

GENERAL REQUIREMENTS

- A. THE GENERAL STRUCTURAL NOTES EMPLOY THE FOLLOWING DEFINITIONS AND ABBREVIATIONS:
- GENERAL CONTRACT DOCUMENTS – THE LATEST SET OF DRAWINGS, SPECIFICATIONS, AND RECORDED ADDENDA AND AMENDMENTS ISSUED FOR BID OR CONSTRUCTION.
 - LICENSED PROFESSIONAL (STRUCTURAL) ENGINEER – AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND QUALIFIED TO PERFORM THE WORK REQUIRED.
 - STRUCTURAL ENGINEER OF RECORD – LICENSED PROFESSIONAL ENGINEER WHO IS IN RESPONSIBLE CHARGE FOR THE PREPARATION, SIGNING, DATING, SEALING, AND ISSUING OF STRUCTURAL ENGINEERING DOCUMENTS FOR ENGINEERING SERVICE OR CREATIVE WORK.
 - DELEGATED ENGINEER – A LICENSED PROFESSIONAL ENGINEER WHO PROVIDES SERVICES OR CREATIVE WORK REGARDING A PORTION OF THE ENGINEERING PROJECT. THE DELEGATED ENGINEER IS THE ENGINEER OF RECORD FOR THAT PORTION OF THE ENGINEERING PROJECT. TYPICALLY, DELEGATED ENGINEERS FALL INTO ONE OF THE FOLLOWING CATEGORIES:
 - AN INDEPENDENT CONSULTANT
 - AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING COMPONENTS TO A FABRICATOR OR CONTRACTOR
 - AN EMPLOYEE OR OFFICER OF A FABRICATOR OR CONTRACTOR
 - DELEGATED ENGINEERING DOCUMENTS – ENGINEERING DOCUMENTS THAT ARE PREPARED BY A DELEGATED ENGINEER.
 - DESIGN TEAM – DESIGN PROFESSIONALS INCLUDING THE ARCHITECT, STRUCTURAL ENGINEER, CIVIL ENGINEER, MEP ENGINEER, AND ANY OTHER CONSULTANT THAT ISSUES CONTRACT DOCUMENTS.
 - CONTRACTOR – GENERAL CONTRACTOR, CONSTRUCTION MANAGER, DESIGN BUILDER, OR ANY OTHER ENTITY CONTRACTED BY THE OWNER TO PERFORM THE WORK.
 - SHOP DRAWINGS – DRAWINGS DEPICTING INSTALLATION MEANS AND METHODS AND CATALOG INFORMATION ON STANDARD PRODUCTS. SHOP DRAWINGS SHALL BE PREPARED BASED ON ENGINEERING DIRECTION CONTAINED IN CONTRACT DOCUMENTS BY A CONTRACTOR, FABRICATOR, MANUFACTURER, OR LICENSED PROFESSIONAL ENGINEER, FOR INCORPORATION INTO THE PROJECT.
 - ESTABLISHED CHANNELS – AT THE ONSET OF THE PROJECT, ARCHITECT, OWNER, AND CONTRACTOR SHALL ESTABLISH DESIRED LINES OF COMMUNICATION BETWEEN ALL PROJECT PARTIES. THESE AGREED UPON LINES OF COMMUNICATION ARE THE ESTABLISHED CHANNELS.
- B. GENERAL STRUCTURAL NOTES ARE APPLICABLE TO THE DESIGN AND CONSTRUCTION OF THE ENTIRE PROJECT AND THIS ARE APPLICABLE TO ANY PART OF THE PROJECT THAT IS NOT SPECIFICALLY EXCLUDED BY THE CONTRACT DOCUMENTS.
- C. WHERE A DETAIL, TYPICAL, DETAIL, SECTION, TYPICAL SECTION, OR PLAN NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL SIMILAR OR LIKE CONDITIONS, UNLESS NOTED OTHERWISE.
- D. ISOMETRIC VIEWS ARE FOR VISUALIZATION PURPOSES ONLY AND DO NOT CONVEY ALL OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- E. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE DRAWINGS AND ANY OTHER CONTRACT DOCUMENT OR APPLICABLE CODE OR STANDARD OF PRACTICE DURING BIDDING, THE PROVISION RESULTING IN THE GREATER COST APPLIES. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT DURING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR CLARIFICATION TO THE DESIGN TEAM, WHO WILL PROVIDE A WRITTEN RESPONSE IN RETURN.
- F. SPECIFICATIONS HAVE BEEN ISSUED ON THIS PROJECT BY THE STRUCTURAL ENGINEER OF RECORD AND ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS.
- G. SEE SPECIFICATIONS FOR MATERIALS TESTING REQUIREMENTS.
- H. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH OTHER TRADES INCLUDING, BUT NOT LIMITED TO: ARCHITECTURAL, CIVIL, AND MEP FOR FLOOR SLAB STEPS, SLOPES AND CURBS, FLOOR SLAB FINISH, OPENINGS IN STRUCTURAL FLOORS, ROOFS AND WALLS, ETC.
- I. THE BUILDING HAS BEEN DESIGNED BY THE STRUCTURAL ENGINEER OF RECORD TO RESIST THE CODE REQUIRED VERTICAL AND LATERAL FORCES IN ITS FULLY COMPLETED CONDITION. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED BRACING, SHORING, AND OTHER CONSTRUCTION SUPPORTS NECESSARY TO ENSURE THE BUILDINGS STABILITY AND SAFETY THROUGHOUT THE DURATION OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOT OVERLOAD THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER TO PROVIDE THE ANALYSIS AND DESIGN NECESSARY TO DETERMINE POTENTIALLY OVERLOADED, UNSTABLE, OR OTHERWISE INADEQUATE CONDITIONS THAT MAY OCCUR AT ANY STAGE DURING CONSTRUCTION.
- J. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
- K. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
- L. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
- M. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROJECT SAFETY AND OSHA REQUIREMENTS. SHOULD THE STRUCTURAL ENGINEER OF RECORD NOTIFY THE CONTRACTOR OF A POTENTIALLY UNSAFE CONDITION, IT IS SOLELY AS A COURTESY FROM THE ENGINEER. IT SHOULD NOT BE INTERPRETED AS THE STRUCTURAL ENGINEER OF RECORD ASSUMING ANY RESPONSIBILITY FOR PROJECT SAFETY.
- N. ALL STRUCTURES REQUIRE PERIODIC MAINTENANCE TO EXTEND LIFE SPAN AND ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A MAINTENANCE PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE BUILDING OWNER. THIS PROGRAM SHALL INCLUDE, BUT NOT BE LIMITED TO: PAINTING OF STRUCTURAL STEEL, PROTECTIVE COATINGS FOR CONCRETE, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, SPALLS AND CRACKS IN CONCRETE, AND PRESSURES OF EXPOSED STRUCTURAL ELEMENTS EXPOSED TO A SALINE OR OTHER HARSH CHEMICAL ENVIRONMENT.
- O. THE USE OF DE-ICING CHEMICALS ON ANY EXPOSED STRUCTURAL ELEMENT IS DISCOURAGED AND WILL ACCELERATE DEGRADATION OF STRUCTURAL ELEMENTS.
- P. THE BUILDING OWNER SHALL NOT ALTER OR MODIFY ANY STRUCTURAL ELEMENT WITHOUT CONSULTING A LICENSED PROFESSIONAL ENGINEER. FURTHER, BUILDING OWNER SHALL NOT RENOVATE, REPAIR, ADD-ON TO, OR OTHERWISE MODIFY THE EXISTING STRUCTURAL SYSTEMS WITHOUT CONSULTING A LICENSED PROFESSIONAL ENGINEER.
- Q. CONTRACT DRAWINGS SHOW MAJOR OPENINGS IN FLOORS AND WALLS AND DO NOT NECESSARILY SHOW ALL OPENINGS REQUIRED. THE CONTRACTOR SHALL COORDINATE ALL OPENING SIZES AND LOCATIONS BETWEEN ALL DISCIPLINES AND TRADES. ADDITIONAL OPENINGS, BLOCKOUTS, AND SLEEVES MAY BE REQUIRED AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR REQUIREMENTS WITHIN THE CONTRACT DOCUMENTS. OPENINGS REQUIRED, BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS, MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
- R. THE CONTRACTOR SHALL COORDINATE PIPING AND CONDUIT EMBEDDED IN OR ATTACHED TO SLABS, SLAB-ON-DECK BEAMS, AND COLUMNS. ANY REQUIRED MODIFICATIONS TO STRUCTURAL MEMBERS OR THEIR REINFORCEMENT AS A RESULT OF EMBEDMENT OR ATTACHMENT SHALL BE SUBMITTED TO THE DESIGN TEAM FOR THEIR REVIEW. SEE GENERAL STRUCTURAL NOTES SECTION "DESIGN CRITERIA" FOR LIMITATIONS OF MEP LOADING ON STRUCTURAL SYSTEMS.
- S. THE STRUCTURAL ENGINEER OF RECORD'S ROLE DURING CONSTRUCTION
- THE STRUCTURAL ENGINEER OF RECORD SHALL NOT ASSUME CONTROL OF, OR RESPONSIBILITY FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, PROJECT SAFETY, THE ACTS AND OMISSIONS OF THE CONTRACTOR, OR THEIR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - STRUCTURAL ENGINEER OF RECORD SHALL NOT HAVE AUTHORITY TO STOP THE WORK OR AUTHORIZE CHANGES TO ANY CONTRACT SUM.
 - PERIODIC SITE VISITS BY REPRESENTATIVES OF THE STRUCTURAL ENGINEER OF RECORD ARE SOLELY FOR THE PURPOSE OF BECOMING GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK AND DETERMINING, IN GENERAL, IF THE WORK OBSERVED IS BEING PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS LIMITED OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS AND THAT OBSERVATIONS ARE QUALITATIVE, NOT QUANTITATIVE. THIS LIMITED INFORMATION WILL BE USED TO ADVISE THE OWNER/CONTRACTOR/ARCHITECT OF POTENTIAL DEFICIENCIES.
- C. CLARIFICATION OF POSITION OF STRUCTURALLY FRAMING ELEMENTS
- USE ONLY DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE ANY DIMENSIONS.
 - IF NOT INDICATED ON DRAWINGS, ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS.
 - CENTER LINES OF COLUMNS AND FOUNDATIONS SHALL COINCIDE WITH GRID LINE INTERSECTION, UNLESS NOTED OTHERWISE.
 - CENTER LINES OF FRAMING MEMBERS SHALL COINCIDE WITH COLUMN CENTER LINES, UNLESS NOTED OTHERWISE.
 - ELEVATIONS SHOWN ARE TO TOP OF FOUNDATIONS, SLABS, OR BEAMS, UNLESS NOTED OTHERWISE.
- U. SEE ARCHITECTURAL, CIVIL, MEP, AND VERTICAL TRANSPORTATION CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION RELATING TO THE COORDINATION OF STRUCTURAL COMPONENTS INCLUDING, BUT NOT LIMITED TO:
- CIVIL
 - SITING OF BUILDING GRID LINES WITH RESPECT TO CITY BENCHMARKS
 - SITE PREPARATION
 - BACKFILLING MATERIALS AND REQUIREMENTS INCLUDING DRAINAGE ADJACENT TO RETAINING WALLS
 - SITE ELEMENTS OUTSIDE OF BUILDING ENVELOPE
 - NEW AND EXISTING SITE UTILITIES
2. MECHANICAL
- PLAN DIMENSIONS AND PROJECT DATUM
 - SLAB EDGE DIMENSIONS AND FINISH ELEVATIONS
 - WATERPROOFING AND DAMP PROOFING DETAILS
 - SLAB SLOPES, STEPS AND DEPRESSIONS, RAMPS, TRENCHES
 - EMBEDMENTS, INSERTS, BLOCKOUTS, ETC.
 - CONCRETE FINISHES AND TOPPING SLABS
 - CONCRETE CURBS AND HOUSEKEEPING PADS
 - INTERIOR NON-STRUCTURAL MASONRY PARTITIONS
 - LIFE SAFETY, FIRE RATING
 - METAL PAN STAIRS AND SUPPORTS
 - OPERABLE PARTITIONS
3. MEP
- PIPE AND DUCT SIZES FOR OPENING AND SLEEVE COORDINATION
 - FLOOR DRAINS
 - UNDER FLOOR AND PERIMETER DRAINAGE SYSTEMS
 - EQUIPMENT CURBS
 - CONDUITS AND EMBEDMENTS IN WALLS AND SLABS
4. VERTICAL TRANSPORTATION
- INSERTS, HANGERS, TRENCHES, PITS, CONDUITS IN WALLS AND SLAB
- V. THIS BUILDING DOES NOT QUALIFY AS A THRESHOLD BUILDING PER CHAPTER 553.71 OF THE FLORIDA STATUTES. HOWEVER, THE OWNER HAS ELECTED TO PERFORM SPECIAL INSPECTIONS ABOVE AND BEYOND THOSE REQUIRED BY THE AUTHORITY HAVING JURISDICTION. SEE SPECIAL INSPECTION PLAN FOR SPECIFIC INSPECTION REQUIREMENTS.

ELECTRONIC DATA/REPRODUCTION

- A. ALL INFORMATION CONTAINED IN THE ELECTRONIC FILES OF THE CONTRACT DOCUMENTS ARE INSTRUMENTS OF SERVICE OF THE ARCHITECT/STRUCTURAL ENGINEER AND SHALL NOT BE USED FOR OTHER PROJECTS, ADDITIONS TO THE PROJECT, OR THE COMPLETION OF THE PROJECT BY OTHERS. ELECTRONIC FILES OF THE STRUCTURAL DOCUMENTS REMAIN THE PROPERTY OF JEZERINAC GROUP AND IN NO CASE SHALL THEIR TRANSFER BE CONSIDERED A SALE.
- B. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ENGINEER, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREIN AS CORRECT AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS OR OMISSIONS THAT MAY OCCUR HEREIN. THE USE OF ELECTRONIC FILES DOES NOT RELIEVE THE CONTRACTORS RESPONSIBILITY FOR PROPER CHECKING AND COORDINATION OF DIMENSIONS, DETAILS, SIZE, AND QUANTITIES.
- C. DIMENSIONS AND ELEMENT SIZES AND LOCATIONS IN THE ELECTRONIC FILES MAY NOT BE PRECISE AND, IN SOME CASES, HAVE BEEN INTENTIONALLY ALTERED FOR PRESENTATION PURPOSES. DO NOT SCALE DIMENSIONS ELECTRONICALLY OR OTHERWISE.
- D. WHEN USED FOR THE PREPARATION OF SHOP DRAWINGS, ALL INFORMATION NOT APPLICABLE TO THE SUBCONTRACT SHALL BE REMOVED FROM THE DRAWINGS, INCLUDING, BUT NOT LIMITED TO: SHEET NUMBERS, SECTION MARKS, TITLE BLOCKS, AND REFERENCES TO THE CONTRACT DOCUMENTS.

SUBMITTALS

- A. REFER TO DIVISION 01 OF SPECIFICATIONS FOR SUBMITTAL PROCEDURES AND REQUIREMENTS. REFER TO THE APPLICABLE SPECIFICATION SECTIONS FOR TECHNICAL CONTENT.
- B. SUBMIT SPECIFIC COMPONENTS SUCH AS COLUMNS, FOUNDATIONS, ETC. IN A SINGLE PACKAGE. SUBMIT SIMILAR FLOORS TOGETHER.
- C. TEN WORKING DAYS PRIOR TO SUBMITTING SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT, FOR REVIEW AND COMMENT BY THE STRUCTURAL ENGINEER OF RECORD, A SCHEDULE WHICH DETAILS THE ESTIMATED QUANTITY OF SHOP DRAWINGS AND THE DATE THE SHOP DRAWINGS WILL BE RECEIVED BY THE STRUCTURAL ENGINEER OF RECORD. THE STRUCTURAL ENGINEER OF RECORD SHALL HAVE THE OPPORTUNITY TO REVIEW THE PROPOSED SCHEDULE AND SUBMIT COMMENTS TO THE CONTRACTOR. THE FINAL SHOP DRAWING SCHEDULE SHALL BE DEVELOPED AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD. IN ACCORDANCE WITH THE DRAWING SCHEDULE, THE STRUCTURAL ENGINEER OF RECORD WILL RETURN THE SHOP DRAWING ITEMS WITHIN TEN WORKING DAYS AFTER HAVING RECEIVED THE REPRODUCIBLE SHOP DRAWING.
- D. THE CONTRACTOR SHALL REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR SHALL STAMP EACH SUBMITTAL VERIFYING THAT THE FOLLOWING IS ADDRESSED:
- THE SUBMITTAL IS REQUESTED.
 - THE SUBMITTAL IS BASED ON THE LATEST DESIGN.
 - THE SUBMITTAL IS CLEARLY CLOUDED FOR ALL THE DIFFERENCES FROM THE CONTRACT DOCUMENTS ON THE FIRST SUBMITTAL.
 - THE SUBMITTAL IS CLEARLY CLOUDED FOR ALL CHANGES AND ADDITION FROM PREVIOUS SUBMITTAL.
 - THE ARCHITECTS AND STRUCTURAL ENGINEER OF RECORDS COMMENTS FROM ANY PREVIOUS SUBMITTALS ARE ADDRESSED.
 - THE WORK IS COORDINATED AMONGST ALL CONSTRUCTION TRADES.
 - THE SUBMITTAL IS COMPLETE.
 - THE SUBMITTAL SHALL INCLUDE A STAMP INDICATING PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, AND SPECIFICATION SECTION NUMBER.
- E. THE STRUCTURAL ENGINEER OF RECORD'S REVIEW OF SUBMITTALS SHALL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT.
- F. THE STRUCTURAL ENGINEER OF RECORD SHALL RETURN, WITHOUT COMMENT, SUBMITTALS WHICH THE CONTRACTOR HAS NOT STAMPED OR WHICH DO NOT MEET THE ABOVE REQUIREMENTS.
- G. FOR THE COMPONENTS DESIGNED BY A DELEGATED ENGINEER PROVIDE SHOP DRAWINGS, DESIGN CALCULATIONS, AND A COVER LETTER SIGNED AND SEALED BY THE DELEGATED ENGINEER. LETTER SHALL INDICATE THAT THE SHOP DRAWINGS ARE IN CONFORMANCE WITH THE DELEGATED ENGINEER'S CALCULATIONS. REFER TO APPLICABLE SPECIFICATION SECTIONS FOR ADDITIONAL REQUIREMENTS.
- H. THE CONTRACTOR SHALL NOT ALTER OR MODIFY ANY STRUCTURAL ELEMENT WITHOUT CONSULTING THE STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT THE REVIEWED DEFERRED SUBMITTAL DOCUMENTS TO THE BUILDING OFFICE FOR APPROVAL. THESE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN TEAM HAS REVIEWED AND THE BUILDING OFFICIAL HAS APPROVED. SEE BELOW FOR THE LIST OF DEFERRED SUBMITTALS.
- I. THE FOLLOWING SUBMITTALS ARE REQUIRED TO BE SUBMITTED FOR STRUCTURAL ENGINEER OF RECORD REVIEW AS OUTLINED IN THE SPECIFICATIONS:

DESIGN CRITERIA

- A. STRUCTURE LOCATION:
LONGITUDE: -82.6577
LATITUDE: 30.2394
- B. LOADING:
- SUPERIMPOSED DEAD & LIVE LOADS
ALL DEAD LOADS LISTED BELOW ARE IN ADDITION TO THE STRUCTURE'S SELF-WEIGHT.

	DEAD LOAD	LIVE LOAD
TYPICAL	10 PSF	20 PSF REDUCIBLE
FLOOR:		
OFFICE	20 PSF	80 PSF REDUCIBLE
CORRIDORS	10 PSF	100 PSF NON-REDUCIBLE
STAIRS	10 PSF	100 PSF NON-REDUCIBLE
STORAGE	20 PSF	125 PSF NON-REDUCIBLE
MECHANICAL ROOM	150 PSF	125 PSF NON-REDUCIBLE
 - RAIN LOAD:
DESIGN RAINFALL: 4.44" HOOR (100-YEAR)
RAINWATER AT LOWEST POINT OF ROOF SHALL NOT POND DURING DESIGN RAINFALL AND SHALL NOT EXCEED 3/8" DURING DESIGN RAINFALL.
DESIGN RAIN LOAD, R: 20 PSF
 - SNOW LOAD:
 - WIND LOAD:
ULTIMATE DESIGN WIND SPEED, V_W: 75 MPH
NOMINAL DESIGN WIND SPEED, V_W: 75 MPH
RISK CATEGORY: IV
MAFED SPECTRAL RESPONSE ACCELERATION PARAMETER, S_s: 0.081 g
ENCLOSURE CLASSIFICATION: ENCLOSED
INTERNAL PRESSURE COEFFICIENT: +/- 0.18
COMPONENTS & CLADDING DESIGN PRESSURES: SEE WIND PRESSURE DIAGRAMS
 - TORNADO LOAD:
RISK CATEGORY: IV
WIND EXPOSURE: C
EFFECTIVE PLAN AREA: 1,000.00 SF
ULTIMATE TORNADO SPEED, V_W: 116 MPH
PER 32.52 OF ASCE 7, DESIGN FOR TORNADO LOADS SHALL NOT BE REQUIRED FOR STRUCTURES IN SEISMIC ZONE I, II, OR III.
 - SEISMIC LOAD:
RISK CATEGORY: IV
SEISMIC IMPORTANCE FACTOR, I_p: 1.5
SITE CLASS: D
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER, S_s: 0.087 g
SPECTRAL RESPONSE ACCELERATION PARAMETER, S₁: 0.051 g
SPECTRAL RESPONSE ACCELERATION PARAMETER, S₂: 0.092 g
SPECTRAL RESPONSE ACCELERATION PARAMETER, S₃: 0.092 g
SEISMIC FORCE RESISTING SYSTEM: NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
 - HANDRAIL AND GUARDRAIL LOADS
CONCENTRATED AND DISTRIBUTED LOADS ARE TO BE APPLIED AT THE HANDRAIL OR TOP RAIL IN ANY DIRECTION. CONCENTRATED AND DISTRIBUTED LOADS ARE NOT TO BE APPLIED CONCURRENTLY.
CONCENTRATED LOAD: 200 LB
DISTRIBUTED LOAD: 50 PLF
 - FUTURE EXPANSION:
NO PROVISIONS HAVE BEEN MADE FOR FUTURE VERTICAL OR HORIZONTAL EXPANSION OF THE STRUCTURE.
 - SERVICE LOADS:
1. DEFLECTION LIMITS: TOTAL LOAD DEFLECTION ONLY APPLIES TO THE DEFLECTION DUE TO THE CREEP COMPONENT OF LONG-TERM DEAD DEFLECTION PLUS THE SHORT-TERM DEFLECTION. LONG-TERM DEFLECTION SHALL BE CALCULATED IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.1. IT IS PERMITTED TO ESTIMATE THE CREEP COMPONENT OF THE LONG-TERM DEFLECTIONS WITH THE IMMEDIATE DEAD LOAD DEFLECTION.
 - ROOF MEMBERS
TOTAL LOAD DEFLECTION: L/240
TRANSITORY LOAD DEFLECTION: L/360
 - FLOOR MEMBERS
TOTAL LOAD DEFLECTION: L/240
LIVE LOAD DEFLECTION: L/360
 - DRIFT LIMITS:
 - INTERSTORY DRIFT: L/600
 - TOTAL STRUCTURE DRIFT: L/600

EARTHWORK & FOUNDATIONS

- A. GEOTECHNICAL INVESTIGATION REPORT
- FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT AS FOLLOWS:
 - REPORT TITLE: GEOTECHNICAL ENGINEERING REPORT-PROJECT 441-TERRACON PROJECT NO. E0215160
 - PREPARED BY: TERRACON CONSULTANTS, INC.
 - DATED: APRIL 21, 2022
 - THE GEOTECHNICAL INVESTIGATION REPORT IS AVAILABLE TO THE CONTRACTOR UPON REQUEST TO THE OWNER. THE INFORMATION HEREIN MAY BE USED BY THE CONTRACTOR FOR HIS GENERAL REFERENCE ONLY. THE GEOTECHNICAL INVESTIGATION REPORT RECOMMENDATIONS SHALL SUPERSEDE THE MINIMUM CRITERIA STATED IN THE STRUCTURAL GENERAL NOTES.
- B. SHALLOW FOUNDATIONS
- FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
 - FOUNDATION SIZES AND REINFORCEMENT ARE BASED ON AN ALLOWABLE BEARING PRESSURE OF 2500 PSF FOR COLUMNS AND 2,000 PSF FOR WALLS.
 - ITEMS SUBMITTED FOR RECORD SHALL BEAR A MINIMUM OF 2'-0" BELOW ADJACENT EXTERIOR GRADE.
 - FOUNDATIONS SHALL BEAR ON COMPACTED STRUCTURAL FILL, NATURAL SOILS, OR ROCK PREPARED PER THE GEOTECHNICAL INVESTIGATION REPORT.
 - PRIOR TO PLACEMENT OF CONCRETE, A QUALIFIED GEOTECHNICAL ENGINEER SHALL VERIFY SOILS CONFORMANCE TO THE RECOMMENDATIONS AND ASSUMPTIONS IN THE GEOTECHNICAL INVESTIGATION REPORT. ALL ADVERSE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD.
 - SOILS BELOW FOUNDATIONS NOT MEETING DESIGN BEARING PRESSURE SHALL BE REMEDIATED PER THE GEOTECHNICAL INVESTIGATION REPORT AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE FOUNDATIONS.
 - CENTER ALL FOUNDATIONS UNDER THEIR RESPECTIVE COLUMNS OR WALLS, UNLESS NOTED OTHERWISE.
 - TOP OF FOUNDATION ELEVATIONS PROVIDED ON THE CONTRACT DRAWINGS ARE FOR PURPOSE OF THE CONTRACT AND SHALL BE ADJUSTED, AS REQUIRED, AT THE TIME OF EXCAVATION TO BEAR ON PROPERLY PREPARED SUPPORT SUBGRADE (PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS).
- C. EARTHWORK AND EXCAVATION
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING, BUT NOT LIMITED TO: LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT AND OSHA REGULATIONS.
 - EXCAVATION SHALL NOT OCCUR WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FURTHER UNLESS THE FOUNDATION IS PROTECTED AGAINST SETTLEMENT.
 - THE EXTENT OF SUBGRADE PREPARATION SHALL EXTEND A MINIMUM OF 5'-0" BEYOND THE BUILDING PERIMETER.
 - THE CONTRACTOR SHALL PROVIDE A SUBGRADE BENEATH THE SLAB-ON-GROUND PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
 - UNLESS NOTED IN THE GEOTECHNICAL INVESTIGATION REPORT, COMPACT FILL TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557. EACH LAYER SHALL NOT EXCEED 8" LOOSE THICKNESS. COMPACT PRIOR TO THE PLACEMENT OF THE NEXT LAYER. COMPACT SHALL MEET ALL RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT.
 - PLACEMENT OF FILL AND COMPACT SHALL BE MONITORED AND ACCEPTED BY A RETAINED TESTING AGENCY. PERFORM A MINIMUM OF ONE FIELD DENSITY TEST (ASTM D-1558 OR D-6586) FOR EVERY 2,500 SQUARE FEET OF EACH LAYER. THE TESTING AGENCY SHALL RANDOMLY SELECT TEST LOCATIONS.
 - THE CONTRACTOR SHALL DETERMINE THE EXTENT OF THE CONSTRUCTION DETERMINING SYSTEMS REQUIRED FOR THE EXCAVATION. AT A MINIMUM, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING SITE.
 - THE CONTRACTOR SHALL SUBMIT CONSTRUCTION DETERMINING PLAN TO THE GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO BEGINNING EXCAVATION.
 - THE CONTRACTOR SHALL INSTALL ALL NECESSARY DETERMINING SYSTEMS.
- D. RETAINING WALL
- RETAINING WALLS SHALL BE DESIGNED FOR THE FOLLOWING:
 - LATERAL EARTH PRESSURE AT REST: 55 PSF/FT DEPTH
 - ACTIVE EARTH PRESSURE: 36.3 PSF/FT DEPTH
 - PASSIVE EARTH PRESSURE RESISTANCE: 330 PSF/FT DEPTH
 - SOIL FRICTION FACTOR: 0.35
 - RETAINING WALL DESIGN IS BASED ON DRAINED BACKFILL WITH NO BUILDUP OF WATER. THE CONTRACTOR SHALL PROVIDE A DRAINAGE SYSTEM IN ALL BACKFILL CONDITIONS (SEE CIVIL/ ARCHITECTURAL DRAWINGS FOR DRAINAGE SPECIFICATIONS).
 - DO NOT BACKFILL AGAINST CANTILEVERED RETAINING WALLS UNTIL CONCRETE COMPRESSIVE STRENGTH, f_c, REACHES ITS 28 DAY DESIGN STRENGTH. DO NOT BACKFILL PRIOR TO WATERPROOFING AND INSPECTION.

SLAB-ON-GROUND

- A. THE SLAB-ON-GROUND HAS BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- B. SLAB THICKNESSES AND REINFORCEMENT ARE BASED ON A MODULUS OF SUBGRADE REACTION OF AN ASSUMED VALUE OF 150 PSI.
- C. SUBGRADE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- D. FOR INTERIOR SLABS, PLACE A 10-MIL (MINIMUM) VAPOR RETARDER BETWEEN THE SOIL AND BOTTOM OF SLAB. SEE CAST-IN-PLACE CONCRETE SPECIFICATIONS FOR APPROVED VAPOR RETARDER PRODUCTS/MANUFACTURERS. DO NOT USE VAPOR RETARDERS AT EXTERIOR SLABS. SEE ARCHITECTURAL CONTRACT DOCUMENTS FOR PROJECT SPECIFIC REQUIREMENTS.
- E. IF THE SLAB-ON-GROUND HAS BEEN DESIGNATED AS A STRUCTURAL SLAB-ON-GROUND IN THE CONTRACT DOCUMENTS, NO SAW CUTTING OF THE SLAB IS PERMITTED.
- F. CONTROL JOINTS SHALL BE CUT INTO THE SURFACE OF THE SLAB IN EACH DIRECTION. SEE THE TYPICAL SAW CUT JOINT DETAIL FOR TIME, DEPTH, AND SPACING OF JOINT REQUIREMENTS UNLESS NOTED OTHERWISE. CONTROL JOINTS SHALL BE CONSTRUCTED SUCH THAT THE AREA CONTAINED BY THE CONTROL JOINTS HAS A MAXIMUM RATIO OF LONG SIDE TO SHORT SIDE OF 1.5 TO 1 UNLESS NOTED OTHERWISE. DO NOT CONSTRUCT CONTROL JOINTS SUCH THAT L-SHAPED SLAB PANELS ARE CREATED.
- G. COLUMN ISOLATION JOINTS SHALL BE CONSTRUCTED PER THE TYPICAL COLUMN ISOLATION JOINT DETAIL IN ORDER TO PROVIDE ADEQUATE SPACE FOR COLUMN INSTALLATION.
- H. CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL. SLAB CONSTRUCTION JOINTS SHALL BE DOWELED.
- I. WHERE SPECIFIED ON PLAN, WELDED WIRE REINFORCEMENT SHALL BE INSTALLED. WELDED WIRE REINFORCEMENT SHALL BE PROPERLY CHAINED SUCH THAT IT IS LOCATED AT A DEPTH OF 1/2" FROM THE TOP OF SLAB.
- J. REFERENCE ARCHITECTURAL AND MEP DOCUMENTS FOR SLAB FINISHES AND SLOPES NOT REFERENCED ON THE STRUCTURAL DOCUMENTS. THE MINIMUM SLAB THICKNESS SPECIFIED IN THE CONTRACT DOCUMENTS MUST BE MAINTAINED.
- K. REFERENCES ARCHITECTURAL DOCUMENTS FOR VAPOR RETARDER AND SLAB AND CONTROL JOINT SEALANT REQUIREMENTS.
- L. CONDUITS SHALL NOT BE PLACED WITHIN THE SLAB. CONDUITS SHALL BE PLACED BENEATH THE SLAB.

CONCRETE REINFORCEMENT

- A. ALL CONCRETE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 03 OF THE SPECIFICATIONS.
- B. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE.
- C. WHERE WELDS ARE INDICATED FOR REINFORCING STEEL ON THE DRAWINGS, REINFORCING STEEL SHALL BE A706, GRADE 60 UNLESS OTHERWISE NOTED.
- D. WELDED WIRE REINFORCEMENT SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF ASTM A1064.
- E. ALL 90°, 135°, AND 180° HOOKED REINFORCEMENT SPECIFIED AND GRAPHICALLY DEPICTED IN THE CONTRACT DOCUMENTS SHALL BE DETAILED IN ACCORDANCE WITH ACI 318 STANDARD HOOK GEOMETRY FOR DEFORMED BARS IN TENSION AND FOR STIRRUPS, TIES, AND HOOPS.
- F. FOR EVERY VERTICAL OR HORIZONTAL BAR DISCONTINUED BY AN OPENING, ONE BAR (MINIMUM OF 2 BARS) SHALL BE ADDED AT SIDE OF OPENING (HALF TO EACH SIDE, TYPICAL).
- G. FOR CONCRETE CLEAR COVER TO REINFORCEMENT SEE SCHEDULE ON SHEET S-003 UNLESS NOTED OTHERWISE. CLEAR COVER IN PARENTHESES () DENOTES CLEAR COVER WHEN THE AS-BUILT APPLICATION IS EXPOSED TO WEATHER.
- H. ALL LAP SPICES SHALL BE CLASS B TENSION LAP SPICES IN ACCORDANCE WITH ACI 318 UNLESS NOTED OTHERWISE. SEE LAP SPICE SCHEDULE ON SHEET S-003 FOR LAP SPICE LENGTHS. UNLESS NOTED AS CONTINUOUS, REINFORCED LONGitudinal REINFORCEMENT SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL.
- I. A MINIMUM LAP SPICE OF 8" SHALL BE PROVIDED AT ALL END AND SIDE LAP CONDITIONS FOR WELDED WIRE REINFORCEMENT UNLESS NOTED OTHERWISE.
- J. MECHANICAL SPICES ARE REQUIRED WHERE SPECIFIED ON THE CONTRACT DOCUMENTS. MECHANICAL SPICES ARE ALSO REQUIRED TO SPICE #14 AND #18 BARS. MECHANICAL SPICES MAY ALSO BE USED AT THE CONTRACTOR'S OPTION. PROVIDED THE MECHANICAL SPICES HAVE A CURRENT CODES REPORT DEMONSTRATING THEY CAN DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR IN TENSION OR COMPRESSION. MECHANICAL SPICES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL.
- K. THE USE OF WELDED SPICES IS PROHIBITED UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL SUBMIT THE LOCATIONS OF WELDED SPICES TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL. IF APPROVED, THE CONTRACTOR SHALL SUBMIT THE REQUIREMENTS OF AWS D1.1.
- L. DOWELS MATCH LAYOUT SIZE AND SPACING OF PRIMARY REINFORCEMENT UNLESS NOTED OTHERWISE.
- M. SEE TYPICAL DETAILS FOR REINFORCEMENT REQUIRED AT OPENINGS AND PENETRATIONS.
- N. THE CONTRACTOR SHALL ACCURATELY DEPICT THE REINFORCEMENT BAR SIZES AND PLACEMENT. WRITTEN DESCRIPTION OF REINFORCEMENT WITHOUT ADEQUATE SECTIONS, ELEVATIONS, AND DETAILS IS NOT ACCEPTABLE.

CONCRETE

- A. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH DIVISION 03 OF THE SPECIFICATIONS.
- B. FOR CONCRETE MIXTURE REQUIREMENTS SEE SCHEDULE ON SHEET S-003.
- C. THE USE OF RECYCLED CONCRETE IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.
- D. NORMAL WEIGHT CONCRETE SHALL BE USED FOR ALL CONCRETE MEMBERS UNLESS NOTED OTHERWISE. NORMAL WEIGHT CONCRETE SHALL HAVE A CURED DENSITY OF 145 PCF ±5 PCF. WHERE LIGHT WEIGHT CONCRETE IS SPECIFIED THE CURED DENSITY SHALL BE 112 PCF ±3 PCF.
- E. EACH MIX SHALL BE UNDOUBLY IDENTIFIED BY MIX NUMBER AND THE INTENDED LOCATION OF PLACEMENT ON THE SPECIFIC PROJECT SHALL BE CLEARLY STATED.
- F. ALL PROPOSED CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN BEAMS, WALLS, AND SLABS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS OR BY WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD. FOR MILD REINFORCED MEMBERS, CONSTRUCTION JOINTS SHALL BEAR A MINIMUM OF 12" FROM THE END OF A MEMBER SPAN. ALL APPROVED CONSTRUCTION JOINTS SHALL BE INDICATED, DIMENSIONED, AND DETAILED ON THE CONCRETE REINFORCEMENT SHOP DRAWINGS.
- G. GIRDERS, BEAMS, HAUNCHES, DROP PANELS, DROP CAPS, AND CAPITALS SHALL BE POURED MONOLITHICALLY AS PART OF THE SLAB SYSTEM UNLESS NOTED OTHERWISE.
- H. PROVIDE A 1/4" INCH CHAMFER AT ALL EXPOSED CORNERS OF BEAMS, WALLS, ETC. UNLESS NOTED OTHERWISE. CONCRETE CORING AND INSTALLATION OF DRILLED ANCHORS IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.
- I. REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL CONCRETE DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL COORDINATE BETWEEN THE ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS TO FURNISH DIMENSIONED DRAWINGS THAT LOCATE AND SIZE ALL SLAB EDGES, OPENINGS, AND PENETRATIONS. THESE DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL.
- K. EMBEDDED CONDUITS, PIPES, AND SLEEVES
- THE OUTSIDE DIAMETER OF CONDUITS, PIPES, AND SLEEVES SHALL NOT EXCEED ONE-THIRD THE THICKNESS OF THE SLAB, WALL OR BEAM IN WHICH THEY ARE EMBEDDED. EMBEDMENTS SHALL NOT SIGNIFICANTLY REDUCE THE CAPACITY OF THE MEMBERS THEY PENETRATE.
 - THE MINIMUM CLEAR COVER FOR CONDUITS, PIPES, AND SLEEVES SHALL BE 1 1/2" FOR CONCRETE EXPOSED TO EARTH OR WEATHER AND 1" FOR CONCRETE NOT EXPOSED TO EARTH OR WEATHER.
 - ALUMINUM EMBEDMENTS AND EMBEDMENTS MADE OF ANY OTHER MATERIAL HARMFUL TO THE CONCRETE OR REINFORCEMENT ARE PROHIBITED.
 - EMBEDMENTS NOT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE DESIGNED TO RESIST THE EFFECTS OF MATERIAL, PRESSURE, AND TEMPERATURE THAT THEY WILL BE SUBJECTED TO. THE WORK SHALL BE COORDINATED AMONGST ALL CONSTRUCTION TRADES.
 - THE CONTENTS OF EMBEDDED PIPES SHALL NOT FLOW UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED DESIGN STRENGTH.
 - CONDUITS, PIPES, AND SLEEVES SHALL BE PLACED BETWEEN TOP AND BOTTOM LAYERS OF REINFORCEMENT IN SLABS AND BETWEEN INNER AND OUTER LAYERS OF REINFORCEMENT IN WALLS.
 - CONCRETED ITEMS SHALL BE FABRICATED AND INSTALLED SUCH THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS SPECIFIED LOCATION IS NOT REQUIRED.

STRUCTURAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
B-S001	GENERAL NOTES
B-S002	GENERAL NOTES
B-S003	GENERAL SCHEDULES
B-S004	SPECIAL INSPECTION PLAN
B-S101	FOUNDATION & FRAMING PLANS
B-S001	FOUNDATION SECTIONS & DETAILS
B-S002	FOUNDATION SECTIONS & DETAILS
B-S301	FRAMING SECTIONS & DETAILS

ABBREVIATIONS

ADDL	ADDITIONAL
ADJ	ADJACENT
AF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT OR ARCHITECTURAL
ASD	ALLOWABLE STRESS DESIGN
BT	BOTTOM
BV	BACK-TO-BACK
BLDG	BUILDING
BLOCK	BLOCKING
BP	BASE PLATE
BRS	BEARINGS
BT	BOTTOM
BTWN	BETWEEN
C	COMPRESSION
CFS	COLD-FORMED STEEL
CONST	CAST-IN-PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR OR CLEARANCE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN(S)	CONNECTION(S)
CONT	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
D&E	DRILL & EPOXY
D&E	REINFORCING BAR DIAMETER
OP	OUTSIDE FACE
CH	OPPOSITE HAND
OPNG(S)	OPENING(S)
OPP	OPPOSITE
OSL	OUTSTANDING LEG
D&E	DIAMETER
D&E	DIAGONAL
DM(S)	DIMENSION(S)
DL	DEAD LOAD
DWG(S)	DRAWING(S)
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	ELEVATOR
EQ	EASE-OF-SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FF	FACE-TO-FACE
FD	FLOOR DRAIN
FF	FINISH FLOOR
FND	FOUNDATION
FS	FEET
FT	FEET
FTG	FOOTING
GA	GAGE, GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GDR	GROVER
GEN	GENERAL
GYP	GYPSUM
HCA	HEADED CONCRETE ANCHORS
HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
TOP	TOP OF
TEMP	TEMPERATURE OR TEMPORARY
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VEHICLE
VIF	VERIFY IN FIELD
W	WITH
WO	WITHOUT
WP	WORK POINT
WWR	WELDED WIRE REINFORCEMENT

ABBREVIATIONS

KSI	KIPS PER SQUARE INCH
L	LENGTH
LL(S)	FOOTING(S)
LL	LIVE LOAD
LLH	LONG LONG HORIZONTAL
LLV	LONG LONG VERTICAL
LNG	LONGitudinal
LRFD	LOAD RESISTANCE FACTORED DESIGN
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LTP	LAP TENSION SPICE
LW	LIGHT WEIGHT
LWC	LIGHT WEIGHT CONCRETE
M	MOMENT
MAX	MAXIMUM
MC	MOMENT CONNECTION(S)
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
FP	FIRE PROTECTION
MFR	MANUFACTURER
MD	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NFS	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OP	OPPOSITE HAND
OPNG(S)	OPENING(S)
OPP	OPPOSITE
OSL	OUTSTANDING LEG
P&F	POWER ACTUATED FASTENER
PERF	PERPENDICULAR
PJP	PREFORMED JOINT FILLER
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PCST	PRECAST
PREFAB	PRE-FABRICATED
PSF	POUNDS PER SQUARE FOOT
RENF	REINFORCED
REQD	REQUIRED
POST	POST-TENSIONED

STEEL DECK GENERAL REQUIREMENTS

- A. ALL STEEL DECK SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE DIVISION 05 SPECIFICATIONS.
- B. STEEL DECK SHALL BE SUPPORTED BY A MINIMUM OF FOUR SUPPORT LOCATIONS (THREE SPAN CONDITION), UNLESS NOTED OTHERWISE.
- C. STEEL CONTRACTOR SHALL COORDINATE SLAB/DECK OPENING SIZES AND LOCATIONS PER ARCHITECTURAL AND MEP CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PROVIDE OPENING SUPPORT FRAMING AND REINFORCEMENT AS REQUIRED PER TYPICAL DETAILS AND SUBMIT PROPOSED SLAB/DECK OPENINGS FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD.
- D. SHOP DRAWINGS SHALL BE SUBMITTED INDICATING:
- 1. MATERIAL STRENGTH
 - 2. SECTION PROPERTIES
 - 3. DECK GAGE, LAYOUT
 - 4. FASTENER TYPE
 - 5. CONNECTION PATTERN
 - 6. CLOSURE ANGLE
- E. THE CAPACITY OF THE DECK SHALL BE BASED ON CURRENT ICC-ES EVALUATION REPORTS.

STRUCTURAL STEEL

- STRUCTURAL STEEL**

 - A. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE ON CONTRACT DOCUMENTS:

1. ROLLED SHAPES AND CHANNELS 2. ANGLES FOR TRUSSES AND BRACES 3. MISCELLANEOUS ANGLES 4. HOLLOW STRUCTURAL SECTIONS	ASTM A572 OR A582, MIN. YIELD STRENGTH 50 KSI ASTM A36 MIN YIELD STRENGTH 36 KSI ASTM A506 ASTM A406, C MIN YIELD STRENGTH 46 KSI FOR ROUND AND 50 KSI FOR RECTANGULAR HSS
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 - B. CONNECTION MATERIAL SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS OR AS NEEDED FOR CONNECTION DESIGN:

1. ANGLES 2. WTS 3. PLATES 4. BOLTS 5. NUTS 6. WIM FABRIC 7. ANCHOR RODS 8. WELD ELECTRODES	ASTM A36 ASTM A502 ASTM A572, MIN YIELD STRENGTH 50 KSI ASTM A525 ASTM A563 WIM FABRIC ASTM F1554 Grade 55 WITH WELDABILITY SUPPLEMENT S1 MATCH FILLER METAL TO BASE METAL PER AWS D11.1
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 - C. FABRICATE MEMBERS AS INDICATED. FABRICATE MEMBERS SHALL BE NATURAL CAMBER IS UPWARD AFTER ERECTION.
 - D. CANTILEVERED BEAMS WITH FULLER METAL CAMBER SHALL BE ERECTED SUCH THAT THE CAMBER IS ORIENTED DOWNWARD (OR CONCAVE UP).
 - E. SPACING SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SER IN WRITING.
 - F. ALL STEEL MEMBERS AND EMBEDMENTS EXPOSED TO WEATHER, PROVIDE HOT-DIPPED GALVANIZED FINISH.
 - G. PENETRATION OF WATER SHALL BE PREVENTED BY ANY ACCUMULATION OF WATER. ALL PENETRATION THROUGH MAIN MEMBERS SHALL NOT EXCEED 1/16" DIA. AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.
 - H. SHOW ALL JOINT OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.
 - I. ALL MODIFICATIONS OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER.
 - J. WHERE BEAM SHEAR IS NOT NOTED, DESIGN FOR 10K.
 - K. ALL CONNECTIONS SHALL BE DESIGNED FOR THE SPECIFIED SHEAR, MOMENT, AND AXIAL LOADS ON THE DRAWINGS. THE CONNECTIONS SHALL BE DESIGNED FOR LOAD REVERSAL. ALL CONNECTIONS FORCEWAYS SPECIFIED ON PLAN ARE TO BE MAINTAINED. ALL LEVELS REQUIRED TO BE MAINTAINED.
 - L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, AND FABRICATION OF ALL STEEL FRAMING CONNECTIONS UNLESS SPECIFICALLY NOTED OTHERWISE AS COMPLETLY DESIGNED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL RETAIN A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED, WHO SHALL DESIGN THE CONNECTIONS. SUBMIT SIGN AND SEALED CALCULATION TO THE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO STARTING FABRICATION.
 - M. CONNECTION DESIGN SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATIONS AND THE BUILDING CODE. CONNECTIONS SHALL BE CAPABLE OF RESISTING VERTICAL AND HORIZONTAL LOADS LISTED ON THE DRAWINGS.
 - N. CONNECTION DESIGN SHALL BE APPROVED BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, AND FABRICATION OF ALL STEEL FRAMING CONNECTIONS UNLESS SPECIFICALLY NOTED OTHERWISE AS COMPLETLY DESIGNED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL RETAIN A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED, WHO SHALL DESIGN THE CONNECTIONS. SUBMIT SIGN AND SEALED CALCULATION TO THE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO STARTING FABRICATION.
 - O. STEEL CONNECTION DETAILS SHOW GENERAL CRITERIA FOR DESIGN AND DETAILING, AND ARE NOT INTENDED TO SUBSTITUTE FOR CONNECTION DESIGN. CONNECTION DESIGN SHALL BE THE RESPONSIBILITY OF THE ARCHITECT FOR CONNECTION DESIGN ENGINEER. ALTERNATIVE CONNECTION CONFIGURATION MAY BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONNECTIONS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE USED.

STEEL JOISTS

- A. MANUFACTURE AND ERECT ALL STRUCTURAL STEEL JOISTS, JOIST GIRDERS, AND BRIDGING IN ACCORDANCE WITH SPECIFICATION SECTION 05210.0, STRUCTURAL OF THE STEEL JOIST INSTITUTE AND ALL OSHA REQUIREMENTS.
- B. PROVIDE ALL JOIST DESIGN JOISTS PER DESIGN CRITERIA AND ALL ADDITIONAL LOADS SHOWN ON PLAN OR IN DETAILS. AT A MINIMUM, JOIST SHALL BE DESIGNED PER STEEL JOIST INSTITUTE (SJI) LOAD TABLES.
- C. JOIST BRIDGING SHALL BE EQUALLY SPACED BETWEEN COLUMN LINES OR OTHER SPECIFICALLY LOCATED FRAMING MEMBERS UNLESS NOTED OTHERWISE.
- D. STEEL JOISTS, BRIDGING AND THEIR CONNECTIONS SHALL BE DESIGNED FOR NET UPLIFT (NEGATIVE PRESSURE) AS NOTED ON THE STRUCTURAL DRAWINGS. REFER TO THE APPLICABLE BUILDING CODE LISTED IN DESIGN CRITERIA FOR LOAD COMBINATIONS.
- E. DEAD LOAD (MIN) = 10 PSF
- F. STEEL JOISTS, BRIDGING, AND THEIR CONNECTIONS SHALL BE DESIGNED FOR ADDITIONAL WIND FORCE RESULTING FROM WIND (POSITIVE PRESSURE) AS INDICATED IN THE STRUCTURAL DRAWINGS.
- G. WIND (MAXIMUM) = 30 PSF
- H. JOIST MANUFACTURER SHALL DESIGN AND DETAIL ALL BRIDGING PER SJI REQUIREMENTS AND CLEARLY INDICATE LOCATION ON STEEL Erection DRAWINGS.
- I. BRIDGING ON ROOF SHALL BE DESIGNED FOR THE TOP CHORD OF JOISTS UNDER SERVICE LOADS FOR JOISTS NOT BRACED BY STEEL ROOF DECK.
- J. BOTTOM CHORD OF ROOF JOISTS SHALL BE DESIGNED FOR NET UPLIFT (COMPONENTS & CLADDING) SHOWN ON DRAWING ON BRIDGING OR NOTED OTHERWISE.
- K. PROVIDE ADDITIONAL BOTTOM CHORD BRIDGING AS REQUIRED FOR NET UPLIFT (COMPONENTS & CLADDING) SHOWN ON DRAWING ON BRIDGING OR NOTED OTHERWISE.
- L. AN ALLOWABLE STRESS INCREASE FOR LOAD COMBINATIONS INCLUDING WIND IS NOT PERMITTED.
- M. JOIST MANUFACTURER SHALL GAMBER JOISTS PER SJI CRITERIA.
- N. PROVIDE MINIMUM BEARING PER SJI REQUIREMENTS AND CONNECT TO STEEL SUPPORT AS FOLLOWS:
1. L-HANS: 3"x6" x 1" FILLLET WELD EACH SIDE
2. L-H AND D-H: 7"x2" FILLLET WELD EACH SIDE
- O. PROVIDE STANDARD DETAIL OF BEARING FOR ALL JOISTS AS SHOWN BELOW UNLESS NOTED IN DRAWINGS:
1. K-HANS: 2"x3"
2. L-H: 5"
3. JOIST GIRDER: 7"x4"
- P. WHERE STEEL JOIST OR JOIST GIRDER SLOPE EXCEEDS 1/4" INCH PER FOOT, PROVIDE SLOPED BEARING AS REQUIRED PER SJI REQUIREMENTS.
- Q. JOIST MANUFACTURER SHALL DESIGN AND DETAIL FIELD BRIDGING FOR Erection PER SJI REQUIREMENTS.

D

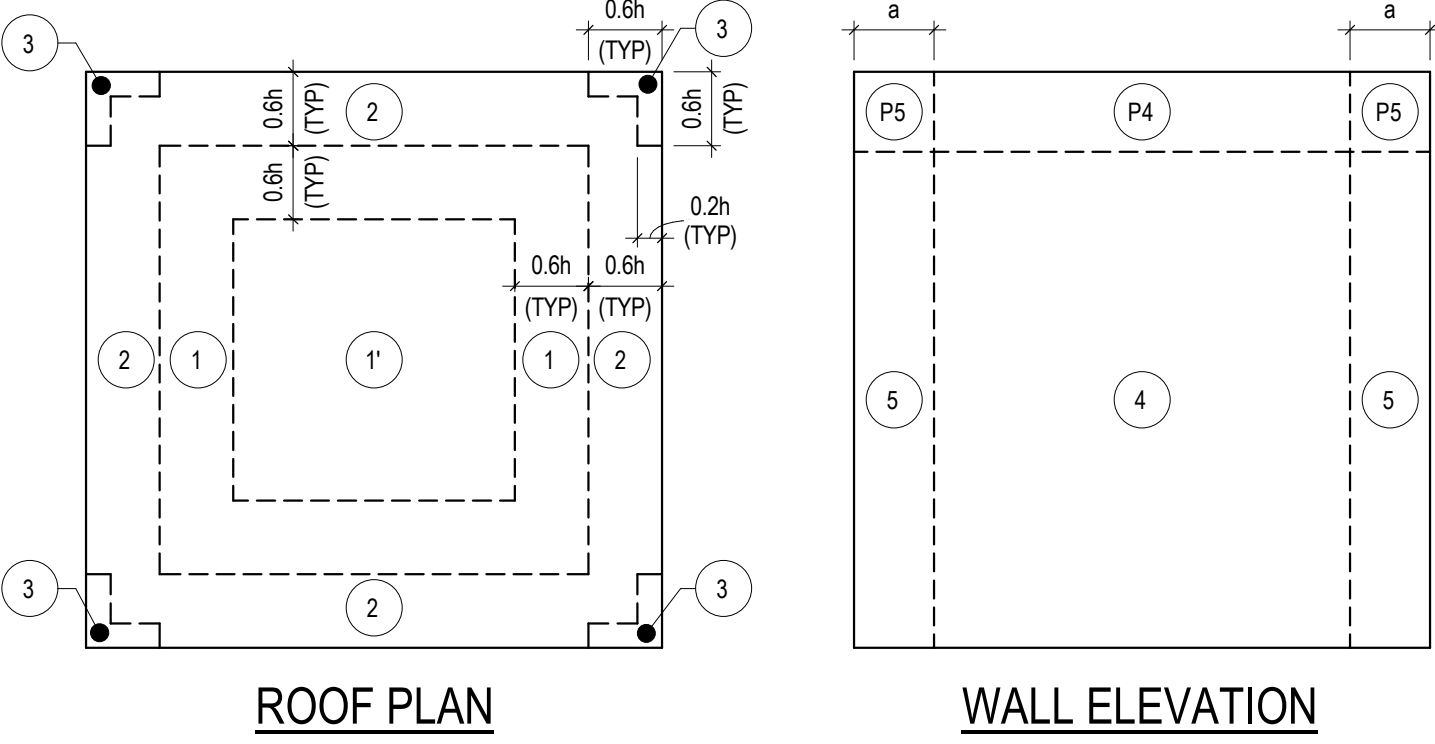
C

B

A

CONCRETE MIXTURE REQUIREMENTS								
APPLICATION	EXPOSURE CLASS	f _c	TEST AGE	MODULUS OF ELASTICITY	MAXIMUM W/C/M	AIR CONTENT	NOMINAL MAXIMUM AGGREGATE	MAXIMUM CONCRETE WEIGHT
FOOTINGS	F0	3000 PSI	28 DAYS	3122 KSI	SEE NOTE 2	SEE NOTE 3	1"	150 PCF
EXTERIOR SLAB-ON-GROUND	F1	4500 PSI	28 DAYS	3824 KSI	0.55	4.5% ± 1.5%	1"	150 PCF
SLAB-ON-GROUND	F0	3000 PSI	28 DAYS	3122 KSI	SEE NOTE 2	SEE NOTE 3	1"	150 PCF
ELEVATED SLABS ON METAL DECK	F0	4000 PSI	28 DAYS	3605 KSI	SEE NOTE 2	SEE NOTE 3	3/4"	150 PCF
TILT-WALLS	F0	4000 PSI (MIN)	28 DAYS	3605 KSI	SEE NOTE 2	SEE NOTE 3	3/4"	150 PCF
NOTES: 1. EXPOSURE CATEGORIES AND CLASSES FOR SULFATES, PERMEABILITY, AND CORROSION PROTECTION OF REINFORCEMENT IS CLASS ZERO UNLESS NOTED OTHERWISE. 2. WATER/CEMENT RATIO SHALL BE AS REQUIRED FOR THE SPECIFIED CONCRETE MIX DESIGN. THERE IS NO MAXIMUM WATER/CEMENT RATIO REQUIREMENT FOR THE EXPOSURE CLASSIFICATION ASSOCIATED WITH THIS APPLICATION. MAXIMUM WATER/CEMENT RATIO IS NOT APPLICABLE FOR DURABILITY REQUIREMENTS IN LIGHTWEIGHT CONCRETE. 3. THERE IS NO MANDATORY TARGET AIR CONTENT FOR THIS APPLICATION. THE CONTRACTOR MAY CHOOSE TO ADD AIR ENTRAINMENT TO IMPROVE THE WORKABILITY AND FINISHING PROPERTIES OF THE MIX. AIR CONTENT SHALL BE AS REQUIRED FOR THE SPECIFIED CONCRETE MIX.								

COMPONENTS & CLADDING EXTERNAL PRESSURE LOADS (PSF)										
EFFECTIVE WIND AREA (FT²)	LOCATION PER ASCE 7-16: FIGURE 30.3-1, 30.3-2A, 30.11-1B									
	1	1'	2	3	4	5	P4	P5	CANOPY	
<10	45 -178	45 -111	45 -234	45 -319	102 -111	102 -136	336	421	85	-104
20	43 -166	43 -111	43 -220	43 -286	98 -106	98 -129	318	384	76	-94
50	39 -149	39 -111	39 -198	39 -248	92 -100	92 -116	290	340	69	-91
100	36 -138	36 -111	36 -185	36 -220	88 -96	88 -106	273	308	61	-71
200	36 -128	36 -88	36 -168	36 -187	82 -91	82 -97	251	270		
500	36 -111	36 -69	36 -149	36 -149	77 -85	77 -85	226	226		
>1000		36 -55								



NOTES:

- FOR COMPONENTS HAVING EFFECTIVE AREAS IN BETWEEN TABULATED VALUES, DESIGN LOADS MAY BE INTERPOLATED. OTHERWISE DESIGN LOAD SHALL BE TAKEN FROM THE NEXT LOWEST TABULATED EFFECTIVE AREA.
- DESIGN VALUES SHOWN IN THIS TABLE ARE ULTIMATE VALUES FOR USE WITH LRFD DESIGN. VALUES MAY BE MULTIPLIED BY 0.6 FOR USE WITH SERVICE LEVEL OR ASD DESIGN. REFER TO THE BUILDING CODE FOR APPLICABLE LOAD COMBINATIONS.
- a = 3'-0". SEE ROOF PLAN MAP BELOW FOR LOCATION OF a-ZONES. WALL a-ZONE LOCATIONS TO MATCH ROOF a-ZONES.
- 0.6h = 8'-0". SEE ROOF PLAN MAP BELOW FOR LOCATION OF ROOF PRESSURE ZONES.
- POSITIVE PRESSURE VALUES REFER TO FORCES ACTING TOWARDS BUILDING OR COMPONENT FACE. NEGATIVE PRESSURE VALUES REFER TO FORCES ACTING AWAY FROM BUILDING OR COMPONENT FACE.
- EACH COMPONENT AND ITS CONNECTION SHALL BE DESIGNED FOR MAXIMUM POSITIVE AND NEGATIVE FORCES.
- PARAPET COMPONENTS AND CLADDING ARE THOSE ELEMENTS WHICH EXIST ABOVE THE HORIZONTAL PLANE OF THE ROOF AND SHALL BE DESIGNED FOR:
 - POSITIVE AND NEGATIVE PRESSURES 4 OR 5 APPLIED TO THE SHEATHING OR PANELING AND ITS CONNECTION ON OUTSIDE FACE.
 - POSITIVE PRESSURES 4 OR 5 APPLIED TO THE SHEATHING OR PANELING AND ITS CONNECTION ON ROOF SIDE FACE.
 - NEGATIVE PRESSURES 2 OR 3 APPLIED TO THE SHEATHING OR PANELING AND ITS CONNECTION ON ROOF SIDE FACE.
 - P4S SHALL BE APPLIED TO THE DESIGN OF THE STRUCTURAL ELEMENT OF THE PARAPET AND ITS CONNECTION, INCLUDING BUT NOT LIMITED TO THE STUD FRAMING OF THE PARAPET.
- A DESIGN WIND PRESSURE HORIZONTAL VALUE OF 179 PSF AND VERTICAL VALUE OF 142 PSF SHALL BE APPLIED TO COMPONENTS WHICH ARE EITHER ROOFTOP STRUCTURES OR ROOFTOP APPURTENANCES AND THEIR CONNECTION. EXAMPLES OF THIS ARE RTUS, AHUs, AND SCREEN WALLS.
- ROOF - DENOTES DESIGN WIND PRESSURE VALUES WHICH SHALL BE APPLIED AT ROOF OVERHANGS TO TOP SURFACE CLADDING OR SHEATHING AND ITS CONNECTION. SOFFIT CLADDING OR SHEATHING SHALL BE DESIGNED FOR SIMILAR PRESSURE TO THE ADJACENT WALL PRESSURE. A COMBINATION OF THESE FORCES SHALL BE APPLIED TO THE STRUCTURAL ELEMENT OF THE OVERHANG AND ITS CONNECTION, INCLUDING BUT NOT LIMITED TO THE STUD FRAMING OF THE OVERHANG.
- ALL DOORS TO BE RATED TO RESIST DESIGN WIND PRESSURES SPECIFIED.

CAST-IN-PLACE CONCRETE (NON-PRESTRESSED) CLEAR COVER SCHEDULE

APPLICATION	BOTTOM	TOP	SIDES
FOUNDATIONS	3"	2"	3"
SLAB-ON-GROUND	SEE DETAILS	SEE DETAILS	3"
RETAINING WALLS	N/A	N/A	2"
WALLS	N/A	N/A	1 1/2" (2")
COLUMNS	N/A	N/A	1 1/2" (2")
ELEVATED SLABS	3/4" (2")	3/4" (2")	3/4" (2")
BEAMS	1 1/2" (2")	1 1/2" (2")	1 1/2" (2")

DEVELOPMENT LENGTH SCHEDULE (INCHES)												
BAR SIZE	MIN BAR SPACING (INCHES) (MAX OF 48" OR 24s)	TENSION				COMPRESSION						
		NOTED AS Ld ON DRAWINGS, f _c (psi)	NOTED AS Ldh ON DRAWINGS, f _c (psi)	NOTED AS Ld ON DRAWINGS, f _c (psi)	NOTED AS Ldh ON DRAWINGS, f _c (psi)	3,000	4,000	5,000	3,000	4,000	5,000	
#3	1.375	17	15	13	9	8	7	9	8	8	8	
#4	1.500	22	19	17	11	10	9	11	10	9	9	
#5	1.625	28	24	22	14	12	11	14	12	12	12	
#6	1.750	33	29	26	17	15	13	17	15	14	14	
#7	1.875	48	42	38	20	17	15	20	17	16	16	
#8	2.000	55	48	43	22	19	17	22	19	18	18	
#9	2.375	62	54	48	25	22	20	25	22	21	21	
#10	2.625	70	61	54	28	25	22	28	25	23	23	
#11	2.875	78	67	60	31	27	24	31	27	26	26	

FOOTING LAP SPlice LENGTH SCHEDULE (INCHES)

BAR SIZE	MIN BAR SPACING (INCHES)	TENSION (LTS)			
		f _c = 4,000 PSI	f _c = 5,000 PSI	f _c = 6,000 PSI	f _c = 7,000 PSI
#4	1.500	33	25	29	23
#5	1.875	41	31	36	28
#6	2.250	49	37	44	34
#7	2.625	71	54	63	49
#8	3.000	81	62	72	56
#9	3.500	91	70	81	63
#10	3.875	102	79	92	71
#11	4.250	114	87	102	78

WALL REINFORCEMENT - HORIZONTAL BAR LAP SPlice LENGTH SCHEDULE (INCHES)

BAR SIZE	MIN BAR SPACING (INCHES)	TENSION (LTS)			
		f _c = 4,000 PSI	f _c = 5,000 PSI	f _c = 6,000 PSI	COMPRESSION (LCS)
#4	1.500	33	30	27	15
#5	1.875	40	36	34	19
#6	2.250	48	44	40	23
#7	2.625	105	95	87	27
#8	3.000	121	108	99	30
#9	3.500	137	122	112	34
#10	3.875	153	138	125	39
#11	4.250	170	152	139	43

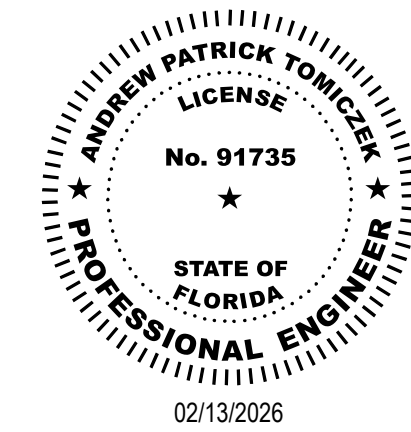
WALL REINFORCEMENT - VERTICAL BAR LAP SPlice LENGTH SCHEDULE (INCHES)

BAR SIZE	MIN BAR SPACING (INCHES)	TENSION (LTS)			
		f _c = 4,000 PSI	f _c = 5,000 PSI	f _c = 6,000 PSI	COMPRESSION (LCS)
#4	2.000	25	23	21	15
#5	2.125	31	28	26	19
#6	2.250	37	34	31	23
#7	2.375	54	49	45	27
#8	2.500	62	56	51	30
#9	2.625	70	63	57	34
#10	3.250	118	106	96	39
#11	3.625	131	117	107	43



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PROJECT MANAGER
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DESIGN TEAM
JEZERINAC GROUP

COLUMBIA STORM PROCESSING & SERVICE CENTER - BUILDING B - TRUCK STOCK
COUNTY ROAD 25A, LAKE CITY, FL

PROJECT NO.
814C632800
SHEET TITLE
GENERAL SCHEDULES

SHEET NUMBER
B-S003

B-S004

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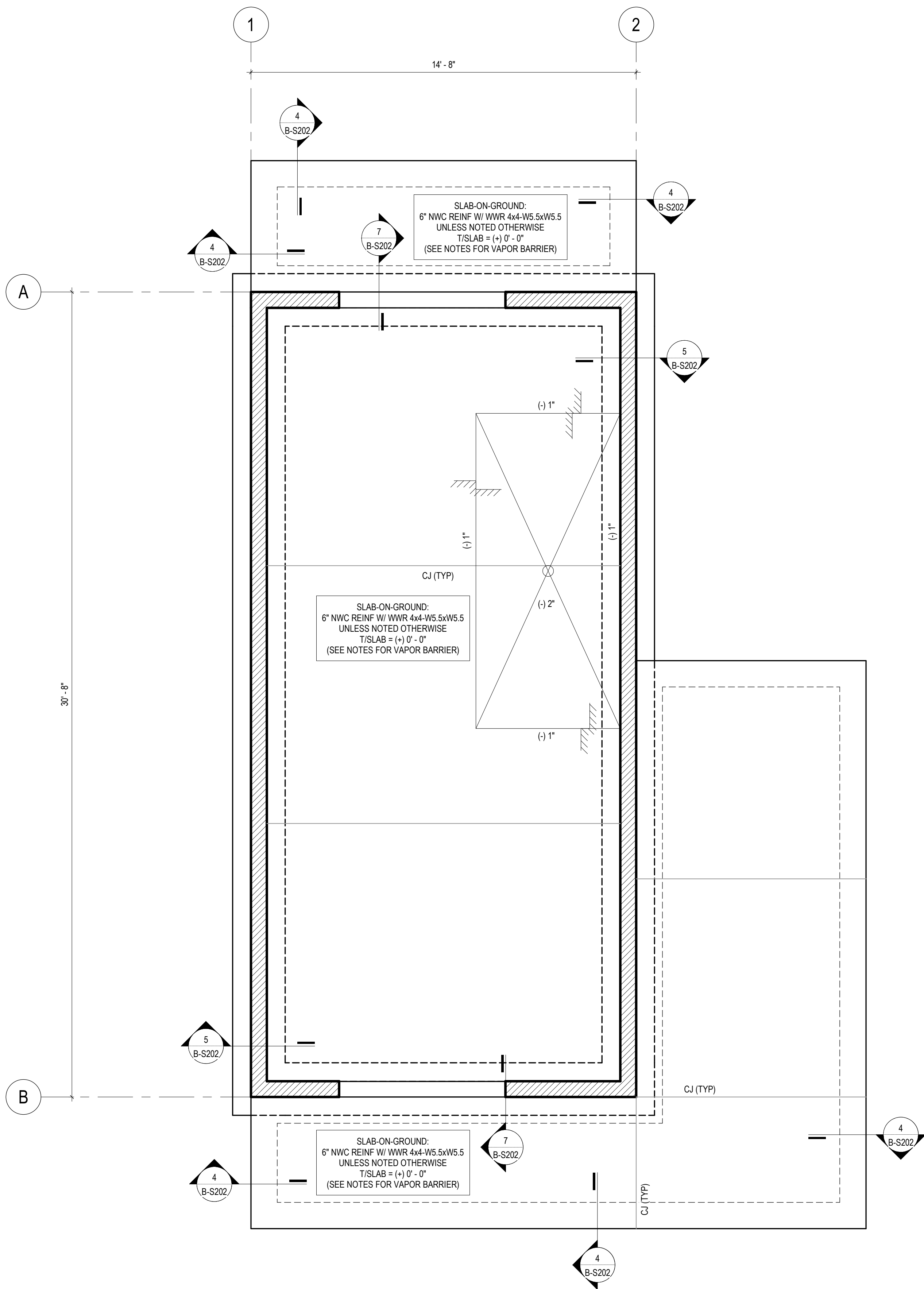
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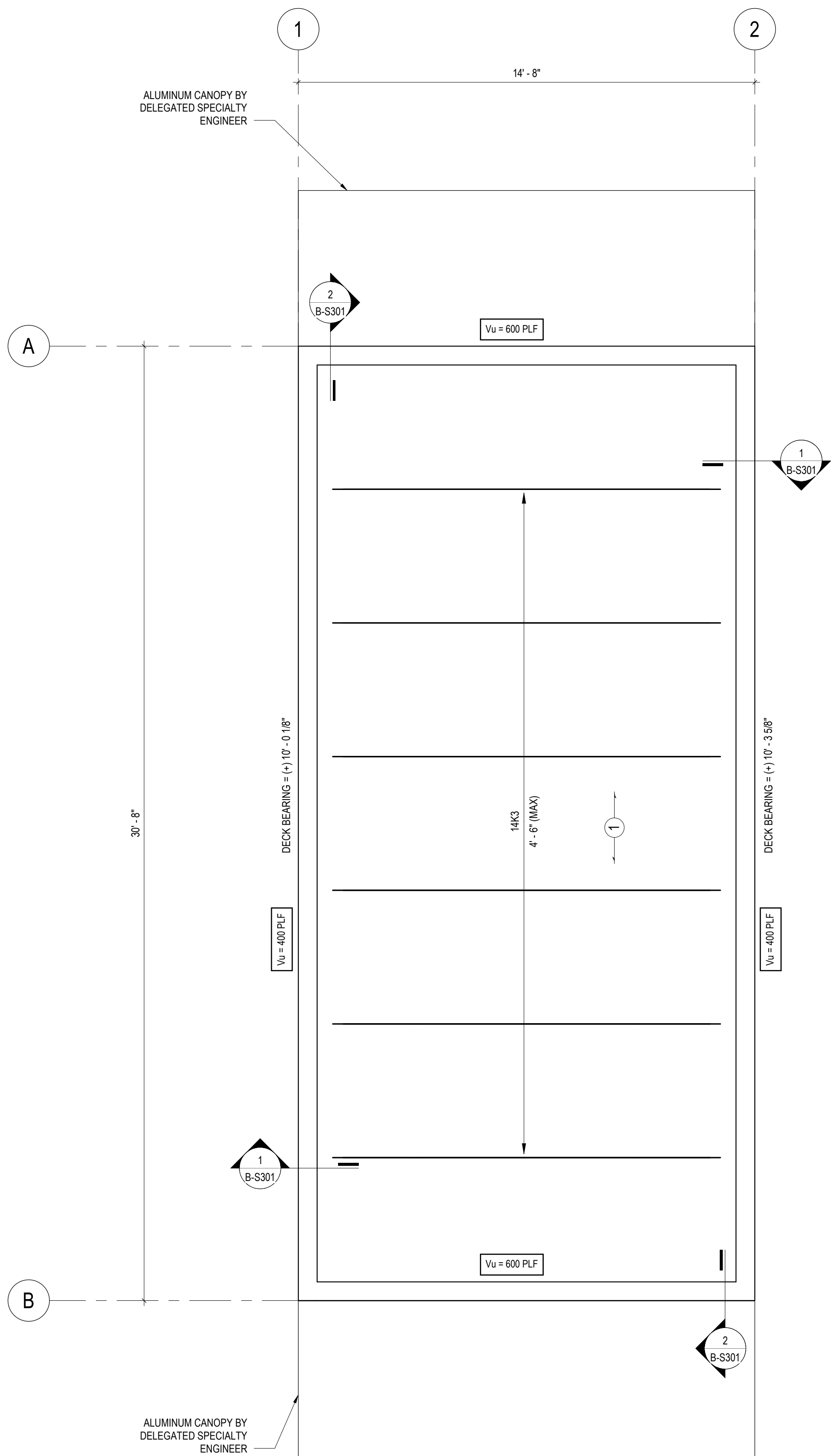


1 FOUNDATION PLAN

3/8" = 1'-0"

NOTES:

1. TOP OF GRADE SLAB ELEVATION = (+) 0'-0"
2. CJ DENOTES SLAB-ON-GROUND CONTROL JOINT. SPACING SHALL NOT EXCEED 15'-0" UNLESS NOTED OTHERWISE
3. FOR RE-ENTRANT CORNER BARS, SEE 1 & 2/S301.
4. PLACE MIN 10 ML VAPOR BARRIER OVER TERMITTE TREATED, WELL COMPACTED FILL, SEE ARCH.
5. FOR CONCRETE FINISH, SEE ARCH.
6. [Symbol] DENOTES 7 1/4" TILT-UP CONCRETE PANEL
7. PIPING MUST PASS OVER COLUMN FOOTINGS. SEE DETAILS FOR STANDARD DETAILS OF PIPING PASSING UNDER WALL FOOTINGS AND TRENCHES ADJACENT TO FOOTINGS. PIPING PASSING UNDER FOOTINGS MUST BE IN PLACE AND INSPECTED BEFORE FOOTINGS ARE PREPARED OR FOOTING MUST STEP BELOW PIPE.
8. GC SHALL COORDINATE PLUMBING AND UTILITIES LOCATIONS WITH FOUNDATION AS NEEDED. ADDITIONALLY, GC SHALL COORDINATE FOUNDATION ELEVATIONS WITH PLUMBING AND UTILITIES AS NEEDED. FORWARD ANY CHANGES REQUIRED TO FOUNDATION LOCATIONS TO STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
9. COORDINATE DIMENSION WITH EXISTING OIL WATER SEPARATOR.



2 ROOF FRAMING PLAN

3/8" = 1'-0"

NOTES:

1. [Symbol] 1 DENOTES 3" NORMALWEIGHT CONCRETE ON 1 1/2" 22 GAGE CORRUGATED COMPOSITE DECK REINFORCED WITH WWR 6x6-W1 4xW1 4
2. GC TO COORDINATE OPEN WEB STEEL JOIST BRIDGING AND BRACING REQUIREMENTS PER OPEN WEB STEEL JOIST SUPPLIER AND S.J.
3. T/STEEL = VARIES (SEE PLAN)
4. JOIST SPACING SHALL NOT EXCEED 5'-0" UNLESS NOTED OTHERWISE.
5. [Symbol] VU = XXX PLF DENOTES IN-PLACE UNFACTORED ULTIMATE LEVEL WIND SHEAR APPLIED TO CONCRETE TILT-WALL AT ROOF LEVEL



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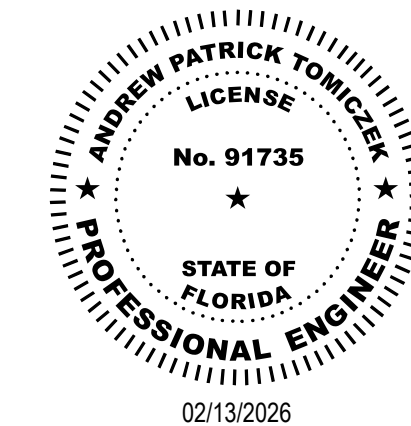
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PROJECT MANAGER
ANDREW TOMICZEK

DESIGN TEAM
JEZERINAC GROUP

PROJECT NAME
COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING B -
TRUCK STOCK

COUNTY ROAD 25A, LAKE
CITY, FL

PROJECT NO.
814C632800

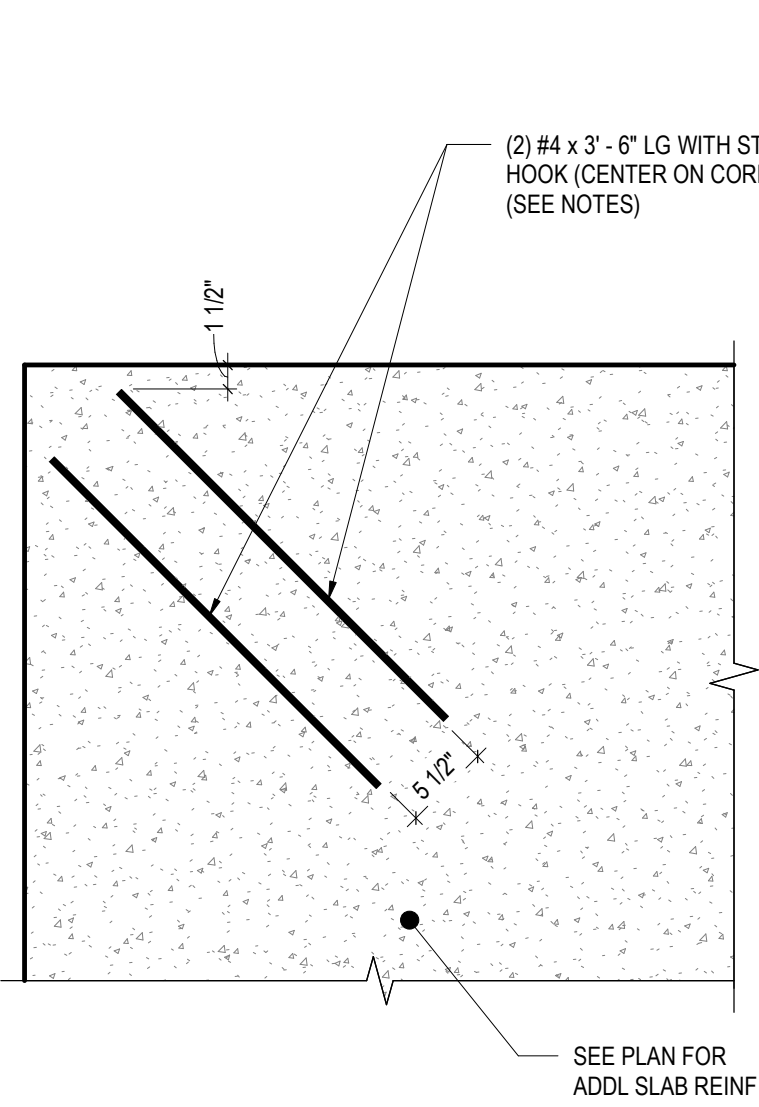
SHEET TITLE
FOUNDATION & FRAMING
PLANS

SHEET NUMBER
B-S101

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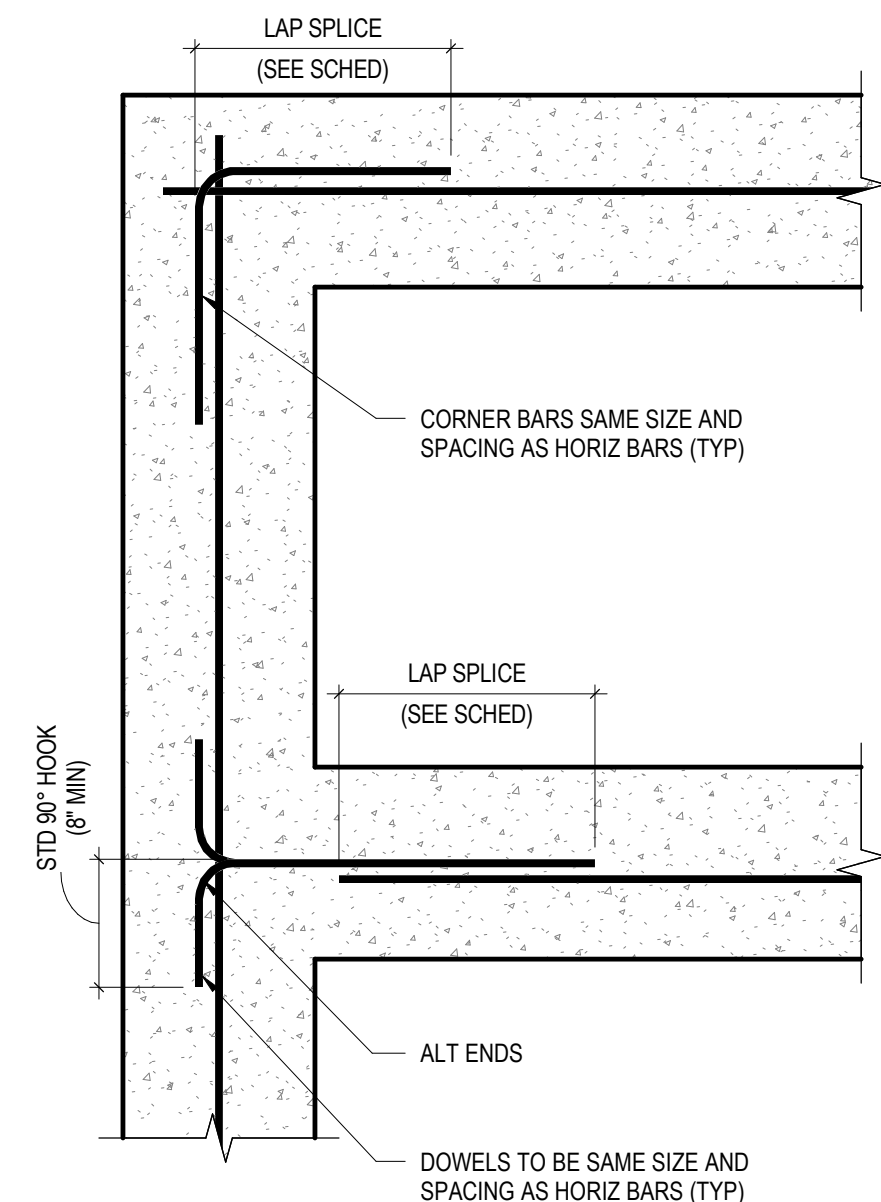
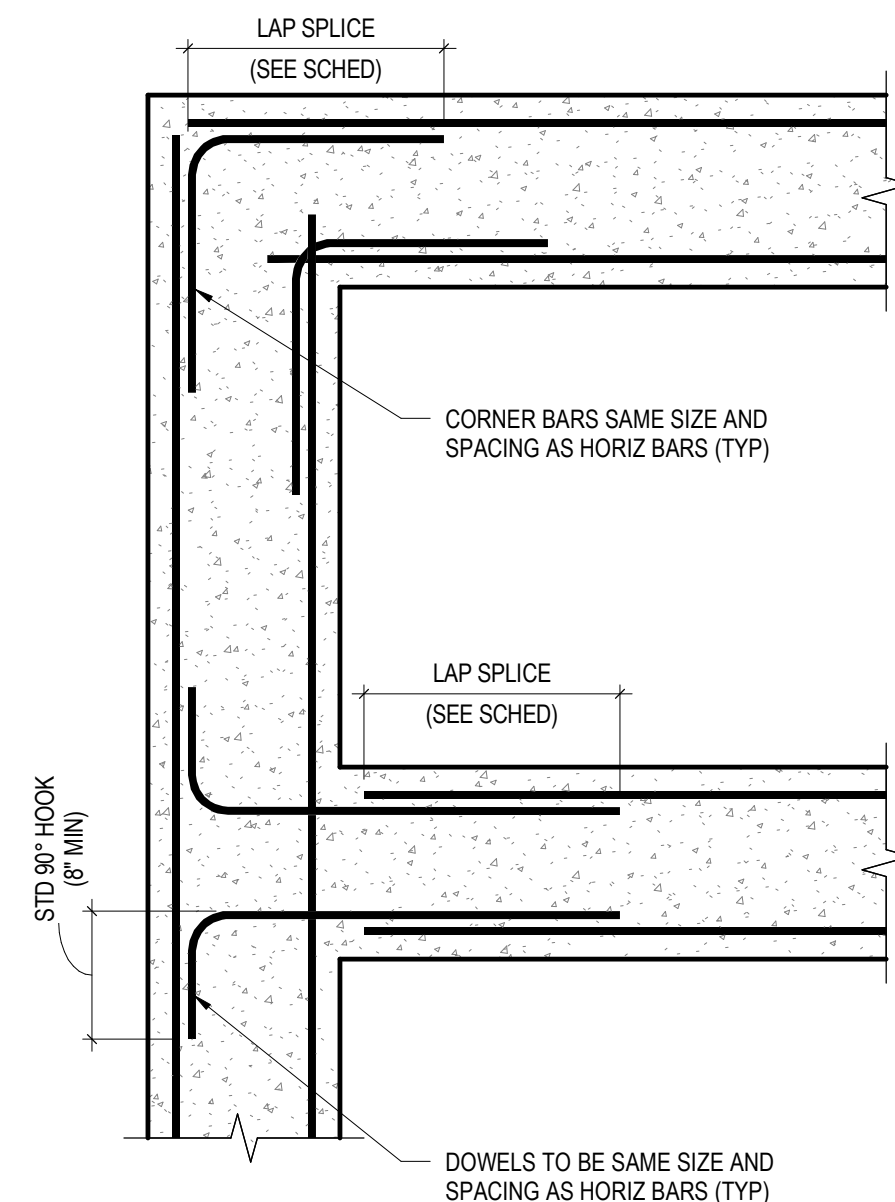
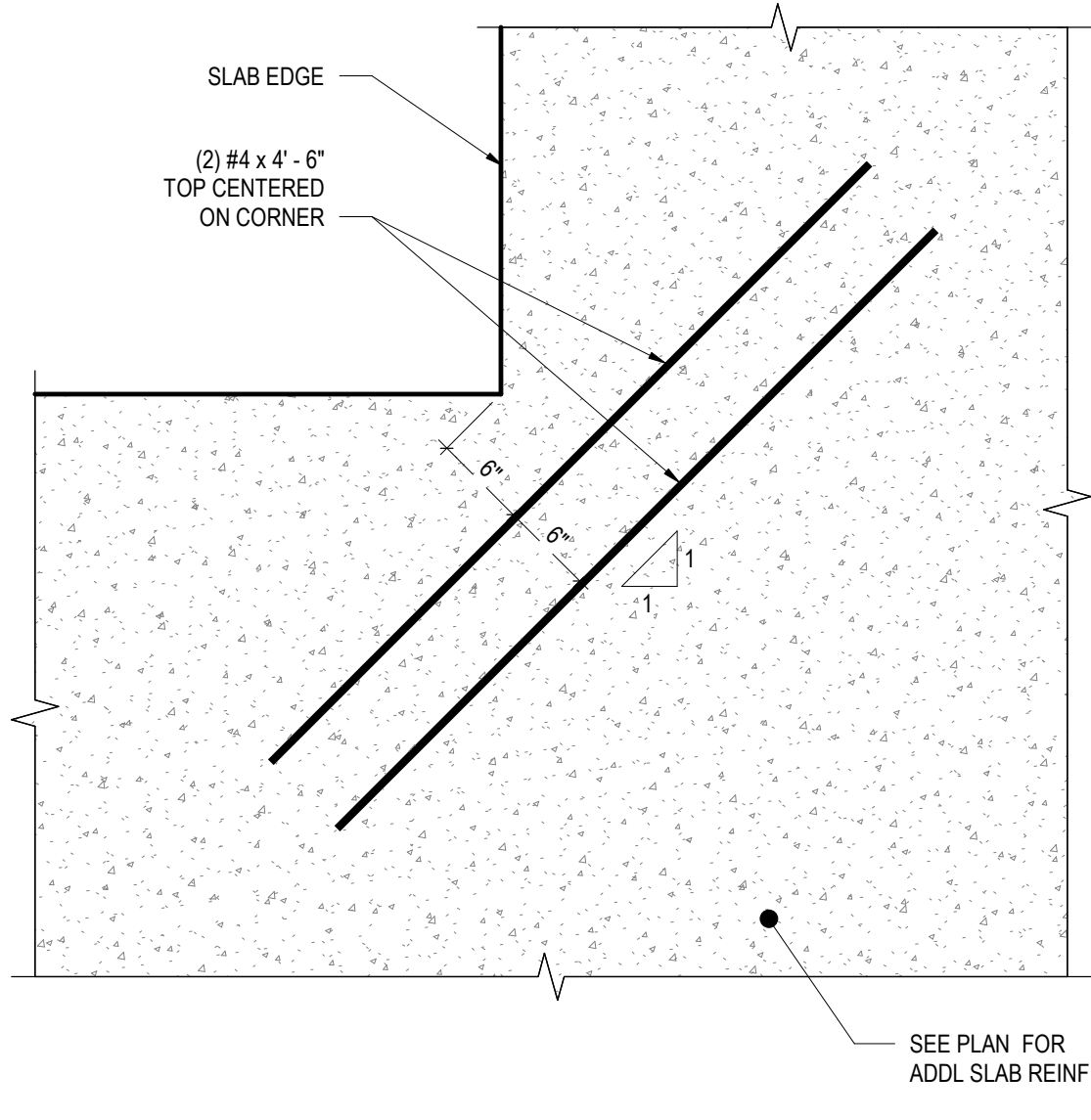
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TYPICAL ADDITIONAL SLAB CORNER REINFORCEMENT

NOTES:

1. INSTALL BELOW TOP LAYER OF SLAB REINFORCING.



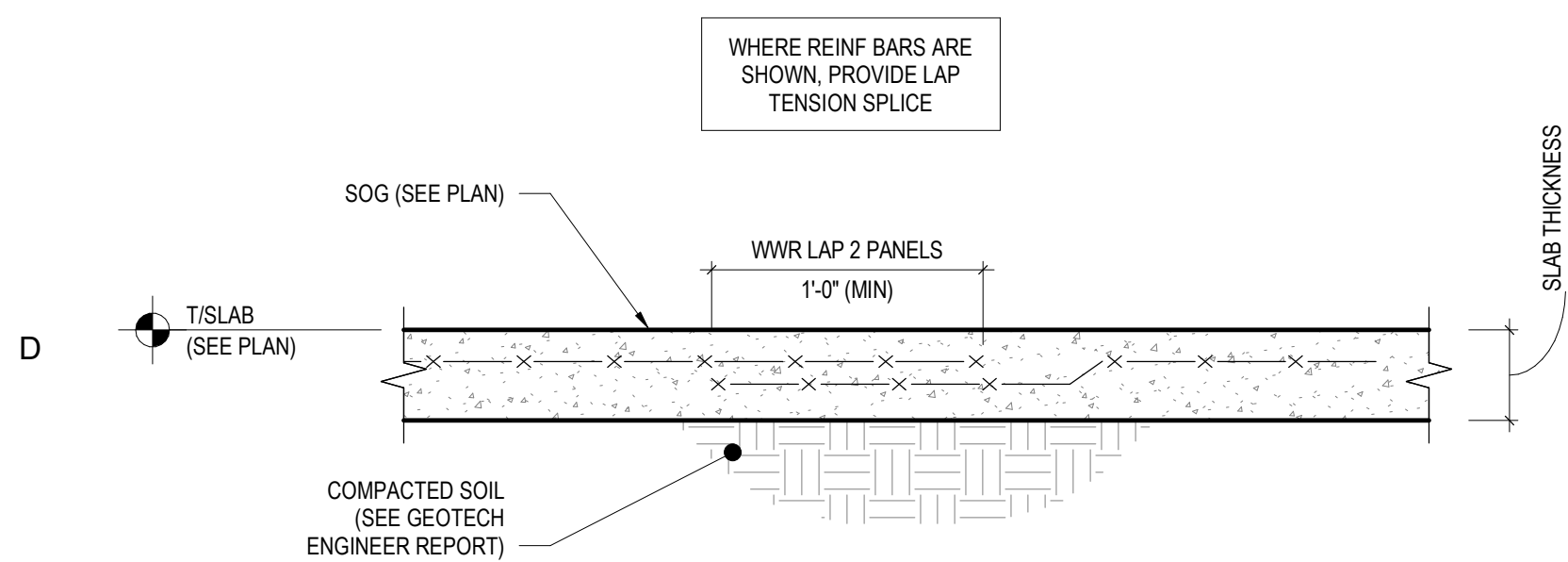
TYPICAL CORNER BARS FOR CONCRETE WALL AND FOOTING CONSTRUCTION

1 DETAIL

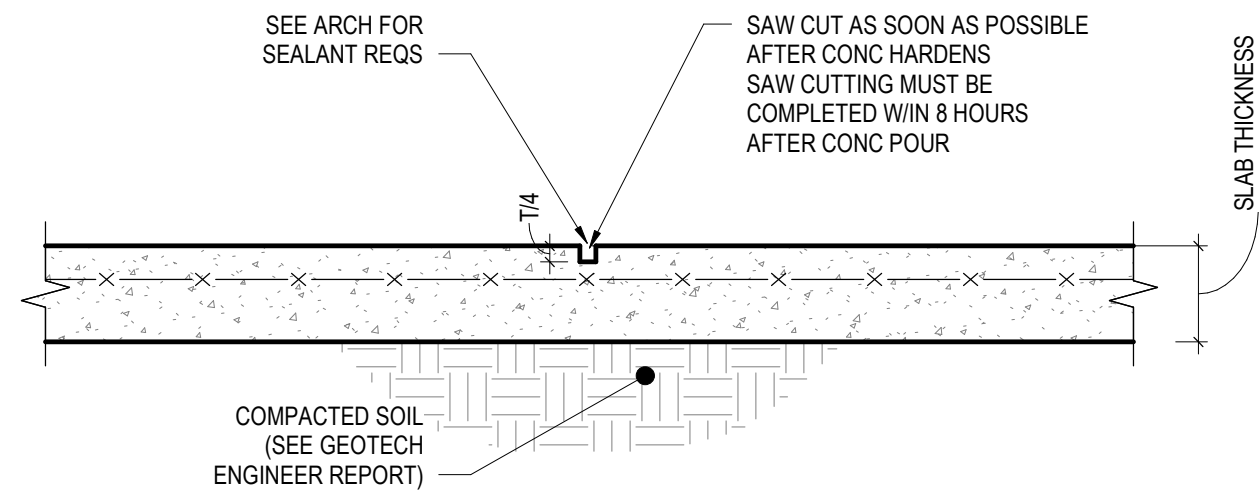
1" = 1'-0"

2 DETAIL

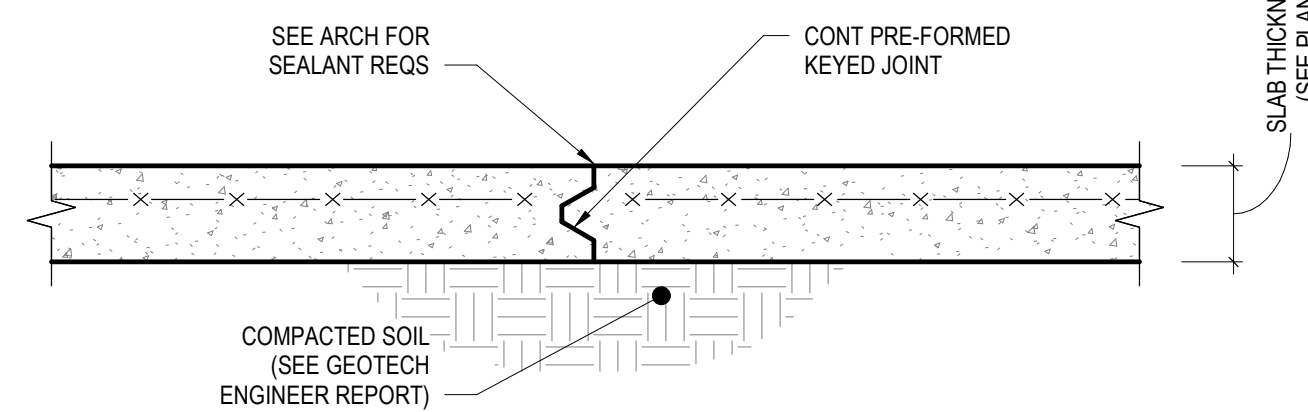
1" = 1'-0"



SLAB-ON-GROUND



SAW CUT JOINT



CONSTRUCTION JOINT

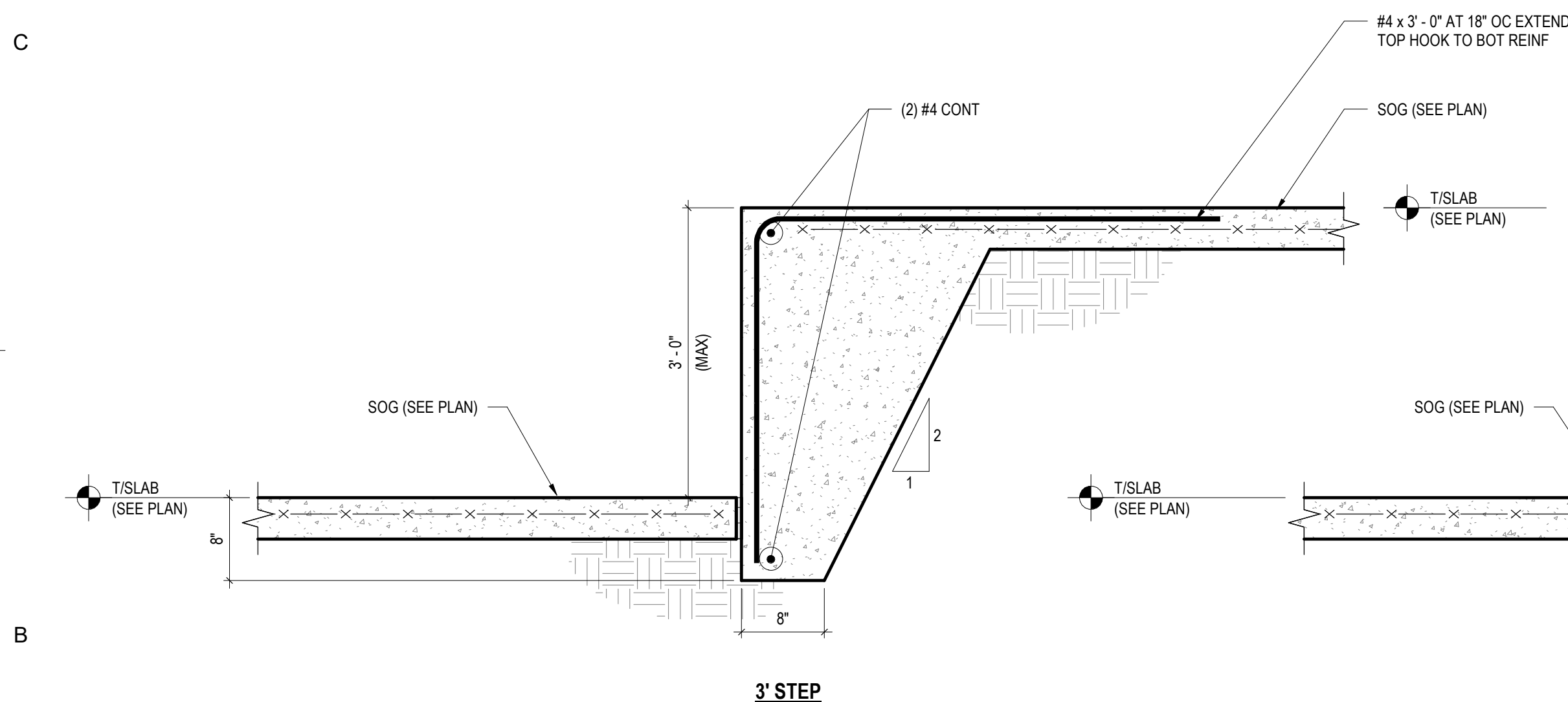
NOTES:

1. WHERE NOT INDICATED ON PLAN PROVIDE JOINTS AT COLUMN CENTER LINES AND BETWEEN COLUMN CENTER LINES WITH SPACING OF JOINTS NOT TO EXCEED 36 TIMES THE SLAB THICKNESS

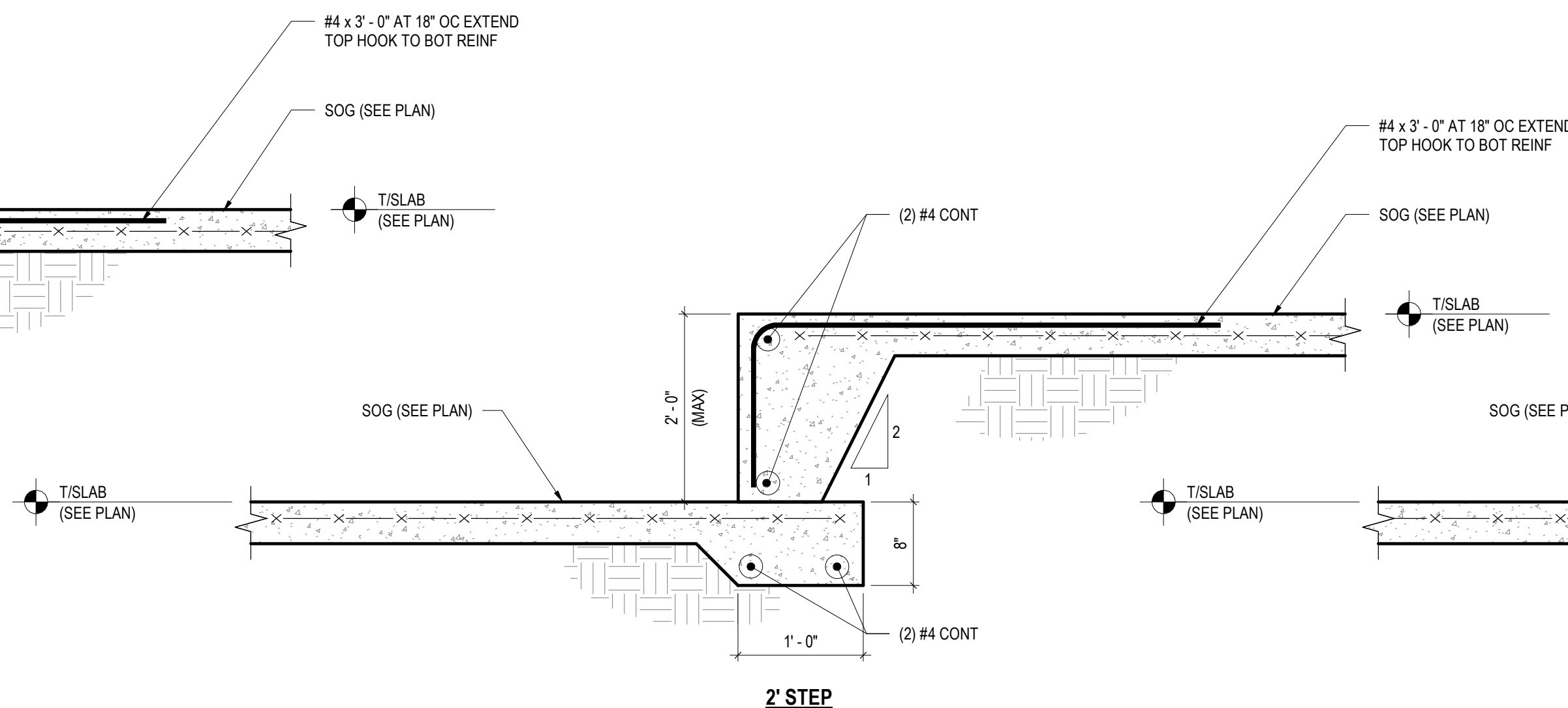
TYPICAL SLAB-ON-GROUND DETAILS

3 DETAIL

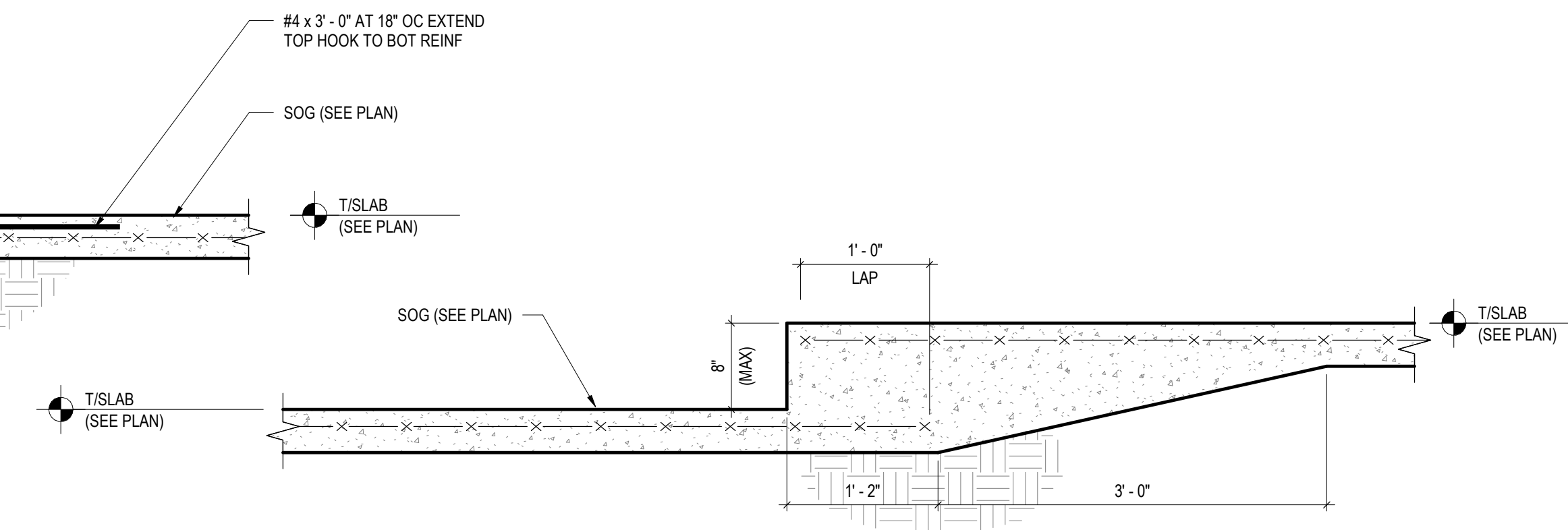
1" = 1'-0"



3' STEP



2' STEP



8' STEP

NOTES:

1. COORDINATE ALL SLAB STEPS WITH ARCHITECT

TYPICAL SLAB STEP DETAILS

4 DETAIL

1" = 1'-0"



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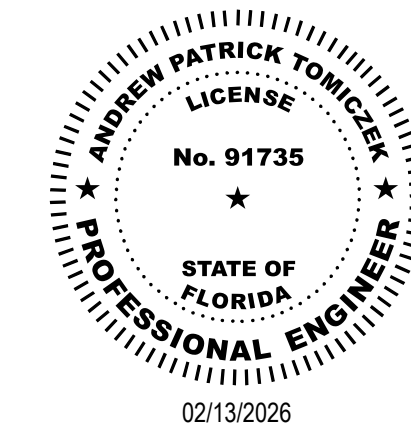
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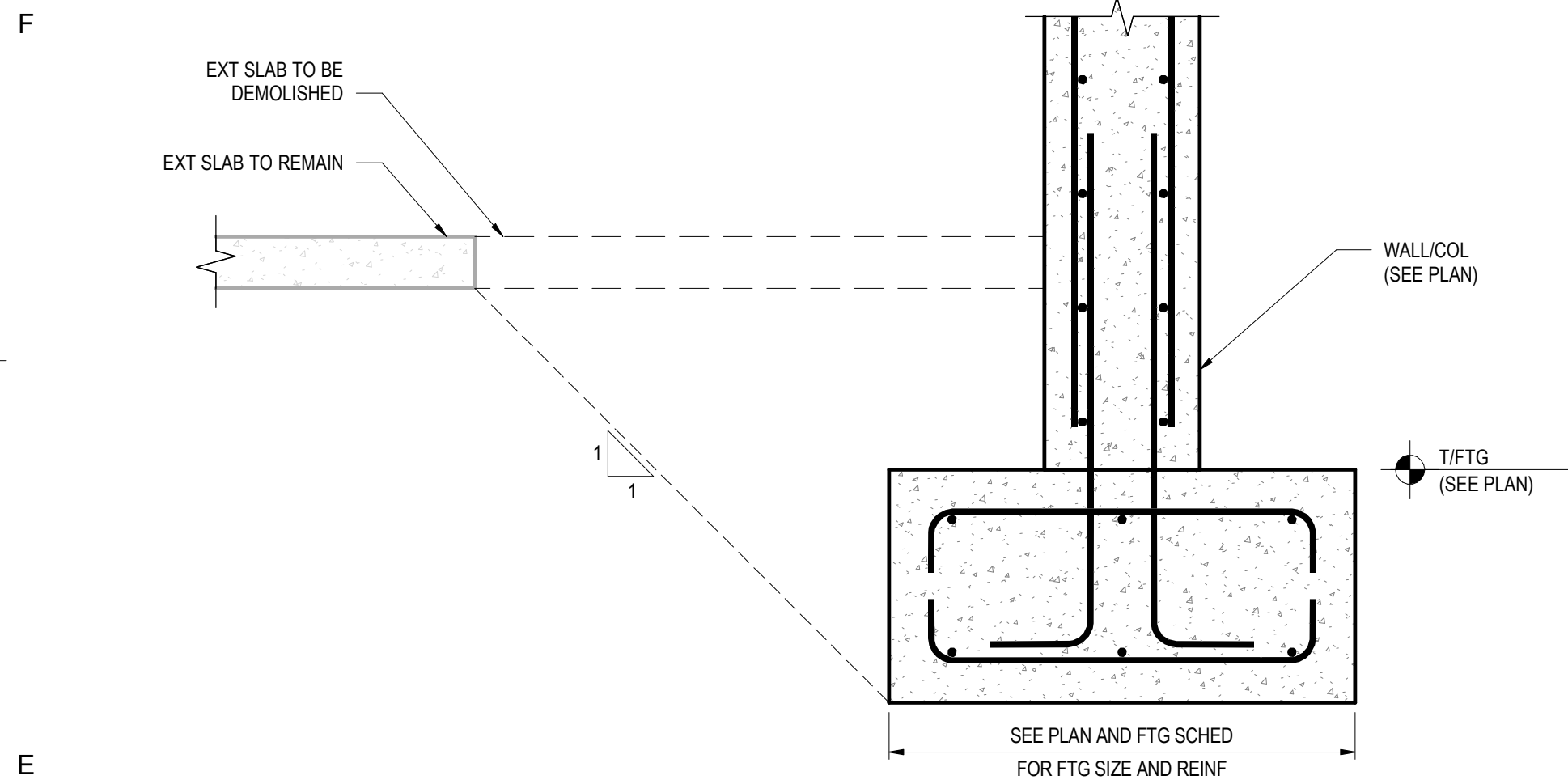
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FOUNDATION SECTIONS &
DETAILS

SHEET NUMBER
B-S201

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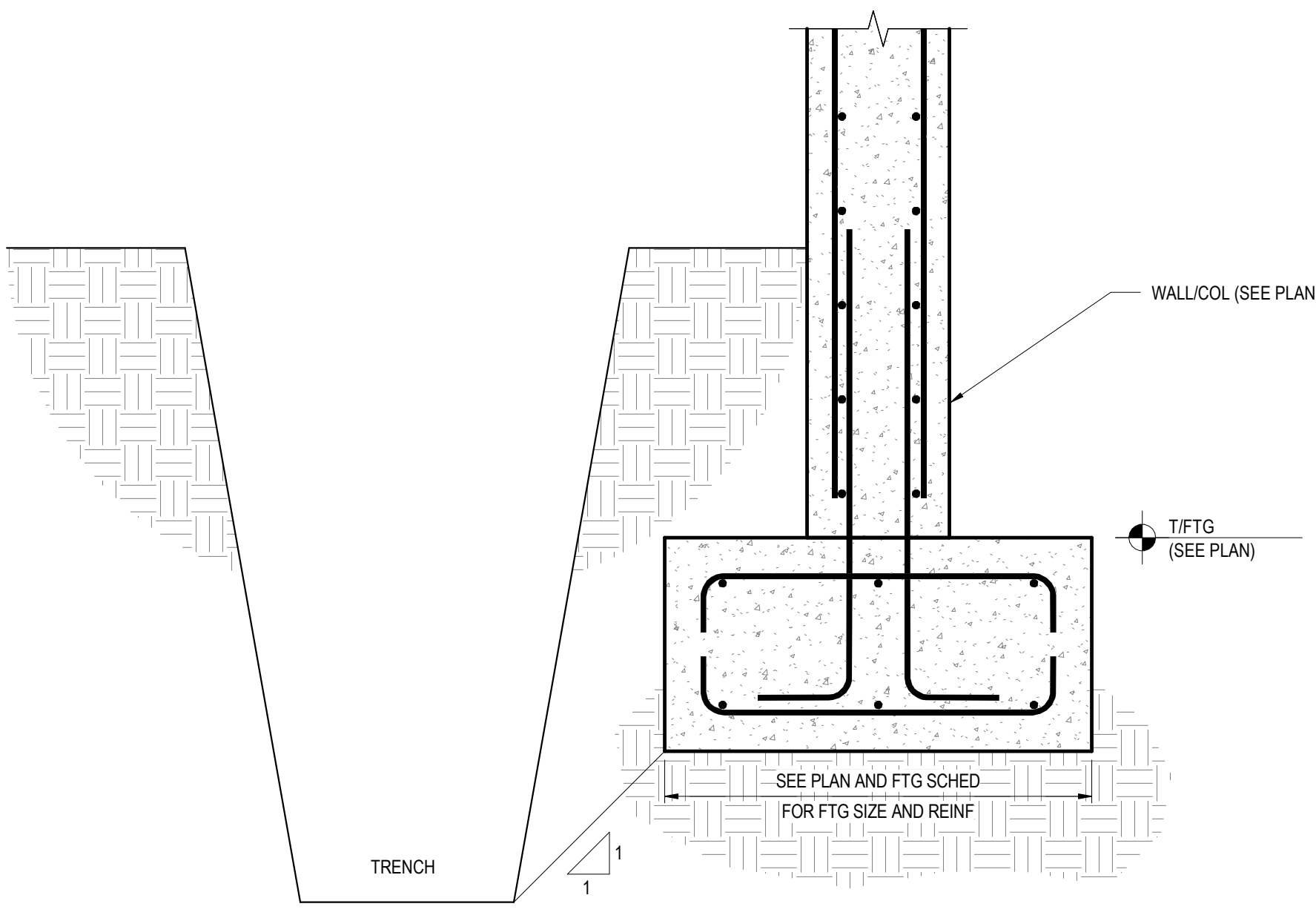


TYPICAL FOOTING ADJACENT TO EXTERIOR SLAB

1

DETAIL

1" = 1'-0"

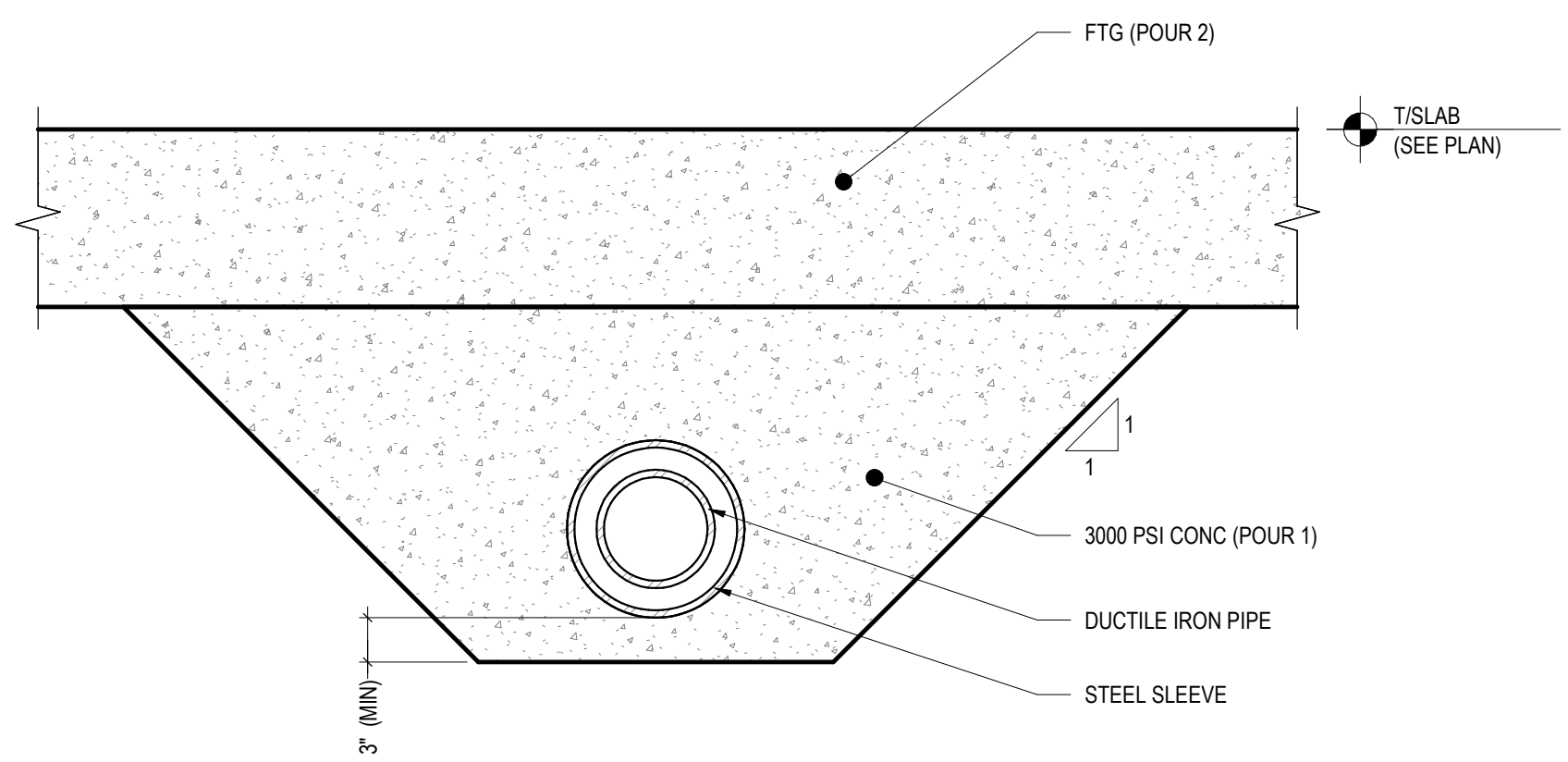


TYPICAL FOOTING ADJACENT TO TRENCH

2

DETAIL

1" = 1'-0"



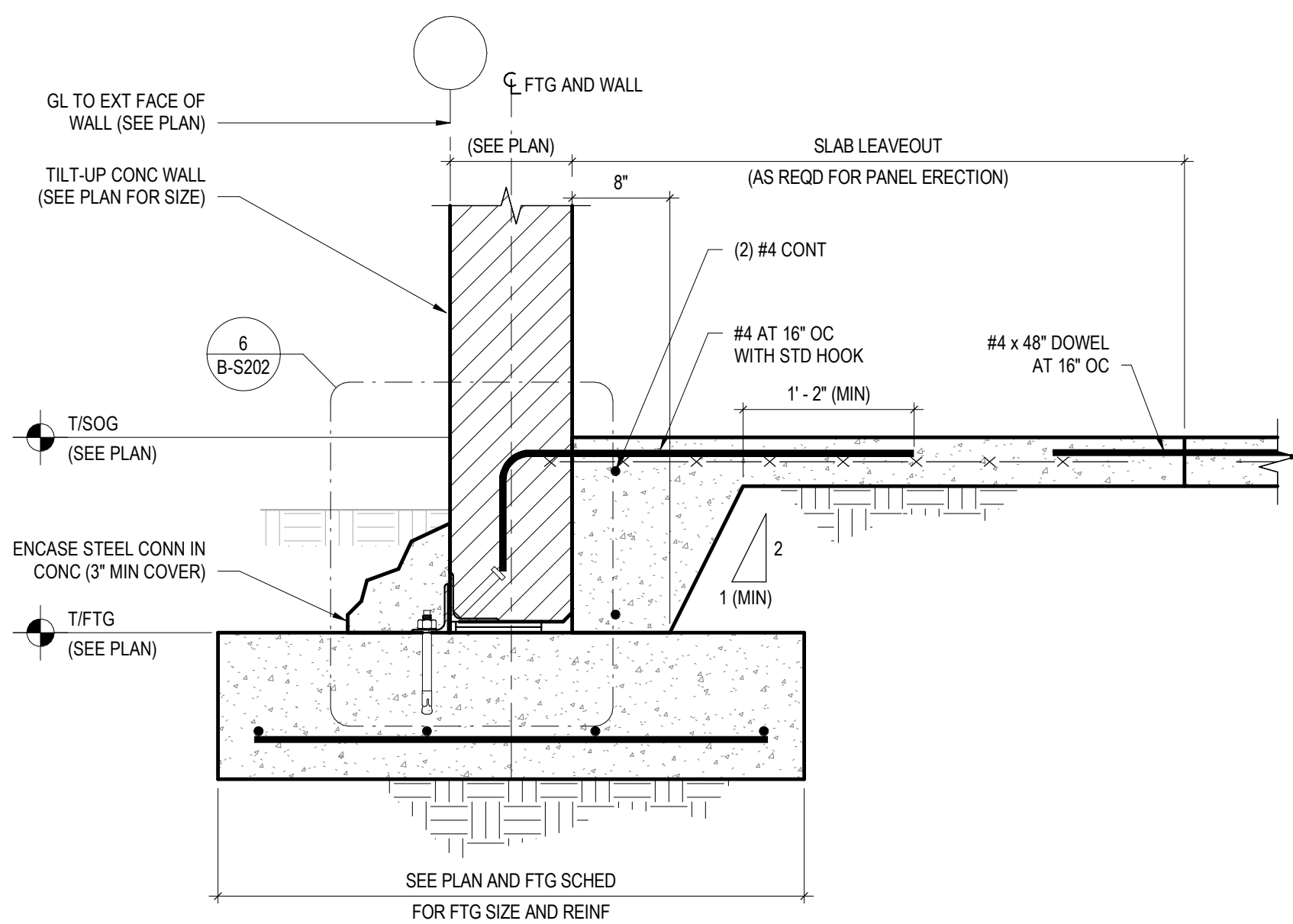
TYPICAL PIPE UNDER FOOTING

3

DETAIL

1" = 1'-0"

CONTINUOUS WALL FOOTING SCHEDULE			
MARK	WIDTH	THICKNESS	REINFORCING
VF-1	2'-0"	1'-0"	(3) #5 LONG & #5 AT 12" OC TRANS BOT

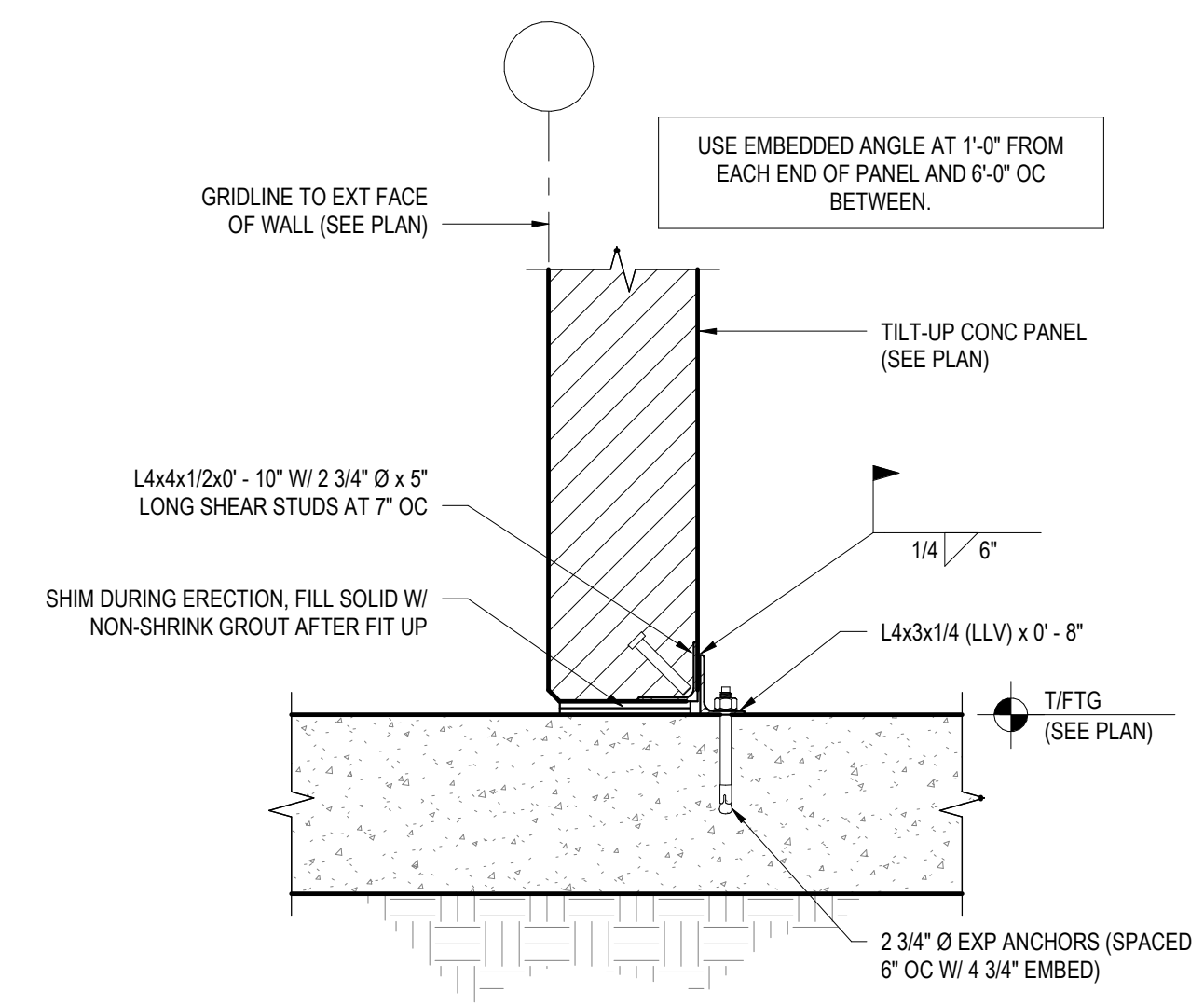


TYPICAL TILT-UP CONCRETE WALL FOOTING

5

SECTION

1" = 1'-0"

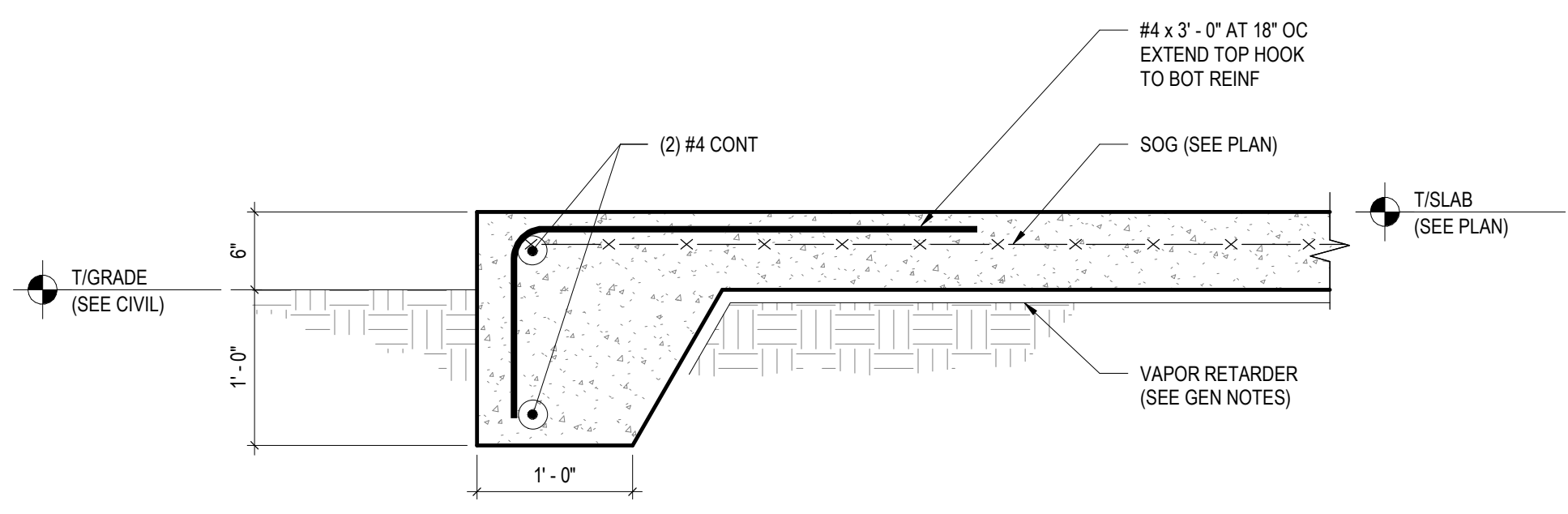


TYPICAL TILT-UP CONCRETE PANEL CONNECTION TO FOUNDATION

6

DETAIL

1" = 1'-0"

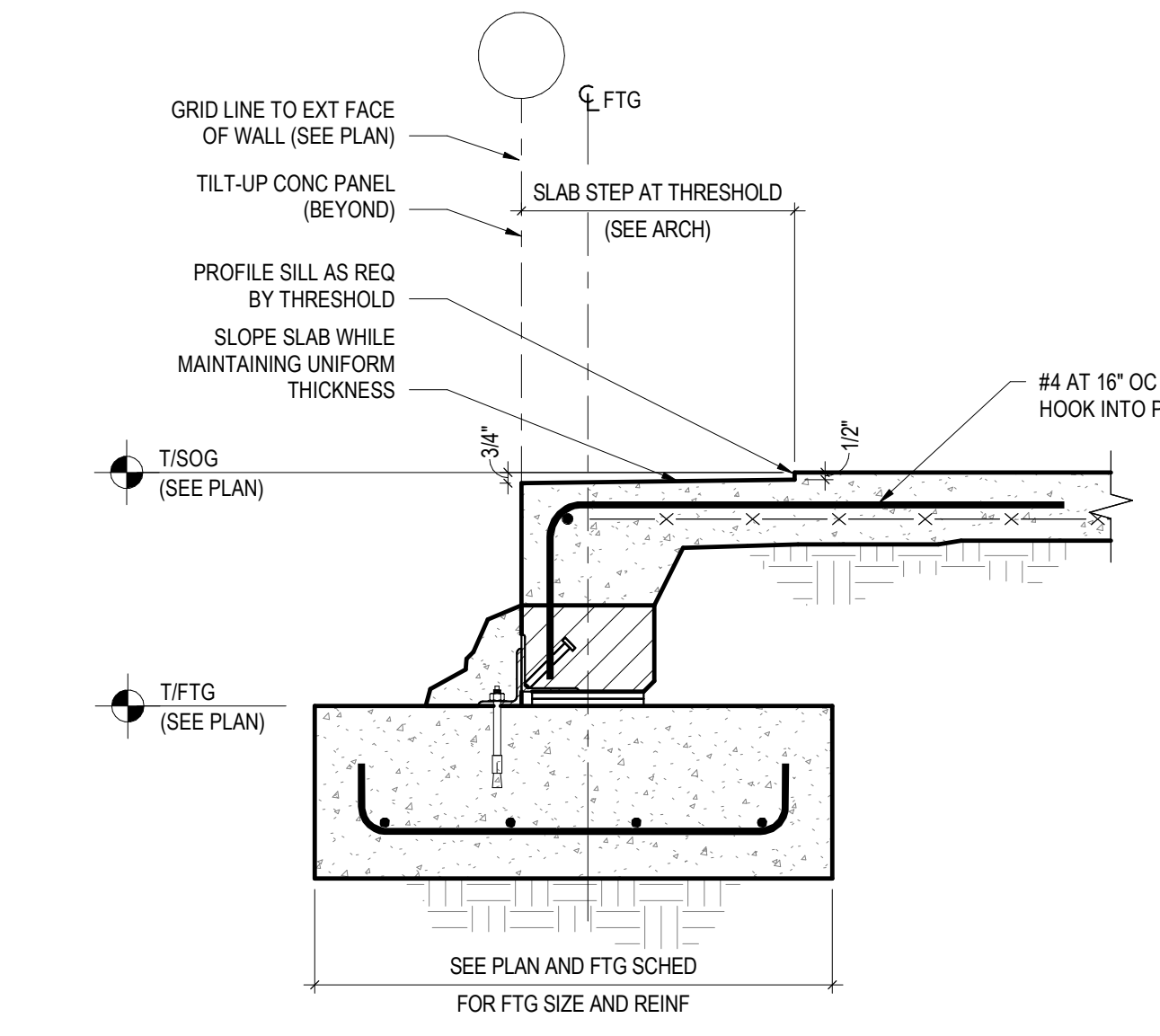


TYPICAL SLAB EDGE

4

SECTION

1" = 1'-0"

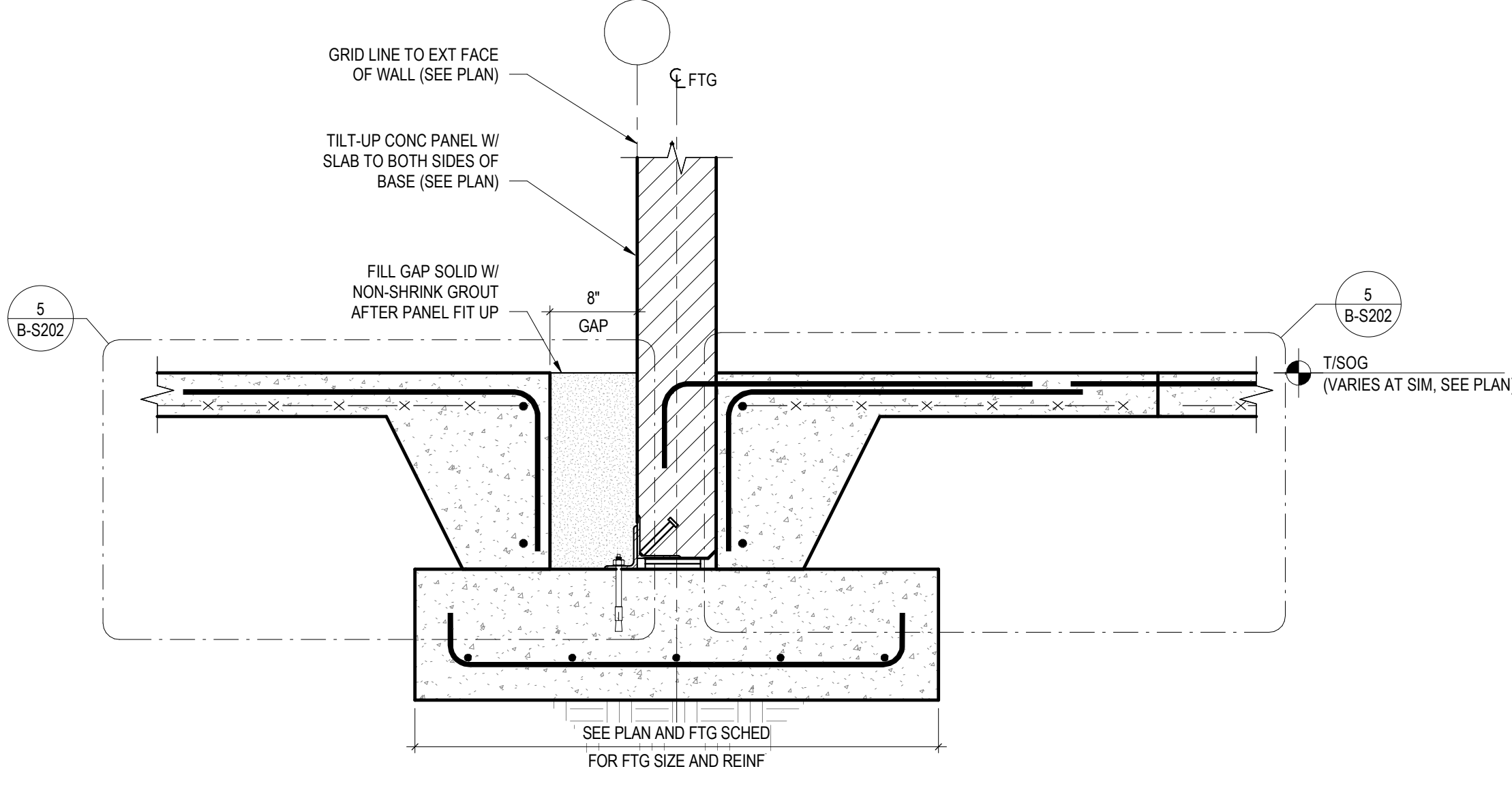


TYPICAL THRESHOLD

7

SECTION

1" = 1'-0"

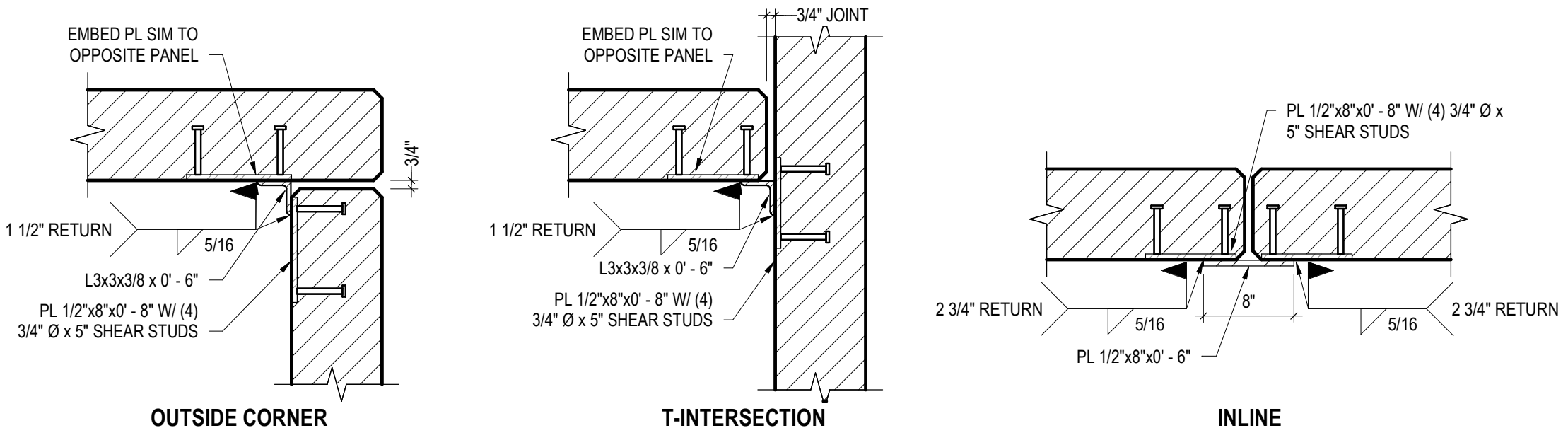


TYPICAL SITE-CAST WALL TO FOOTING SLAB BOTH SIDES

8

SECTION

1" = 1'-0"



NOTES:

1. PROVIDE CONNECTION BETWEEN ALL INTERSECTING PANELS. AT A MINIMUM CONNECTION SHALL BE PLACED 1'-0" ABOVE AND 1'-0" BELOW EACH FLOOR AND ROOF AND AT MID-HEIGHT.
2. CONTRACTOR'S ENGINEER SHALL DESIGN PANEL TO PANEL CONNECTIONS FOR ALL FORCES TRANSFERRED BETWEEN PANELS
3. ALL PANEL EDGES SHALL HAVE 3/4" CHAMFER, UNLESS NOTED OTHERWISE BY ARCHITECT.

TYPICAL TILT-UP CONCRETE PANEL JOINTS

9

DETAIL

1" = 1'-0"

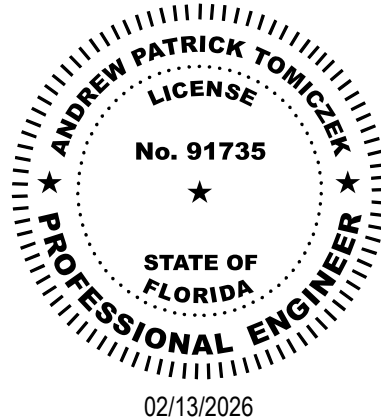
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