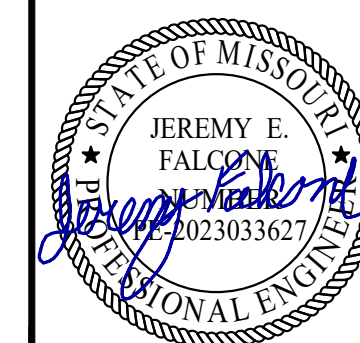


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PROJECT NO: 0129388A.00
DRAWN BY: DFC
CHECKED BY: OWJ

WALL PANEL LAYOUTS

SEAL	SHEET NUMBER
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S414



8" THICK STRUCTURAL PANEL
2" THICK INSULATION
2 1/2" THICK FASCIA PANEL
3/4" DEEP SMOOTH RUSTICATION

AXIUM BTS EXPANSION - ST. PETERS

~~PEAK CONSTRUCTION~~

GENERAL NOTES



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PROJECT NO: 0129388A.00
DRAWN BY: DFC
CHECKED BY: OWJ

WALL PANEL LAYOUTS

SHEET NUMBER



8" THICK STRUCTURAL PANEL
2" THICK INSULATION
2 1/2" THICK FASCIA PANEL
3/4" DEEP SMOOTH RUSTICATION

AXIUM BTS EXPANSION - ST. PETERS

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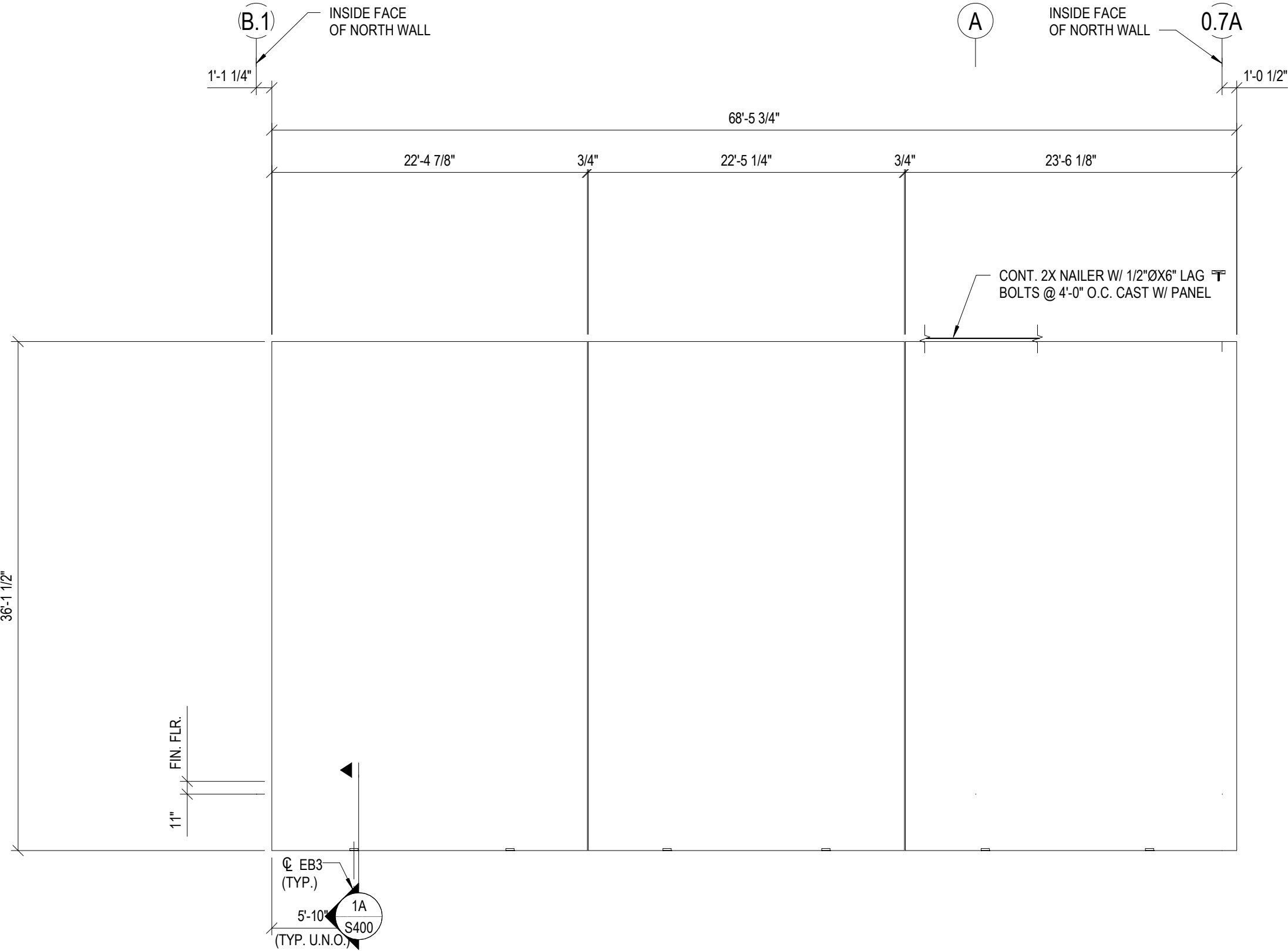
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WALL PANEL LAYOUTS

SHEET NUMBER



S416

WB11WB12WB13WB14WB15WB16

WB17

WEST WALL

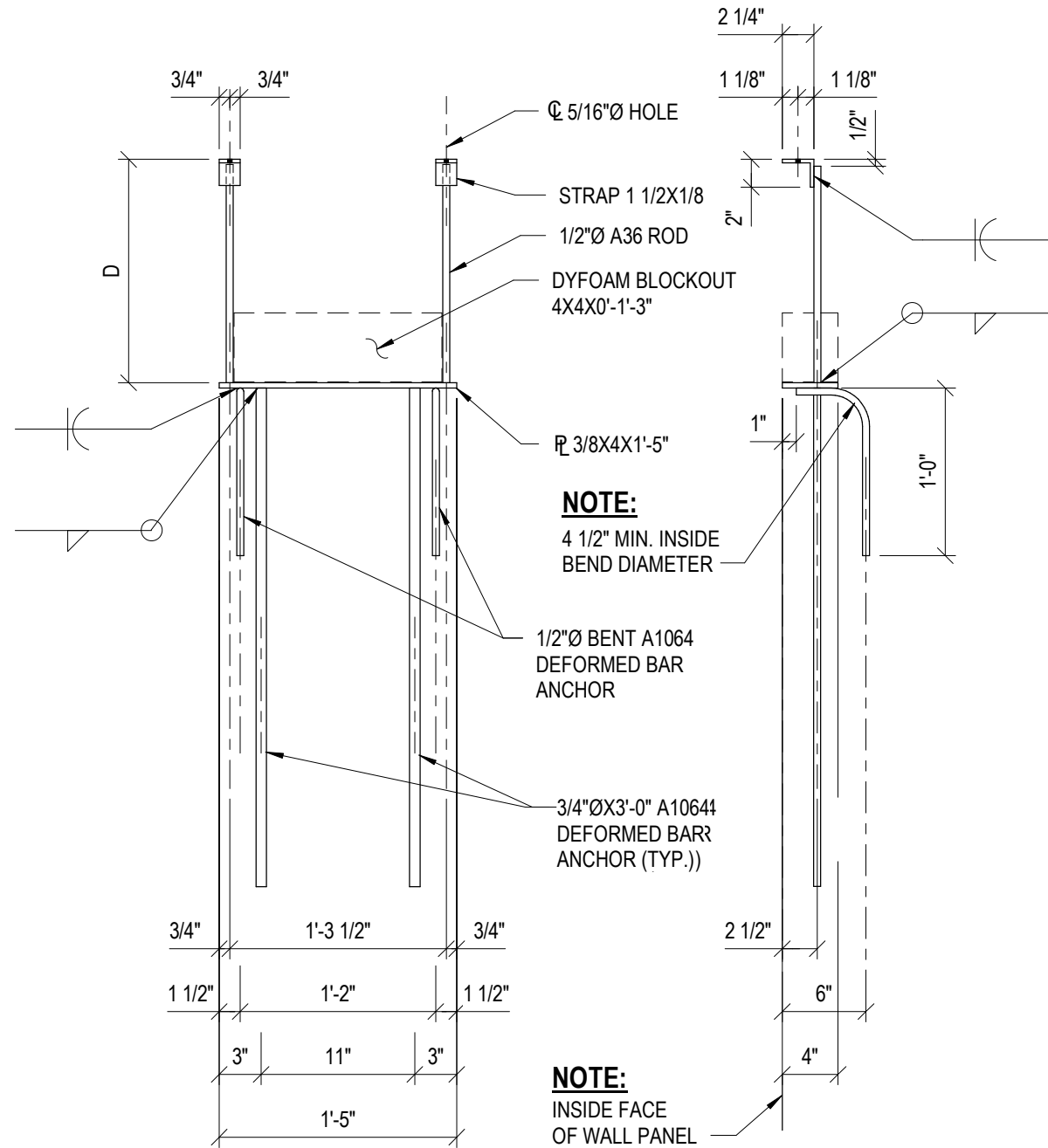
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2" THICK INSULATION
2 1/2" THICK FASCIA PANEL
3/4" DEEP SMOOTH RUSTICATION

WEST WALL

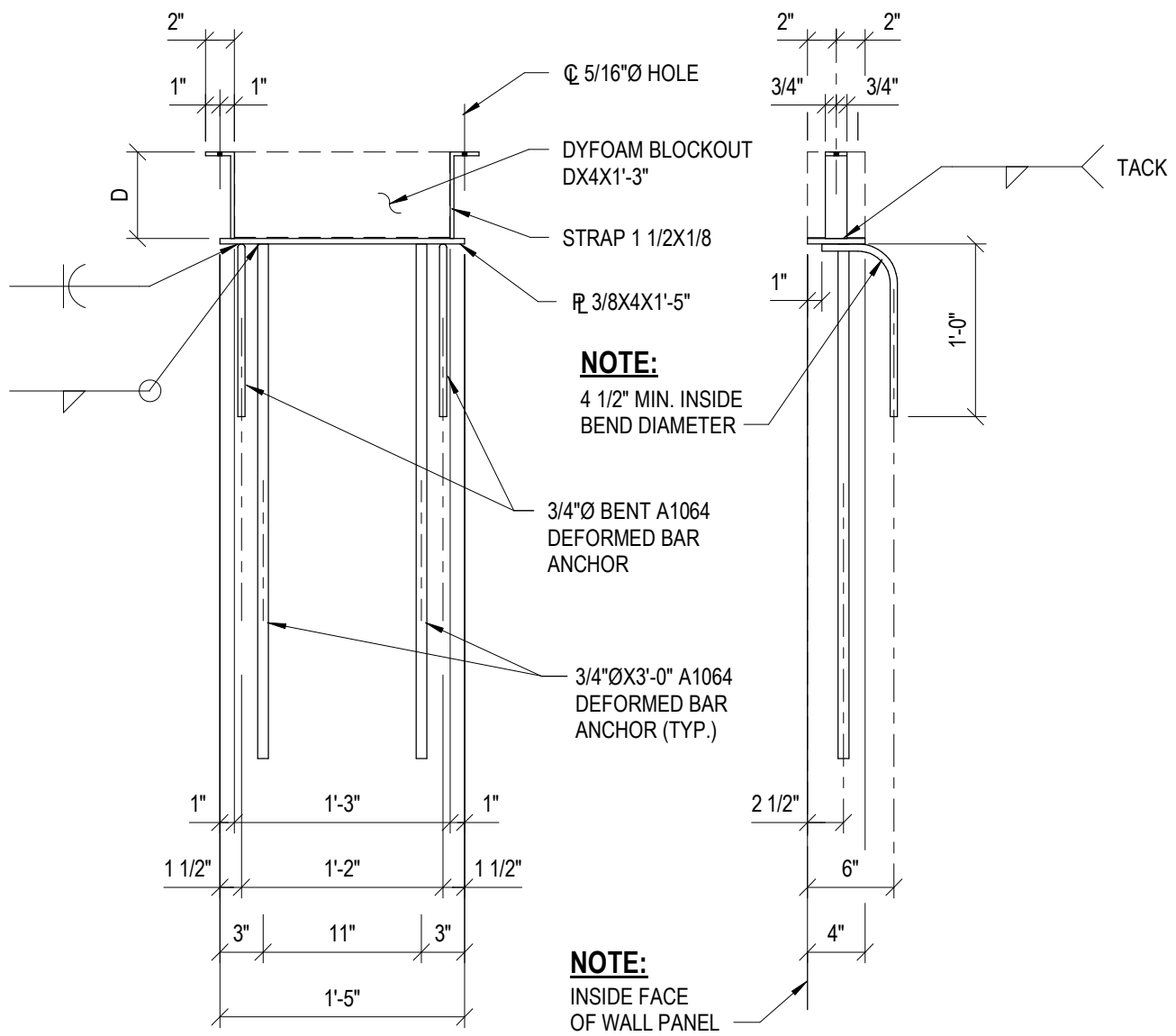
8" THICK STRUCTURAL PANEL
2" THICK INSULATION
2 1/2" THICK FASCIA PANEL
3/4" DEEP SMOOTH RUSTICATION

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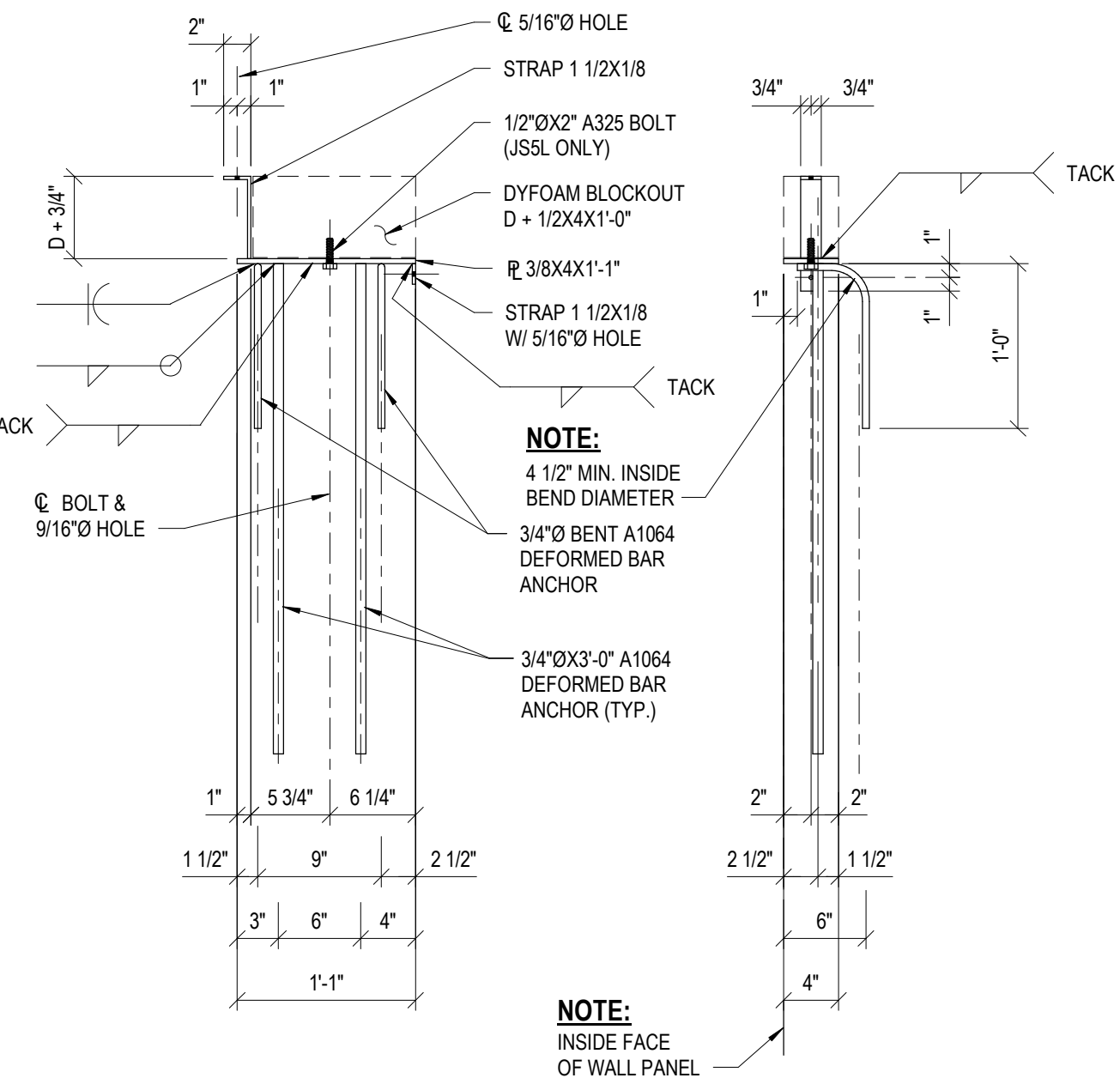
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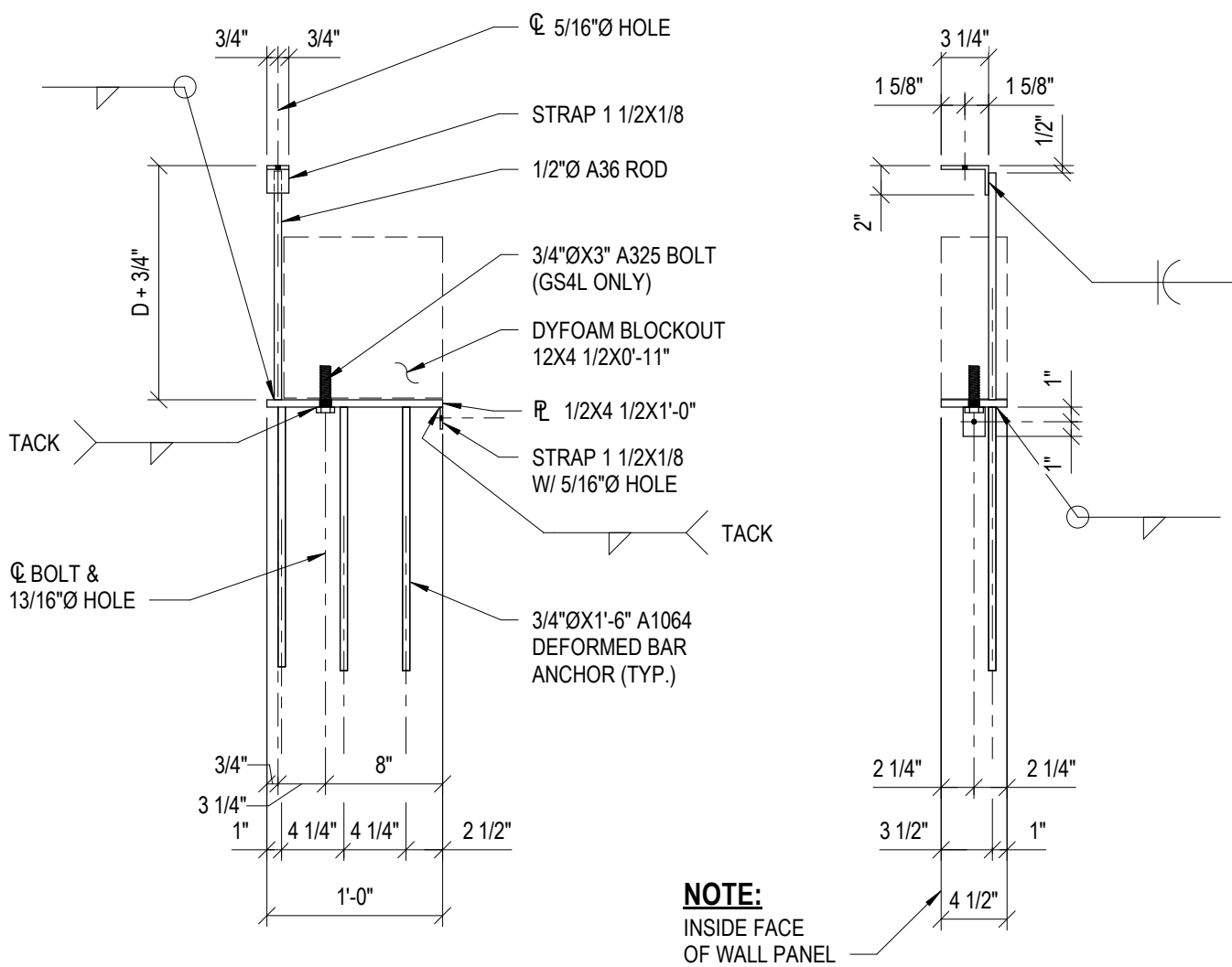
BAR JOIST SEAT
JS1



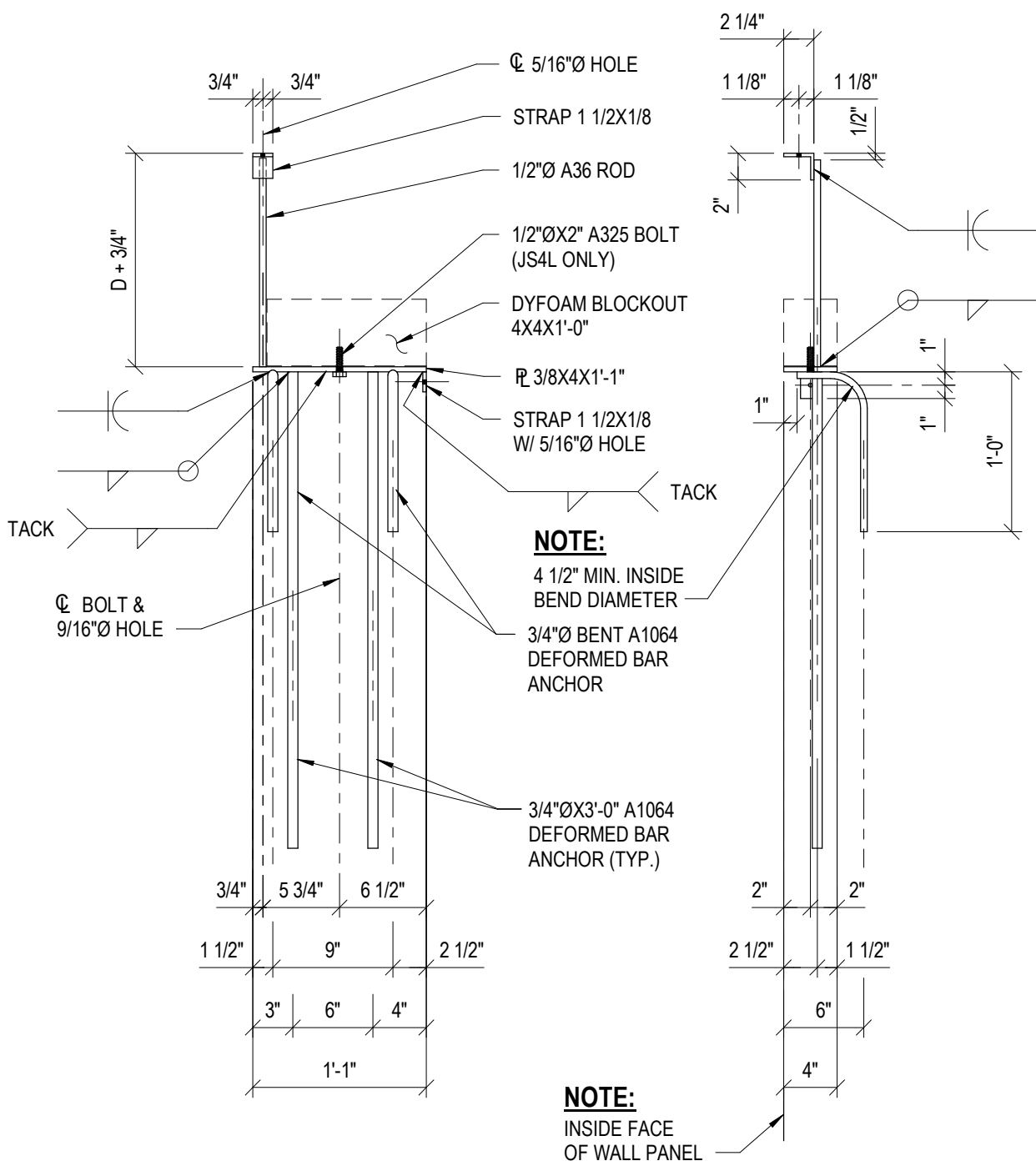
BAR JOIST SEAT
JS2



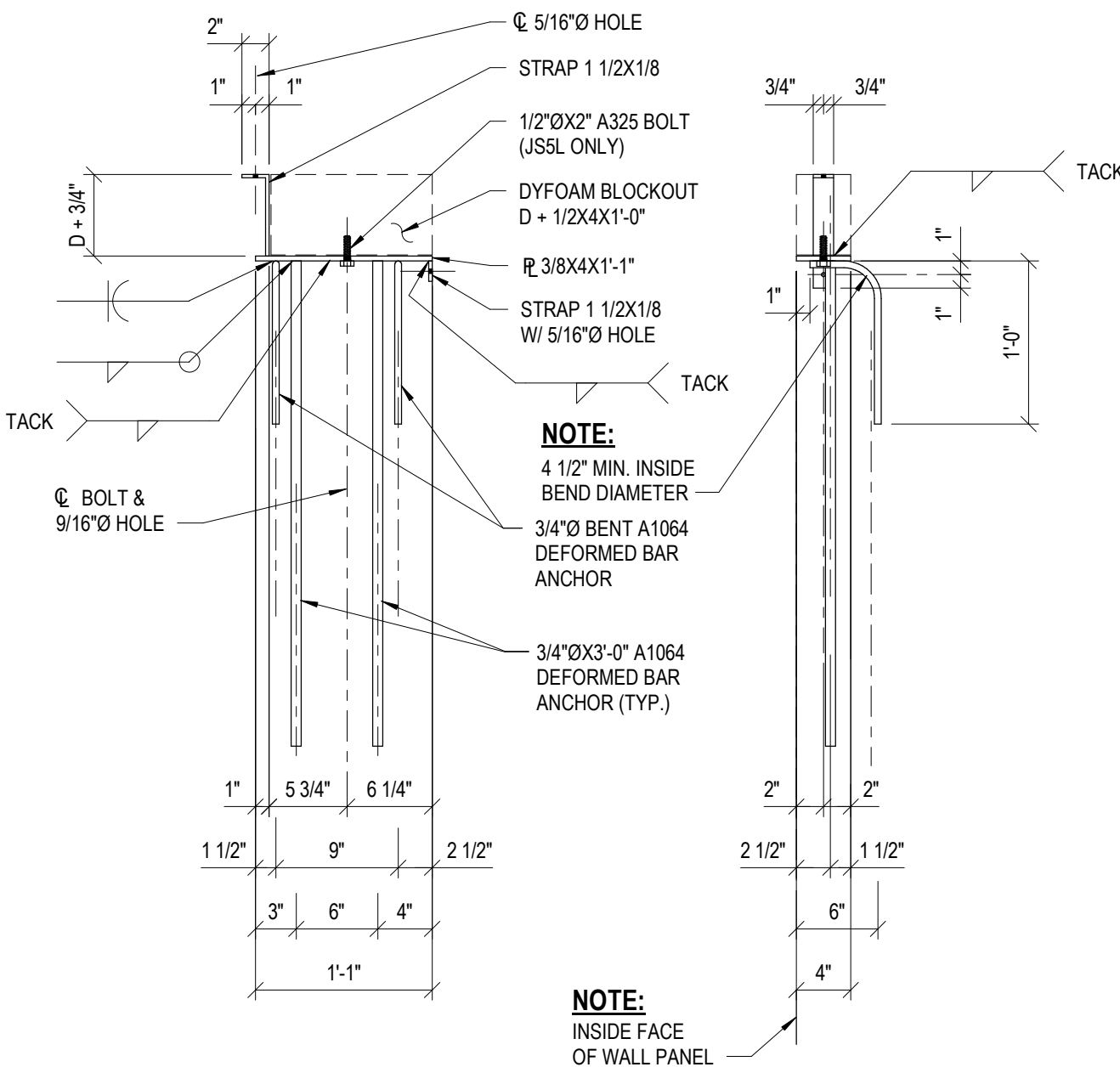
BAR JOIST SEAT
JS5L (AS SHOWN)
JS5R (OPP. HAND)



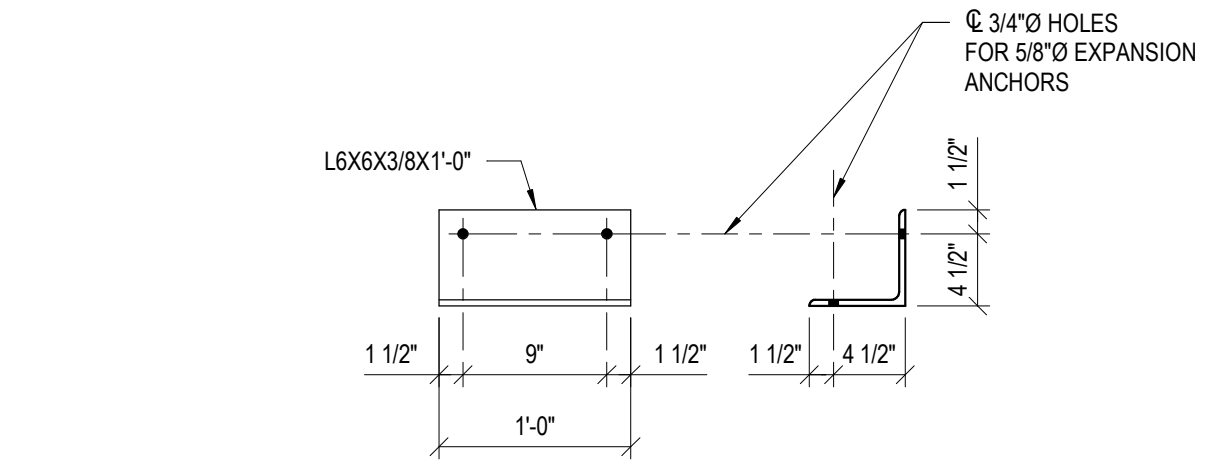
JOIST GIRDER
GS4L (AS SHOWN)
GS4R (OPP. HAND)



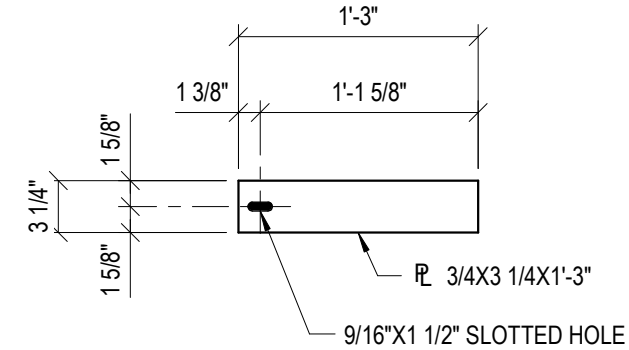
BAR JOIST SEAT
JS4L (AS SHOWN)
JS4R (OPP. HAND)
(NO BOLT)



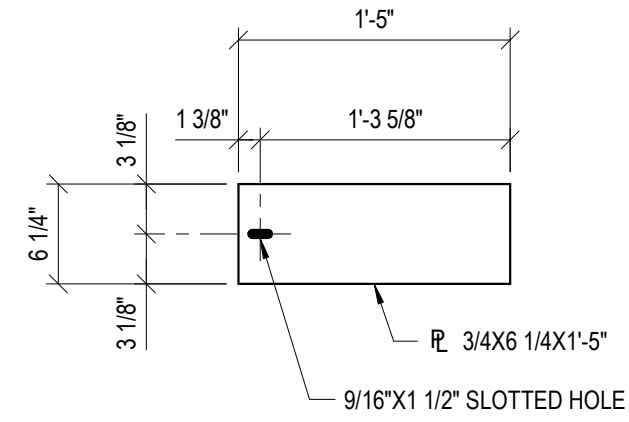
BEAM SEAT
BS1L (AS SHOWN)
BS1R (OPP. HAND)



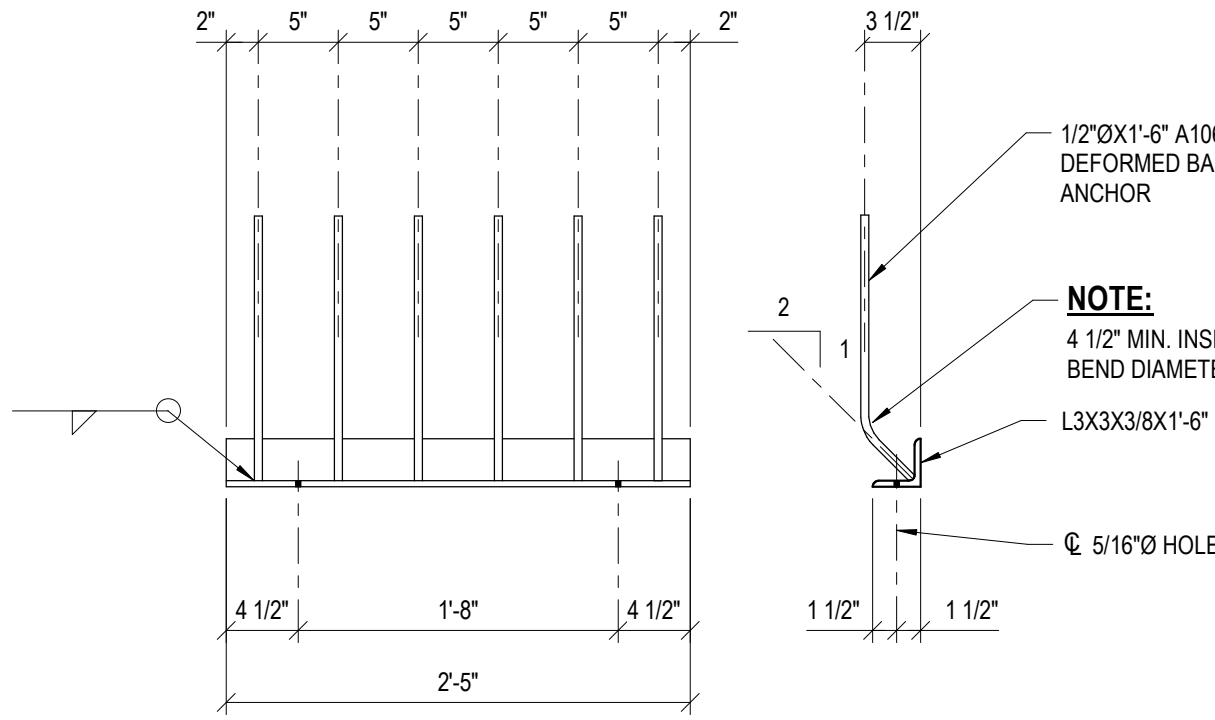
CORNER ANGLE
L1



JOIST BEARING PLATE
JP1



JOIST BEARING PLATE
GP1



EMBEDDED ANGLE
EA1

STANDARD FABRICATION NOTES

1. ALL SHOP DRAWINGS THAT RECREATE OR CALL OUT THE STANDARD FABRICATION ITEMS SHOWN ON SHEETS S700-S701 SHALL MAINTAIN THE SAME PIECE MARKS AS SHOWN ON THE STRUCTURAL DRAWINGS.
2. LJB WILL REVIEW SHOP DRAWINGS OF EMBEDDED ITEMS FOR CONFORMANCE WITH STRUCTURAL DRAWINGS. HOWEVER, SINCE LJB HAS PROVIDED PANEL LAYOUTS SHOWING EMBEDDED ITEMS AND THEIR LOCATIONS, LJB WILL ONLY REVIEW PANEL LAYOUT DRAWINGS FOR QUESTIONS AND COORDINATION ISSUES.
3. STUD WELDS AND DEFORMED BAR ANCHOR WELDS SHALL DEVELOP THE FULL TENSILE AND SHEAR STRENGTH OF THE STUDS AND DEFORMED BAR ANCHORS RESPECTIVELY.
4. VERIFICATION OF QUANTITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

PLAIN MATERIALS LIST	
DESCRIPTION	MARK
WT8X28.5 X 0'-4 1/2"	BS1

powers brown architecture

18W140 Butterfield Road,
Suite 1560
Oakbrook Terrace, IL 60181
312.967.4530

www.powersbrown.com

PROJECT TITLE

AXIUM BTS EXPANSION - ST. PETERS

4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301

A PROJECT FOR

PEAK CONSTRUCTION

GENERAL NOTES

Engineering
Building Partnerships

LJB Inc. com
(866) 552-3536
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DATE	REVISION
2026-04-17	ISSUE FOR PERMIT

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DRAWN BY: RMS
CHECKED BY: OWJ
SHEET NAME

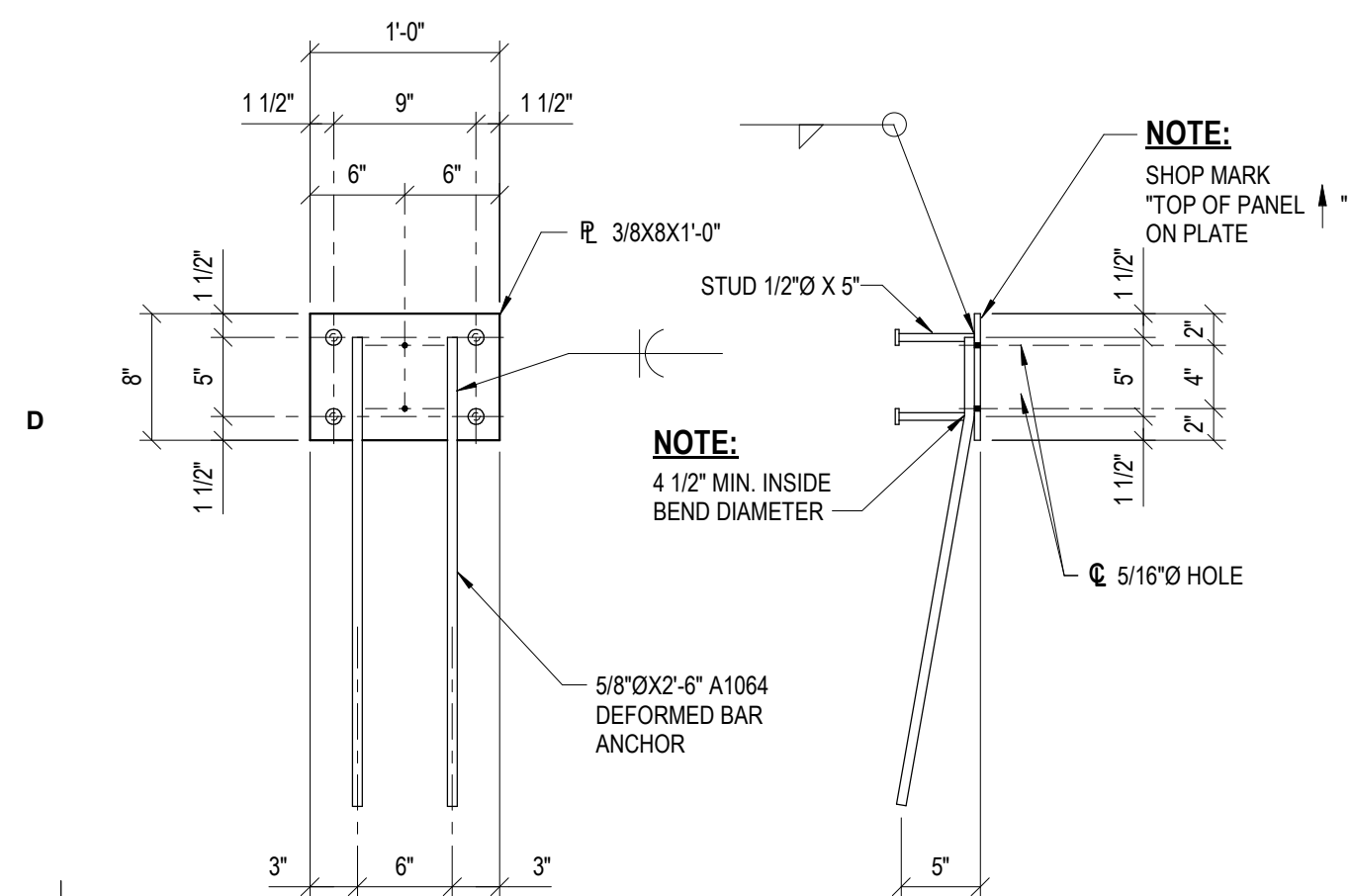
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SEAL

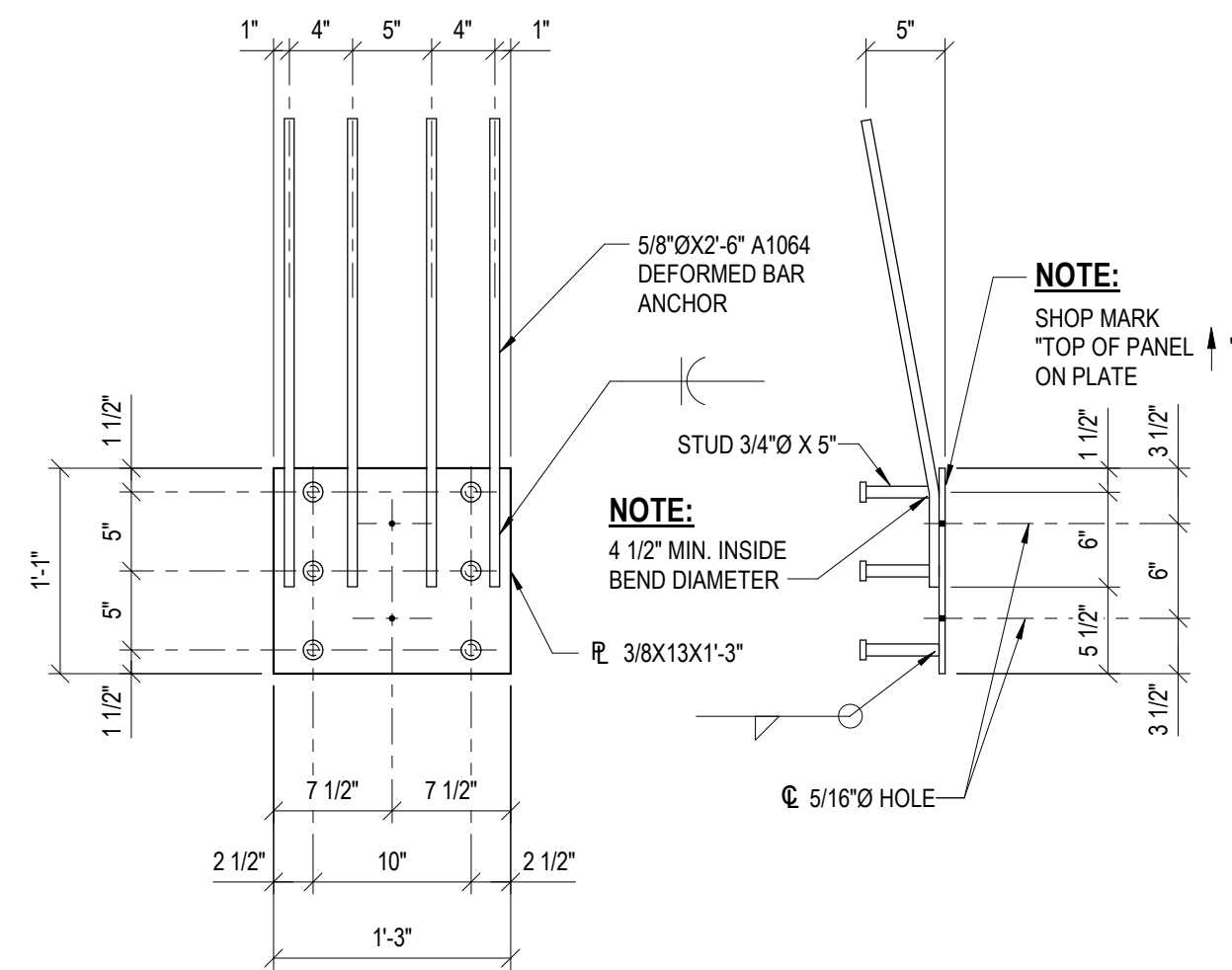
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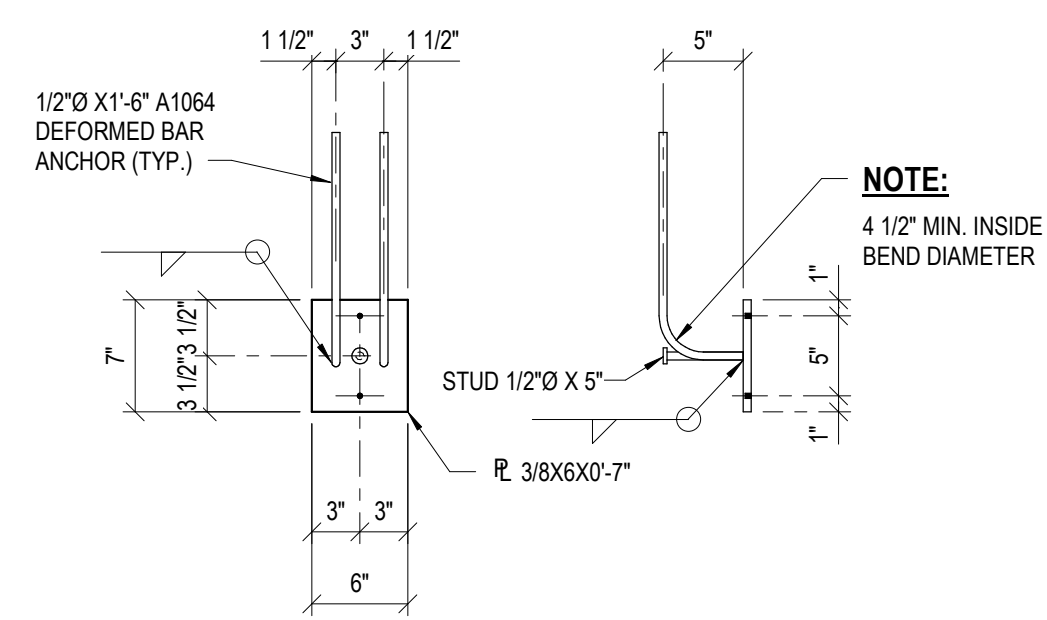
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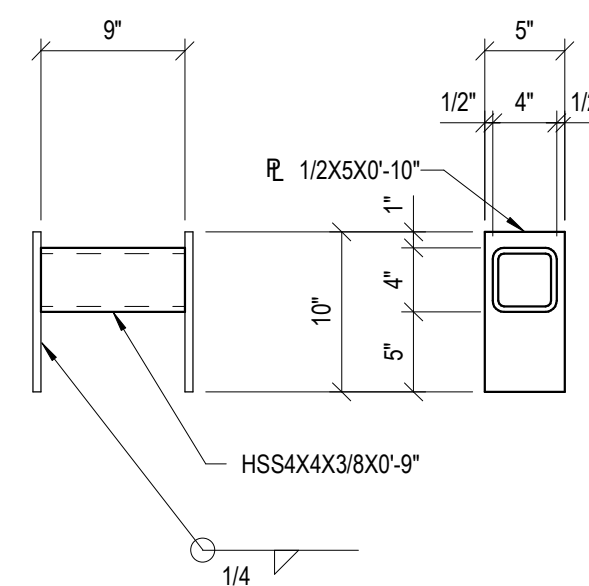
EMBEDDED PLATE
EP1



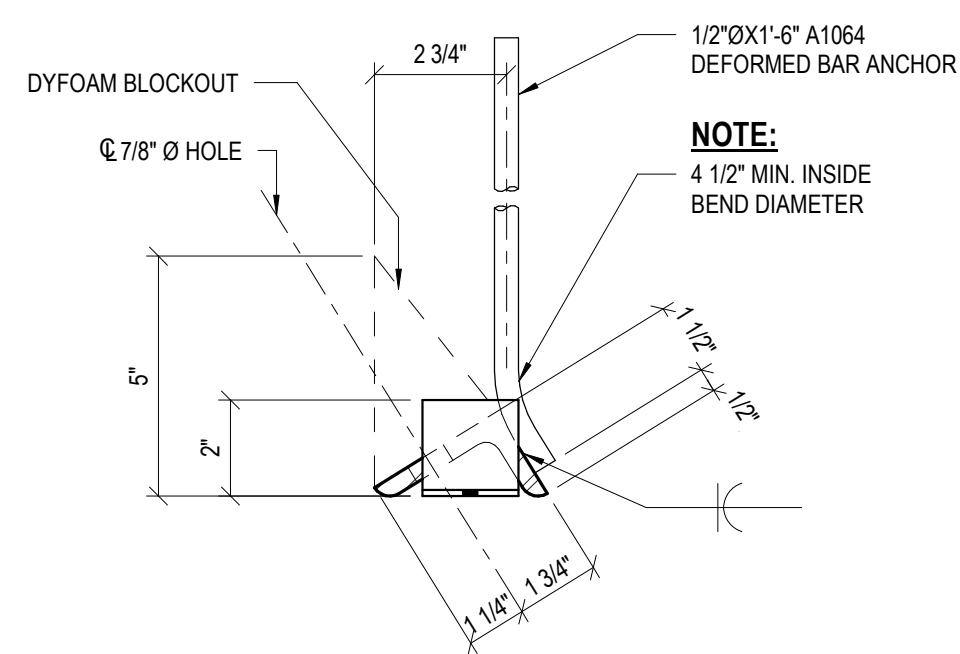
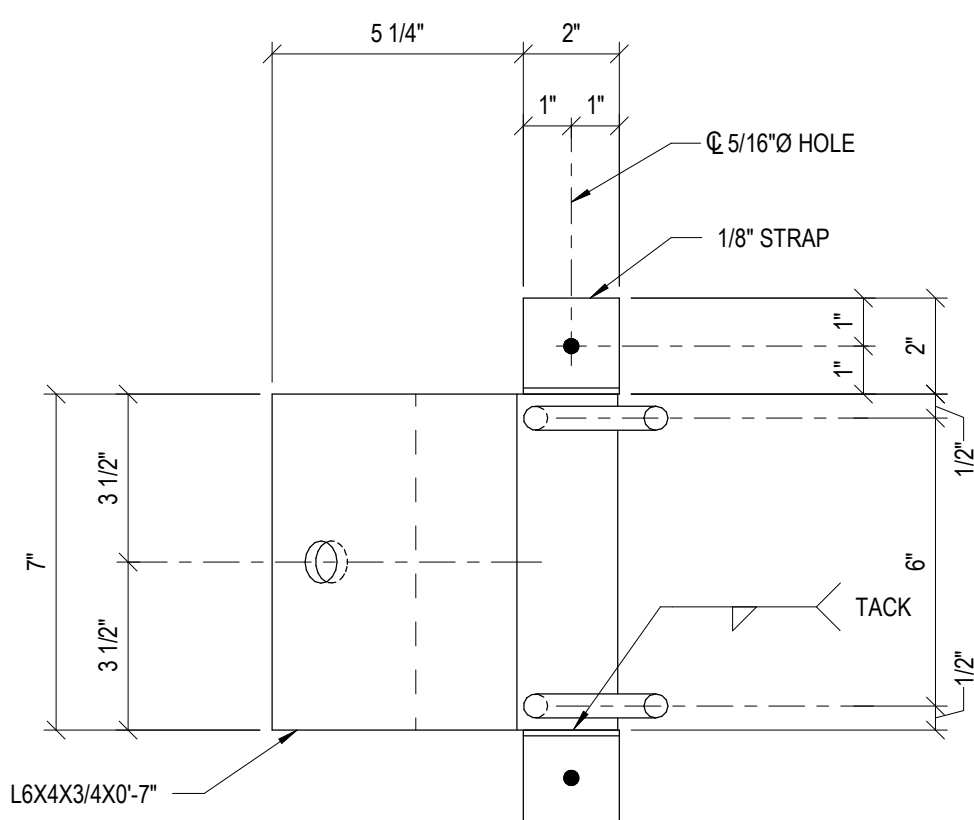
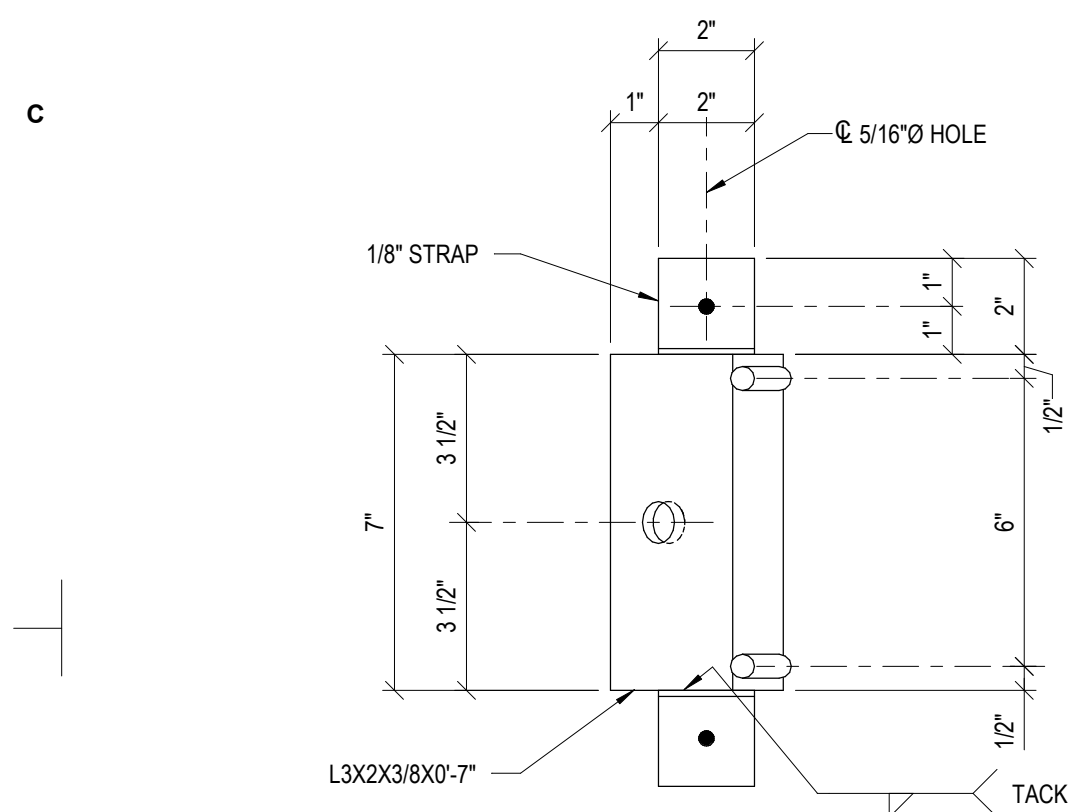
EMBEDDED PLATE
EP2



EMBEDDED PLATE
EP11



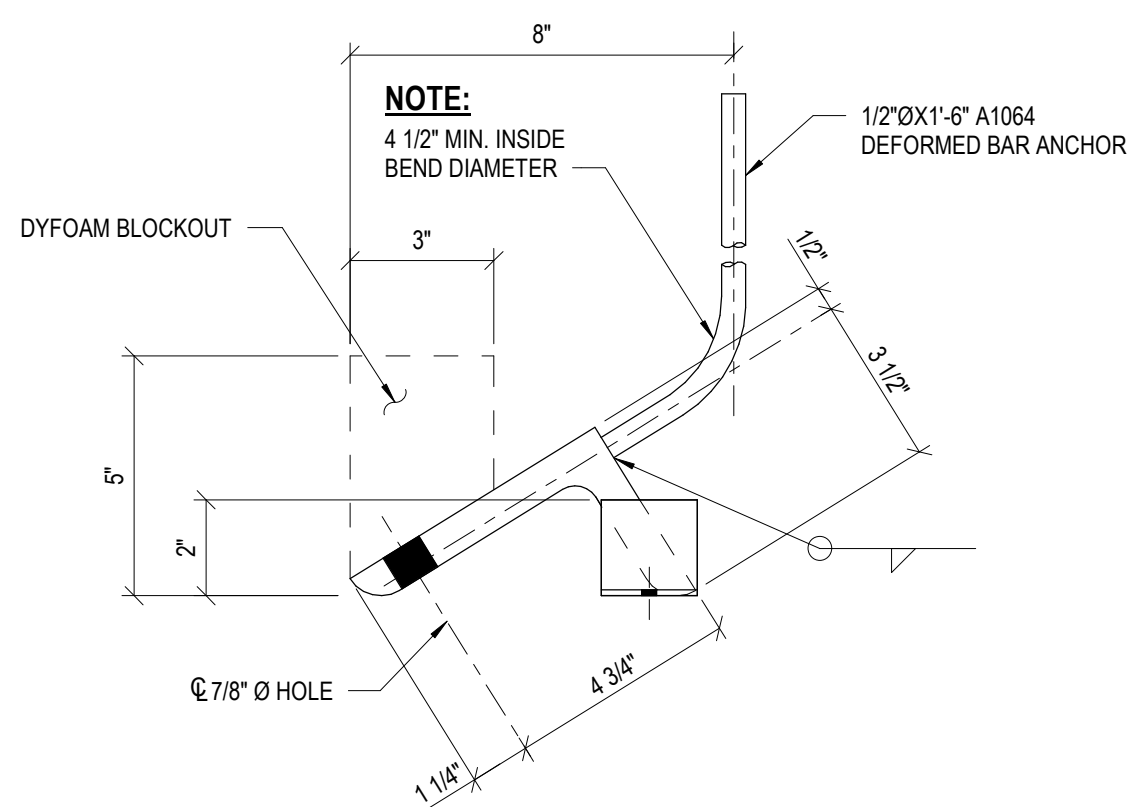
BEAM SEAT
BS1



U.S. PATENT NO. 5,609,005

EMBEDDED BASE ANCHOR

EB1



U.S. PATENT NO. 5,609,005

EMBEDDED BASE ANCHOR

EB3

PROJECT TITLE

AXIUM BTS EXPANSION - ST.
PETERS

4001 PREMIER PARKWAY ST. PETERS, MISSOURI 63301

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GENERAL NOTES



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PROJECT NO: 0129388A.00

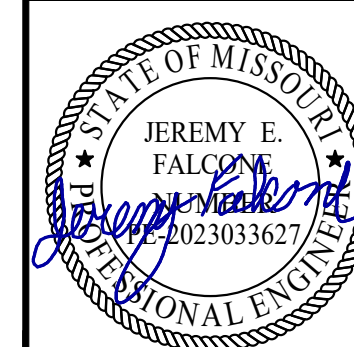
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CHECKED BY: OWJ

SHEET NAME

STANDARD FABRICATION DETAILS

SEAL



SHEET NUMBER

S701