

GENERAL REQUIREMENTS

- A. THE GENERAL STRUCTURAL NOTES EMPLOY THE FOLLOWING DEFINITIONS AND ABBREVIATIONS:
 1. CONTRACT DOCUMENTS – THE LATEST SET OF DRAWINGS, SPECIFICATIONS, AND RECORDED ADDENDA AND AMENDMENTS ISSUED FOR BID OR CONSTRUCTION.
 2. LICENSED PROFESSIONAL (STRUCTURAL) ENGINEER – AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND QUALIFIED TO PERFORM THE WORK REQUIRED.
 3. 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.
 4. 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:
 - a. AN INDEPENDENT CONSULTANT
 - b. AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING COMPONENTS TO A FABRICATOR OR CONTRACTOR
 - c. AN EMPLOYEE OR OFFICER OF A FABRICATOR OR CONTRACTOR
 5. DELEGATED ENGINEERING DOCUMENTS – ENGINEERING DOCUMENTS THAT ARE PREPARED BY A DELEGATED ENGINEER.
 6. DESIGN TEAM – DESIGN PROFESSIONALS INCLUDING THE ARCHITECT, STRUCTURAL ENGINEER, CIVIL ENGINEER, MEP ENGINEER, AND ANY OTHER CONSULTANT THAT ISSUES CONTRACT DOCUMENTS.
 7. CONTRACTOR – GENERAL CONTRACTOR, CONSTRUCTION MANAGER, DESIGN BUILDER, OR ANY OTHER ENTITY CONTRACTED BY THE OWNER TO PERFORM THE WORK.
 8. 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.
 9. 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 EVERY SHEET WITHIN THIS SET.
 - 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.
- E. SPECIFICATIONS HAVE BEEN ISSUED ON THIS PROJECT BY THE STRUCTURAL ENGINEER OF RECORD AND ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS.
 - F. SEE SPECIFICATIONS FOR MATERIALS TESTING REQUIREMENTS.
 - H. THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR THE QUALITY AND CORRECTNESS OF THE WORK.
 - I. 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, AND WALLS, ETC.
 - J. 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 CONTRASTS NECESSARY TO MAINTAIN THE BUILDING'S 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 HAZARDOUS CONDITIONS THAT MAY OCCUR AT ANY STAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
 - K. THE CONTRACTOR SHALL NOT EMPLOY CONSTRUCTION MEANS OR METHODS THAT MAY DAMAGE UTILITIES, ADJACENT BUILDINGS, OR PROPERTY. DOCUMENTATION OF ADJACENT CONDITIONS PRIOR TO CONSTRUCTION IS RECOMMENDED. FURTHER, THE CONTRACTOR SHALL EITHER ADEQUATELY CONFINE THE SITE OR PROTECT ADJACENT PROPERTY FROM DAMAGE.
 - M. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROJECT SAFETY AND OSHA REQUIREMENTS. SHOULD THE STRUCTURAL ENGINEER OF RECORD NOTIFY THE CONTRACTOR OF A PROJECT SAFETY ISSUE, IT IS SOLELY AS A COURTESY FROM ONE PROFESSIONAL TO ANOTHER. 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 TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED 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, CONNECTION JOINTS, SPALLS AND CRACKS IN CONCRETE, AND PRESSURE WASHING OF EXPOSED STRUCTURAL ELEMENTS EXPOSED TO A SALINE OR OTHER HARSH CHEMICAL ENVIRONMENT.
- D. O. THE USE OF DE-ICING CHEMICALS ON ANY EXPOSED STRUCTURAL ELEMENT IS DISCOURAGED AND WILL ACCELERATE DETERIORATION 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, REPURPOSE, 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-BEAM 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
 1. 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.
 2. STRUCTURAL ENGINEER OF RECORD SHALL NOT HAVE AUTHORITY TO STOP THE WORK OR AUTHORIZE CHANGES TO ANY CONTRACT SUM.
 3. 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.
- T. CLARIFICATION OF POSITION OF STRUCTURALLY FRAMING ELEMENTS
 1. USE ONLY DIMENSIONS INDICATED ON THE DRAWINGS, DO NOT SCALE ANY DIMENSIONS.
 2. IF NOT INDICATED ON DRAWINGS, ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS.
 3. CENTER LINES OF COLUMNS AND FOUNDATIONS SHALL COINCIDE WITH GRID LINE INTERSECTION, UNLESS NOTED OTHERWISE.
 4. CENTER LINES OF FOUNDATIONS, GRADE BEAMS, AND WALLS SHALL COINCIDE WITH CENTER LINES OF FOUNDATIONS, UNLESS NOTED OTHERWISE.
 5. CENTER LINES OF FRAMING MEMBERS SHALL COINCIDE WITH COLUMN CENTER LINES, UNLESS NOTED OTHERWISE.
 6. 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:
 1. CIVIL
 - a. SITING OF BUILDING GRID LINES WITH RESPECT TO CITY BENCHMARKS
 - b. SITE PREPARATION
 - c. BACKFILLING MATERIALS AND REQUIREMENTS INCLUDING DRAINAGE ADJACENT TO RETAINING WALLS
 - d. SITE ELEMENTS OUTSIDE OF BUILDING ENVELOPE
 - e. NEW AND EXISTING SITE UTILITIES
 2. ARCHITECTURAL
 - a. PLAN DIMENSIONS AND PROJECT DATUM
 - b. SLAB EDGE DIMENSIONS AND FINISH ELEVATIONS
 - c. WATERPROOFING AND DAMP PROOFING DETAILS
 - d. SLAB SLOPES, STEPS AND DEPRESSIONS, RAMPS, TRENCHES
 - e. EMBEDMENTS, INSERTS, BLOCKOUTS, ETC.
 - f. CONCRETE FINISHES AND TOPPING SLABS
 - g. CONCRETE CURBS AND HOUSEKEEPING PADS
 - h. INTERIOR NON-STRUCTURAL MASONRY PARTITIONS
 - i. LIFE SAFETY, FIRE RATING
 - j. METAL PAN STAIRS AND SUPPORTS
 - k. OPERABLE PARTITIONS
 3. MEP
 - a. PIPE AND DUCT SIZES FOR OPENING AND SLEEVE COORDINATION
 - b. FLOOR DRAINS
 - c. UNDERFLOOR AND PERIMETER DRAINAGE SYSTEMS
 - d. EQUIPMENT CURBS
 - e. CONDUITS AND EMBEDMENTS IN WALLS AND SLABS
 4. VERTICAL TRANSPORTATION
 - a. INSERTS, HANGERS, TRENCHES, PITS, CONDUITS IN WALLS AND SLAB
- V. THIS BUILDING QUALIFIES AS A THRESHOLD BUILDING PER CHAPTER 653.71 OF THE FLORIDA STATUTES. AS SUCH, SPECIAL INSPECTIONS SHALL BE REQUIRED PER CHAPTER 653.79 OF THE FLORIDA STATUTES BY PERSONS DULY AUTHORIZED TO PERFORM THEM BY CHAPTER 61015-36.003 OF THE FLORIDA ADMINISTRATIVE CODE. SEE SPECIAL INSPECTION PLAN FOR SPECIAL 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 OF RECORD 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 THE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, 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.
- C. THE USE OF ELECTRONIC FILES DOES NOT RELIEVE THE CONTRACTORS RESPONSIBILITY FOR PROPER CHECKING AND COORDINATION OF DIMENSIONS, DETAILS, SIZE, AND QUANTITIES.
- D. 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.
- E. WHEN USED FOR THE PREPARATION OF SHOP DRAWINGS, ALL INFORMATION NOT APPLICABLE TO THE SUBSECTION SHALL BE REMOVED FROM THE DRAWINGS, INCLUDING, BUT NOT LIMITED TO, SHEET NUMBERS, SECTION MARKS, TITLE BLOCKS, AND REFERENCES TO THE CONTRACT DOCUMENTS.

GOVERNING CODES & STANDARDS

| | | |
|----------------|-----------|--|
| BUILDING CODE: | FBC 2023 | FLORIDA BUILDING CODE, BUILDING |
| STANDARDS: | ASCE 7 | AMERICAN SOCIETY OF CIVIL ENGINEERS: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES |
| | ACI 318 | AMERICAN CONCRETE INSTITUTE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE |
| | AISC 360 | AMERICAN INSTITUTE OF STEEL CONSTRUCTION: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS |
| | AWS D1.1 | AMERICAN WELDING SOCIETY: STRUCTURAL WELDING CODE - SHEET |
| | AWS D1.3 | AMERICAN WELDING SOCIETY: STRUCTURAL WELDING CODE - SHEET |
| | AWS D1.4 | AMERICAN WELDING SOCIETY: STRUCTURAL WELDING CODE - REINFORCEMENT STEEL |
| | ASTM A510 | AMERICAN IRON AND STEEL INSTITUTE: NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS |
| | ASTM | AMERICAN SOCIETY FOR TESTING AND MATERIALS |

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 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 SHOP DRAWING SCHEDULE. THE STRUCTURAL ENGINEER OF RECORD WILL RETURN THE SHOP DRAWING ITEMS WITHIN TEN WORKING DAYS AFTER HAVING RECEIVED THE REQUIRED SHOP DRAWING SCHEDULE.
- 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:
 1. THE SUBMITTAL IS REQUESTED.
 2. THE SUBMITTAL IS BASED ON THE LATEST DESIGN.
 3. THE SUBMITTAL IS CLEARLY CLOUDED FOR ALL THE DIFFERENCES FROM THE CONTRACT DOCUMENTS ON THE FIRST SUBMITTAL.
 4. THE SUBMITTAL IS CLEARLY CLOUDED FOR ALL CHANGES AND ADDITION FROM PREVIOUS SUBMITTAL.
 5. THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD'S COMMENTS FROM ANY PREVIOUS SUBMITTALS ARE ADDRESSED.
 6. THE WORK IS COORDINATED AMONGST ALL CONSTRUCTION TRADES.
 7. THE SUBMITTAL IS COORDINATED WITH THE ARCHITECT'S SHOP DRAWING SCHEDULE.
 8. 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. DEFERRED SUBMITTALS ARE MANUFACTURER OR CONTRACTOR DESIGNED COMPONENTS PER THE CONTRACT DOCUMENTS. THESE ELEMENTS OF THE DESIGN ARE DEFERRED SUBMITTAL COMPONENTS AND HAVE NOT BEEN PERMITTED UNDER THE BASE BUILDING APPLICATION. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD, WHO SHALL REVIEW THEM FOR GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE CONTRACTOR SHALL SUBMIT THESE REVIEWED DEFERRED SUBMITTAL DOCUMENTS TO THE BUILDING OFFICIAL 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:

| | | |
|--------|--|---|
| 031000 | CONCRETE FORMWORK | (SS, CALC) |
| 032000 | CONCRETE REINFORCEMENT LAYOUT | (S) |
| 033000 | CONCRETE MIX DESIGNS | (CALC, TA) |
| 033000 | CONCRETE CONSTRUCTION JOINT LAYOUT | (S) |
| 034100 | STRUCTURAL PRECAST CONCRETE CONNECTION | (DF, SS, CALC) |
| 034100 | STRUCTURAL PRECAST CONCRETE CONNECTION | (DF, SS, CALC) |
| 051200 | STRUCTURAL STEEL | (S) |
| 051200 | STRUCTURAL STEEL CONNECTIONS | (DF, S, CALC) |
| 054000 | COLD-FORMED METAL FRAMING USED FOR EXTERIOR EXTERIOR CLADDING SYSTEM SHORING AND RESHORING | (SS, CALC) (SEE ARCH) (DF, SS, CALC) |
| 133419 | METAL BUILDING HANDRAIL, GUARDRAIL, RAILING | (DF, SS, CALC) (SEE ARCH) (SS, CALC, REC) |
| 312319 | DEWATERING POST-INSTALLED ANCHOR PRODUCT DATA AND INSTALLER CERTIFICATES | (GEO, REC) |

STRUCTURAL THRESHOLD INSPECTIONS

- A. PER CHAPTER 653.71 OF THE FLORIDA STATUTES, THIS BUILDING QUALIFIES AS A THRESHOLD BUILDING.
- B. SPECIAL INSPECTORS OF THRESHOLD BUILDINGS (THRESHOLD INSPECTORS) SHALL MEET THE REQUIREMENTS OF RULE 61G15-36.003 OF THE FLORIDA ADMINISTRATIVE CODE.
- C. PER CHAPTER 653.79 OF THE FLORIDA STATUTES, THE ENFORCING AGENCY SHALL REQUIRE A THRESHOLD INSPECTOR TO PERFORM STRUCTURAL INSPECTIONS ON A THRESHOLD BUILDING PURSUANT TO A STRUCTURAL INSPECTION PLAN PREPARED BY THE STRUCTURAL ENGINEER OF RECORD.
- D. THRESHOLD INSPECTOR SHALL BE A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA WHO IS CERTIFIED UNDER CHAPTER 61015 OF THE FLORIDA STATUTES. TO CONDUCT INSPECTIONS OF A THRESHOLD BUILDING, FURTHER, THE THRESHOLD INSPECTOR MUST BE ON THE FLORIDA BOARD OF PROFESSIONAL ENGINEERS LIST OF PERSONS QUALIFIED TO BE THRESHOLD INSPECTORS.
- E. THE STRUCTURAL INSPECTION PLAN MUST BE SUBMITTED TO AND APPROVED BY THE ENFORCING AGENCY PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR THE CONSTRUCTION OF A THRESHOLD BUILDING.
- F. THE FEE OWNER OF A THRESHOLD BUILDING SHALL SELECT AND PAY ALL COSTS OF EMPLOYING A THRESHOLD INSPECTOR, BUT THE THRESHOLD INSPECTOR SHALL BE RESPONSIBLE TO THE ENFORCING AGENCY.
- G. THRESHOLD INSPECTIONS RELATED TO TEMPORARY CONDITIONS SUCH AS SHORING, RE-SHORING, AND TEMPORARY BRACING ARE REQUIRED TO BE PERFORMED BY THE CONTRACTOR'S DELEGATED ENGINEER. DELEGATED ENGINEER (NOT SPECIAL INSPECTOR) IS RESPONSIBLE FOR THE SUPERVISION, INSPECTION AND CERTIFICATION OF SUCH TEMPORARY SYSTEMS.
- H. SEE STRUCTURAL INSPECTION PLAN FOR FURTHER INFORMATION.

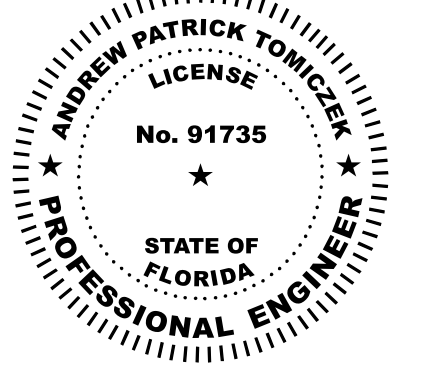
EXISTING CONDITIONS & DEMOLITION

- A. EXISTING CONDITIONS
 1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING BUILDINGS AT THE CONSTRUCTION SITE AND REPORT ANY DISCREPANCIES FROM THE ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD PRIOR TO FABRICATION OR ERECTION OF ANY STRUCTURAL MEMBER.
 2. EXISTING CONDITIONS HAVE BEEN SHOWN HALFTONE ON THE CONTRACT DRAWINGS UNLESS NOTED OTHERWISE.
 3. EXISTING CONDITIONS SHOWN ON THE CONTRACT DRAWINGS WERE OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE TO THE CONTRACTOR UPON REQUEST TO THE OWNER. HOWEVER, THE AVAILABLE DRAWINGS OF THE EXISTING CONDITIONS ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL APPLICABLE INFORMATION.
 4. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND ENSURE PROTECTION OF EXISTING UTILITIES THAT REMAIN IN SERVICE.
- B. DEMOLITION
 1. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION AND THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION UNTIL THE WORK IS COMPLETED. THE CONTRACTOR AND HIS ENGINEER SHALL PROVIDE SHORING IN REQUIRED LOCATIONS WHERE EXISTING CONSTRUCTION TO REMAIN WILL BE AFFECTED BY DEMOLITION.
 2. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY STRUCTURAL ELEMENTS WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE CONTRACTOR SHALL RETAIN A LICENSED STRUCTURAL ENGINEER TO DESIGN AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.
 3. ALL EXISTING FRAMING INDICATED IS FOR REFERENCE ONLY AND IS TO BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION.
 4. THE CONTRACTOR SHALL USE THE STRUCTURAL CONTRACT DOCUMENTS IN CONJUNCTION WITH THE ARCHITECTURAL AND MEP DEMOLITION CONTRACT DOCUMENTS. IN THE EVENT OF CONFLICTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD.
 5. THE CONTRACTOR SHALL USE PERSONNEL WITH A MINIMUM OF 5 YEARS EXPERIENCE FOR DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.
 6. DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL OR DEBRIS TO DROP EXCEPT BY MEANS AND METHODS WHICH WILL ENSURE INTEGRITY OF THE STRUCTURE.
 7. PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT, OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM, OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.
 8. REMOVE ONLY PORTIONS OF THE EXISTING STRUCTURE INDICATED ON CONTRACT DOCUMENTS. DO NOT CUT, DAMAGE, OR MAR THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.
 9. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF REMOVING DEMOLISHED MATERIALS FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS.
 10. WHERE NEW OPENINGS IN EXISTING SLABS OR WALLS ARE TO BE CREATED, THE DEMOLITION CONTRACTOR SHALL CORE HOLES AT THE OUTSIDE CORNERS OF THE NEW OPENING PRIOR TO DEMOLITION. SAW CUT AND DEMOLISH SLAB OR WALL ONLY AFTER THE INSTALLATION OF ALL REQUIRED NEW STRUCTURAL FRAMING AND/OR REINFORCEMENT IN PLAN OR SECTION, UNLESS NOTED OTHERWISE. SAW CUTTING SHALL BE STRAIGHT AND SHALL NOT EXTEND INTO EXISTING SLAB OR WALL TO REMAIN OR BEYOND THE HOLES CORED AT THE CORNERS OF THE NEW OPENING.

ABBREVIATIONS

| | | | |
|---------|----------------------------|---------|-----------------------------------|
| ADDL | ADDITIONAL | KSI | KIPS PER SQUARE INCH |
| ADJ | ADJACENT | L | LENGTH |
| AF | ABOVE FINISHED FLOOR | LB(S) | POUNDS(S) |
| ALT | ALTERNATE | LSD | LONG SIDE HORIZONTAL |
| APPROX | APPROXIMATE | LLH | LONG LEG HORIZONTAL |
| ARCH | ARCHITECT OR ARCHITECTURAL | LLV | LONG LEG VERTICAL |
| ASD | ALLOWABLE STRESS DESIGN | LONG | LONGITUDINAL |
| B | BOTTOM OF | LRFD | LOAD RESISTANCE AND FACTOR DESIGN |
| B/B | BACK-TO-BACK | LSH | LONG SIDE HORIZONTAL |
| BLDG | BUILDING | LSV | LONG SIDE VERTICAL |
| BKG | BLOCKING | LTS | LAP TENSION SPICE |
| BRG | BEARING | LW | LIGHT WEIGHT |
| BOT | BOTTOM | LWC | LIGHT WEIGHT CONCRETE |
| BTWN | BETWEEN | M | MOMENT |
| C | COMPRESSION | MAX | MAXIMUM |
| CFS | COLD-FORMED STEEL | MC | MOMENT CONNECTION(S) |
| CFP | CAST-IN-PLACE | MCH | MECHANICAL |
| CJ | CONTRACTION JOINT | MEP | MECHANICAL, ELECTRICAL, PLUMBING |
| CL | CENTER LINE | MFP | FIRE PROTECTION |
| CLR | CLEAR OR CLEARANCE | MFR | MANUFACTURER |
| CMU | CONCRETE MASONRY UNIT | MID | MIDDLE |
| COL | COLLUM | MIN | MINIMUM |
| CONC | CONCRETE | MISC | MISCELLANEOUS |
| CONN(S) | CONNECTION(S) | | |
| CONST | CONSTRUCTION | NC | NOT IN CONTRACT |
| CONT | CONTINUOUS | NS | NEAR SIDE |
| COORD | COORDINATE | NTS | NOT TO SCALE |
| | | NWC | NORMAL WEIGHT CONCRETE |
| | | NSFC | NOT SHOWN FOR CLARITY |
| db | REINFORCING BAR DIAMETER | OC | ON CENTER |
| D&A | DEFORMED BAR ANCHOR | OD | OUTSIDE DIAMETER |
| DBW | DEMAND CRITICAL WELD | OH | OPPOSITE FACE |
| D | DEGREE(S) | OO | OPPOSITE END |
| DI | DIAMETER | OP | OPPOSITE SIDE |
| DIAG | DIAGONAL | OPPG(S) | OPENING(S) |
| DM(S) | DIMENSION(S) | OPPS | OPPOSITE |
| DL | DEAD LOAD | OSL | OUTSTANDING LEG |
| DW(S) | DRAWING(S) | | |
| E | EACH | PAF | POWDER ACTUATED FASTENER |
| EF | EACH FACE | PERP | PERPENDICULAR |
| EJ | EXPANSION JOINT | PJF | PREFORMED JOINT FILLER |
| EL | ELEVATION | PL | PLATE |
| ELEV | ELEVATOR | PLF | POUND PER LINEAR FOOT |
| ELS | EDGE-OF-SLAB | PCST | PRECAST |
| EQL | EQUAL | PFAB | PRE-FABRICATED |
| EQP | EQUIPMENT | PSF | POUNDS PER SQUARE FOOT |
| EW | EACH WAY | PSI | POUNDS PER SQUARE INCH |
| EXIST | EXISTING | PTI | POST-TENSIONED |
| EXP | EXPANSION | | |
| EXT | EXTERIOR | REF | REFERENCE |
| | | REIN | REINFORCE(D) (ING) OR (MENT) |
| | | REQ(D) | REQUIRED |
| | | REV | REVISION |
| | | RTU | ROOF TOP UNIT |
| | | SCHED | SCHEDULE(D) |
| | | SDL | SUPERIMPOSED DEAD LOAD |
| | | SEI | STRUCTURAL ENGINEER OF RECORD |
| | | SF | SQUARE FOOT (FEET) |
| | | SIM | SIMILAR |
| | | SLRS | SEISMIC LOAD RESISTING SYSTEM |
| | | SOG | SLAB-ON-GROUND |
| | | SP | SPACE |
| | | SPEC(S) | SPECIFICATION(S) |
| | | SS | STAINLESS STEEL |
| | | STD | STANDARD |
| | | STIFF | STIFFENER |
| | | STR | STRUCTURE OR STRUCTURAL |
| | | SYM | SYMMETRICAL |
| | | T | TENSION |
| | | T&B | TOP AND BOTTOM |
| | | T&G | TONGUE & GROOVE |
| | | TI | TOP OF |
| | | TEMP | TEMPERATURE OR TEMPORARY |
| | | TYP | TYPICAL |
| | | UNO | UNLESS NOTED OTHERWISE |
| | | V | SHEAR |
| K | KIPS (1,000 POUNDS) | VERT | VERTICAL |
| KLF | KIP PER LINEAR FOOT | VF | VERIFY IN FIELD |
| KSF | KIP PER SQUARE FOOT | W | WITH |
| | | WO | WITHOUT |
| | | WP | WORK POINT |
| | | WWR | WELDED WIRE REINFORCEMENT |

Grand total: 172



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

ISSUE FOR 100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

REVISIONS

| NO. | REASON | DATE |
|-----|--------|------|
|-----|--------|------|

| |
|--------------------------------------|
| PROJECT TEAM |
| PRINCIPAL IN CHARGE: ANDREW TOMICZEK |
| PROJECT MANAGER: ANDREW TOMICZEK |
| DESIGN TEAM: JEZERINAC GROUP |

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO: 814.C6328.01

SHEET TITLE: GENERAL NOTES

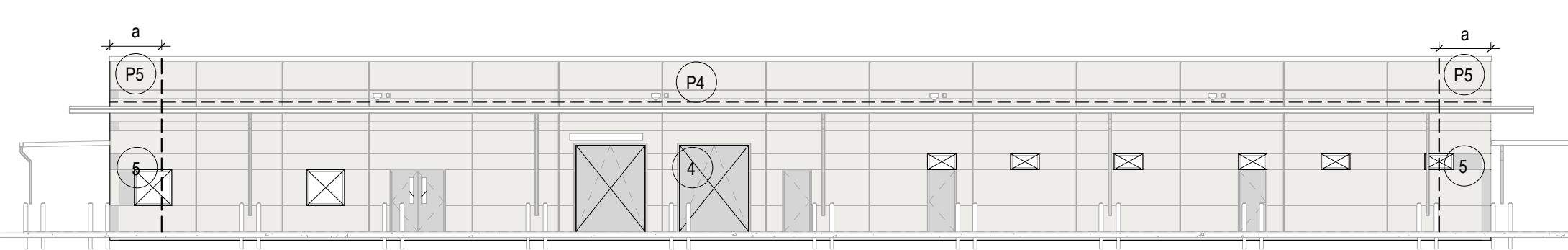
SHEET NUMBER: S001

DESIGN CRITERIA

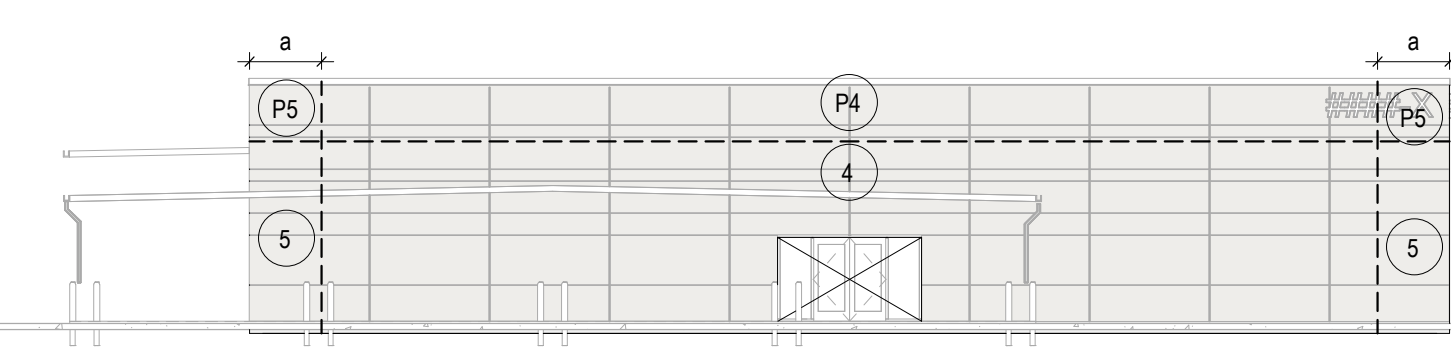
- A. STRUCTURE LOCATION:
LONGITUDE: -82.0577
B. LATITUDE: 28.2204
C. LOADING:
- SUPERIMPOSED DEAD & LIVE LOADS:
ALL DEAD LOADS LISTED BELOW ARE IN ADDITION TO THE STRUCTURE'S SELF-WEIGHT.

| | DEAD LOAD | LIVE LOAD |
|----------------------|-----------|------------------|
| ROOF: | | |
| TYPICAL | 10 PSF | 20 PSF REDUCIBLE |
| MECHANICAL EQUIPMENT | SEE PLAN | N/A |
| FLOOR: | | |
| OFFICE | 20 PSF | 50 PSF |
| CORRIDORS | 10 PSF | 100 PSF |
| STORAGE | 20 PSF | 125 PSF |
| MECHANICAL ROOM | 125 PSF | 100 PSF |
 - RAIN LOAD:
DESIGN RAINFALL: 4.98" HOUR (100-YEAR, 1-HOUR RAINFALL)
RAINFALL AT LOWEST POINT OF ROOF SHALL NOT EXCEED DURING DESIGN RAINFALL / NOT EXCEED 3.8" DURING DESIGN RAINFALL
DESIGN RAIN LOAD, R: 20 PSF
 - WIND LOAD:
ULTIMATE DESIGN WIND SPEED, V_{ult} : 226 MPH
NOMINAL DESIGN WIND SPEED, V_{nom} : 175 MPH
RISK CATEGORY: IV
EXPOSURE CATEGORY: C
ENCLOSURE CLASSIFICATION: ENCLOSED
INTERNAL PRESSURE COEFFICIENT: -1.0
COMPONENTS & CLADDING DESIGN PRESSURES: SEE WIND PRESSURE DIAGRAMS
 - TORNADO LOAD:
RISK CATEGORY: IV
ULTIMATE DESIGN TORNADO SPEED, V_{ult} : 75 MPH
NOMINAL DESIGN WIND SPEED, V_{nom} : 58 MPH
EXPOSURE CATEGORY: C
PER 32.5.2 OF ASCE 7, DESIGN FOR TORNADO LOADS SHALL NOT BE REQUIRED FOR STRUCTURES IN EXPOSURE C WITH $V_{ult} \leq 0.6 V_{ult}$
 - SEISMIC LOAD:
RISK CATEGORY: IV
SEISMIC IMPORTANCE FACTOR, I_e : 1.5
SITE CLASS: D
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER, S_s : 0.13 g
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER, S_1 : 0.059 g
SPECTRAL RESPONSE ACCELERATION PARAMETER, S_{M1} : 0.11 g
SPECTRAL RESPONSE ACCELERATION PARAMETER, S_{M2} : 0.085 g
SEISMIC DESIGN CATEGORY: C
SEISMIC FORCE RESISTING SYSTEM: INTERMEDIATE PRECAST SHEAR WALLS
REDUNDANCY FACTOR, r : 1.0
OVERSTRENGTH FACTOR, O_e : 2.5
RESPONSE MODIFICATION FACTOR, R : 4.0
SEISMIC RESPONSE COEFFICIENT, C_e : 0.041
EFFECTIVE SEISMIC WEIGHT, W : 3500 KIPS
ANALYSIS PROCEDURE: ELF
DESIGN BASE SHEAR: 144 KIPS
 - 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.
 - SERVICEABILITY:
1. DEFLECTION LIMITS: TOTAL LOAD DEFLECTION ONLY APPLIES TO THE DEFLECTION DUE TO THE CREEP COMPONENT OF LONG-TERM DEAD LOAD DEFLECTION PLUS THE SHORT-TERM DEFLECTION. LONG-TERM DEFLECTION OF WOOD STRUCTURAL MEMBERS SHALL BE CALCULATED IN ACCORDANCE WITH THE AWC NDS. IT IS PERMITTED TO ESTIMATE THE CREEP COMPONENT OF THE LONG-TERM DEFLECTION AS THE IMMEDIATE DEAD LOAD DEFLECTION.

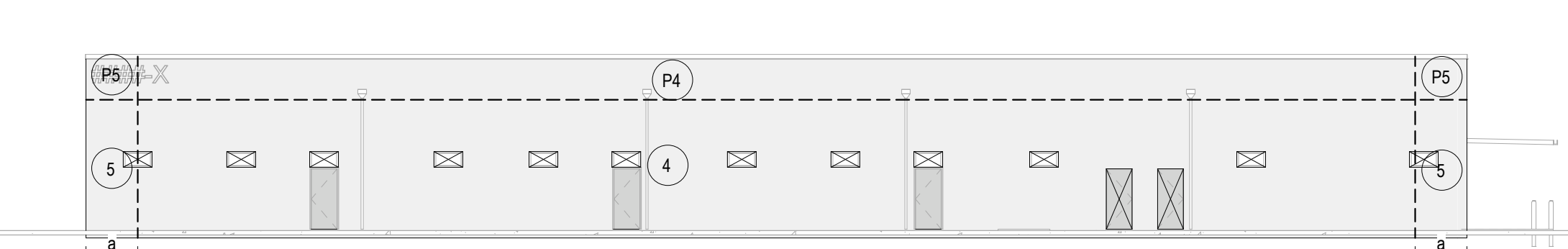
| | L/240 |
|-------------------------------|-------|
| a. ROOF MEMBERS | |
| • TOTAL LOAD DEFLECTION: | L/240 |
| • TRANSITORY LOAD DEFLECTION: | L/360 |
| b. FLOOR MEMBERS | |
| • TOTAL LOAD DEFLECTION: | L/240 |
| • LIVE LOAD DEFLECTION: | L/360 |
| c. EXTERIOR WALLS & CLADDING | |
| • WIND LOAD DEFLECTION: | L/360 |
| • INTERIOR PARTITIONS: | L/360 |
| • LIVE LOAD DEFLECTION: | L/360 |
| d. DRIFT LIMITS | |
| a. INTERSTORY DRIFT: | L/600 |
| b. TOTAL STRUCTURE DRIFT: | L/600 |



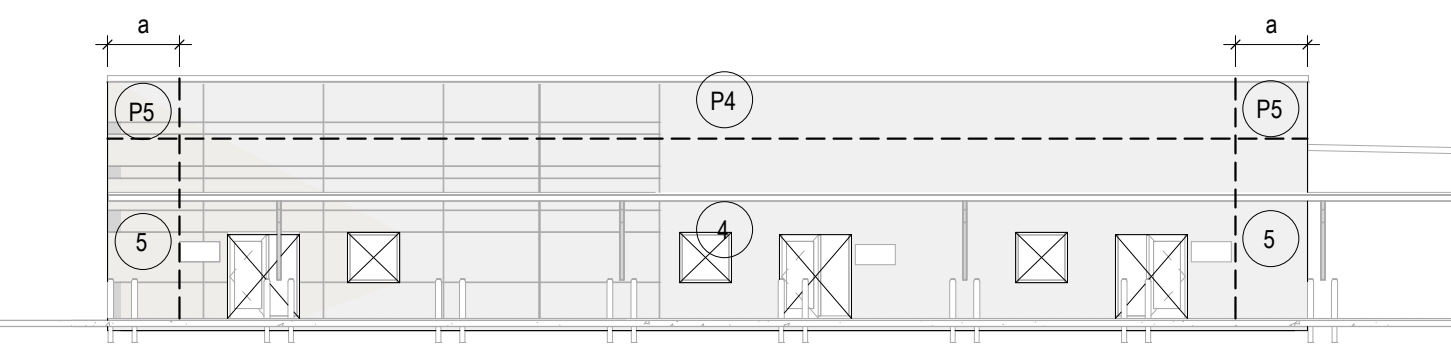
1 NORTH WALL COMPONENTS & CLADDING DIAGRAM
S002 1/16" = 1'-0"



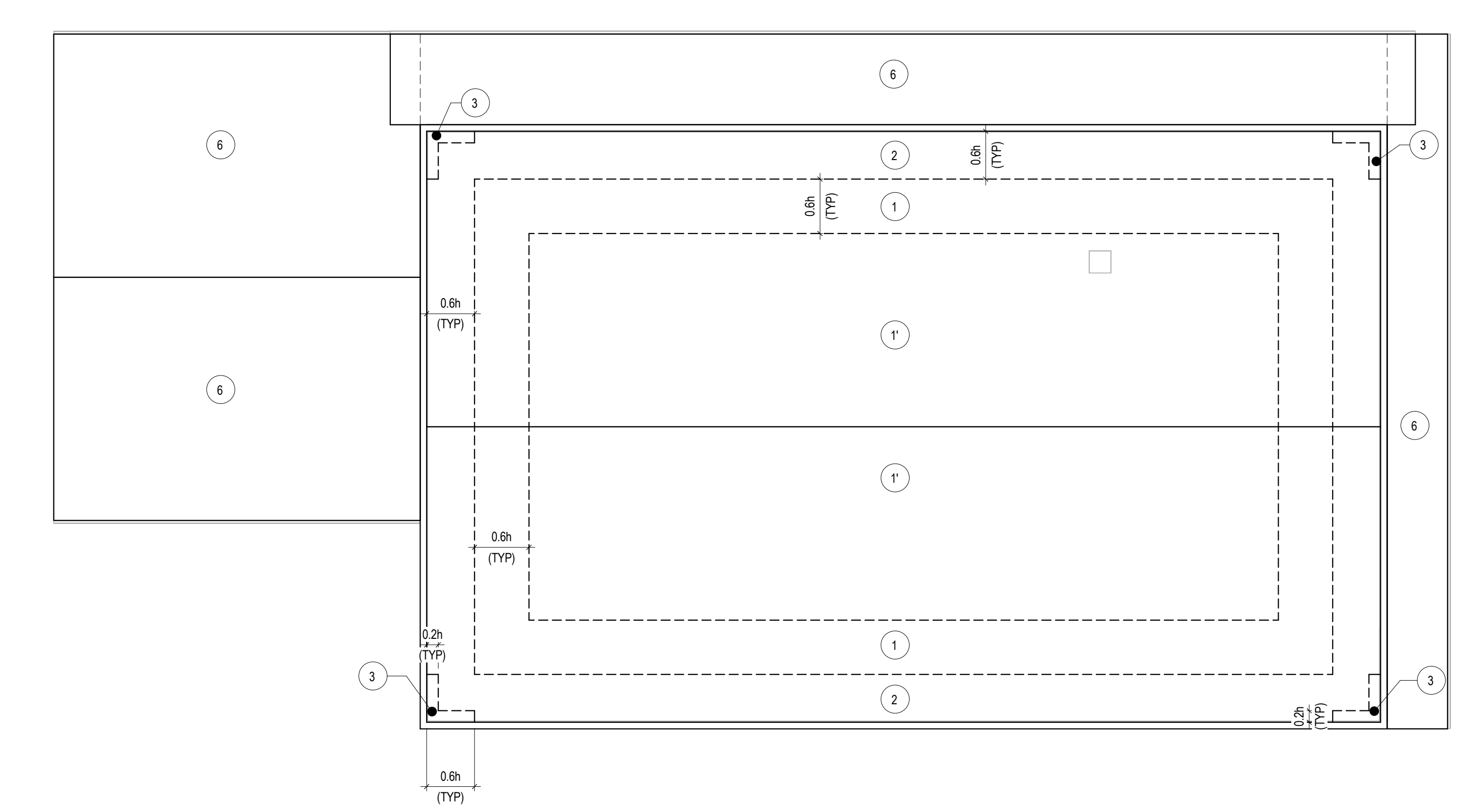
2 WEST WALL COMPONENTS & CLADDING DIAGRAM
S002 1/16" = 1'-0"



3 SOUTH WALL COMPONENTS & CLADDING DIAGRAMS
S002 1/16" = 1'-0"



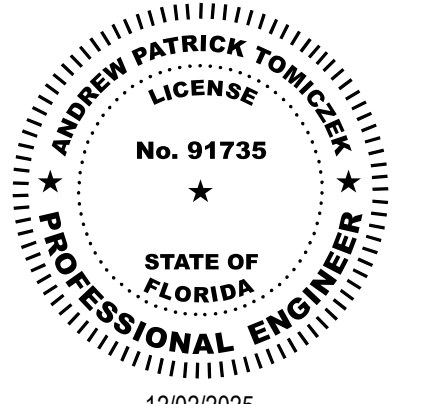
4 EAST WALL COMPONENTS & CLADDING DIAGRAMS
S002 1/16" = 1'-0"



5 ROOF COMPONENTS & CLADDING WIND PRESSURE DIAGRAM
S002 1/16" = 1'-0"

| EWA (ft²) | COMPONENTS & CLADDING EXTERNAL PRESSURE LOADS (PSF) | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|----|-----|-----|
| | Zone | | | | | | | | | |
| | 1' | 1 | 2 | 3 | 4 | 5 | 6 | P4 | P5 | P6 |
| 10 | 45 | 45 | 112 | 112 | 112 | 112 | 112 | 85 | 346 | 346 |
| | -102 | -178 | -235 | -235 | -121 | -149 | -133 | | | |
| 20 | 43 | 43 | 107 | 107 | 107 | 107 | 107 | 78 | 326 | 326 |
| | -102 | -166 | -220 | -220 | -116 | -139 | -124 | | | |
| 50 | 39 | 39 | 100 | 100 | 100 | 100 | 100 | 69 | 300 | 300 |
| | -102 | -151 | -200 | -200 | -109 | -126 | -113 | | | |
| 100 | 36 | 36 | 95 | 95 | 95 | 95 | 95 | 62 | 279 | 279 |
| | -102 | -139 | -184 | -184 | -104 | -116 | -104 | | | |
| 200 | 36 | 36 | 90 | 90 | 90 | 90 | 90 | 62 | 259 | 259 |
| | -88 | -127 | -169 | -169 | -99 | -106 | -104 | | | |
| 500 | 36 | 36 | 83 | 83 | 83 | 83 | 83 | 62 | 233 | 233 |
| | -69 | -112 | -149 | -149 | -93 | -93 | -104 | | | |

- 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 0.8 FOR USE WITH SERVICE LEVEL OR ASD DESIGN. REFER TO THE BUILDING CODE FOR APPLICABLE LOAD COMBINATIONS.
 - $h = 6'-0"$. SEE ROOF PLAN MAP BELOW FOR LOCATION OF h -ZONES. WALL h -ZONE LOCATIONS TO MATCH ROOF h -ZONES.
 - $h = 15'-0"$. SEE ROOF PLAN MAP BELOW FOR LOCATION OF h -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 _____ PSF AND VERTICAL VALUE OF _____ 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.
 - ROH# 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.



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR
100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

REVISIONS

| NO. | REASON | DATE |
|-----|--------|------|
| | | |

PROJECT TEAM
PRINCIPAL IN CHARGE
ANDREW TOMICZEK
PROJECT MANAGER
ANDREW TOMICZEK
DESIGN TEAM
JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO.
814.C6328.01

SHEET TITLE
LOADING CRITERIA

SHEET NUMBER
S002

EARTHWORK & FOUNDATIONS

- A. GEOTECHNICAL INVESTIGATION REPORT
 FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT AS FOLLOWS:
 a. REPORT TITLE: GEOTECHNICAL ENGINEERING REPORT PROJECT 441 (REPORT No. EQ215160)
 b. PREPARED BY: TERRACON, JACKSONVILLE, FL
 c. DATED: APRIL 21, 2022
2. 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.
- F. SHALLOW FOUNDATIONS
 FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
 2. FOUNDATION SIZES AND REINFORCEMENT ARE BASED ON AN ALLOWABLE BEARING PRESSURE OF 2,500 PSF FOR COLUMNS AND 2,000 PSF FOR WALLS PER THE GEOTECHNICAL INVESTIGATION REPORT.
 3. FOUNDATIONS SHALL BEAR A MINIMUM OF 1'-0" BELOW ADJACENT EXTERIOR GRADE.
 4. FOUNDATIONS SHALL BEAR ON COMPACTED STRUCTURAL FILL, NATURAL SOILS, OR ROCK PREPARED PER THE GEOTECHNICAL INVESTIGATION REPORT.
 5. 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.
 6. 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.
 7. CENTER ALL FOUNDATIONS UNDER THEIR RESPECTIVE COLUMNS OR WALLS, UNLESS NOTED OTHERWISE.
 8. 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
 1. 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.
 2. EXCAVATION SHALL NOT OCCUR WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FOUNDATION UNLESS THE FOUNDATION IS PROTECTED AGAINST SETTLEMENT.
 3. THE EXTENT OF SUBGRADE PREPARATION SHALL EXTEND A MINIMUM OF 5'-0" BEYOND THE BUILDING PERIMETER.
 4. THE CONTRACTOR SHALL PROVIDE A SUBGRADE BENEATH THE SLAB-ON-GROUND PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
 5. 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.
 6. PLACEMENT OF FILL AND COMPACTION SHALL BE MONITORED AND ACCEPTED BY A RETAINED TESTING AGENCY. PERFORM A MINIMUM OF ONE FIELD DENSITY TEST (ASTM D-1558 OR D-6938) FOR EVERY 2,500 SQUARE FEET OF EACH LAYER. THE TESTING AGENCY SHALL RANDOMLY SELECT TEST LOCATIONS.
 7. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF THE CONSTRUCTION DEWATERING SYSTEMS REQUIRED FOR THE EXCAVATION. AT A MINIMUM, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING SITE.
 8. THE CONTRACTOR SHALL SUBMIT CONSTRUCTION DEWATERING PLAN TO THE GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO BEGINNING EXCAVATION.
 9. THE CONTRACTOR SHALL INSTALL ALL NECESSARY DEWATERING SYSTEMS.

CONCRETE

- A. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH DIVISION 03 OF THE SPECIFICATIONS.
 B. FOR CONCRETE MIXTURE REQUIREMENTS SEE SCHEDULE ON THIS SHEET.
 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 UNQUELIFY 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 OCCUR WITHIN THE MIDDLE THIRD OF A MEMBER'S 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 1/2 INCH CHAMFER AT ALL EXPOSED CORNERS OF BEAMS, WALLS, ETC UNLESS NOTED OTHERWISE.
 I. CONCRETE CORING AND INSTALLATION OF DRILLED ANCHORS IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.
 J. 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
 1. 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.
 2. THE MINIMUM CLEAR COVER FOR CONDUITS, PIPES, AND SLEEVES SHALL BE 1 1/2" FOR CONCRETE EXPOSED TO EARTH OR WEATHER AND 1/2" FOR CONCRETE NOT EXPOSED TO EARTH OR WEATHER.
 3. ALL ALUMINUM EMBEDMENTS AND EMBEDMENTS MADE OF ANY OTHER MATERIAL HARMFUL TO THE CONCRETE OR REINFORCEMENT ARE PROHIBITED.
 4. 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.
 5. THE CONTENTS OF EMBEDDED PIPES SHALL NOT FLOW UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED DESIGN STRENGTH.
 6. 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.
 7. EMBEDDED ITEMS SHALL BE FABRICATED AND INSTALLED SUCH THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS SPECIFIED LOCATION IS NOT REQUIRED.

CONCRETE REINFORCEMENT

- A. ALL CONCRETE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 03 OF THE SPECIFICATIONS.
 B. ALL REINFORCEMENT STEEL SHALL BE ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE.
 C. WHERE WELDS ARE INDICATED FOR REINFORCEMENT STEEL ON THE DRAWINGS, REINFORCEMENT STEEL SHALL BE #76, 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 THIS SHEET, 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 THIS SHEET FOR LAP SPICE LENGTHS. UNLESS NOTED AS CONTINUOUS, REINFORCEMENT SHALL ONLY BE SPICED AT LOCATIONS SHOWN ON THE CONTRACT DOCUMENTS. SPICES AT NON-SPECIFIED LOCATIONS 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 #4 AND #18 BARS. MECHANICAL SPICES MAY ALSO BE USED AT THE CONTRACTOR'S OPTION, PROVIDED THE MECHANICAL SPICES HAVE A CURRENT TEST 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, WELDED SPICES SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.
 L. DOWELS SHALL MATCH SIZE AND SPACING OF PRIMARY REINFORCEMENT UNLESS NOTED OTHERWISE.
 M. SEE TYPICAL DETAILS FOR REINFORCEMENT REQUIRED AT OPENINGS AND PENETRATIONS.
 N. SUBMIT SHOP DRAWINGS WHICH ADEQUATELY DEPICT THE REINFORCEMENT BAR SIZES AND PLACEMENT. WRITTEN DESCRIPTION OF REINFORCEMENT WITHOUT ADEQUATE SECTIONS, ELEVATIONS, AND DETAILS IS NOT ACCEPTABLE.

| CONCRETE MIXTURE REQUIREMENTS | | | | | | | | |
|-------------------------------|----------------|---------------------------|----------|-----------------------------|---------------|-------------|---------------------------|-------------------------------|
| APPLICATION | EXPOSURE CLASS | F _c (PSI) | TEST AGE | MODULUS OF ELASTICITY (KSI) | MAXIMUM W/C/M | AIR CONTENT | NOMINAL MAXIMUM AGGREGATE | MAXIMUM CONCRETE WEIGHT (PCF) |
| FOUNDATIONS | F0, S1, CO, W1 | 3000 | 28 DAYS | 3122 | SEE NOTE 2 | SEE NOTE 3 | 1" | 150 |
| EXTERIOR SLAB-ON-GROUND | F0, S1, CO, W1 | 4500 | 28 DAYS | 3824 | 0.55 | 4.5% ± 1.5% | 1" | 150 |
| SLAB-ON-GROUND | F0, S0, CO, W0 | 3000 | 28 DAYS | 3122 | SEE NOTE 2 | SEE NOTE 3 | 1" | 150 |
| PRECAST | F0, S0, CO, W0 | SEE PRECAST GENERAL NOTES | 28 DAYS | SEE PRECAST GENERAL NOTES | SEE NOTE 2 | SEE NOTE 3 | SEE PRECAST GENERAL NOTES | SEE PRECAST GENERAL NOTES |

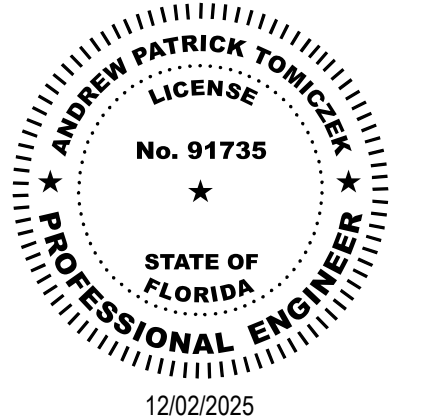
NOTES:
 1. EXPOSURE CLASSIFICATION FOR FREEZING AND THAWING, SULFATE EXPOSURE, PERMEABILITY, AND CORROSION PROTECTION SHALL BE AS LISTED WITH MIX DESIGNS SUBMITTED ACCORDINGLY TO COMPLY WITH THE APPLICABLE PROVISIONS OF ACI 301-20.
 2. WATER/CEMENT RATIO SHALL BE AS REQUIRED FOR THE SPECIFIED CONCRETE 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, OTHER THAN AREAS THAT ARE TO RECEIVE HARD TROWEL FINISH. AIR CONTENT SHALL BE AS REQUIRED FOR THE SPECIFIED CONCRETE MIX.
 4. COARSE AGGREGATE SHALL BE ASTM C 33 GRADED. SELECT GRADING CLASS PER TYPE OF CONSTRUCTION OR LOCATION USED, AND IN RELATION TO SPECIFIC WEATHER REGION. AGGREGATE SHALL BE FROM A SINGLE SOURCE. #67 GRADING SHALL BE USED FOR CONCRETE WITH 3/4 INCH MAXIMUM; #57 GRADING SHALL BE USED FOR CONCRETE WITH 1 INCH MAXIMUM.

| NON-PRESTRESSED CAST-IN-PLACE CONCRETE CLEAR COVER SCHEDULE | | | |
|---|-------------|-------------|-------------|
| APPLICATION | BOTTOM | TOP | SIDES |
| FOUNDATIONS | 3" | 2" | 3" |
| SLAB-ON-GROUND | SEE DETAILS | SEE DETAILS | 3" |
| RETAINING WALLS | NA | NA | 2" |
| WALLS | NA | NA | 1/2" (2") |
| COLUMNS | NA | NA | 1 1/2" (2") |
| ELEVATED SLABS | 1/2" (2") | 1/2" (2") | 1/2" (2") |
| BEAMS | 1 1/2" (2") | 1 1/2" (2") | 1 1/2" (2") |

NOTE:
 1. CLEAR COVER IN PARENTHESES () DENOTES CLEAR COVER WHEN THE AS-BUILT APPLICATION IS EXPOSED TO WEATHER.

| LAP SPICE LENGTH SCHEDULE (INCHES) | | | | | |
|------------------------------------|--------------------------|----------------------------|-------|----------------------------|-------|
| BAR SIZE | MIN BAR SPACING (INCHES) | TENSION (LTS) | | | |
| | | F _c = 4,000 PSI | | F _c = 5,000 PSI | |
| | | TOP BARS | OTHER | TOP BARS | OTHER |
| #4 | 1,500 | 33 | 25 | 29 | 23 |
| #5 | 1,625 | 41 | 31 | 36 | 28 |
| #6 | 1,750 | 49 | 37 | 44 | 34 |
| #7 | 1,875 | 57 | 44 | 52 | 40 |
| #8 | 2,000 | 65 | 51 | 60 | 46 |
| #9 | 2,125 | 73 | 58 | 68 | 52 |
| #10 | 2,250 | 81 | 65 | 76 | 58 |
| #11 | 2,375 | 89 | 72 | 84 | 64 |

| DEVELOPMENT LENGTH SCHEDULE (INCHES) | | | | | | |
|--------------------------------------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| BAR SIZE | MIN BAR SPACING (INCHES) (MAX OF db + 1" OR 2db) | TENSION | | | | |
| | | Ld, F _c (psi) | Ld, F _c (psi) | Ld, F _c (psi) | Ld, F _c (psi) | Ld, F _c (psi) |
| | | #4 | #5 | #6 | #7 | #8 |
| #4 | 1,500 | 22 | 19 | 17 | 11 | 10 |
| #5 | 1,625 | 28 | 24 | 22 | 14 | 12 |
| #6 | 1,750 | 33 | 29 | 26 | 17 | 15 |
| #7 | 1,875 | 48 | 42 | 38 | 20 | 17 |
| #8 | 2,000 | 55 | 48 | 43 | 22 | 19 |
| #9 | 2,125 | 62 | 54 | 48 | 25 | 22 |
| #10 | 2,250 | 70 | 61 | 54 | 28 | 25 |
| #11 | 2,375 | 78 | 67 | 60 | 31 | 27 |



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR
100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

REVISIONS
 NO. REASON DATE

PROJECT TEAM
 PRINCIPAL IN CHARGE
ANDREW TOMICZEK
 PROJECT MANAGER
ANDREW TOMICZEK
 DESIGN TEAM
JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
 1185 NW 25A
 LAKE CITY, FL 32055

PROJECT NO.
814.C6328.01

SHEET TITLE
CONCRETE GENERAL NOTES & SCHEDULES

SHEET NUMBER
S003A

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 50 PCF.
- 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. CONTRACTION 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. CONTRACTION JOINTS SHALL BE CONSTRUCTED SUCH THAT THE AREA CONTAINED BY THE CONTRACTION JOINTS HAS A MAXIMUM RATIO OF LONG SIDE TO SHORT SIDE OF 1.5 TO 1 UNLESS NOTED OTHERWISE. DO NOT CONSTRUCT CONTRACTION 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 DOVELEDED.
- I. WHERE SPECIFIED ON PLAN, WELDED WIRE REINFORCEMENT SHALL BE INSTALLED. WELDED WIRE REINFORCEMENT SHALL BE PROPERLY CHAIRED SUCH THAT IT IS LOCATED AT A DEPTH OF 1 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. REFERENCE ARCHITECTURAL DOCUMENTS FOR VAPOR RETARDER AND SLAB AND CONTRACTION JOINT SEALANT REQUIREMENTS.
- L. CONDUITS SHALL NOT BE PLACED WITHIN THE SLAB. CONDUITS SHALL BE PLACED BENEATH THE SLAB.

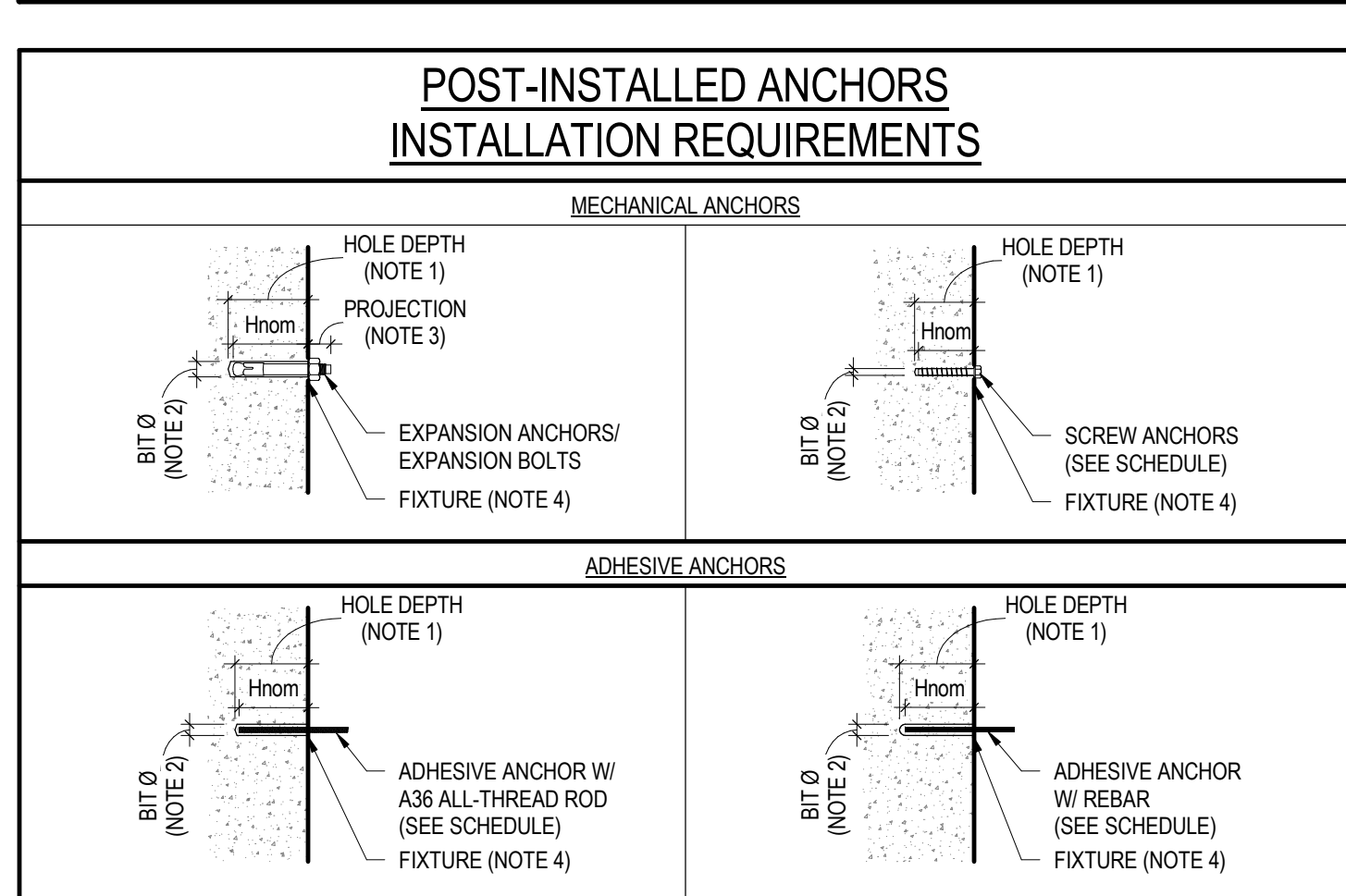
POST-INSTALLED ANCHORS

- A. SEE THE POST-INSTALLED ANCHORS SPECIFIED PRODUCTS BY APPLICATION SCHEDULE ON THIS SHEET FOR PRE-APPROVED PRODUCTS.
 - 1. WHEN A SPECIFIC MANUFACTURER AND PRODUCT IS NOT CALLED FOR, IT IS ACCEPTABLE TO USE ANY OF THE LISTED PRODUCTS FOR THAT APPLICATION AS APPROPRIATE FOR THE SUBSTRATE AND LIMITATIONS OF THE PRODUCT PER MANUFACTURER'S LITERATURE.
 - 2. WHEN A SPECIFIC PRODUCT IS LISTED WITHIN THE CONSTRUCTION DOCUMENTS, SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD, INCLUDING SUBSTITUTION FOR ONE OF THE PRE-APPROVED ANCHORS LISTED.
- B. SEE THE POST-INSTALLED ANCHORS INSTALLATION REQUIREMENTS ON THIS SHEET. THE MANUFACTURERS PUBLISHED INSTALLATION INSTRUCTIONS, AND THE ASSOCIATED PRODUCT APPROVALS FOR EACH PRODUCT TO BE UTILIZED ON THIS PROJECT.
- C. ANCHOR MATERIALS/COATINGS SHALL BE HOT DIP GALVANIZED AT ALL EXTERIOR LOCATIONS OR UNCONDITIONED SPACES, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. PROVIDE SEPARATING RUBBER/EPRENE WASHERS AT DISSIMILAR MATERIALS WHEN ANCHOR MATERIAL DIFFERS FROM FIXTURE MATERIAL.
- D. SPECIAL INSPECTIONS SHALL BE PROVIDED FOR POST-INSTALLED ANCHORS IN ACCORDANCE WITH THE ANCHOR MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, APPLICABLE EVALUATION REPORTS, AND AS INDICATED WITHIN THE SPECIAL INSPECTIONS PLAN WITHIN THE CONSTRUCTION DOCUMENTS.
- E. ADHESIVE ANCHORS SHALL BE PROOF TESTED AS FOLLOWS:
 - 1. EACH TYPE AND SIZE OF ANCHOR SHALL BE PROOF TESTED IN TENSION BY AN INDEPENDENT TESTING LABORATORY.
 - 2. PROOF LOADING SHALL BE PERFORMED TO ADHESIVE ANCHORS AS FOLLOWS:
 - a. MIN OF ADHESIVE ANCHORS FOR EACH TYPE AND SIZE OF ADHESIVE ANCHOR
 - 3. PROOF LOADING SHALL BE PERFORMED ON PRODUCTION ANCHORS. SACRIFICIAL ANCHORS SHALL BE NOT CONSIDERED ACCEPTABLE.
 - 4. THE INDEPENDENT TESTING LABORATORY SHALL SUBMIT AN ANCHORAGE TESTING PLAN TO THE STRUCTURAL ENGINEER OF RECORD.
 - 5. TENSION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM F488 AND ACI 308.4. PERFORMED AFTER THE 28-DAY CONCRETE CURING PERIOD AND AFTER THE MINIMUM EPOXY CURING PERIOD SPECIFIED BY THE MANUFACTURER. PROOF LOAD SHALL BE 1.5 X THE ASD CAPACITY OF THE ANCHOR, AND LOAD SHALL BE MAINTAINED ON THE ANCHOR FOR A MINIMUM OF 10 SECONDS.
 - 6. ANCHORS SHALL HAVE NO VISIBLE INDICATION OF DISPLACEMENT OR DAMAGE DURING OR AFTER PROOF LOAD APPLICATION. CONCRETE CRACKING IN THE VICINITY OF THE ANCHOR AFTER LOADING SHALL BE CONSIDERED A FAILURE.
 - 7. IF MORE THAN 10% OF THE TESTED ANCHORS FAIL TO ACHIEVE THE SPECIFIED PROOF LOAD WITHIN THE LIMITED DEFLECTED IN THESE NOTES, AN ADDITIONAL 20% OF THE ANCHORS OF THE SAME DIAMETER AND TYPE AS THE FAILED ANCHOR SHALL BE PROOF TESTED.
 - 8. IN THE EVENT OF FAILURE TO ACHIEVE PROOF LOAD, OR EXCESSIVE DISPLACEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO THE CONCRETE.

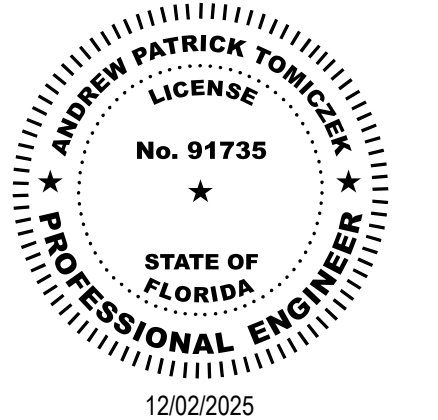
STRUCTURAL PRECAST CONCRETE

- A. DESIGN, DETAILING, MATERIALS AND INSTALLATION OF PRECAST CONCRETE SUPER STRUCTURE SHALL MEET REQUIREMENTS AS SET FORTH BY THE PRECAST/PRESTRESSED CONCRETE INSTITUTE, THE AMERICAN CONCRETE INSTITUTE, AND THE APPLICABLE BUILDING CODE. DESIGN SHALL BE PER LOADS INDICATED IN THESE GENERAL NOTES AS A MINIMUM. DESIGN AND DETAILING SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
- B. SHOP DRAWINGS SHALL BE SUBMITTED INDICATING COMPLETE INFORMATION REQUIRED FOR CONSTRUCTION OF THE PRECAST STRUCTURE. SHOP DRAWINGS SHALL INCLUDE LAYOUT AND DIMENSIONS OF STRUCTURE INCLUDING ANY OPENINGS, PRECAST COMPONENTS, CONNECTION DETAILS, REINFORCEMENT, LOADS TO THE FOUNDATIONS, AND RELATIONSHIP TO ADJACENT ITEMS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. DO NOT BEGIN FABRICATION UNTIL SHOP DRAWINGS AND CALCULATIONS ARE COMPLETED AND REVIEWED.
- C. THE PRECAST CONCRETE SUPER STRUCTURE DESIGNER IS RESPONSIBLE FOR ALL ASPECTS OF THE PRECAST SUPER STRUCTURE. THIS SHALL INCLUDE THE GRAVITY AND LATERAL DESIGN OF THE PRECAST STRUCTURE AND ANY OTHER ELEMENTS REQUIRED TO PROVIDE A COMPLETE STRUCTURAL SYSTEM. THIS ALSO INCLUDES THE DESIGN AND DETAILING OF STRUCTURAL DIAPHRAGMS, STRUCTURAL TOPPING SLABS, CABLE RAIL SUPPORTS AND CONNECTIONS OR EMBED PLATES OR OTHER EMBEDDED ELEMENTS OR REQUIRED NOTICES IN CAST-IN-PLACE CONCRETE OR STRUCTURAL STEEL MEMBERS. THE DESIGN OF THE FOUNDATION SYSTEM IS NOT INCLUDED AS PART OF THE PRECAST DESIGNER'S RESPONSIBILITY, HOWEVER, ANY INFORMATION THAT MIGHT AFFECT THE DESIGN OF THE FOUNDATION SYSTEM SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AND SHOWN ON THE SHOP DRAWINGS.
- D. THE PRECAST SYSTEM DESIGNER SHALL PERFORM THE DUTIES OF SPECIALTY STRUCTURAL ENGINEER WHO IS UNDER CONTRACT WITH THE CONTRACTOR AND IS RESPONSIBLE FOR STRUCTURAL ENGINEERING FUNCTIONS NECESSARY FOR THE COMPLETION OF THE STRUCTURE AS SPECIFIED IN THE CONTRACT DOCUMENTS. THIS INCLUDES THE DESIGN OF ALL PRECAST CONCRETE ELEMENTS UNDER ALL LOADS APPLICABLE TO THE SUPER STRUCTURE.
- E. CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR LOCATION, GENERAL ARRANGEMENT AND MINIMUM CAPACITY REQUIRED. PRECAST CONCRETE LOAD BEARING CONNECTIONS SHALL BE MADE TO CAST-IN-PLACE CONCRETE OR STRUCTURAL STEEL MEMBERS AS INDICATED ON THE DRAWINGS.
- F. ALL HOLES REQUIRED IN PRECAST MEMBERS SHALL BE PROVIDED TO THE PRECAST MANUFACTURER FOR DESIGN OF THE MEMBERS WITH HOLES AND FOR INCLUSION WITH THE CASTING FORMS. IF ANY HOLES ARE REQUIRED AFTER THE PRECAST MEMBERS ARE CAST, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST, LABOR AND MATERIALS REQUIRED TO ANALYZE THE EXISTING MEMBER THAT IS AFFECTED AND TO CUT THE HOLE(S) IN THAT MEMBER.

| POST-INSTALLED ANCHORS SPECIFIED PRODUCTS BY APPLICATION | | | |
|--|--|--|---|
| | ANCHOR TYPE | CONCRETE | CONCRETE MASONRY |
| MECHANICAL | EXPANSION ANCHORS/ EXPANSION BOLTS | HILTI KWIK BOLT T2 SIMPSON STRONG-BOLT 2 DEWALT POWER-STUD-SD2 | HILTI KWIK BOLT 3 SIMPSON STRONG-BOLT 2 DEWALT POWER-STUD-SD1 |
| | SCREW ANCHORS | HILTI HUS-EZ SIMPSON TITEN HD DEWALT SCREW-BOLT+ | HILTI HUS-EZ SIMPSON TITEN HD DEWALT SCREW-BOLT+ |
| ADHESIVE | ADHESIVE ANCHORS (EPOXY ANCHORS) WITH A36 ALL-THREAD ROD | HILTI HIT-HY200 SIMPSON SET-3G DEWALT PURE110+ OR PURE220+ | HILTI HIT-HY270 SIMPSON SET-3G DEWALT AC100- GOLD |
| | ADHESIVE ANCHORS (EPOXY ANCHORS) WITH REBAR | HILTI HIT-HY200 SIMPSON SET-3G DEWALT PURE110+ OR PURE220+ | |



- NOTES:**
1. POST-INSTALLED ANCHORS ARE SPECIFIED BY THE NOMINAL EMBEDMENT (H_{nom}) INDICATED IN MANUFACTURER'S LITERATURE. INCREASE THE HOLE DEPTH AS REQUIRED BY THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS FOR THE SPECIFIED ANCHOR SIZE AND EMBEDMENT.
 2. COORDINATE BIT DIAMETER WITH MANUFACTURER REQUIREMENTS.
 3. TOTAL ANCHOR LENGTH SHALL BE COORDINATED TO PROVIDE ADEQUATE PROJECTION LENGTH FOR FIXTURE THICKNESS, WASHER(S) AS REQUIRED (SEE NOTE 5), AND FULL ENGAGEMENT OF NUT.
 4. FIXTURE CONSIDERATIONS SHALL BE COORDINATED WITH MANUFACTURER REQUIREMENTS:
 - A. CONSIDERATION FOR "THROUGH-SET" VS "PRESET" INSTALLATION IN DETERMINING FIXTURE HOLE DIAMETER AND WASHER REQUIREMENTS (SEE NOTE 5).
 - B. INCREASE NOMINAL EFFECTIVE EMBEDMENT IF REQUIRED WHEN FIXTURE THICKNESS IS LESS THAN MINIMUM FOR EXPANSION ANCHORS.
 - C. PROVIDE DOUBLE WASHERS WHEN "THROUGH-SET" INSTALLATION IS USED FOR ADHESIVE ANCHORS AS REQUIRED BY MANUFACTURER REQUIREMENTS.
 5. LOCATE BY NONDESTRUCTIVE MEANS. ALL EXISTING REINFORCEMENT AND EMBEDMENTS (REBAR, POST-TENSIONED TENDONS, CONDUIT, ETC) AND TAKE NECESSARY MEASURES TO AVOID CONFLICT AND DAMAGE OF EXISTING ELEMENTS DURING DRILLING OPERATIONS AND THE INSTALLATION OF ANCHORS. IF EXISTING REINFORCEMENT AND/OR EMBEDMENTS PROHIBIT THE INSTALLATION OF ANCHORS AS INDICATED ON THE STRUCTURAL DRAWINGS, THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF RECORD IMMEDIATELY AND DISCONTINUE DRILLING OPERATIONS.
 6. DEFECTIVE OR ABANDONED HOLES WITHIN A DISTANCE OF THE GREATER OF (4 x ANCHOR DIAMETER) OR 3", WHICHEVER IS GREATER, SHALL BE FILLED WITH AN INJECTABLE ADHESIVE PRODUCT.
 7. COORDINATE OTHER REQUIREMENTS WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS INCLUDING (BUT NOT LIMITED TO) TEMPERATURE, HOLE DRILLING/CLEANING/PREPARATION, AND INSTALLATION TORQUE. INSTALLATION INTO CORE DRILLED HOLES SHALL NOT BE PERMITTED UNLESS SPECIFICALLY ALLOWED BY MANUFACTURER PRINTED INSTALLATION INSTRUCTIONS WITH CERTIFICATION THAT EQUAL CAPACITY IS ACHIEVED TO INSTALLATION IN HOLES DRILLED USING CARBIDE-TIPPED BITS. HOLES SHALL NOT BE OVERSIZED.
 8. ADDITIONAL NOTES FOR ANCHORS IN MASONRY WALLS:
 - A. ANCHORS SHALL NOT BE INSTALLED WITHIN 1-3/8" OF HEAD JOINTS. THE GENERAL CONTRACTOR SHALL REVIEW FIXTURE HOLE LOCATIONS RELATIVE TO HEAD JOINT LAYOUT ACCORDINGLY AND NOTIFY THE STRUCTURAL ENGINEER OF RECORD IF GEOMETRY RESULTS IN A CONDITION WHERE ANCHORS WILL BE LOCATED WITHIN THIS DISTANCE FROM HEAD JOINTS FOR A MODIFIED ANCHOR LAYOUT.
 - B. ANCHORS SHALL NOT BE INSTALLED IN HOLLOW CORE / UNGROUTED MASONRY. THE GENERAL CONTRACTOR SHALL COORDINATE FILLED CELL LOCATIONS AND PROVIDE POUR STOPS TO PROVIDE SOLID GROUTED MASONRY AT ALL AREAS TO RECEIVE POST-INSTALLED ANCHORS WITH A MINIMUM EDGE DISTANCE OF 4" ON ALL SIDES. IF INSTALLATION INTO HOLLOW CORE / UNGROUTED MASONRY IS REQUIRED, SCREEN TUBES INTO HOLLOW CORE / UNGROUTED MASONRY SHALL ONLY BE PERMISSIBLE WHEN SPECIFICALLY INDICATED AS SUCH WITHIN THE DOCUMENTS, OR WITH WRITTEN APPROVAL TO DO SO BY THE STRUCTURAL ENGINEER OF RECORD.
 9. INSTALLATION OF ANCHORS INTO EXISTING MASONRY WALLS SHALL CONFORM WITH THESE REQUIREMENTS, INCLUDING KNOCKING OUT OF-FACE SHELLS AS REQUIRED TO GROUT SOLID AND/OR KNOCKING OUT LOCAL HEAD JOINTS TO CREATE SOLID PORTIONS OF WALL WITH NO JOINT WITHIN THE REQUIRED EDGE DISTANCE FOR ANCHOR INSTALLATION.
 10. ADDITIONAL NOTES FOR ADHESIVE ANCHORS:
 - A. ADHESIVE ANCHOR DESIGN TEMPERATURE RANGE IS 110°F (LONG TERM) AND 130°F (SHORT TERM).
 - B. IN ADDITION TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, THE FOLLOWING GUIDELINES SHALL BE FOLLOWED FOR INSTALLATION OF ADHESIVE ANCHORS:
 - a. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION.
 - b. ADHESIVE ANCHORS SHALL BE INSTALLED IN DRY CONCRETE, AND DURING DRY CONDITIONS.
 - c. ADHESIVE ANCHORS SHALL BE INSTALLED IN HOLES PREDRILLED WITH A CARBIDE TIPPED DRILL BIT.
 - d. ADHESIVE ANCHORS SHALL BE INSTALLED WITHIN THE TEMPERATURE RANGE SPECIFIED IN THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, BUT NOT OUTSIDE OF THE DESIGN TEMPERATURE RANGE.
 - e. LOAD SHALL NOT BE APPLIED TO ADHESIVE ANCHORS UNTIL THE FULL CURING TIME ASSOCIATED WITH THE INSTALLATION TEMPERATURE HAS ELAPSED.
 - C. INSTALLATION OF ADHESIVE ANCHORS SHALL BE PERFORMED BY CERTIFIED PERSONNEL. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE AICORSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR EQUIVALENT.
 11. ANCHOR ALIGNMENT SHALL BE WITHIN 6" OF PERPENDICULAR TO THE BASE MATERIAL. ANCHORS OUT-OF-ALIGNMENT SHALL BE REVIEWED BY A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED WITH SIGNED AND SEALED CALCULATIONS SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD TO EVALUATE INDUCED BENDING LOAD USING A RATIONAL METHOD. ALTERNATELY, JOB SITE TESTS MAY BE CONDUCTED WITH WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD TO DO SO.
 12. ANCHORS SHALL NOT BE REUSED AFTER INITIAL INSTALLATION. HOLES FOR REMOVED ANCHORS SHALL NOT BE REUSED.
 13. NOTIFY THE STRUCTURAL ENGINEER OF RECORD IF SUBSTRATE THICKNESS IS NOT COMPATIBLE WITH THE INDICATED EMBEDMENT LENGTH.



12/02/2025
THIS FORM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

REVISIONS
NO. REASON DATE

| NO. | REASON | DATE |
|-----|--------|------|
| | | |
| | | |

PROJECT TEAM
PRINCIPAL IN CHARGE
ANDREW TOMICZEK
PROJECT MANAGER
ANDREW TOMICZEK
DESIGN TEAM
JEZERINAC GROUP

PROJECT INFO
FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO.
814.C6328.01

SHEET TITLE
CONCRETE GENERAL NOTES & SCHEDULES

SHEET NUMBER
S003B

STRUCTURAL STEEL

- A. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE ON THE CONTRACT DOCUMENTS:
 1. ROLLED SHAPES AND CHANNELS: ASTM A572 OR A992, MIN. YIELD STRENGTH 50 KSI
 2. ANGLES FOR TRUSSES AND BRACES: ASTM A36 MIN YIELD STRENGTH 36 KSI
 3. MISCELLANEOUS ANGLES: ASTM A36
 4. HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE C, MIN YIELD STRENGTH 46 KSI FOR ROUND AND 50 KSI FOR RECTANGULAR HSS
- F. CONNECTION MATERIAL SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS OR AS NEEDED FOR CONNECTION DESIGN:
 1. ANGLES: ASTM A36
 2. WTS: ASTM A992
 3. PLATES: ASTM A572, MIN YIELD STRENGTH 50 KSI
 4. BOLTS: ASTM A325
 5. NUTS: ASTM A305
 6. WASHERS: ASTM F438
 7. ANCHOR RODS: ASTM F1554 GRADE 55 WITH WELDABILITY SUPPLEMENT S1
 8. WELD ELECTRODES: MATCH FILLER METAL TO BASE METAL PER AWS D1.1
- C. WHERE NO CAMBER IS INDICATED, FABRICATE BEAMS SO THAT ANY NATURAL CAMBER IS UPWARD AFTER ERECTION
- D. CANTILEVERED BEAMS WITH NATURAL MILL CAMBER SHALL BE ERECTED SUCH THAT THE CAMBER IS ORIENTED DOWNWARD (OR CONCAVE UP)
- E. SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SEER IN WRITING
- F. FOR STEEL MEMBERS AND EMBEDMENTS EXPOSED TO WEATHER, PROVIDE HOT-DIPPED GALVANIZED FINISH
- G. PROVIDE HOLES IN ALL STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED 1/8" DIA. AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN
- H. SHOW ALL COPIES, HOLES, 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. FIELD 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 FORCES SPECIFIED ON PLAN ARE ULTIMATE LEVEL FORCES UNLESS NOTED OTHERWISE
- L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, AND FABRICATION OF ALL STEEL FRAMING CONNECTIONS UNLESS SPECIFICALLY NOTED AS COMPLETELY DESIGNED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED, WHO SHALL DESIGN THE CONNECTIONS. SUBMIT SIGN AND SEALED CALCULATIONS 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. CONNECTION DESIGN SHALL PROVIDE AN ADEQUATE LOAD PATH TO TRANSFER THE LOADS FROM EACH MEMBER THROUGH THE CONNECTION INTO THE SUPPORTING MEMBER, AND SHALL CONSIDER THE EFFECTS OF THE FORCES ON EACH MEMBER. PROVIDE STIFFENER PLATES, WEB DOUBLER PLATES, FLANGE CONTINUITY PLATES, ETC. AS REQUIRED. MEMBERS SHOWN ON THE DRAWINGS HAVE NOT BEEN SIZED FOR LOCAL EFFECTS AT CONNECTIONS
- N. STEEL CONNECTION DETAILS SHOW GENERAL CRITERIA FOR DESIGN AND DETAILING, AND ARE NOT INTENDED TO SHOW COMPLETE CONNECTION CONFIGURATIONS OR OTHER SPECIFIC INFORMATION THAT ARE THE RESPONSIBILITY OF THE CONNECTION DESIGN ENGINEER. ALTERNATE CONNECTION CONFIGURATION MAY BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONNECTIONS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS ARE TO BE FABRICATED AS SHOWN
- O. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS THAT INCLUDE, BUT ARE NOT LIMITED TO ERECTION ANGLES, LIFT HOLES, AND OTHER AIDS
- P. STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS AT THE MAXIMUM DECK SPAN LOCATION UNLESS NOTED OTHERWISE. MINIMUM CONNECTIONS SHALL BE A TWO-BOLT CONNECTION USING 3/4 INCH DIAMETER A325 BOLTS IN SINGLE SHEAR UNLESS NOTED OTHERWISE. ALL HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED, AND INSPECTED IN ACCORDANCE WITH THE RCSC. BOLTS IN CONNECTIONS SHALL BE INSTALLED WITH FULL PRETENSION EXCEPT WHERE "SNUG-TIGHT" INSTALLATION IS SPECIFICALLY PERMITTED ON THE DRAWINGS. WHERE CONNECTIONS ARE NOTED AS SNUG-TIGHT, THE CONTRACTOR MAY INSTALL PER THE CRITERIA FOR SNUG-TIGHT BOLTS. BOLTS IN SLIP-CRITICAL CONNECTIONS SHALL BE INSTALLED USING TURN-OF-NUT PRETENSIONING, TWIST-OFF TYPE TENSION CONTROL BOLT PRETENSIONING, OR DIRECT TENSION-INDICATOR (DTI) PRETENSIONING. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS NOTED OTHERWISE

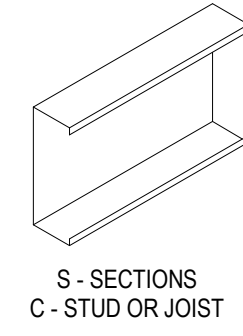
WELDING

- D. ALL WELDING SHALL BE PERFORMED IN STRICT ADHERENCE TO A WRITTEN WELDING PROCEDURE SPECIFICATION PER AMERICAN WELDING SOCIETY D1.1. ALL WELDING PARAMETERS SHALL BE WITHIN THE ELECTRODE MANUFACTURER'S RECOMMENDATIONS. WELDING PROCEDURES SHALL BE SUBMITTED TO THE OWNER'S TESTING AGENCY FOR REVIEW BEFORE STARTING FABRICATION OR ERECTION. COPIES OF THE WELDING PROCEDURE SPECIFICATION SHALL BE ON SITE AND AVAILABLE TO ALL WELDERS AND THE SPECIAL INSPECTOR
- B. ALL WELDS SHALL BE MADE USING LOW HYDROGEN ELECTRODES WITH MINIMUM TENSILE STRENGTH PER AWS D1.1 (MINIMUM 70 KSI)
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOINT PREPARATIONS AND WELDING PROCEDURES THAT INCLUDE, BUT ARE NOT LIMITED TO, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPIES, SURFACE ROUGHNESS VALUES, TAPERS, AND TRANSITIONS OF UNEQUAL PARTS
- D. WELDING SHALL BE DONE BY WELDERS WITH CURRENT AMERICAN WELDING SOCIETY CERTIFICATION
- E. FIELD WELDING SYMBOLS HAVE NOT NECESSARILY BEEN INDICATED ON THE DRAWINGS. WHERE SHOWN, PROPER FIELD WELDING PER AMERICAN WELDING SOCIETY D1.1 SHALL BE USED. WHERE NO FIELD WELDING SYMBOLS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF SHOP AND FIELD WELDS
- F. ALL WELD SIZES SHALL BE THE LARGER OF THE SIZE REQUIRED BY THE CONNECTION FORCES, MINIMUM SIZE PER ANSIAWS D1.1 OR 3/16 INCH MINIMUM FILLET WELD, UNLESS NOTED OTHERWISE
- G. PROVIDE FILLET WELDS AT CONTACT POINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THE ALLOWABLE TENSILE FORCE OF THE SMALLER MEMBER AT THE JOINT, UNLESS NOTED OTHERWISE
- H. ALL FILLET WELDS SHALL BE VISUALLY INSPECTED BY THE TESTING FIRM
- I. GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE
- J. ALL COMPLETE JOINT PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED UPON COMPLETION OF THE CONNECTION, EXCEPT PLATES LESS THAN OR EQUAL TO 1/4-INCH THICK SHALL BE MAGNETIC PARTICLE TESTED. REDUCTION IN TESTING MAY BE MADE IN ACCORDANCE WITH THE BUILDING CODE WITH APPROVAL OF THE ENGINEER
- K. A RUN-OFF TAB SHALL BE USED AT ALL BEVEL AND FULL PENETRATION WELDS. RUN-OFF TABS SHALL BE REMOVED BY NEAT CUTS AFTER WELD IS COMPLETED. GRIND SMOOTH WHERE REQUIRED BY DETAIL
- L. WHERE REQUIRED BY DETAIL, REMOVE WELD BACKING BARS AND GRIND SMOOTH AFTER WELD IS COMPLETED
- M. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING
- N. STEEL USING COMPLETE JOINT PENETRATION GROOVE WELDS THAT FUSE THROUGH THE THICKNESS OF THE FLANGE OR WEB SHALL HAVE A MINIMUM CHARPY V-NOTCH IMPACT TESTING VALUE AS FOLLOWS:
 1. ASTM A66M HOT-ROLLED SHAPES WITH A FLANGE THICKNESS EXCEEDING 2 INCHES AND BUILT-UP HEAVY SHAPES WITH PLATES EXCEEDING 2 INCHES IN THICKNESS: 20 FT-LB AT 70° FAHRENHEIT
 2. REGARDLESS OF THICKNESS, ALL TRUSSES, LATERAL SYSTEM MEMBERS (INCLUDING COLUMNS, WIND GIRDERS, BRACES, ETC): 20 FT-LB AT 70° FAHRENHEIT
 3. STEEL EXPOSED TO TEMPERATURES IN SERVICE BELOW 50° FAHRENHEIT: 20 FT-LB AT SERVICE TEMPERATURE - 20° FAHRENHEIT; 40° FAHRENHEIT MAXIMUM
 4. WELD METAL: 20 FT-LB AT 20° FAHRENHEIT AND 40 FT-LB AT 70° FAHRENHEIT
 5. TESTING IS TO BE IN ACCORDANCE WITH ASTM A66M, SUPPLEMENTARY REQUIREMENT S30, CHARPY V-NOTCH IMPACT TEST FOR STRUCTURAL SHAPES - ALTERNATE CORE LOCATION, AT ROLLED SHAPES AND ASTM A674 FOR PLATES, AT ANY PERMITTED LOCATIONS. WELD METAL SHALL BE TESTED IN ACCORDANCE WITH ASTM E23, STANDARD METHODS FOR NOTCHED BAR IMPACT TESTING OF METALLIC MATERIALS FOR WELD METAL.

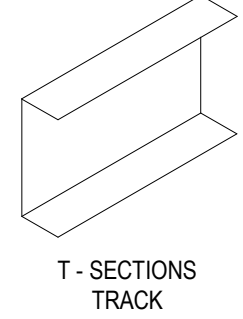
COLD-FORMED STEEL

- A. DESIGN, FABRICATION, AND ERECTION OF COLD-FORMED STEEL SHALL CONFORM TO AISI S100
- B. ALL STUDS, JOISTS, TRACK, BRIDGING, END CLOSURES, AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE REQUIREMENTS OF AISI S100
- C. THE CONTRACTOR'S DELEGATED ENGINEER SHALL DESIGN ALL COLD-FORMED STEEL AND ITS CONNECTIONS TO THE BUILDING STRUCTURE. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED COLD-FORMED STEEL
- D. ALL EXTERIOR COLD-FORMED STEEL AND ITS CONNECTIONS TO THE BUILDING STRUCTURE SHALL BE DESIGNED PER DESIGN CRITERIA AND COMPONENTS AND CLADDING WIND PRESSURES LISTED IN THE STRUCTURAL DOCUMENTS
- E. ALL INTERIOR COLD-FORMED STEEL AND ITS CONNECTIONS TO THE BUILDING STRUCTURE SHALL BE DESIGNED PER DESIGN CRITERIA LISTED IN THE GENERAL STRUCTURAL NOTES AND A MINIMUM OF 5 PSF INTERNAL PRESSURE NORMAL TO THE STRONG AXIS OF FRAMING MEMBER IN ADDITION TO DEAD LOAD
- F. ALL EXTERIOR COLD-FORMED STEEL SHALL HAVE A MINIMUM G90 GALVANIZED COATING. ALL INTERIOR COLD-FORMED STEEL SHALL HAVE A MINIMUM G60 GALVANIZED COATING
- G. ALL STUDS SHALL BE DESIGNED TO A MINIMUM GAUGE OF 43 MILS. STUD SPACING SHALL NOT EXCEED 24" ON CENTER
- H. ALL COLD-FORMED STEEL, 5/16 MIL AND THICKER SHALL HAVE A MINIMUM YIELD STRENGTH (F_y) OF 50 KSI
- I. ALL WELDING SHALL MEET REQUIREMENTS OF AWS D1.3 AND THE AISI STANDARD
- J. ALL SCREWS OR PINS SHALL BE NON-CORROSIVE NO. 8-18 (Ø = 0.125") OR LARGER, UNLESS NOTED OTHERWISE. DO NOT USE STAINLESS STEEL OR COPPER-COATED FASTENERS
- K. TRACKS SHALL BE THE SAME DEPTH AS STUDS OR JOISTS AND OF EQUAL OR THICKER GAUGE THAN STUDS OR JOISTS, UNLESS NOTED OTHERWISE. TRACKS SHALL BE CONNECTED IN ORDER TO SUPPORT STUDS OR JOISTS AT 24" ON CENTER. MAXIMUM STUDS AND JOISTS SHALL BE CONNECTED TO TRACKS AT EACH SIDE
- L. INSTALLATION OF CURTAIN WALL FRAMING SHALL ACCOMMODATE VERTICAL DISPLACEMENT OF THE PRIMARY STRUCTURE
- M. DESIGN OF SLIP TRACKS SHALL CONFORM TO GUIDELINES ESTABLISHED IN STEEL STUD MANUFACTURERS ASSOCIATION TECHNICAL NOTE NO. 1, PUBLISHED JANUARY 2000
- N. PROVIDE THE STANDARD TRACK, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION INDICATED AND AS NEEDED TO PROVIDE A COMPLETE FRAMING SYSTEM. INSTALL THE FRAMING SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, UNLESS NOTED OTHERWISE
- O. MATCH FILLER METAL TO BASE METAL PER AWS D1.3 FOR WELDING STEEL STUDS. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS PROCEDURES. CONSULT MANUFACTURER FOR EQUIPMENT RECOMMENDATIONS AND PROPER ELECTRODE SELECTION. TOUCH UP WELDED AREAS WITH A ZINC RICH PAINT
- P. STUD-TO-STUD CONNECTIONS SHALL BE A MINIMUM OF (4) #8 TEK SCREWS AT EACH CONNECTION, UNLESS NOTED OTHERWISE
- Q. RESISTANCE TO MINOR AXIS BENDING AND ROTATION SHALL BE PROVIDED BY GYPSUM BOARD, GYPSUM SHEATHING, PLYWOOD, HORIZONTAL BRACING, OR CHANNEL SHAPED COLD-FORMED STEEL FRAMING BLOCKING
- R. SHOP DRAWINGS, INCLUDING CALCULATIONS, SHALL BE SIGNED AND SEALED BY A DELEGATED ENGINEER AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD AND ARCHITECT FOR REVIEW
- S. SHOP DRAWINGS SHALL CLEARLY INDICATE ALL FRAMING SIZES, CONNECTIONS, AND BRACING. IF FRAMING DEPTH IS NOT INDICATED IN THE CONTRACT DOCUMENTS, THE MOST ECONOMICAL MEMBER AND CONNECTION MEETING THE DESIGN CRITERIA SHALL BE PROVIDED
- T. CALCULATIONS SHALL CLEARLY INDICATE DESIGN LOADING, FRAMING SIZE, SPACING, ASSUMPTIONS, AND FORCES IMPOSED ONTO BUILDING STRUCTURE FROM CONNECTIONS
- U. STEEL STUD MANUFACTURERS ASSOCIATION FOUR PART NOMENCLATURE IDENTIFIES MEMBER DEPTH, TYPE, FLANGE WIDTH AND GAUGE

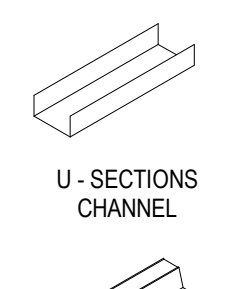
| COLD-FORMED STEEL FRAMING LEGEND | |
|-----------------------------------|------------------|
| COLD-FORMED THICKNESS CONVERSIONS | |
| THICKNESS (MILS) | THICKNESS (GAGE) |
| 33 | 20 |
| 43 | 18 |
| 54 | 16 |
| 68 | 14 |
| 97 | 12 |



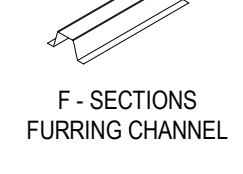
S - SECTIONS
C - STUD OR JOIST



T - SECTIONS
TRACK



U - SECTIONS
CHANNEL



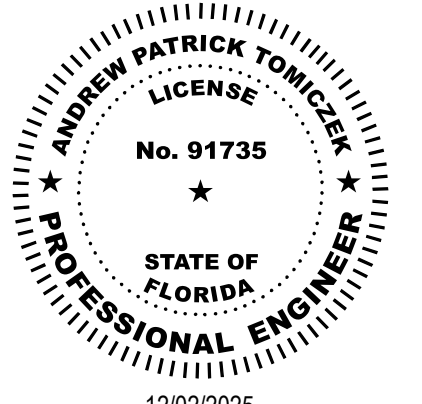
F - SECTIONS
FURRING CHANNEL

600 S 162 - 54

- MATERIAL THICKNESS: (EXAMPLE: 0.054" = 54 MILS; 1 MIL = 1/1000 IN.) MATERIAL THICKNESS IS THE MINIMUM BASE STEEL THICKNESS IN MILS. MINIMUM BASE STEEL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS
- FLANGE WIDTH: (EXAMPLE: 1.58" = 1.625" x 162 x 1/100 INCH) ALL FLANGE WIDTHS ARE TAKEN IN 1/100 INCHES
- STYLE: (EXAMPLE: STUD OR JOIST SECTION = S) THE FOUR ALPHA CHARACTERS UTILIZED BY THE DESIGNATOR SYSTEM ARE:
S = STUD OR JOIST SECTIONS
T = TRACK SECTIONS
U = CHANNEL SECTIONS
F = FURRING CHANNEL SECTIONS
- MEMBER DEPTH: (EXAMPLE: 6" = 600 x 1/100 INCH) ALL MEMBER DEPTHS ARE TAKEN IN 1/100 INCHES. FOR ALL "T" SECTIONS, THE MEMBER DEPTH IS THE INSIDE TO INSIDE DIMENSION

Autodesk Docs://FPL Columbia Storm Processing Facility/614C632801-FPL Columbia Storm Processing Facility_S_v04_R1.rvt

12/2/2025 9:51:03 AM



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR 100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

REVISIONS: NO., REASON, DATE

PROJECT TEAM
PRINCIPAL IN CHARGE: ANDREW TOMICZEK
PROJECT MANAGER: ANDREW TOMICZEK
DESIGN TEAM: JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO.: 814.C6328.01

SHEET TITLE: STEEL GENERAL NOTES & SCHEDULES

SHEET NUMBER: S005

GENERAL

- A. THIS STRUCTURAL INSPECTION PLAN IS PREPARED IN ACCORDANCE WITH SECTION 553.79(5) OF THE FLORIDA STATUTES WHICH DESCRIBES THE REQUIREMENT THAT A STRUCTURAL INSPECTION PLAN BE PREPARED BY THE ENGINEER OF RECORD FOR A THRESHOLD BUILDING.
B. THE PURPOSE OF THIS STRUCTURAL INSPECTION PLAN IS TO PROVIDE SPECIFIC INSPECTION PROCEDURES AND SCHEDULES SO THAT THE BUILDING CAN BE ADEQUATELY INSPECTED FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
C. STRUCTURAL INSPECTIONS SHALL BE PERFORMED BY THE SPECIAL INSPECTOR REGISTERED UNDER SECTION 471 OF THE FLORIDA STATUTES AS AN ENGINEER.
D. THE OWNER SHALL EMPLOY THE SERVICES OF A SPECIAL INSPECTOR IN COMPLIANCE WITH THE PROVISIONS OF CHAPTER 553.79 OF THE FLORIDA STATUTES.
E. THE SPECIAL INSPECTOR SHALL INSPECT THE FRAMING SHOWN ON THE STRUCTURAL DRAWINGS IN ACCORDANCE WITH THIS PLAN TO VERIFY THAT THE WORK IS CONSTRUCTED IN GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS, EXCEPT FOR ACCEPTED VARIATIONS.
1. THE CONTRACT DOCUMENTS ARE DEFINED AS THE PERMITTED DRAWINGS, PROJECT SPECIFICATIONS, AND RECORDED ADDENDA AND AMENDMENTS.
2. UNLESS NOTED OTHERWISE, WORK OF THIS PLAN EXCLUDES THE INSPECTION OF ELEMENTS THAT DO NOT CONTRIBUTE TO THE CAPACITY OF THE PRIMARY STRUCTURAL FRAME. THIS INCLUDES, BUT IS NOT LIMITED TO, RAILINGS, FIRE PROTECTION, ROOFING, GLAZED WINDOW SYSTEMS, MECHANICAL/ELECTRICAL SYSTEMS, ARCHITECTURAL COMPONENTS, SITE WORK, AND OSHA SAFETY PROVISIONS OR OTHER SAFETY STANDARDS THAT APPLY DURING THE CONSTRUCTION PERIOD. PRECAST CLADDING, EXTERIOR MASONRY WALLS, AND SLAB-ON-GROUND ARE SPECIFICALLY INCLUDED.
F. AT A MINIMUM, THE SPECIAL INSPECTOR SHALL PERFORM THE MANDATORY STRUCTURAL INSPECTIONS AS REQUIRED UNDER THE PROVISIONS OF THE FLORIDA BUILDING CODE, IN ACCORDANCE WITH THE SCOPE AND SCHEDULE OUTLINED HEREIN.
G. THE SPECIAL INSPECTOR SHALL LOG EACH SITE VISIT DOCUMENTING THE PROGRESS OF THE WORK, THE RELEVANT TESTING CONDUCTED, THE AREAS INSPECTED, AND ANY OTHER ELEMENTS PERTINENT TO THE WORK PROGRESS AT THE TIME OF THE INSPECTION. THE LOG RECORD SHALL REMAIN ON SITE AND ACCESSIBLE AT ANY TIME.
H. DAILY SIGNED AND SEALED FIELD REPORTS SHALL BE SUBMITTED ON A WEEKLY BASIS TO THE ENFORCING AGENCY, ARCHITECT OR STRUCTURAL ENGINEER OF RECORD, AND OWNER.
I. THE SPECIAL INSPECTOR SHALL NOT MAKE DESIGN DECISIONS, DIRECT THE CONTRACTOR'S WORK, NOR BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS.
J. THE SPECIAL INSPECTOR MAY SEND A FULL TIME COLLEAGUE AS HIS AUTHORIZED REPRESENTATIVE TO THE PROJECT, BUT THAT PERSON SHALL BE KNOWLEDGEABLE AND HAVE A COLLEGE DEGREE IN CIVIL OR STRUCTURAL ENGINEERING.

CONTRACTOR RESPONSIBILITIES

- A. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR WITH AN OFFICE AT THE CONSTRUCTION SITE THAT INCLUDES, AT MINIMUM, A DESK, CHAIR, PLAN TABLE, PLAN RACK, INTERNET ACCESS, AND JANITORIAL SERVICES IN AIR-CONDITIONED SPACE.
B. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR WITH AN UPDATED COPY OF ALL PERMIT DOCUMENTS, REVIEWED AND APPROVED SHOP DRAWING SUBMITTALS, TEST REPORTS, AND OTHER ITEMS WITH THE LATEST INFORMATION IN A TIMELY MANNER.
C. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOURS NOTICE TO THE SPECIAL INSPECTOR PRIOR TO THE NEED FOR ANY INSPECTION ON SITE.
D. THE CONTRACTOR SHALL COOPERATE AND ASSIST THE SPECIAL INSPECTOR IN PERFORMING HIS INSPECTION DUTIES AND SHALL PROVIDE HIM FREE ACCESS TO THE WORK AT ALL TIMES.
E. THE PRESENCE OF THE SPECIAL INSPECTOR DOES NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO COMPLY WITH CONTRACT DOCUMENTS. THE CONTRACTOR HAS THE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS AND THE COSTS OF RECTIFYING THOSE DEVIATIONS.
F. THE CONTRACTOR MAY COMMENT ON THE CONTRACT DOCUMENTS OR MAY ISSUE A REQUEST TO THE DESIGN PROFESSIONAL OF ACCEPTANCE OF THE DEVIATION.
G. CONSTRUCTION PERFORMED WITHOUT INSPECTION MAY REQUIRE TESTING OR MAY NEED TO BE REMOVED AS DETERMINED BY THE STRUCTURAL ENGINEER OR ARCHITECT OF RECORD.
H. THE CONTRACTOR'S SHORING ENGINEER SHALL SUPERVISE, INSPECT, AND CERTIFY THE INSTALLATION OF ALL SHORING AND RE-SHORING PER APPROVED SHOP DRAWINGS. THE SHORING ENGINEER SHALL PROVIDE A SIGNED AND SEALED INSPECTION CERTIFICATION TO THE SPECIAL INSPECTOR PRIOR TO ALL CONCRETE POURS.

FEE OWNER RESPONSIBILITIES

- A. THE FEE OWNER SHALL RETAIN A GEOTECHNICAL ENGINEER TO PROVIDE INSPECTION SERVICES FOR MONITORING THE PREPARATION OF THE FOUNDATION BEARING SURFACE AND PILE FOUNDATION ELEMENTS.
B. THE FEE OWNER SHALL RETAIN AN INDEPENDENT TESTING LABORATORY FOR MATERIAL SAMPLING AND TESTING SERVICES REQUIRED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
C. THE FEE OWNER SHALL ARRANGE AND ENSURE THAT ALL NECESSARY UPDATED CONSTRUCTION DOCUMENTS WITH THE LATEST INFORMATION, APPROVED SHOP DRAWINGS, LATEST SCHEDULES, AND ANY OTHER TYPE OF CORRESPONDENCE WHICH MAY AFFECT THE INSPECTIONS BE FURNISHED TO THE SPECIAL INSPECTOR IN A TIMELY MANNER.
D. THE FEE OWNER SHALL ENSURE THAT THE CONTRACTOR PROVIDES SHOP DRAWINGS FOR ALL PRECAST STRUCTURAL COMPONENTS. THESE SHOP DRAWINGS MUST BE DESIGNED, SIGNED AND SEALED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER AND HAVE BEEN REVIEWED AND STAMPED BY THE ENGINEER OF RECORD.

SPECIAL INSPECTOR RESPONSIBILITIES

- A. PRIOR TO STARTING WITH THEIR WORK, THE SPECIAL INSPECTOR, AND THEIR AUTHORIZED REPRESENTATIVE, IF APPLICABLE, SHALL ATTEND A PRE-CONSTRUCTION MEETING OR THE PURPOSE OF BECOMING FAMILIAR WITH THE SPECIFIC STRUCTURAL COMPONENTS AND SYSTEM WHICH THEY WILL BE RESPONSIBLE FOR INSPECTING.
B. THE SPECIAL INSPECTOR SHALL INSPECT ALL STRUCTURAL SYSTEMS NOTED BELOW AND IN COMPLIANCE WITH THOSE LISTED UNDER THE "GENERAL" HEADINGS.
C. THE SPECIAL INSPECTOR SHALL VISIT THE SITE AT SUCH FREQUENCY TO SATISFY THEMSELVES THAT THEIR REPRESENTATIVE'S INSPECTIONS COMPLY WITH THIS PLAN.
D. THE SPECIAL INSPECTOR SHALL DEDICATE THEIR ENTIRE TIME ON SITE TO THE REQUIREMENTS OF THIS PLAN AND SHALL NOT PERFORM OTHER WORK, SUCH AS MATERIAL TESTING.

REPORTING

- A. THE SPECIAL INSPECTOR SHALL RECORD PROGRESS, WORKING CONDITIONS, OBSERVATIONS, TESTING, DEVIATIONS FROM THE CONTRACT DOCUMENTS, AND ANY REQUIRED CORRECTIVE ACTION. THEY SHALL RETAIN THE RECORDS FOR A MINIMUM OF 7 YEARS AFTER COMPLETION OF THE PROJECT.
B. THE SPECIAL INSPECTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTOR IN PERSON, AND THE ARCHITECT AND STRUCTURAL ENGINEER BY TELEPHONE, OF MATERIALS, TESTS, EQUIPMENT, WORKSMANSHIP, OR CONSTRUCTION THAT:
1. DOES NOT CONFORM TO THE CONTRACT DOCUMENTS, OR
2. IS NOT INSPECTED OR TESTED AND CANNOT BE INSPECTED OR TESTED IN PLACE.
C. THE SPECIAL INSPECTOR SHALL THEN IMMEDIATELY ISSUE THOSE EXCEPTIONS IN WRITING TO THOSE LISTED ABOVE AND ATTACH A COPY TO THE DAILY INSPECTION REPORT.
D. THE SPECIAL INSPECTOR SHALL KEEP AN EXCEPTIONS FILE AND REVIEW IT ON A DAILY BASIS, UPDATING AS EXCEPTIONS ARE RECTIFIED. IF ANY EXCEPTIONS ARE NOT RESOLVED IN A TIMELY MANNER, THE SPECIAL INSPECTOR SHALL ISSUE A NONCOMPLIANCE NOTICE TO THE CONTRACTOR AND SHALL COPY THE ENFORCING AGENCY, OWNER'S REPRESENTATIVE, ARCHITECT, AND STRUCTURAL ENGINEER.
E. AFTER EACH INSPECTION, THE INSPECTOR SHALL WRITE AND SIGN AN INSPECTION REPORT. THE REPORT SHALL INCLUDE THE FOLLOWING:
1. THE NAME AND LOCATION OF PROJECT; NAME OF INSPECTOR; PERMIT NUMBER; DATE; WORKING CONDITIONS, INCLUDING WEATHER AND TEMPERATURE; AND TYPE AND LOCATION OF WORK BEING PERFORMED.
2. DETAILS OF EACH INSPECTION, INCLUDING THE PRESENCE AND ACTIVITIES OF THE TESTING AGENCY.
3. NOTE DEFICIENCIES IN THE WORK AND ANY UNUSUAL CIRCUMSTANCES AFFECTING THE PERFORMANCE OF WORK, INCLUDING CHANGES IN MATERIALS OR WORK SEQUENCE, PLACING EMPHASIS ON RECURRING DEFICIENCIES.
4. IDENTIFY CORRECTIONS TO DEFICIENCIES LISTED IN PREVIOUS REPORTS.
F. SINCE THE SPECIAL INSPECTOR DOES NOT CERTIFY THAT THE CONTRACT DOCUMENTS ARE IN COMPLIANCE WITH THE GOVERNING CODES, ALL STATEMENTS ISSUED SHALL REFER TO WHETHER OR NOT COMPLETED WORK IS IN SUBSTANTIAL ACCORDANCE WITH THE CONTRACT DOCUMENTS.
G. THE REPORT SHALL ALSO COMMENT ON THE FOLLOWING, WHEN APPLICABLE:
1. TEST REPORTS THAT DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.
2. THE GEOTECHNICAL ENGINEER'S INSPECTION REPORTS.
3. SHORING AND RESHORING ENGINEER'S INSPECTION REPORTS.
4. CHANGES MADE IN THE FIELD.
H. THE REPORT SHALL ALSO INCLUDE PHOTOGRAPHS, WHEN APPROPRIATE.
I. THE SPECIAL INSPECTOR SHALL SUBMIT THE REPORTS TO THE ENFORCING AGENCY, OWNER'S REPRESENTATIVE, ARCHITECT, AND STRUCTURAL ENGINEER UNDER A SIGNED AND SEALED COVER LETTER ON A WEEKLY BASIS OR AS DIRECTED BY THE ENFORCING AGENCY.
J. THE SPECIAL INSPECTOR SHALL POST AT THE JOBSITE A LOG SUMMARIZING ALL INSPECTIONS. THE HEADER SHALL CONTAIN, AT A MINIMUM, THE PROJECT NAME AND LOCATION, PERMIT NUMBER, AND THE NAME OF THE SPECIAL INSPECTOR, OWNER, AND CONTRACTOR. THE INSPECTOR SHALL WRITE AN ENTRY AFTER EACH INSPECTION THAT INCLUDES THE DATE, CONSTRUCTION PHASE, WORK DESCRIPTION, COMMENTS, HIS SIGNATURE, AND WHETHER THE WORK INSPECTED IS APPROVED OR REJECTED.
K. UPON COMPLETION OF THE BUILDING AND PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE SPECIAL INSPECTOR SHALL ISSUE A SIGNED AND SEALED STATEMENT ATTESTING THAT THE PART OF THE PROJECT UNDER THEIR INSPECTION RESPONSIBILITIES HAS BEEN CONSTRUCTED IN SUBSTANTIAL ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 553.79(7) OF THE FLORIDA STATUTES AND SHALL BE SUBMITTED TO THE ENFORCING AGENCY, OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.

SOIL OR FOUNDATION PREPARATION

- A. THE STRUCTURAL ENGINEER OF RECORD FOR THE PROJECT SHALL BE RETAINED BY THE FEE OWNER TO MONITOR THE SITE PREPARATION ACTIVITIES, FOUNDATION BEARING SURFACES, AND PILE FOUNDATION ELEMENTS.
B. THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE SPECIAL INSPECTOR WITH DAILY REPORTS AND A SUMMARY REPORT INDICATING THAT THE FOUNDATION BEARING SURFACE IS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT, SUCH THAT THE FOUNDATION FOR THE PROJECT WILL FUNCTION AS INTENDED.
C. THE INDEPENDENT TESTING AGENCY RETAINED BY THE FEE OWNER SHALL MONITOR THE BACKFILL AND COMPACTION OPERATIONS AND PROVIDE THE SPECIAL INSPECTOR WITH REPORTS DOCUMENTING THAT THE OPERATIONS HAVE BEEN PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THE CONTRACT DOCUMENTS.
D. ALL INSPECTION AND TESTING REPORTS PROVIDED TO THE SPECIAL INSPECTOR SHALL BE SIGNED AND SEALED BY AN ENGINEER LICENSED IN FLORIDA.

STRUCTURAL CAST-IN-PLACE CONCRETE

- A. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO THE PLACEMENT OF ANY STRUCTURAL CONCRETE.
B. THE SPECIAL INSPECTOR SHALL:
1. INSPECT SHORING, RESHORING, AND FORMWORK AS FOLLOWS:
a. VERIFY THAT THE DELEGATED SHORING AND RESHORING ENGINEER HAS CONFIRMED THAT THE SHORING AND RESHORING ARE IN COMPLIANCE WITH THEIR SHOP DRAWINGS (REFER TO SECTION 1.5F IN THE SPECIAL INSPECTION PLAN). ADDITIONALLY, THE SPECIAL INSPECTOR SHALL SPOT CHECK THE SHORING AND RESHORING FOR CONFORMANCE WITH THE SHORING AND RESHORING PLANS SUBMITTED TO THE ENFORCING AGENCY.
b. SPOT CHECK SHORING AND RESHORING LAYOUT, ALIGNMENT, AND MATERIALS.
c. CONFIRM THAT THE TIMING OF SHORING, RESHORING, AND FORMWORK PROCEDURES AND REMOVAL COMPLY WITH THE CONTRACT DOCUMENTS AND THE SHORING AND RESHORING DRAWINGS, WHERE APPROPRIATE. VERIFY THAT CONCRETE TEST CYLINDER STRENGTH IS ADEQUATE PRIOR TO FORM REMOVAL.
C. VERIFY THAT SLAB THICKNESS IS MAINTAINED AT SLAB DEPRESSIONS AND STEPS.
D. INSPECT STEEL REINFORCEMENT PER THE STRUCTURAL DRAWINGS, SUPPLEMENTED BY THE APPROVED SHOP DRAWINGS, TO VERIFY:
1. STEEL REINFORCEMENT GRADE, SIZE, QUANTITY, CONFIGURATION, AND SPACING.
2. MINIMUM CLEARANCE REQUIREMENTS FROM CONCRETE SURFACES.
3. STEEL REINFORCEMENT IS ADEQUATELY SUPPORTED AND TIED TO RESIST SHIFTING DURING CONCRETE POUR AND THAT CONCRETE COVER IS PROPER.
4. HOOKED REINFORCEMENT IS PLACED PROPERLY.
5. EMBEDMENT LENGTHS, SPICE LOCATIONS, AND LAP SPICE LENGTHS ARE ACCEPTABLE.
6. MECHANICAL COUPLERS ARE APPROVED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
7. PROPER TIE SPACING, PARTICULARLY AT BEAM/COLUMN INTERSECTIONS.
8. STEEL REINFORCEMENT LAYERS IN SLABS AND WALLS ARE PROPER.
9. ALL OPENINGS LARGER THAN 12" AND NOT SHOWN ON THE CONTRACT DOCUMENTS HAVE BEEN REPORTED TO THE STRUCTURAL ENGINEER OF RECORD. CHECK PLACEMENT OF ADDITIONAL REINFORCEMENT AROUND OPENINGS. OPENINGS THROUGH BEAMS ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.
10. IN ONE-WAY SLABS, THAT TEMPERATURE STEEL IS CORRECT, INCLUDING PROPER LAYERING.
11. IN TWO-WAY SLABS, THAT:
a. THE COLUMN STRIP TOP BARS HAVE A UNIFORM SPACING AND ARE NOT BUNDLED TOGETHER.
b. THE ADDED TOP BARS ARE PLACED IN THE VICINITY OF THE COLUMN.
c. THE TOP AND BOTTOM HOOKED BARS HAVE BEEN PLACED AS REQUIRED, ESPECIALLY AT SLAB EDGES.
12. THE POSITION OF BARS AT SLAB OFFSETS AND DEPRESSIONS.
13. ALL STEEL REINFORCEMENT SURFACES ARE FREE OF EXCESS RUST OR OTHER COATING THAT MAY AFFECT THE BONDING CAPACITY.
E. VERIFY THAT EXPANSION JOINT MATERIAL, DOVETAIL SLOTS, ANCHORS, EMBEDDED CONDUITS, AND LOAD CARRYING EMBEDDED ITEMS ARE PROPERLY POSITIONED AND SECURED TO RESIST DISPLACEMENT DURING CONCRETE PLACEMENT. RELOCATION OF, OR MODIFICATION TO, STRUCTURAL ITEMS DUE TO CONFLICTS WITH REINFORCEMENT IS PROHIBITED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.
F. INSPECT CONSTRUCTION JOINTS AS FOLLOWS:
1. VERIFY THAT DOWELS, KEYWAYS, AND BULKHEADS COMPLY WITH THE CONTRACT DOCUMENTS.
2. CONFIRM THAT BEAM AND SLAB CONSTRUCTION JOINT LOCATIONS COMPLY WITH THE CONTRACTOR'S CONSTRUCTION JOINT PLAN SUBMITTED TO THE ARCHITECT.
G. VERIFY THAT SAWCUT JOINTS ARE:
1. PROVIDED ONLY WHERE INDICATED.
2. THE PROPER DEPTH, SPACING, AND LOCATION.
H. CHECK THAT ALL FOREIGN MATERIAL IS REMOVED FROM FORMS OR EXCAVATIONS PRIOR TO CONCRETE PLACEMENT.
I. BE ON SITE AT THE START OF EACH CONCRETE POUR REQUIRING INSPECTION BY THIS PLAN, AND SHALL REMAIN ON SITE FOR A SUFFICIENT TIME TO CONFIRM THAT CONCRETING PRACTICES ARE PROPER AND COMPLY WITH ACI 301, ASTM C94, AND OTHER RECOGNIZED INDUSTRY STANDARDS INCLUDING THE FOLLOWING:
1. ALL STEEL REINFORCEMENT CORRECTIONS ARE COMPLETED PRIOR TO CONCRETE PLACEMENT.
2. THE FIRST CONCRETE TRUCK OF EACH TYPE OF CONCRETE POUR HAS THE PROPER CONCRETE MIX NUMBER AND STRENGTH AND THAT THE BATCH TIME LEAVES SUFFICIENT TIME TO POUR ALL CONCRETE FROM THE TRUCK. SPOT CHECK FUTURE TRUCKS.
3. THE TESTING AGENCY IS ON SITE FOR EACH TYPE OF CONCRETE POUR TO TEST CONCRETE AS REQUIRED BY THE CONTRACT DOCUMENTS. THIS SHALL INCLUDE MIXING TIME, TEMPERATURE, SLUMP, AND AIR CONTENT, REPORTING ANY CONCRETE DELIVERED THAT IS NOT AS SPECIFIED. ENSURE THAT ADDITION OF WATER TO THE CONCRETE MIX IN THE FIELD COMPLIES WITH THE GUIDELINES IN THE CONTRACT DOCUMENTS.
4. CONCRETE IS BEING CONVEYED FROM MIXER TO PLACE OF FINAL DEPOSIT BY RECOGNIZED INDUSTRY STANDARDS. CONCRETE IS BEING PLACED CONTINUOUSLY, OR IN A MANNER TO AVOID PLACING CONCRETE AGAINST HARDENED CONCRETE WHICH WOULD RESULT IN THE FORMATION OF SEAMS OR PLANES OF WEAKNESS.
5. CONCRETE IS BEING CONSOLIDATED AND THOROUGHLY WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS, AND INTO CORNERS OF FORMS ELIMINATING AIR OR STONE POCKETS THAT MAY CAUSE HONEYCOMBING, FITTING, OR PLANES OF WEAKNESS.
6. SPOT CHECK THAT CURING PROCEDURES COMPLY WITH THE CONTRACT DOCUMENTS, ACI 308, STANDARD PRACTICE FOR CURING CONCRETE, AND OTHER RECOGNIZED INDUSTRY STANDARDS.
7. FOLLOWING FORMWORK REMOVAL, SPOT CHECK CONCRETE SURFACES FOR HONEYCOMBING AND VOIDS.
J. INSPECT EXPANSION ANCHORS AND CHEMICAL ADHESIVE FOR ANCHORING STEEL REINFORCEMENT AND THREADED RODS USED TO SUPPORT WORK DESCRIBED IN THIS PLAN AS FOLLOWS:
1. VERIFY HOLE DIAMETER, DEPTH, LOCATION, SPACING, EDGE DISTANCE, AND CONFIRM THAT THE HOLE HAS BEEN THOROUGHLY CLEANED AS REQUIRED BY MANUFACTURER.
2. VERIFY THAT EXPANSION ANCHORS ARE PROPERLY TIGHTENED.
3. VERIFY THAT THE EPOXY TYPE IS PROPER FOR THE APPLICATION, SUCH AS PASTE FOR HORIZONTAL HOLES. VERIFY THAT EPOXY MIXING AND INSTALLATION COMPLIES WITH MANUFACTURER'S REQUIREMENTS.

SHALLOW FOUNDATIONS

- A. THE SPECIAL INSPECTOR SHALL REVIEW THE SIZE AND CONFIGURATION OF FOUNDATIONS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
B. THE SPECIAL INSPECTOR SHALL REVIEW THE SIZE, PLACEMENT, AND CLEARANCES OF REINFORCEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
C. THE SPECIAL INSPECTOR SHALL REVIEW DOWEL REINFORCEMENT AND DOWEL LENGTHS SUCH THAT LAP SPICES WILL BE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
D. THE SPECIAL INSPECTOR SHALL VERIFY THAT REINFORCEMENT IS SUPPORTED AND TIED SUCH THAT IT WILL NOT BE DISPLACED DURING THE CONCRETE POUR.

POST-INSTALLED ANCHORS

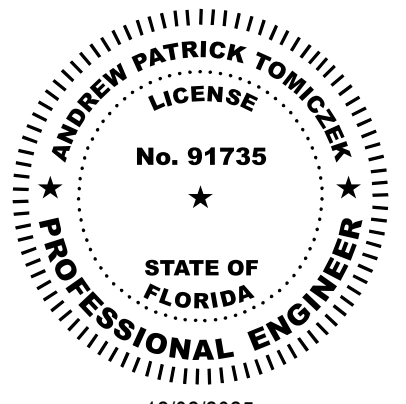
- A. THE STRUCTURAL INSPECTOR SHALL:
1. PERFORM SPECIAL INSPECTIONS FOR ALL POST-INSTALLED ANCHORS PER THE PRODUCT MANUFACTURER'S PRINTED INSTALLATION AND EMBEDMENT INSTRUCTIONS, APPLICABLE EVALUATION REPORTS, AND ANY ADDITIONAL REQUIREMENTS INVOKED WITHIN THE CONSTRUCTION DOCUMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
a. ANCHORS MATCH INTENDED MANUFACTURER AND PRODUCT FOR EACH APPLICATION, OR APPROVED ALTERNATE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
b. ANCHOR PARAMETERS:
• TYPE AND SPECIFIC PRODUCT
• DIMENSIONS (DIAMETER & LENGTH)
• MATERIAL COATING
• ADHESIVE ANCHOR EXPIRATION DATE
• ANCHOR OR THREAD DAMAGE
• PRESENCE OF SUBSTANCES THAT MAY INTERFERE WITH BOND (DUST, MUD, OIL, LOOSE RUST)
c. PLACEMENT:
• RELATIVE TO FUTURE GEOMETRY
• RELATIVE TO OTHER ANCHORS (SPACING)
• RELATIVE TO SUBSTRATE, CONFIRMING MINIMUM EDGE DISTANCES COMMUNICATED WITHIN THE CONTRACT DOCUMENTS.
• RELATIVE TO REBAR AND EMBEDMENTS WITHIN THE SUBSTRATE, CONFIRMING THAT NONDESTRUCTIVE TESTING (NDT) HAS BEEN PERFORMED ACCORDINGLY TO CONFIRM THAT DRILLING AND ANCHOR INSTALLATION DOES NOT DAMAGE EXISTING ELEMENTS.
• AGE OF SUBSTRATE MATERIAL (21 DAYS MINIMUM FROM CONCRETE PLACEMENT FOR ADHESIVE ANCHOR INSTALLATION)
• MINIMUM CONCRETE THICKNESS OF SUBSTRATE TO RECEIVE POST-INSTALLED ANCHORS.
d. HOLES/DRILLING:
• DRILLING METHOD (BIT TYPE AND DIAMETER)
• HOLE DEPTH RELATIVE TO MANUFACTURER REQUIREMENTS FOR SPECIFIED NOMINAL EMBEDMENT
• MATRIX LOCATION
• CLEANING PROCEDURES
• PRESENCE OF ADJACENT EXISTING/ABANDONED HOLES
• HOLE PROTECTION FOR CONTAMINANTS, DEBRIS, OR WATER/MOISTURE
• TIMING OF CLEANING IMMEDIATELY BEFORE ANCHOR INSTALLATION, RECLEANING AS NECESSARY.
e. INSTALLATION AND SETTING:
• TEMPERATURE LIMITS
• SPECIFIED TORQUE AND NUMBER OF FULL TURNS REQUIRED TO ACHIEVE TORQUE. NOTIFY STRUCTURAL ENGINEER OF RECORD WHEN ANCHORS FAIL TO SET WITHIN MAXIMUM PERMITTED NUMBER OF TURNS PER MANUFACTURER.
• PROJECTION LENGTH AND REQUIRED EMBEDMENT
• ADHESIVE QUANTITY DISPENSED FOR HOLE DEPTH TO CONFIRM AIR BUBBLES/VOIDS ARE NOT PRESENT
• APPROPRIATE ADHESIVE MIXING AND METERING PROCEDURES AND EQUIPMENT, INCLUDING MANUFACTURER SPECIFIED SPECIAL EQUIPMENT IF APPLICABLE FOR LONG HOLES AND HORIZONTAL/OVERHEAD APPLICATIONS
• REVIEW FOR SYMPTOMS OF AIR BUBBLES WITHIN ADHESIVE (SPRING BACK OR POPPING SOUNDS DURING ANCHOR INSTALLATION)
• WASHER CONDITIONS AND FLUSH CONDITION WITH FIXTURE
2. CONFIRM THAT ADHESIVE ANCHOR INSTALLERS HAVE THE NECESSARY CERTIFICATIONS (ACI/CRS ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR EQUIVALENT).
3. PERFORM CONTINUOUS SPECIAL INSPECTIONS WHEN THERE IS A CHANGE IN PERSONNEL PERFORMING ANCHOR INSTALLATION.
4. CONDUCT CONTINUOUS INSPECTIONS FOR ADHESIVE ANCHORS INSTALLED HORIZONTALLY, UPWARDLY INCLUDED, OR OVERHEAD.
5. BE FAMILIAR WITH PROOF TESTING REQUIREMENTS AND THE SUBMITTED ROOF TESTING PLAN BY THE INDEPENDENT TESTING LABORATORY. SEE GENERAL NOTES UNDER "POST-INSTALLED ANCHORS"
a. VERIFY THAT FEE OWNER'S TESTING AGENCY HAS TESTED ALL REQUIRED ANCHORS PER THE APPROVED POST-INSTALLED ANCHOR TEST PLAN.
b. VERIFY THAT ANY FAILED ANCHORS HAVE BEEN REPLACED.
c. VERIFY THAT THE TESTING AGENCY HAS SUBMITTED SIGNED AND SEALED TEST REPORTS TO THE STRUCTURAL ENGINEER OF RECORD.

STRUCTURAL PRECAST CONCRETE

- A. THE SPECIAL INSPECTOR SHALL:
1. INSPECT ALL PRECAST MEMBERS AND CONNECTIONS USING BOTH THE CONTRACT DOCUMENTS AND THE SHOP DRAWINGS.
2. INSPECT SETTING OF ANCHOR BOLTS, EMBEDS, AND OTHER MISCELLANEOUS STRUCTURAL ITEMS FOR SIZE, QUANTITY, AND FINISH.
3. CHECK STEEL FOR POSSIBLE DAMAGE DURING SHIPPING.
4. VERIFY THAT PRECAST UNITS ARE PROPERLY LOCATED IN THE STRUCTURE BY CONFIRMING THAT THE MARK NUMBER MATCHES THAT SHOWN ON THE SHOP DRAWINGS. ENSURE THE ERECTION SEQUENCE AND ALL PERMANENT BRACING AND SUPPORTS ARE IN ACCORDANCE WITH APPROVED SUBMITTALS.
5. CONFIRM THAT MEMBER LENGTH, DEPTH, WIDTH, CAMBER, AND SIDE BOW ARE WITHIN ALLOWABLE TOLERANCES.
6. VERIFY THAT BEARING CONDITIONS COMPLY WITH SPECIFIED REQUIREMENTS.
7. INSPECT ALL FIELD CONNECTIONS AND VERIFY CONNECTION MATERIAL, SIZES, AND CONFIGURATIONS FOR EMBEDS AND CONNECTIONS.
a. VISUALLY EXAMINE ALL FIELD WELDS AND SPOT CHECK ALL SHOP WELDS FOR TYPE, SIZE, LENGTH, AND QUALITY. VERIFY THAT SPECIFIED TESTING IS PERFORMED BY THE TESTING AGENCY. VERIFY THAT WELDS ARE CLEAN AND FREE FROM SLAG AND THAT RUST PROTECTION, IF REQUIRED, HAS BEEN APPLIED AS PER THE SPECIFICATIONS. VERIFY THAT ALL WELDERS ARE AWS CERTIFIED.
b. CHECK ALL COLUMN BASE CONNECTIONS AND ALL GROUDED CONNECTIONS. SPOT CHECK GROUT INSTALLATION PROCEDURES.
c. VERIFY BOLT TYPE, SIZE, AND QUANTITY IN ALL BOLTED CONNECTIONS. CHECK THAT BOLTS ARE CLEAN AND LUBRICATED, HAVE PROPER WASHERS, AND CONFORM TO THE SPECIFICATIONS. CHECK THAT BOLT HOLES ARE THE SPECIFIED TYPE AND SIZE. VISUALLY VERIFY PROPER DEGREE OF BOLT TIGHTENING.
8. INSPECT ALL THREADED COUPLERS.
9. VERIFY BEARING PAD MATERIAL, SIZE, POSITION, AND FLUSHNESS WITH ADJACENT MATERIALS.

STRUCTURAL STEEL FRAMING

- A. THE SPECIAL INSPECTOR SHALL:
1. INSPECT ALL STRUCTURAL STEEL FRAMING AS REQUIRED BY THE CONTRACT DOCUMENTS. USE BOTH THE CONTRACT DOCUMENTS AND THE SHOP DRAWINGS FOR ALL INSPECTIONS. VERIFY THAT ALL FIELD WELDERS ARE AWS CERTIFIED FOR THE TYPE OF WELDS BEING MADE.
2. PROVIDE ALL INSPECTIONS REQUIRED BY THE CONTRACT DOCUMENTS. COMPLETE ALL INSPECTIONS AND VERIFY COMPLIANCE PRIOR TO CONCRETE PLACEMENT OR CONCEALMENT.
a. CHECK STRUCTURAL STEEL FRAMING FOR POSSIBLE DAMAGE DURING SHIPPING.
b. CHECK STRUCTURAL STEEL FRAMING SIZES AND GRADES.
c. SPOT CHECK MEMBER STRAIGHTNESS, FINISH, AND CAMBER. CONFIRMING THAT PAINT IS ONLY APPLIED ON APPROPRIATE SURFACES.
d. INSPECT SETTING OF ANCHOR BOLTS, EMBEDS, AND OTHER MISCELLANEOUS STRUCTURAL ITEMS FOR SIZE, QUANTITY AND FINISH. CHECK THE INSTALLATION OF COLUMN BASE PLATES FOR PROPER LEVELING, GROUT TYPE, AND GROUT APPLICATION.
3. CHECK ALL STEEL DECKS PER SHOP SPECIFICATIONS AND AS FOLLOWS:
a. DECK TYPE, SIZE, GAGE, FINISH, ACCESSORIES, AND REINFORCEMENT AROUND OPENINGS.
b. SPACING AND TYPE OF ALL CONNECTIONS.
c. WELDING PROCEDURES.
d. WELD SIZE, SHAPE, QUALITY, RUST PROTECTION, AND WELD WASHERS WHERE APPLICABLE.
e. SCREW SIZE, TYPE, AND FINISH AND OTHER CONNECTION TO SUPPORTS.
4. VISUALLY EXAMINE ALL FIELD WELDS AND SPOT CHECK ALL SHOP WELDS FOR TYPE, SIZE, LENGTH, AND QUALITY. VERIFY THAT SPECIFIED TESTING IS PERFORMED BY THE TESTING AGENCY. VERIFY THAT WELDS ARE CLEAN AND FREE FROM SLAG AND THAT RUST PROTECTION HAS BEEN APPLIED PER THE SPECIFICATIONS.
5. VERIFY THE TYPE, SIZE, AND QUANTITY OF BOLTS IN ALL BOLTED CONNECTIONS. CHECK THAT BOLTS ARE CLEAN AND LUBRICATED, HAVE PROPER WASHERS, AND CONFORM TO THE SPECIFICATIONS. ENSURE BOLT HOLES ARE THE SPECIFIED TYPE AND SIZE. SPOT CHECK THE BOLT TIGHTENING SEQUENCE. VISUALLY VERIFY PROPER DEGREE OF BOLT TIGHTENING, PARTICULARLY OF ALL SLIP-CRITICAL BOLTS. CHECK 10% OF LOAD INDICATOR WASHERS WITH A FEELER GAUGE.
6. CHECK HEADED STUD ANCHORS FOR SIZE, LENGTH, SPACING, AND WELDING AS REQUIRED BY THE CONTRACT DOCUMENTS. VERIFY THAT SHEAR CONNECTORS ARE TESTED BY TESTING LABORATORY.
7. CHECK ALL STEEL DECKS PER SHOP SPECIFICATIONS AND AS FOLLOWS:
a. DECK TYPE, SIZE, GAGE, FINISH, ACCESSORIES, AND REINFORCEMENT AROUND OPENINGS.
b. SPACING AND TYPE OF ALL CONNECTIONS.
c. WELDING PROCEDURES.
d. WELD SIZE, SHAPE, QUALITY, RUST PROTECTION, AND WELD WASHERS WHERE APPLICABLE.
e. SCREW SIZE, TYPE, AND FINISH AND OTHER CONNECTION TO SUPPORTS.



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW TOMICZEK ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

Table with 3 columns: REVISIONS NO., REASON, DATE

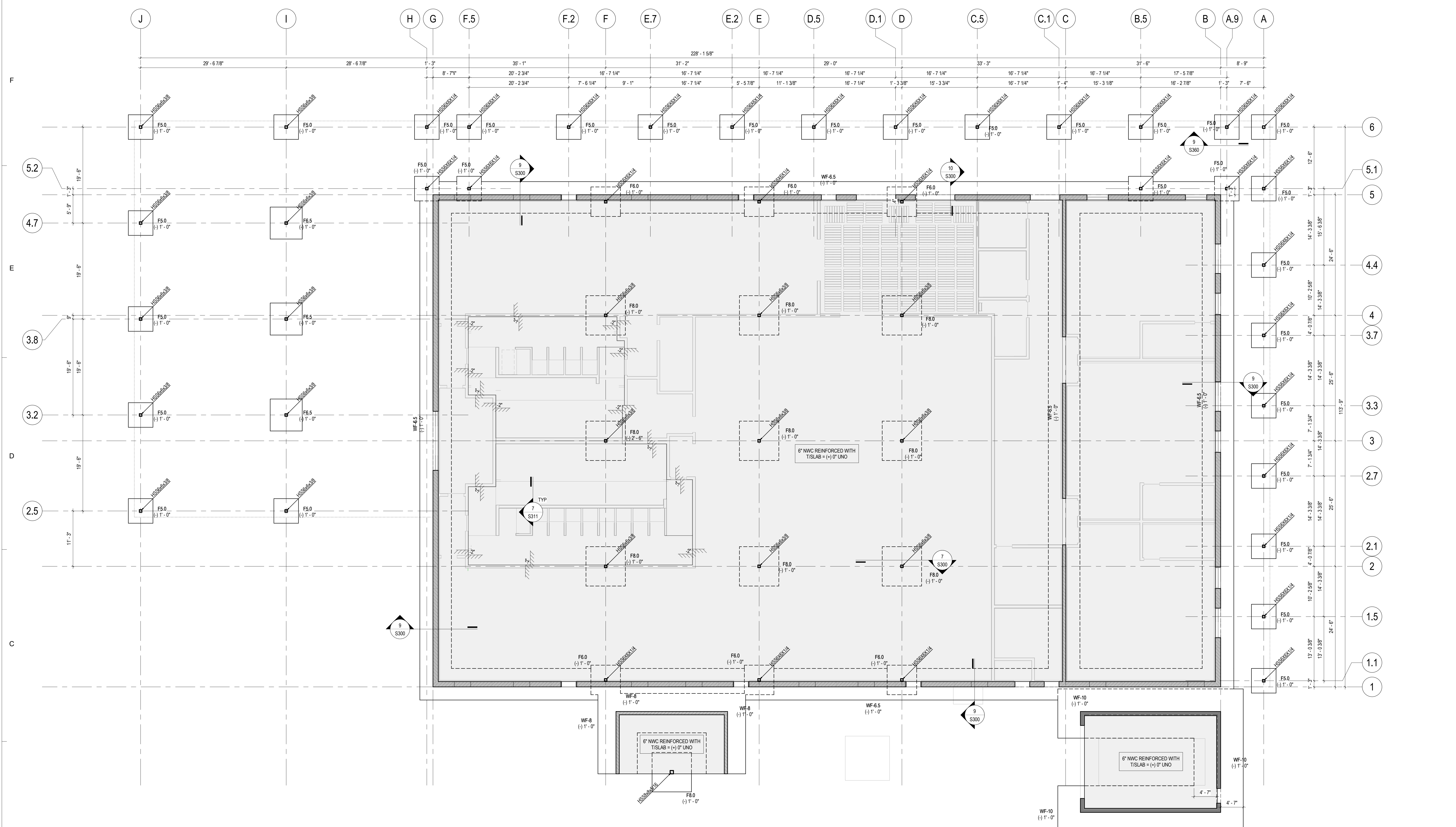
PROJECT TEAM: PRINCIPAL IN CHARGE: ANDREW TOMICZEK, PROJECT MANAGER: ANDREW TOMICZEK, DESIGN TEAM: JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2, 1185 NW 25A LAKE CITY, FL 32055

PROJECT NO.: 814.C6328.01

SHEET TITLE: SPECIAL INSPECTIONS PLAN

SHEET NUMBER: S009A



1
S101
FOUNDATION PLAN

1/8" = 1'-0"

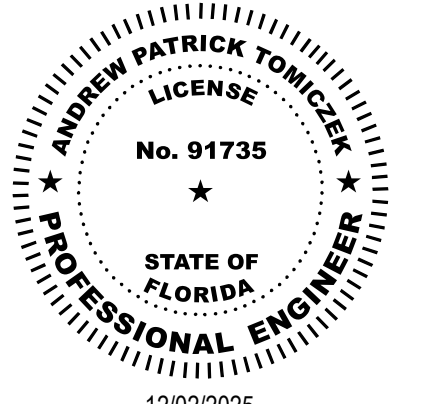
FOUNDATION PLAN NOTES:

- X, X# LOCATION MARK
CC# COLUMN MARK (SEE SCHEDULE ON THIS SHEET AND NOTE 2)
FH, WF, OR # FOUNDATION OR PIER MARK (SEE SCHEDULE ON THIS SHEET)
TOP OF FOOTING/PIER ELEVATION
- DENOTES STEEL COLUMN. SEE S500.
- FOR STEEL COLUMN BASE PLATE INFORMATION, SEE S500.
- FOR TRENCHES ADJACENT TO FOUNDATIONS, SEE S300.
FOR PIPING PASSING UNDER WALL FOUNDATIONS, SEE S300.
FOR PIPING PASSING UNDER FOOTINGS SHALL BE INSPECTED BEFORE FOUNDATIONS ABOVE ARE PREPARED.
- GENERAL CONTRACTOR SHALL COORDINATE PLUMBING AND UTILITIES LOCATIONS WITH FOUNDATIONS AS NEEDED.
ADDITIONALLY, GENERAL CONTRACTOR SHALL COORDINATE FOUNDATION ELEVATIONS WITH PLUMBING AND UTILITIES AS NEEDED. FORWARD ANY FOUNDATION CHANGE REQUESTS TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
- DENOTES STEP IN FOUNDATION, SEE S300
- DENOTES PRECAST CONCRETE SANDWICH PANEL WITH 6" STRUCTURAL WYTHE, 3" INSULATION, AND 4" ARCHITECTURAL WYTHE.
- DENOTES 8" SOLID PRECAST CONCRETE PANEL.
- DENOTES 10" SOLID PRECAST CONCRETE PANEL.

SLAB-ON-GROUND PLAN NOTES:

- REFERENCE BUILDING TOP-OF-SLAB ELEVATION = (+)0'-0" (SEE CIVIL).
- DENOTES SLAB-ON-GROUND MARK (SEE SCHEDULE ON THIS SHEET).
- SJ DENOTES SLAB-ON-GROUND CONTROL JOINT. FOR CONTROL JOINT REQUIREMENTS, SEE S310.
- FOR RE-ENTRANT CORNER BARS, SEE S310.
- GENERAL CONTRACTOR SHALL COORDINATE HOUSEKEEPING PAD LOCATIONS.
- DENOTES STEP IN TOP OF SLAB, SEE S311.
- SEE CIVIL DRAWINGS FOR BASE AND SUBGRADE PREPARATION INFORMATION.
- SEE ARCHITECTURAL DRAWINGS FOR:

 - VAPOR BARRIER REQUIREMENTS AND LOCATIONS.
 - ALL SLOPED SLAB AREAS.
 - MAINTAIN SLAB THICKNESS NOTED ON PLAN AS A MINIMUM IN ALL AREAS.
 - ALL DEPRESSED SLAB AND/OR RAISED SLAB AREAS.
 - MAINTAIN SLAB THICKNESS NOTED ON PLAN AS A MINIMUM IN ALL AREAS.
 - ALL DIMENSIONS NOT SHOWN. VERIFY ALL DIMENSIONS SHOWN IN STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES OR DIMENSIONS NOT SHOWN ON ARCHITECTURAL DRAWINGS FOR CLARIFICATION.
 - SLAB SLOPES, DRAINS, STEPS, PENETRATIONS, FINISHES, AND ANY OTHER ADDITIONAL INFORMATION.



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR
100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

REVISIONS

| NO. | REASON | DATE |
|-----|--------|------|
| | | |

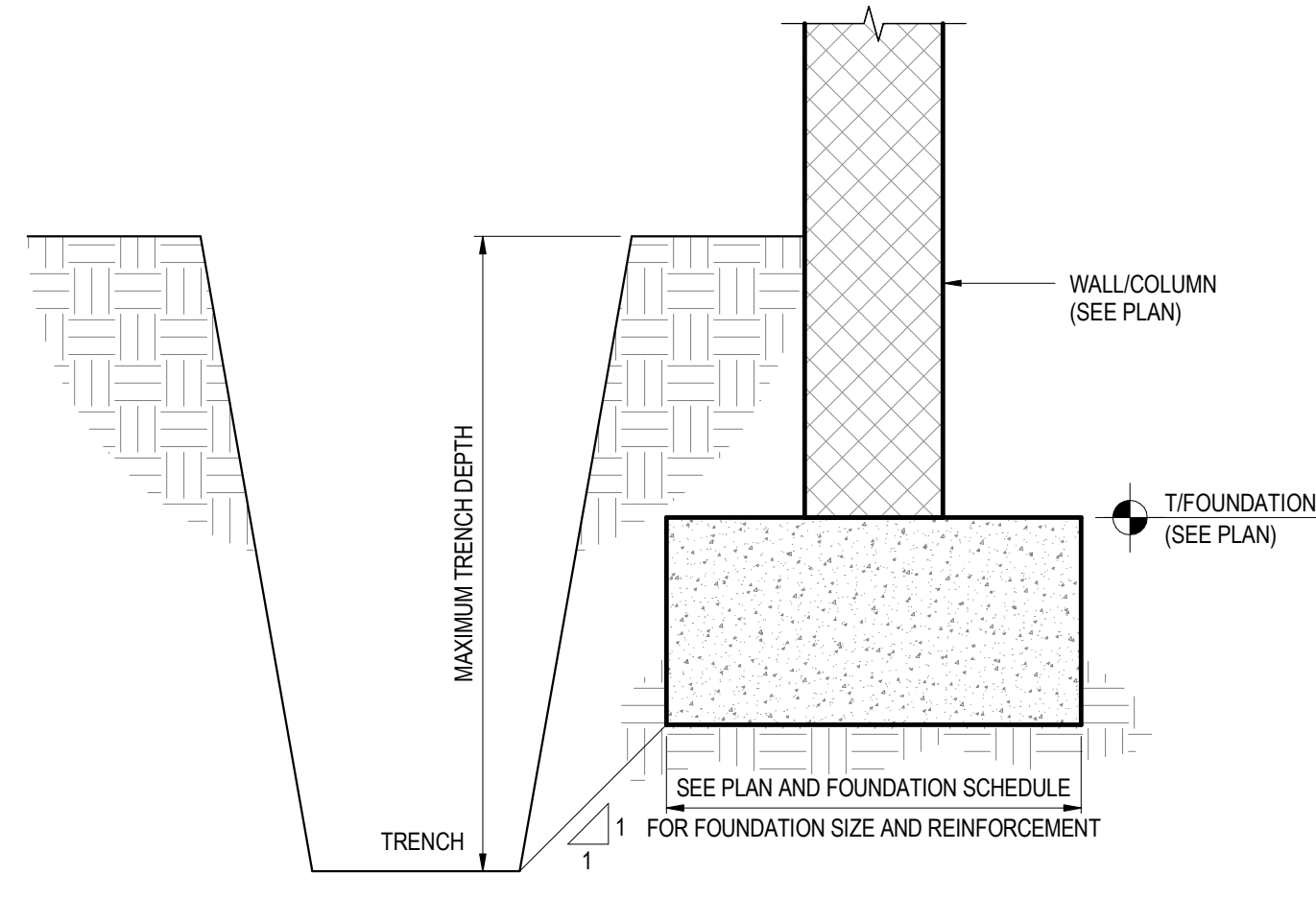
PROJECT TEAM
PRINCIPAL IN CHARGE
ANDREW TOMICZEK
PROJECT MANAGER
ANDREW TOMICZEK
DESIGN TEAM
JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

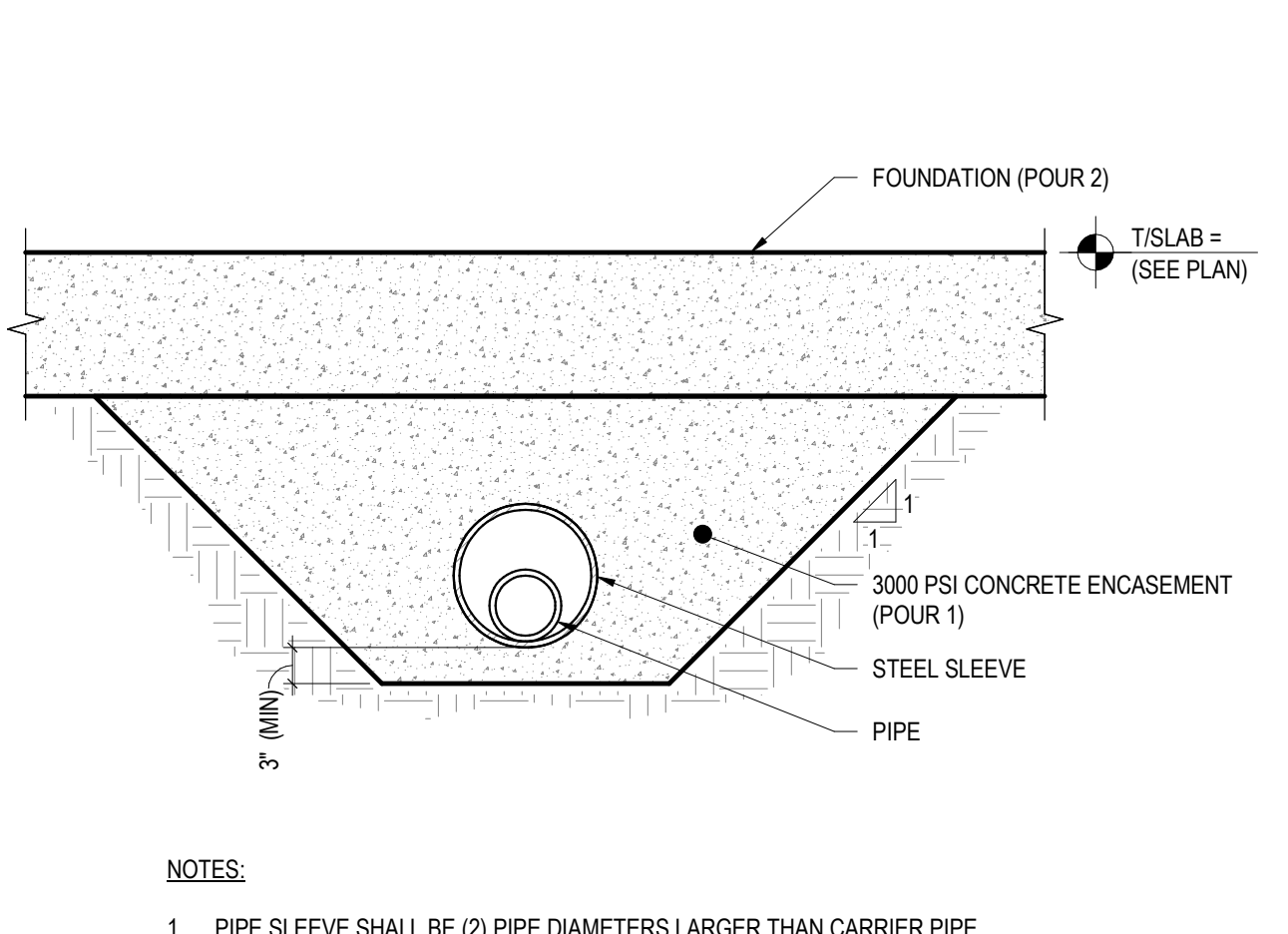
PROJECT NO.
814.C6328.01

SHEET TITLE
FOUNDATION PLAN

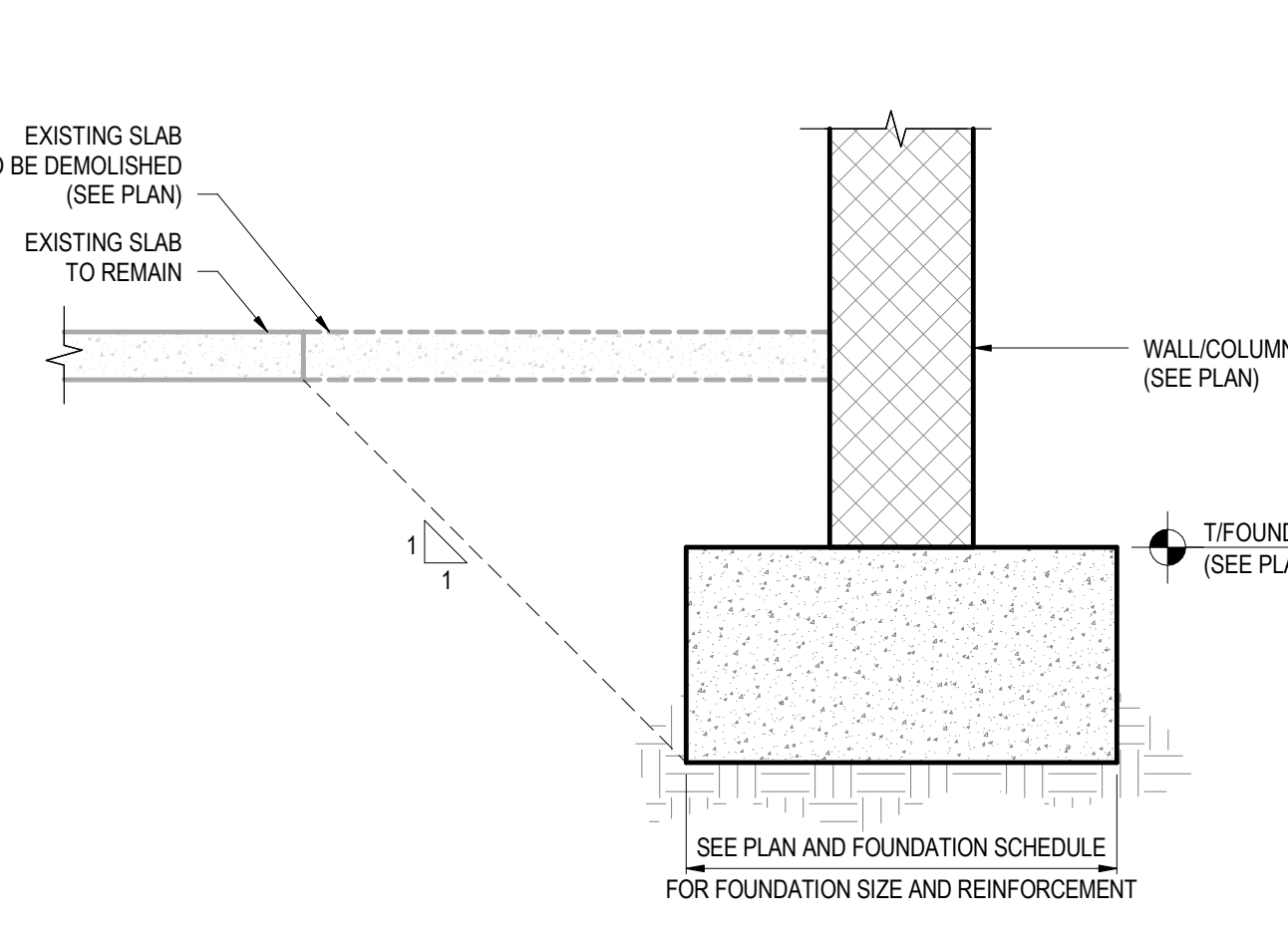
SHEET NUMBER
S101



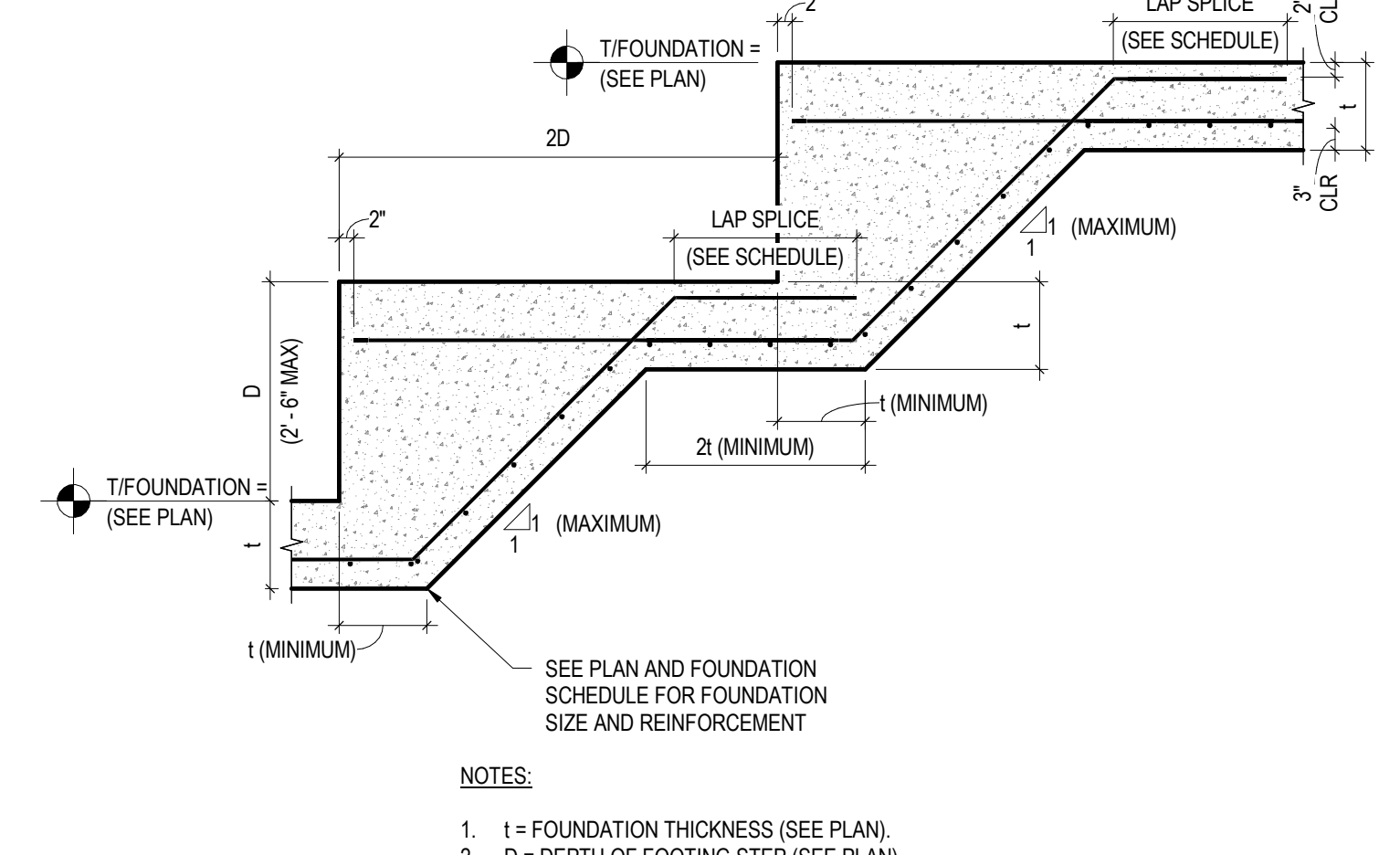
1
S300
FOUNDATION ADJACENT TO TRENCH
3/4" = 1'-0"



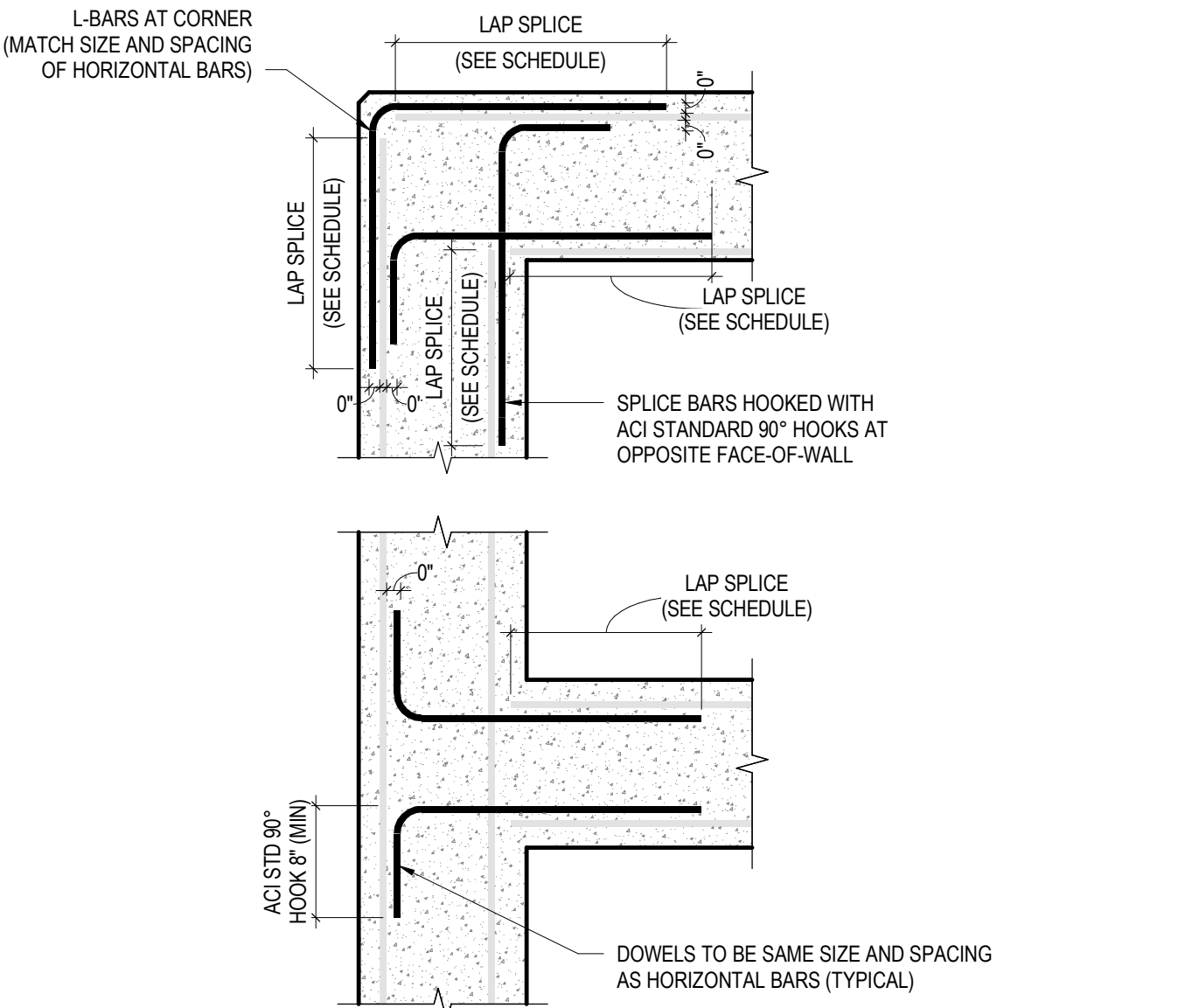
2
S300
PIPE UNDER FOUNDATION
3/4" = 1'-0"



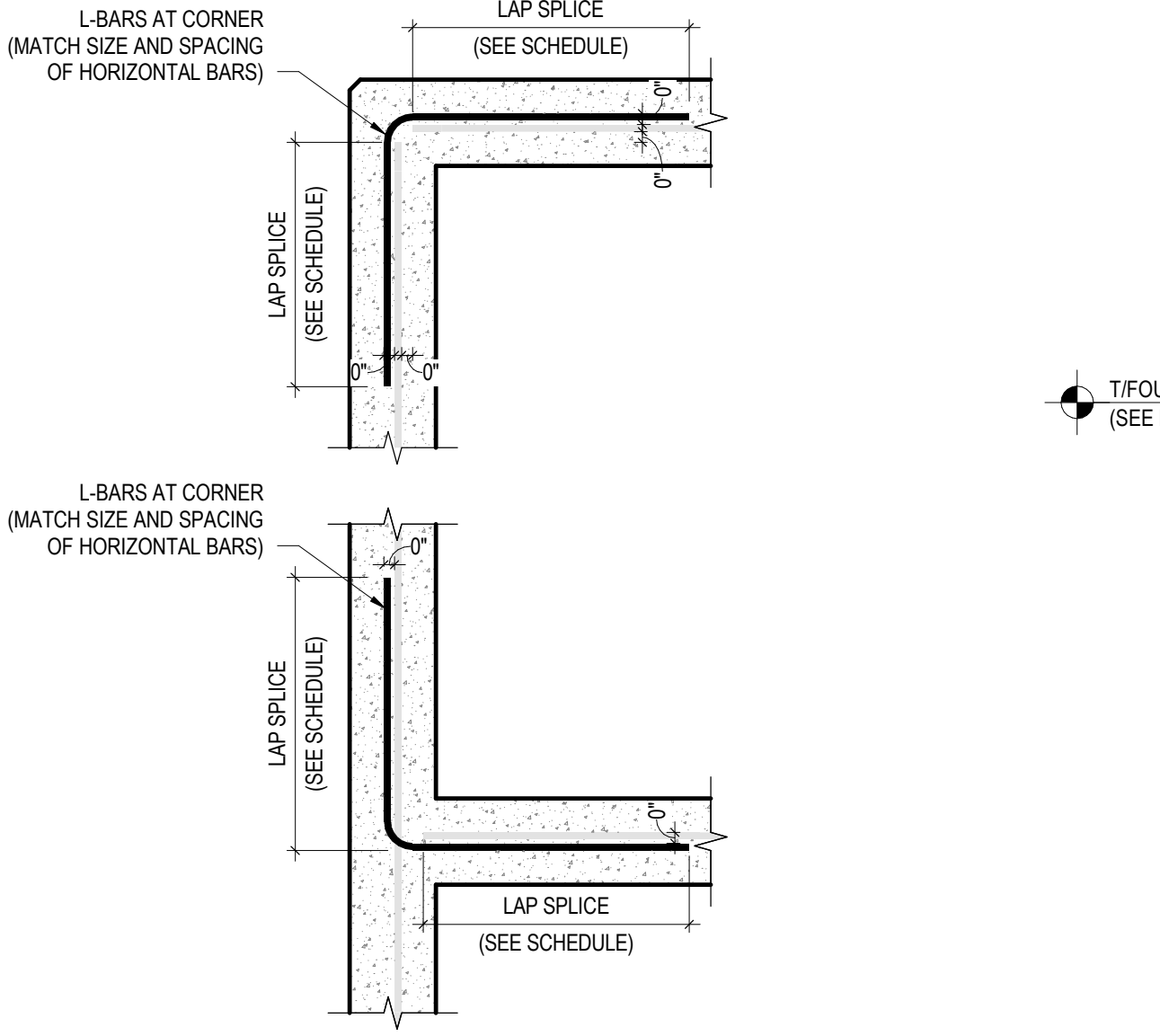
3
S300
FOUNDATION ADJACENT TO EXISTING SLAB
3/4" = 1'-0"



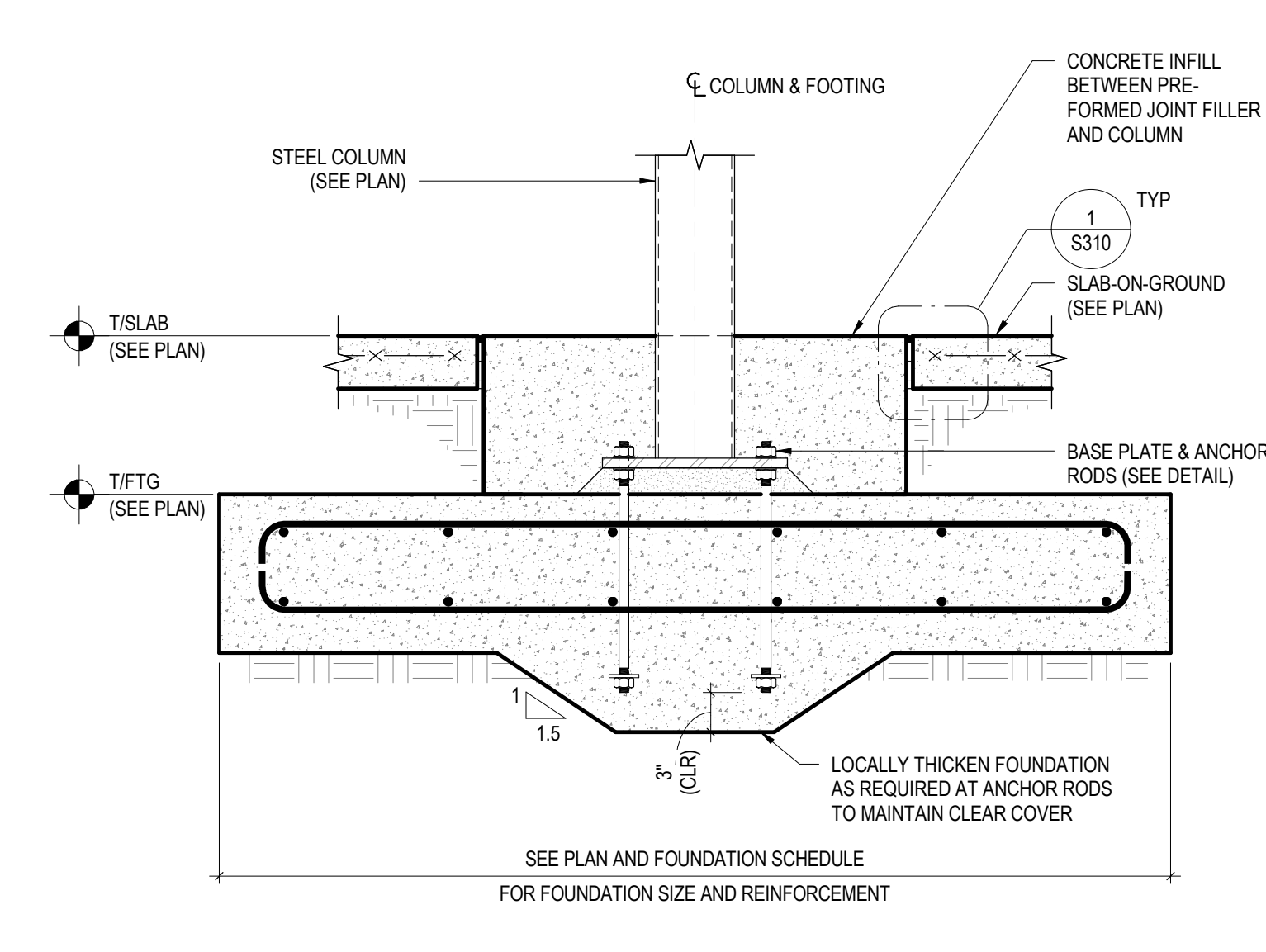
4
S300
STEPPED CONTINUOUS WALL FOUNDATION
1/2" = 1'-0"



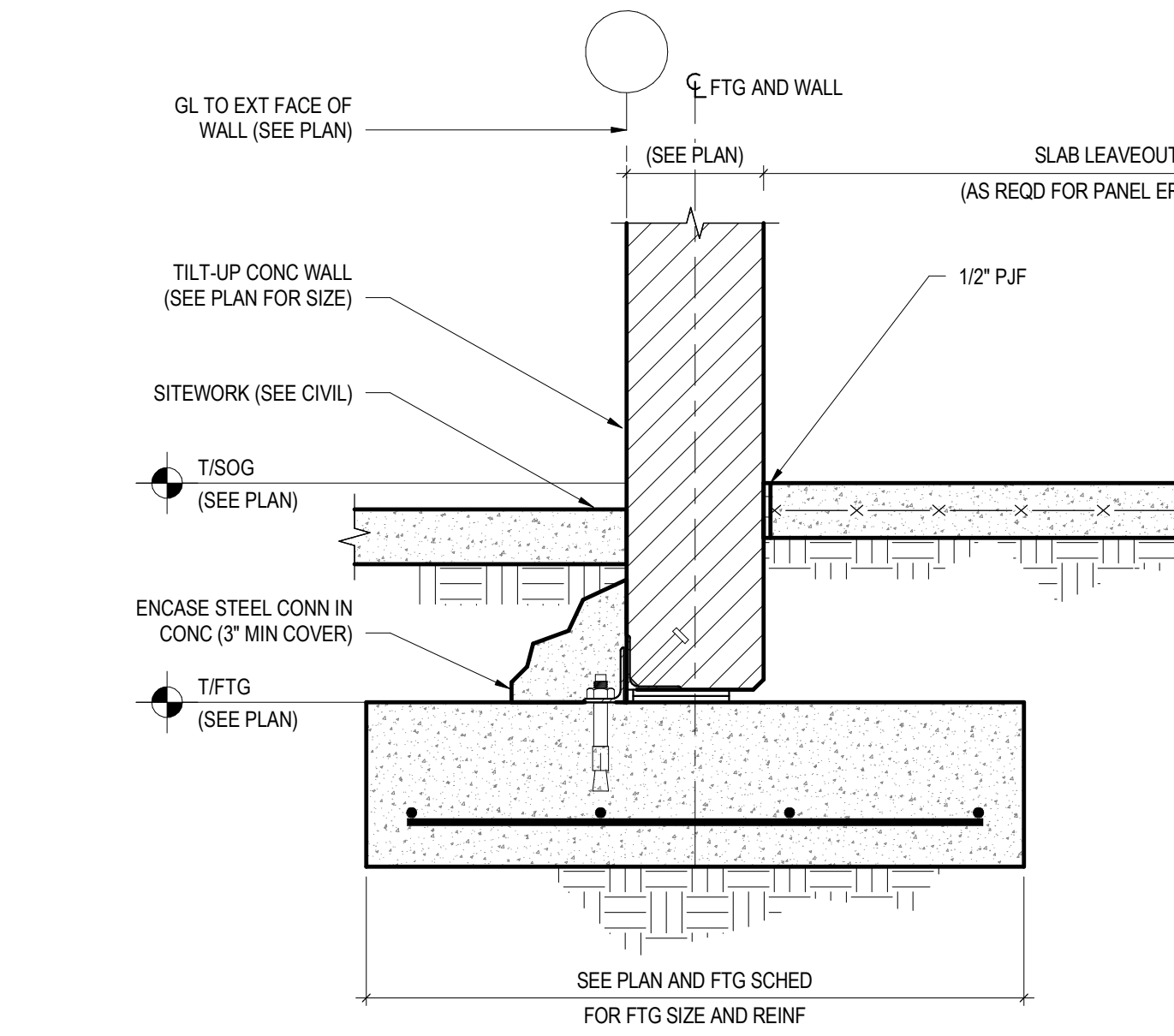
5
S300
CORNER BARS AT WALLS & FOUNDATIONS
1" = 1'-0"



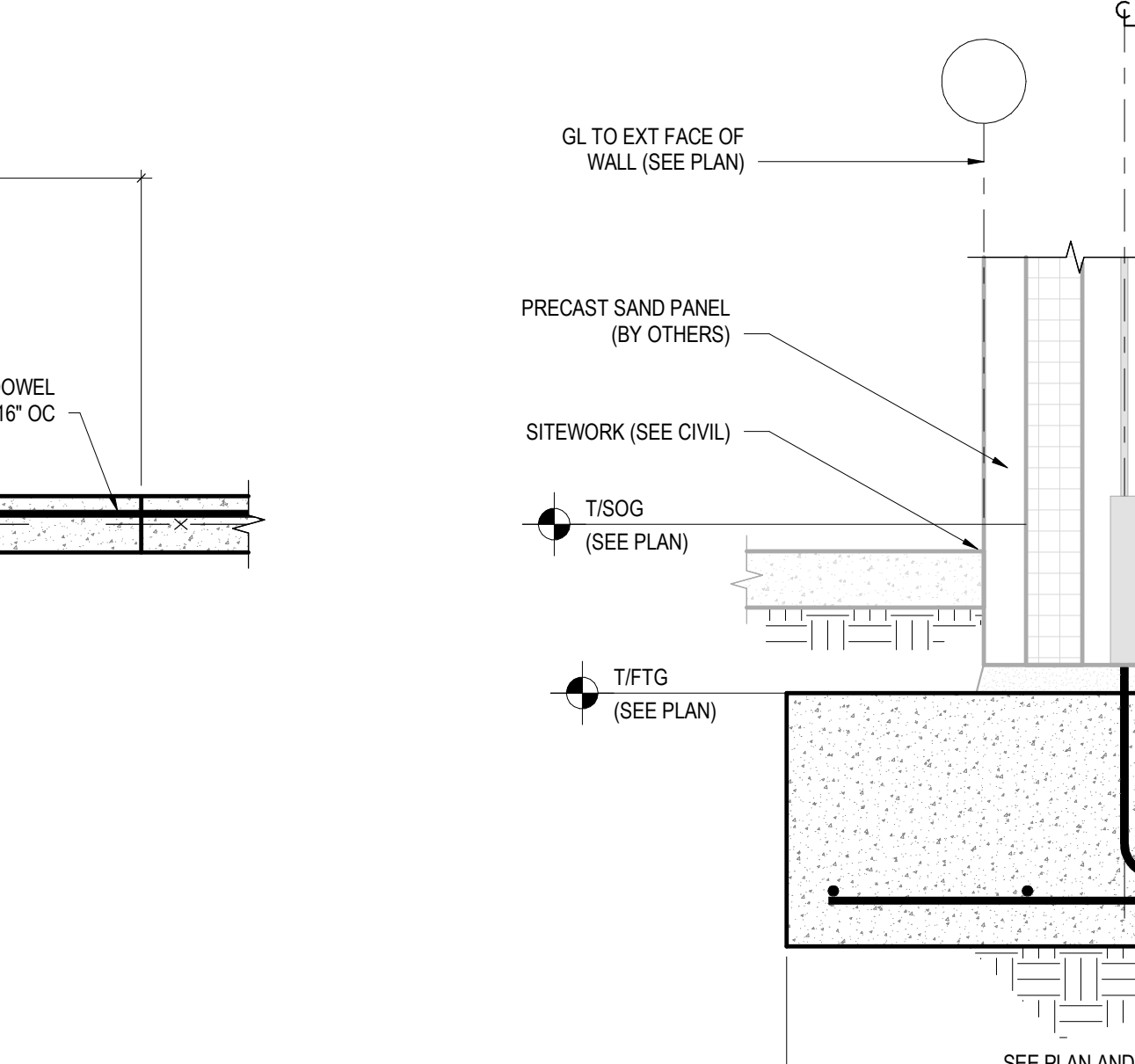
6
S300
WALL FOUNDATION TO COLUMN FOUNDATION TRANSITION
3/4" = 1'-0"



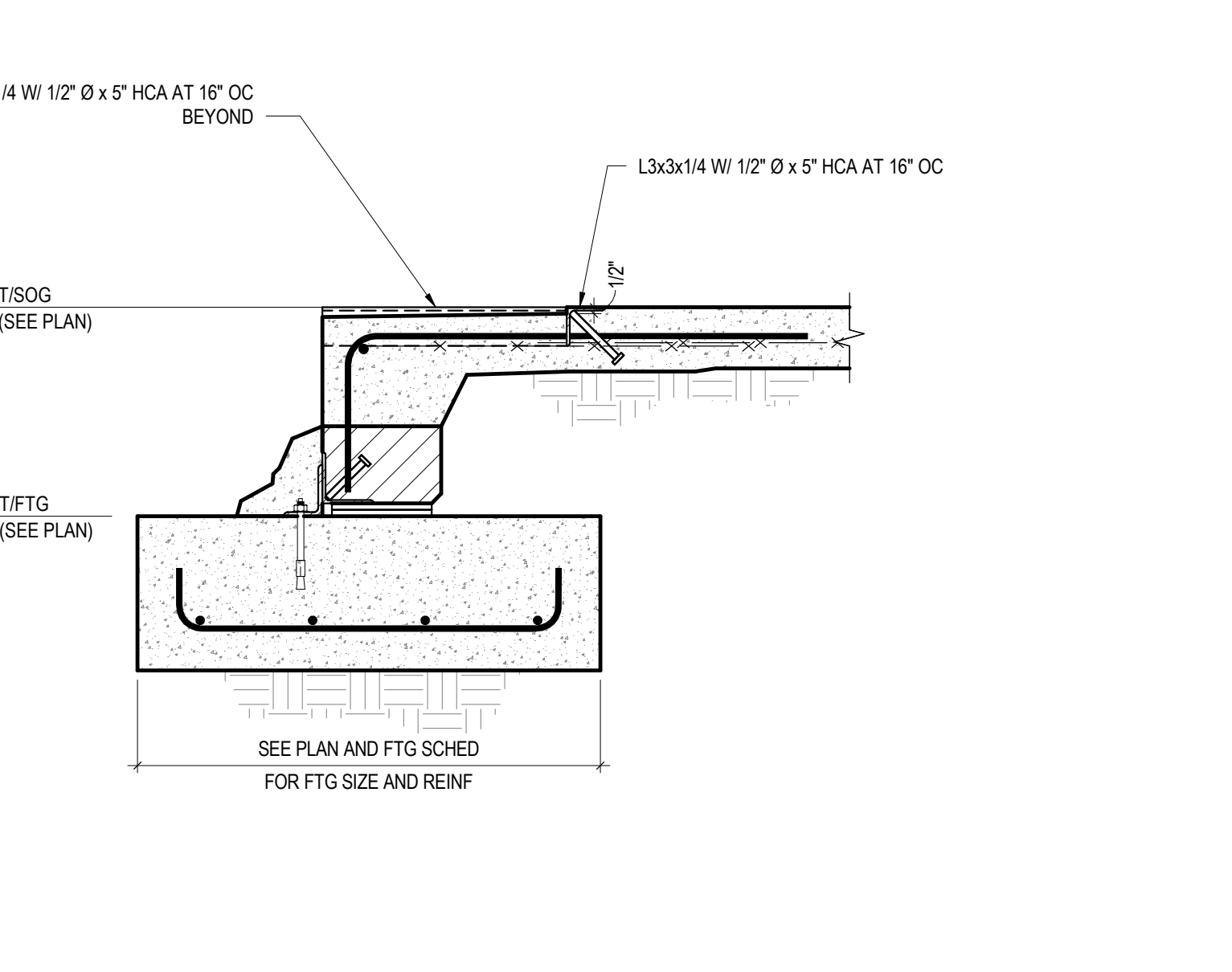
7
S300
STEEL COLUMN FOUNDATION
1" = 1'-0"



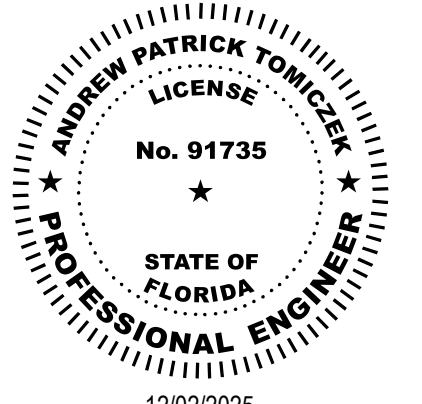
8
S300
TYPICAL PRECAST CONCRETE WALL FOOTING
1" = 1'-0"



9
S300
PRECAST CONCRETE WALL FOOTING
1" = 1'-0"



10
S300
TYPICAL REINFORCED THRESHOLD
1" = 1'-0"



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR
100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

REVISIONS
NO. REASON DATE

| NO. | REASON | DATE |
|-----|--------|------|
| | | |
| | | |
| | | |

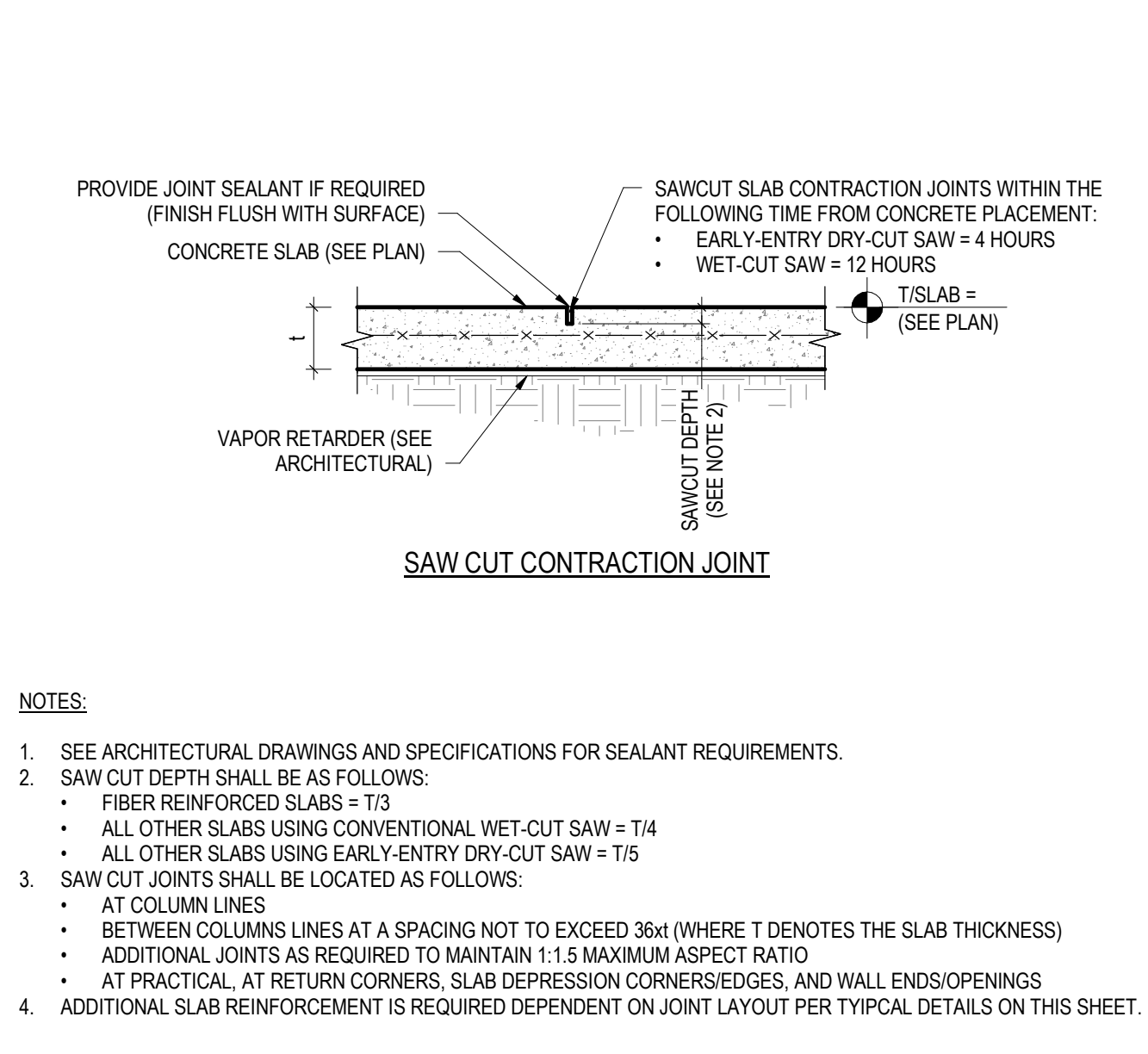
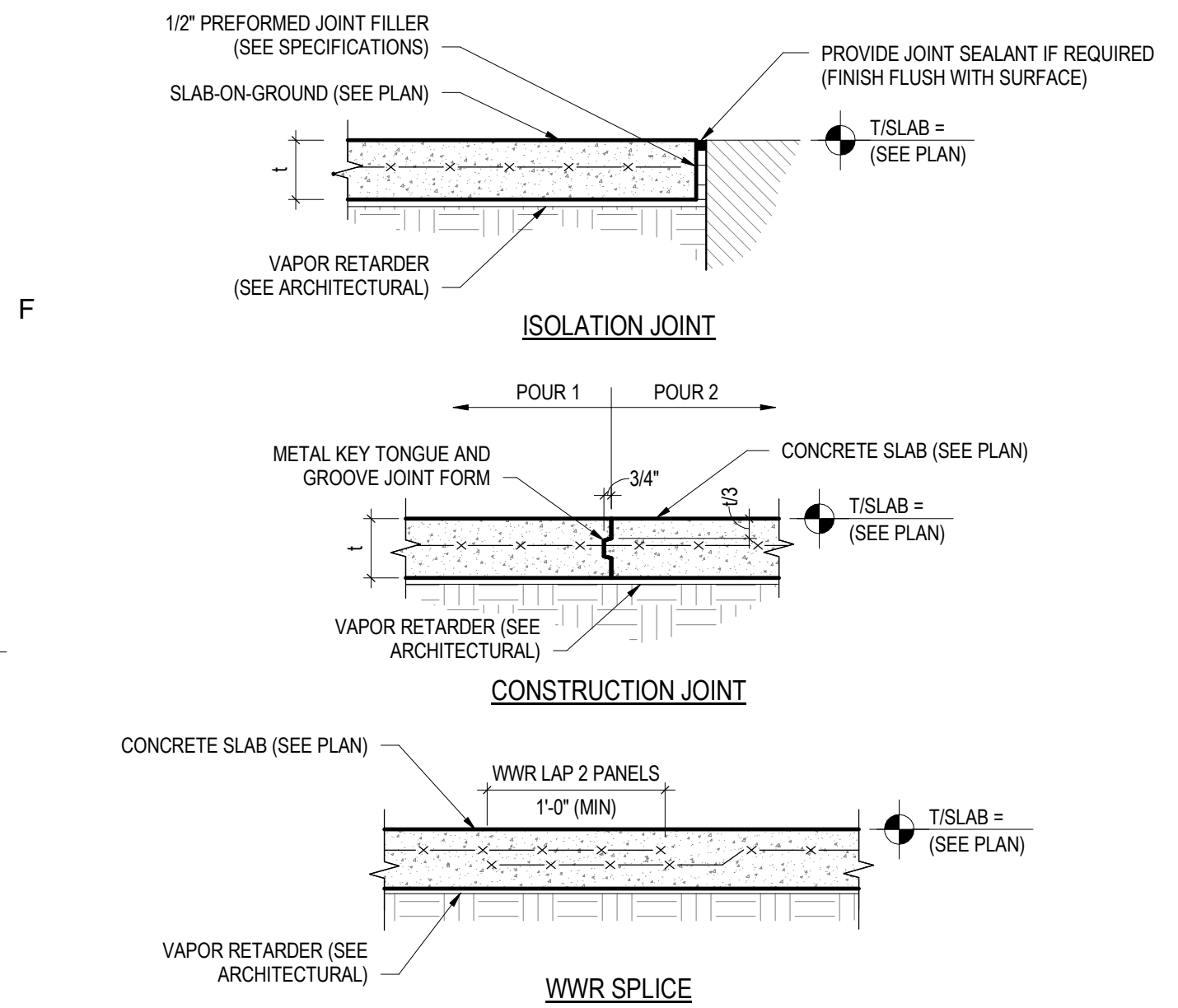
PROJECT TEAM
PRINCIPAL IN CHARGE
ANDREW TOMICZEK
PROJECT MANAGER
ANDREW TOMICZEK
DESIGN TEAM
JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

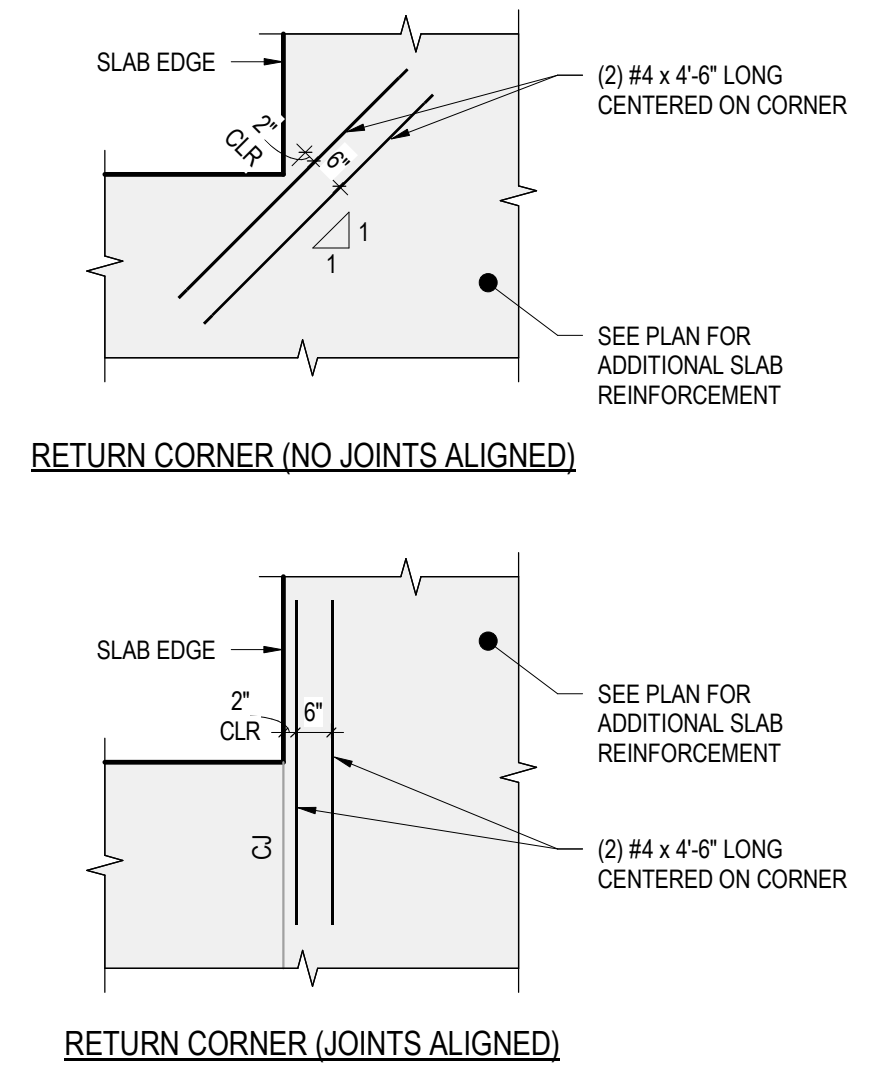
PROJECT NO.
814.C6328.01

SHEET TITLE
TYPICAL FOUNDATION DETAILS

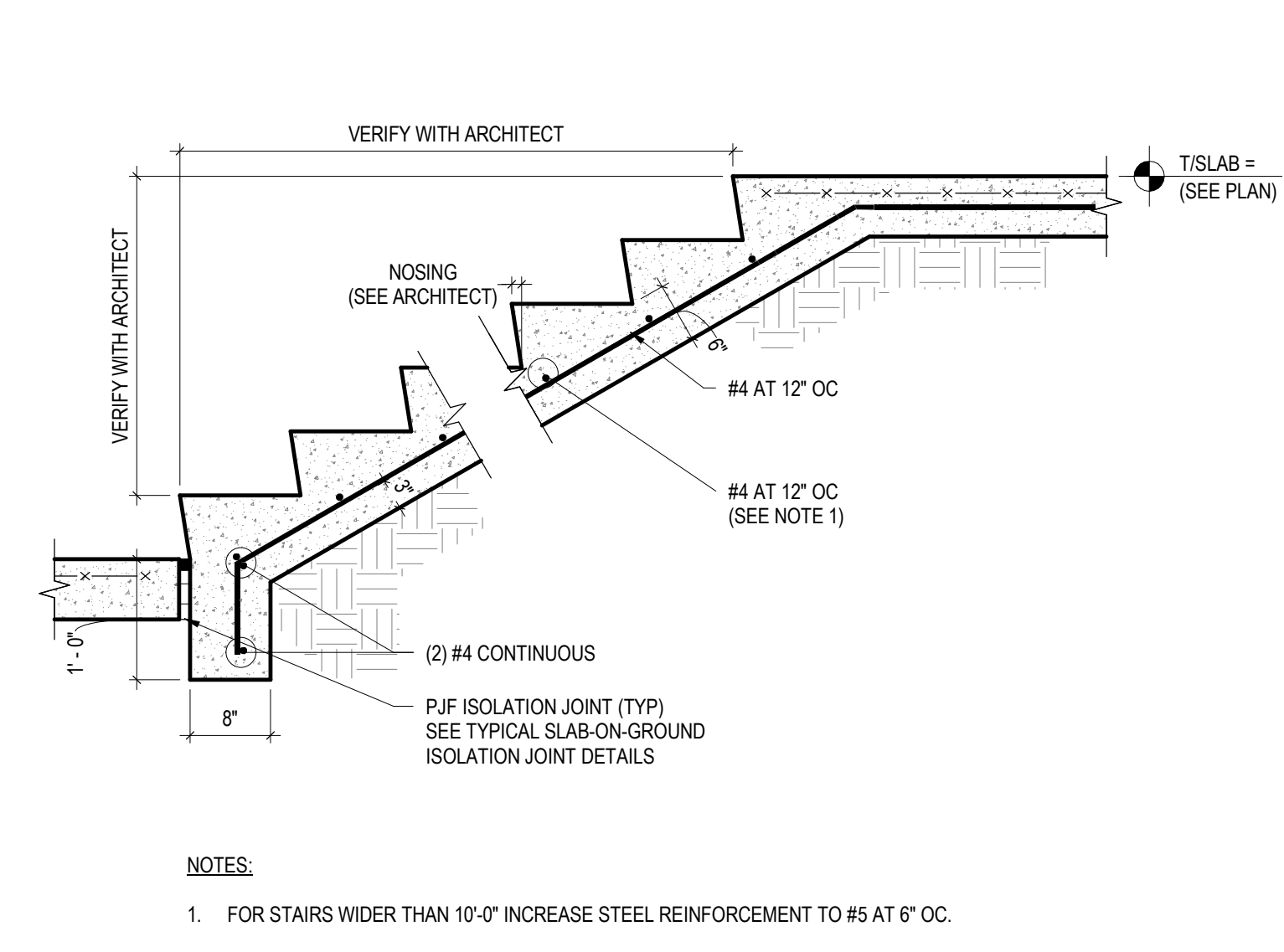
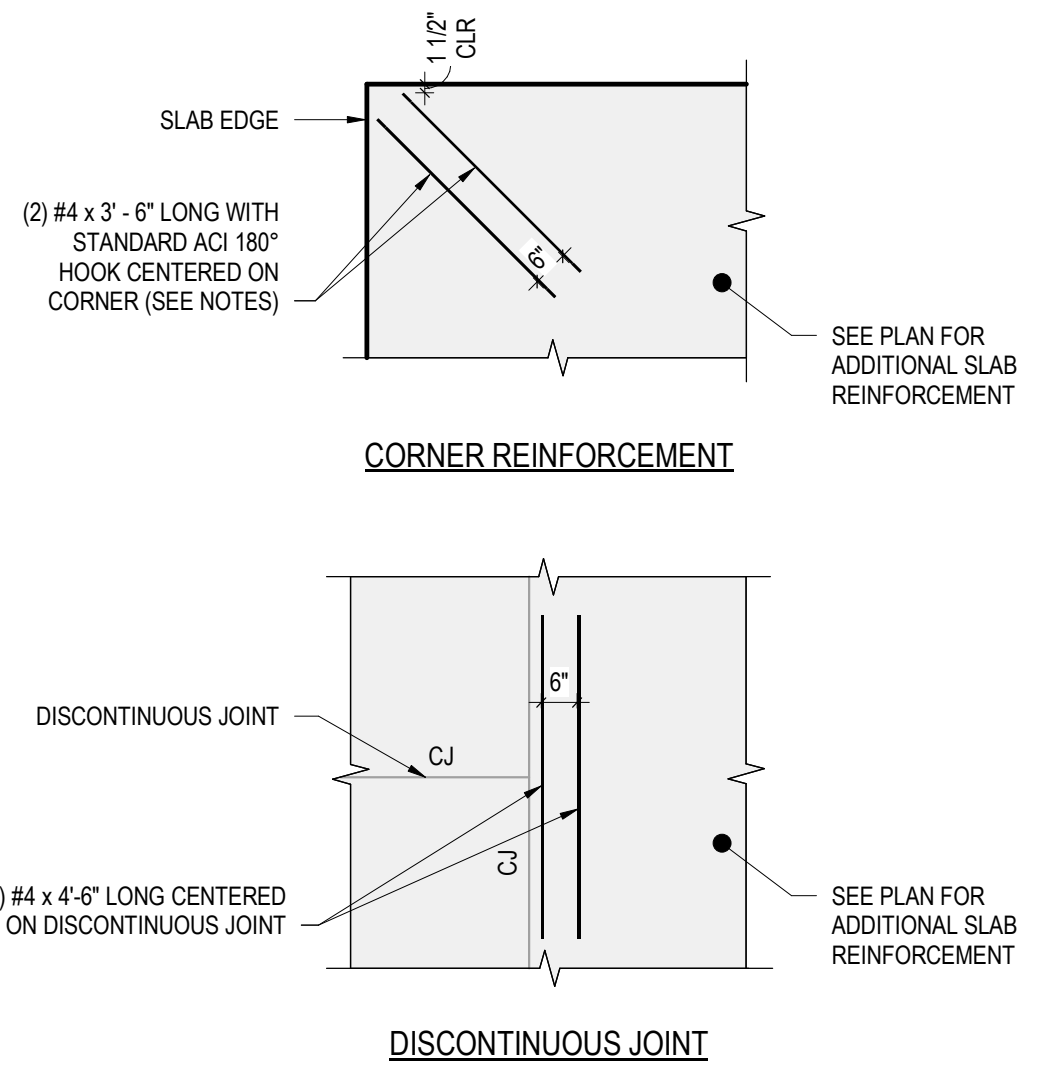
SHEET NUMBER
S300



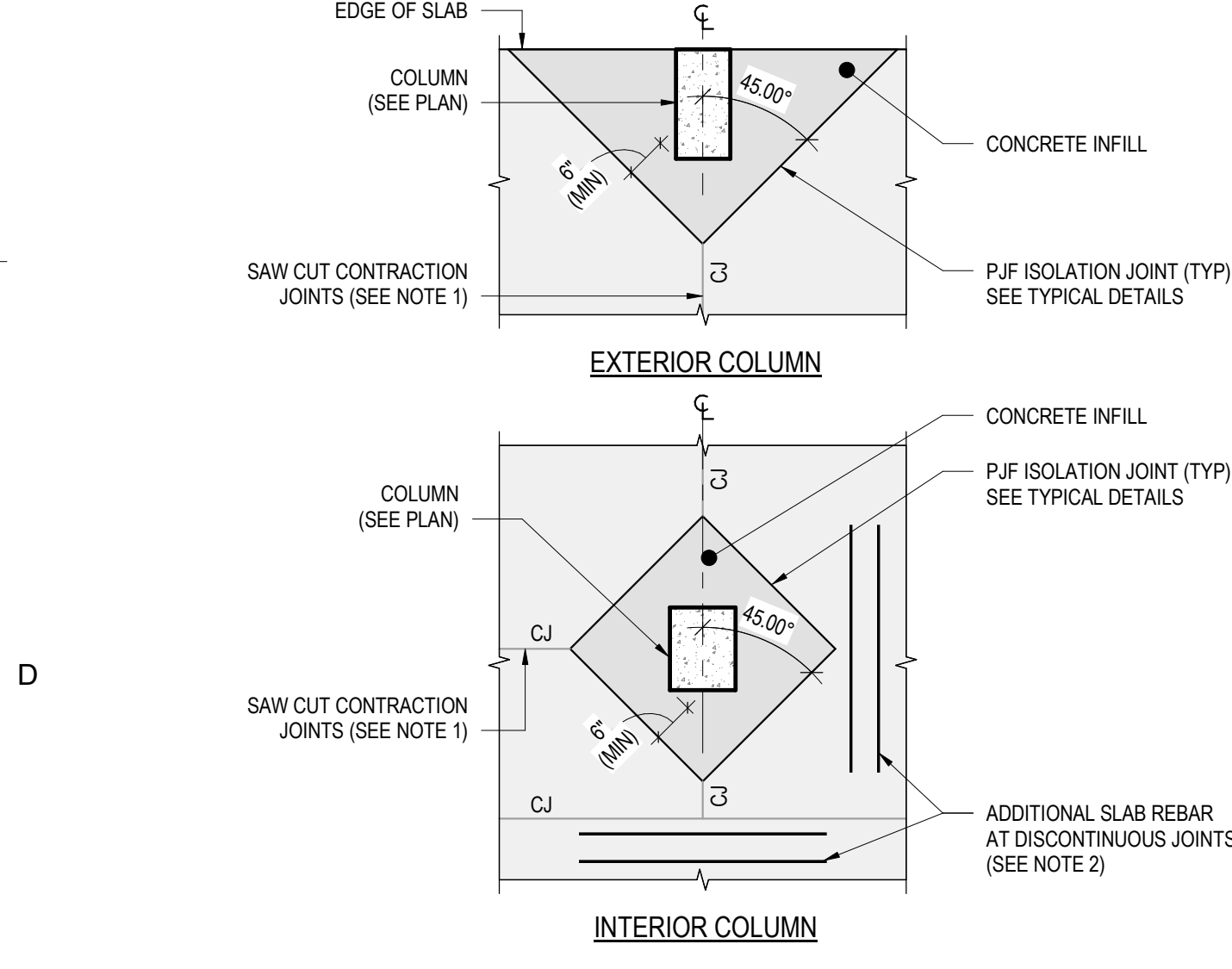
- NOTES:**
- SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR SEALANT REQUIREMENTS.
 - SAW CUT DEPTH SHALL BE AS FOLLOWS:
• FIBER REINFORCED SLABS = T/3
• ALL OTHER SLABS USING CONVENTIONAL WET-CUT SAW = T/4
• ALL OTHER SLABS USING EARLY-ENTRY DRY-CUT SAW = T/5
 - SAW CUT JOINTS SHALL BE LOCATED AS FOLLOWS:
• AT COLUMN LINES
• BETWEEN COLUMN LINES AT A SPACING NOT TO EXCEED 36x (WHERE T DENOTES THE SLAB THICKNESS)
• ADDITIONAL JOINTS AS REQUIRED TO MAINTAIN 1:1.5 MAXIMUM ASPECT RATIO
• AT PRACTICAL AT RETURN CORNERS, SLAB DEPRESSION CORNERS/EDGES, AND WALL ENDS/OPENINGS
 - ADDITIONAL SLAB REINFORCEMENT IS REQUIRED DEPENDENT ON JOINT LAYOUT PER TYPICAL DETAILS ON THIS SHEET.



- NOTES:**
- INSTALL ADDITIONAL REINFORCEMENT SHOWN 1'-1/2" CLEAR FROM TOP OF SLAB.
 - NO ADDITIONAL REINFORCEMENT IS REQUIRED WHEN SAWCUT CONTRACTION JOINTS ALIGN WITH BOTH EDGES OF RETURN CORNER.

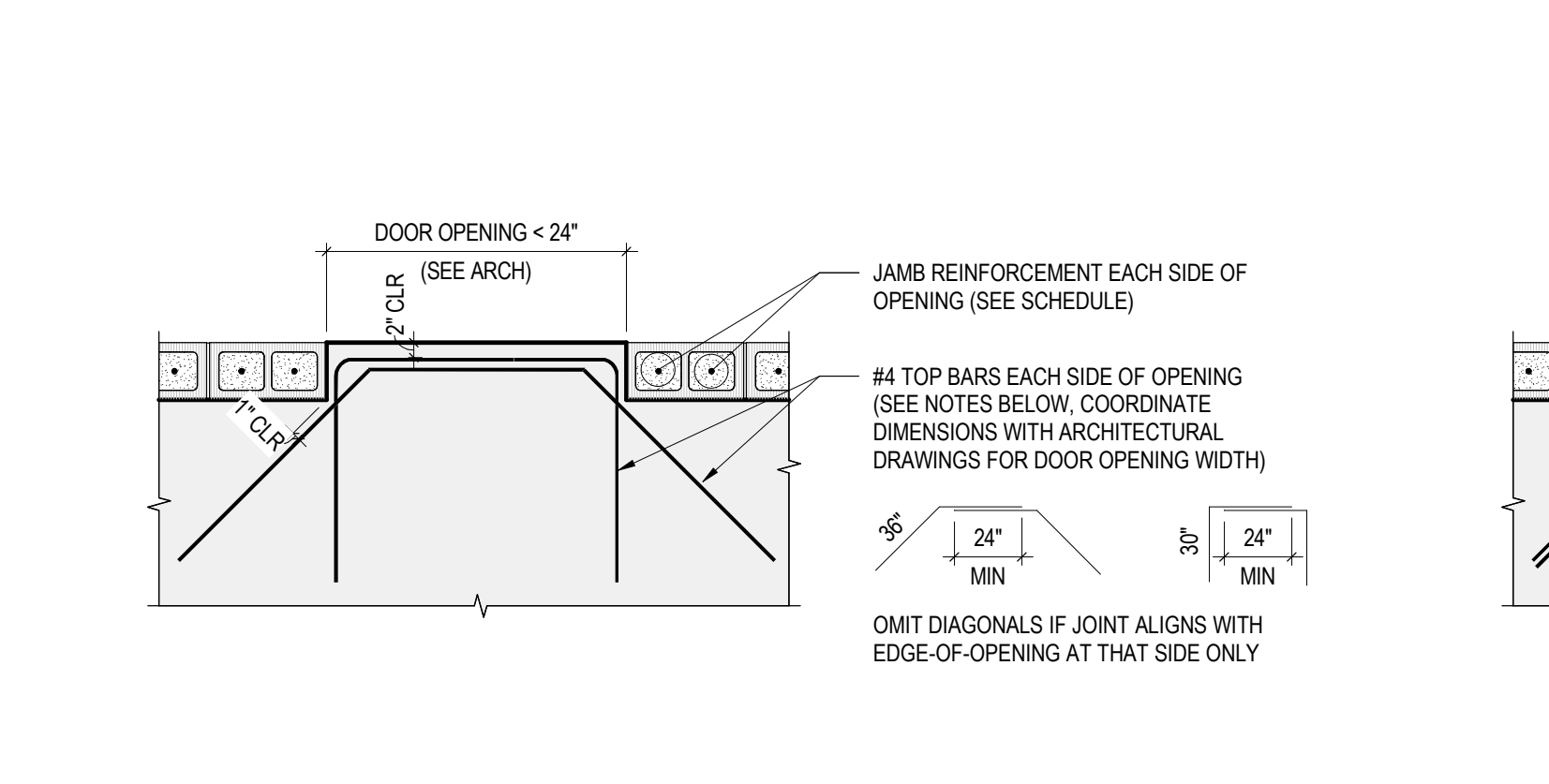


1 SLAB-ON-GROUND JOINT DETAILS
S310 3/4" = 1'-0"



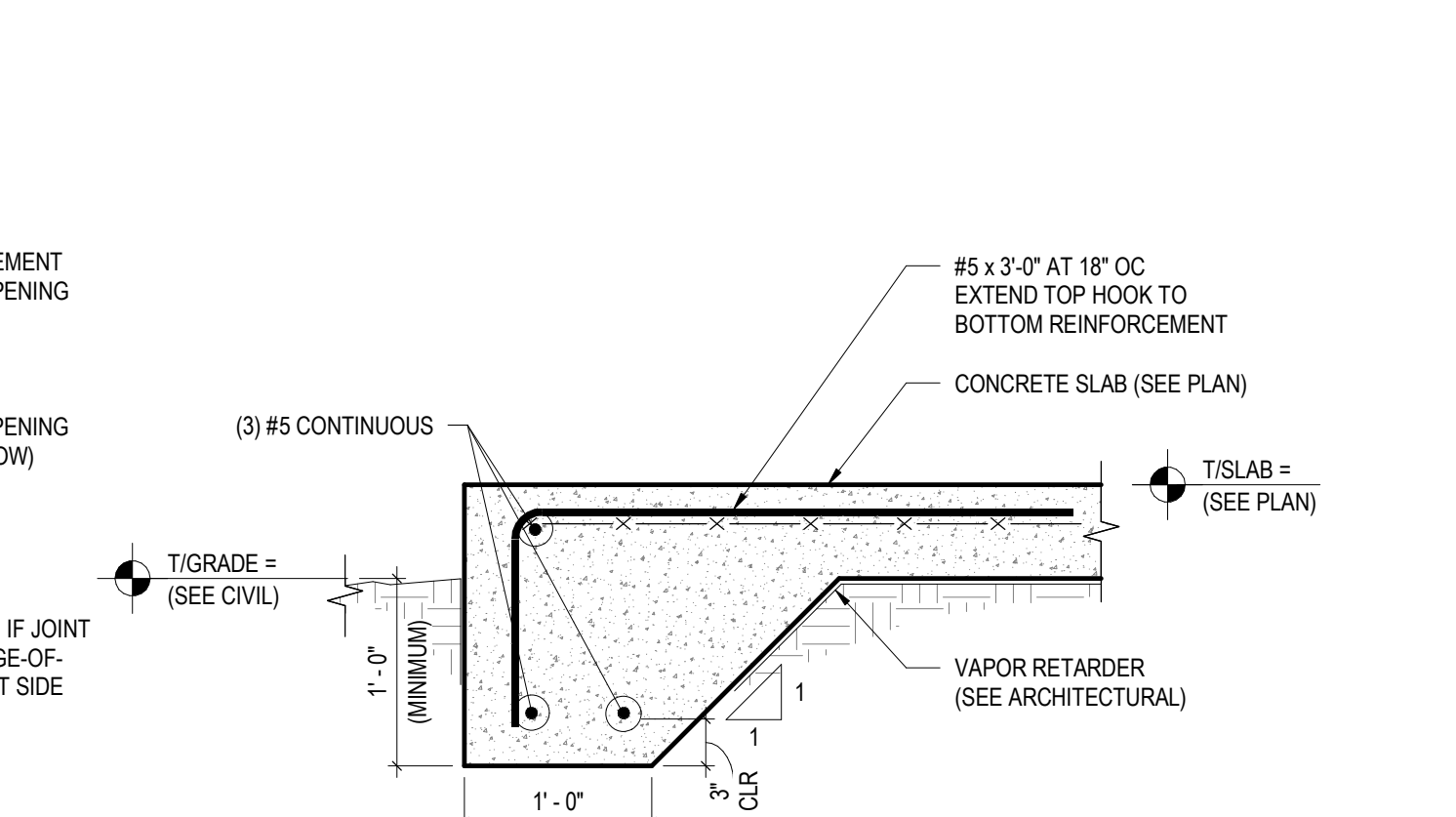
- NOTES:**
- ALIGN SAW CUT CONTRACTION JOINTS WITH CORNERS OF DIAMOND BOXOUTS AT COLUMNS. SEE TYPICAL SLAB-ON-GROUND DETAILS FOR JOINT SPACING REQUIREMENTS BETWEEN COLUMNS.
 - WHEN CONTRACTION JOINTS DO NOT ALIGN WITH CORNERS OF DIAMOND BOXOUT, PROVIDE ADDITIONAL SLAB REINFORCEMENT SIMILAR TO DISCONTINUOUS JOINTS.
 - CONCRETE INFILL BETWEEN COLUMN AND ISOLATION JOINT SHALL BE POURED AFTER ALL THE SLABS SUPPORTED BY THE COLUMN HAVE BEEN POURED.
 - AS A GC OPTION, A PINWHEEL LAYOUT OR R/JF DIRECT APPLIED TO FACE-OF-COLUMN OPTION MAY BE ACCEPTABLE IF THE SLAB-ON-GROUND IS POURED AFTER THE COLUMNS ARE INSTALLED. NOTIFY DESIGN TEAM OF DESIRE TO USE ALTERNATE DETAIL FOR FURTHER CONSIDERATION.
 - DETAIL SCHEMATICALLY SHOWS CONCRETE COLUMNS/PIERS. SIMILAR BOXOUTS ARE REQUIRED AT STEEL COLUMNS, WHERE THE DIMENSION OF THE DIAMOND BOXOUT SHALL BE COORDINATED WITH THE REQUIRED LAYBACK FOR SOIL STABILITY WHILE ALLOWING FOR BASE PLATE INSTALLATION ON ANCHOR ROOFS WITH ADEQUATE CLEARANCE FOR GROUT PLACEMENT BELOW THE BASE PLATE.

2 ADDITIONAL SLAB REINFORCEMENT AT CORNERS
S310 3/8" = 1'-0"

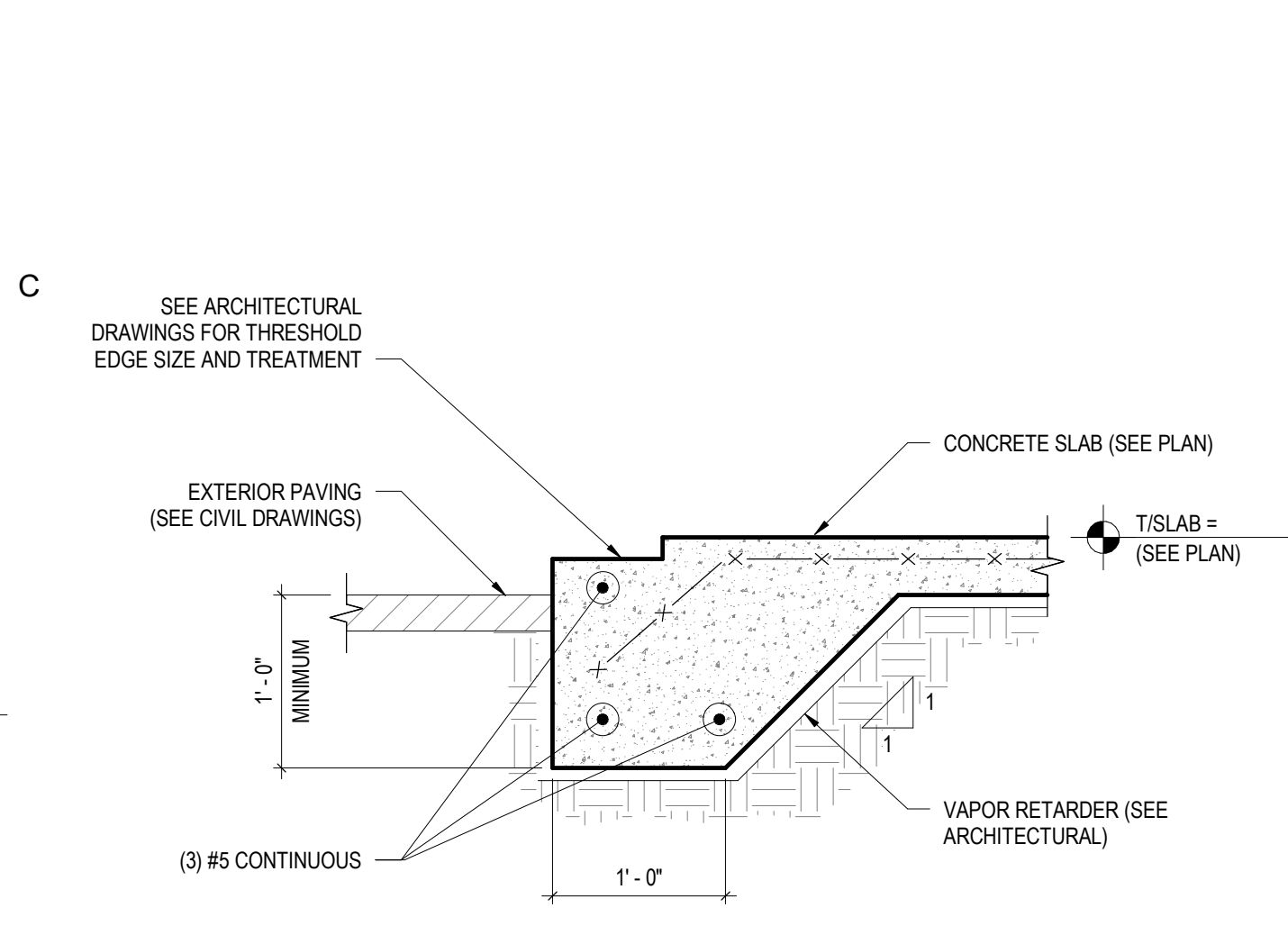


- NOTES:**
- INSTALL REINFORCEMENT SHOWN LOCATED AT A DEPTH 1-1/2" CLEAR FROM TOP-OF-SLAB.
 - REINFORCEMENT SHALL NOT CROSS CONSTRUCTION JOINT OR SAWCUT CONTRACTION JOINTS THAT ALLOW FOR MOVEMENT. I.E., DIAGONAL CORNER REINFORCEMENT SHALL BE OMITTED FROM ONE SIDE WHEN A PERPENDICULAR JOINT ALIGNS WITH EDGE-OF-OPENING AT THAT SIDE.

3 CONCRETE STAIRS-ON-GROUND
S310 3/4" = 1'-0"



4 SLAB-ON-GROUND ISOLATION/CONTRACTION JOINT
S310 1/2" = 1'-0"



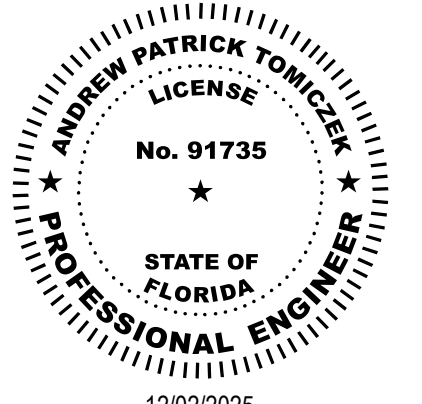
5 SLAB REINFORCEMENT AT DOOR OPENINGS
S310 1/2" = 1'-0"



6 THICKENED EDGE-OF-SLAB
S310 1" = 1'-0"



7 THICKENED EDGE-OF-SLAB AT OPENING
S310 1" = 1'-0"



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

REVISIONS:

| NO. | REASON | DATE |
|-----|--------|------|
| | | |

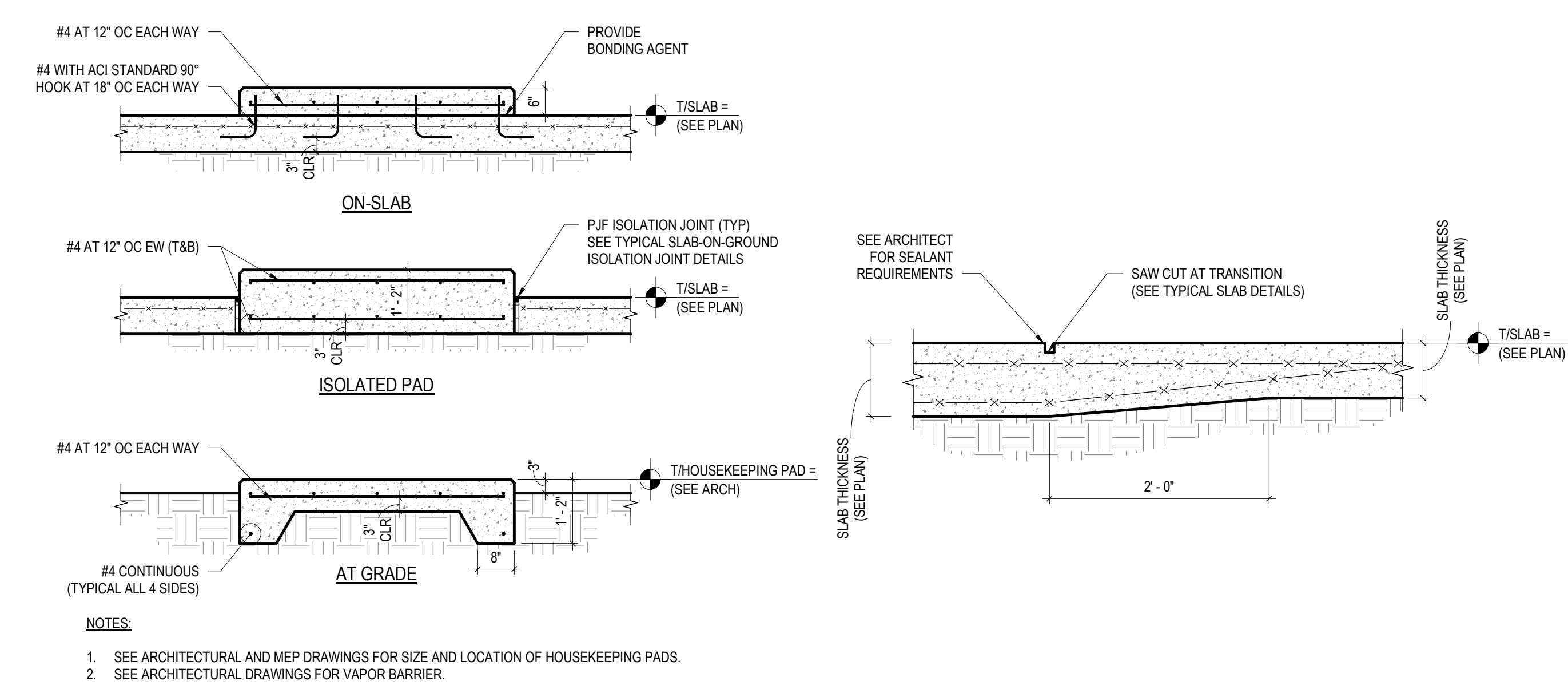
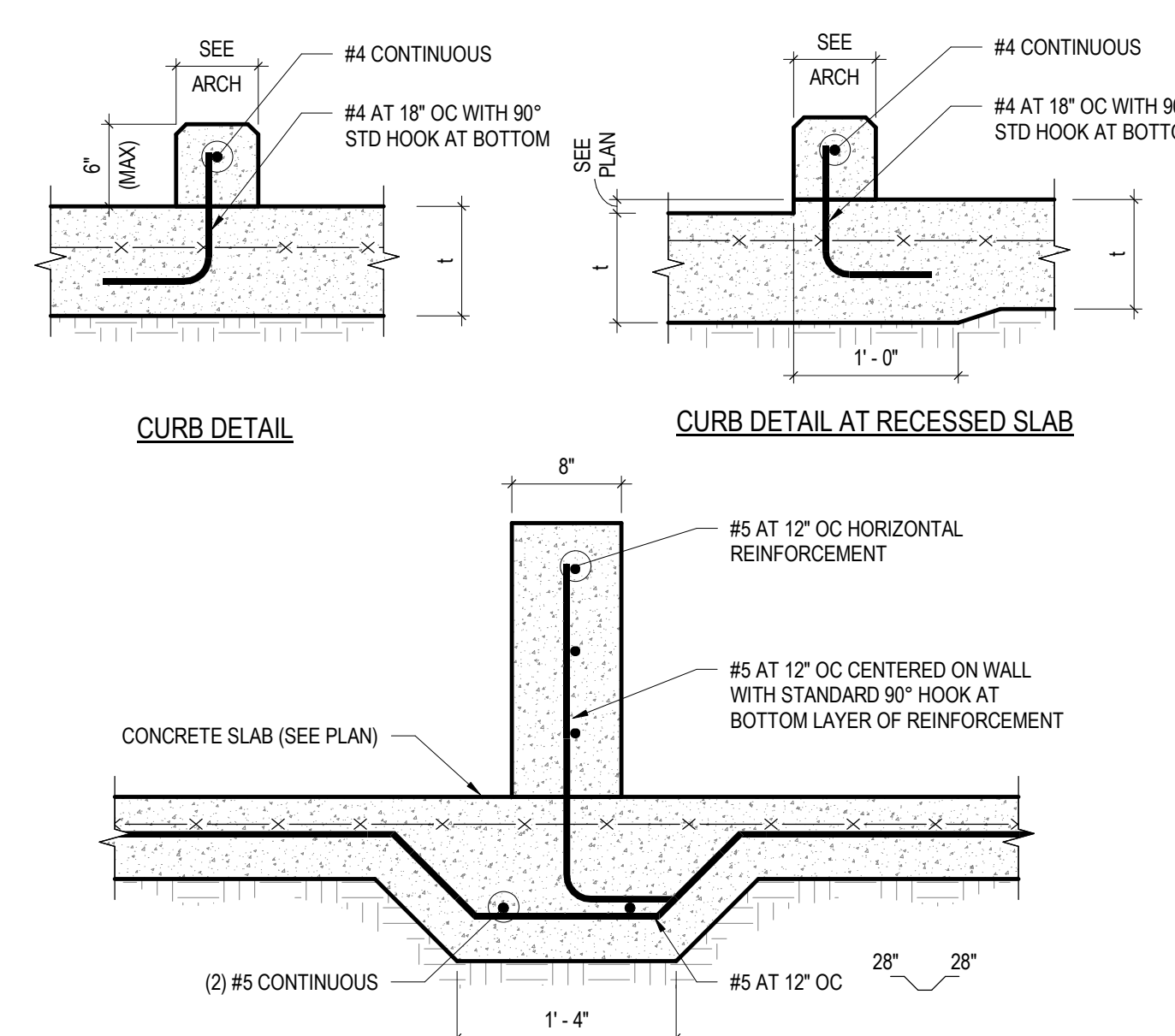
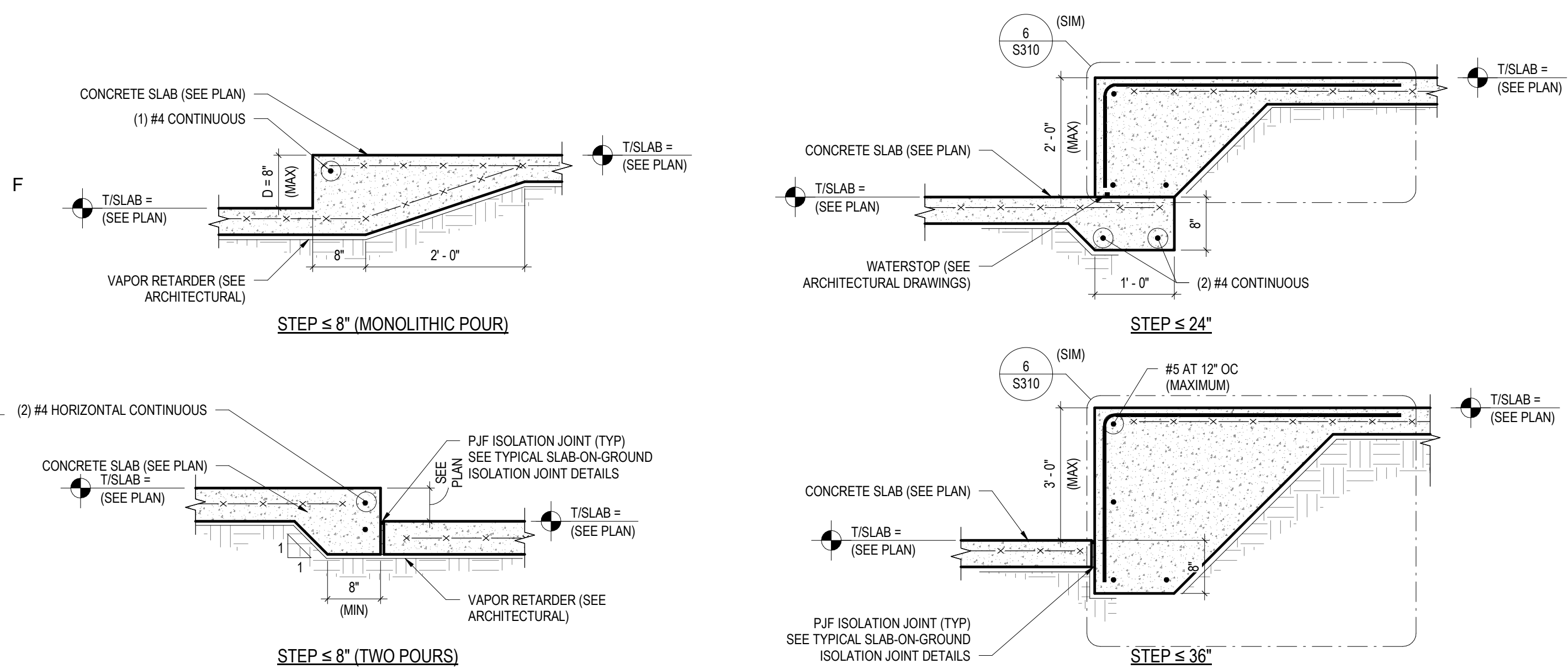
PROJECT TEAM
PRINCIPAL IN CHARGE: ANDREW TOMICZEK
PROJECT MANAGER: ANDREW TOMICZEK
DESIGN TEAM: JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO: 814.C6328.01

SHEET TITLE: TYPICAL SLAB-ON-GROUND DETAILS

SHEET NUMBER: S310

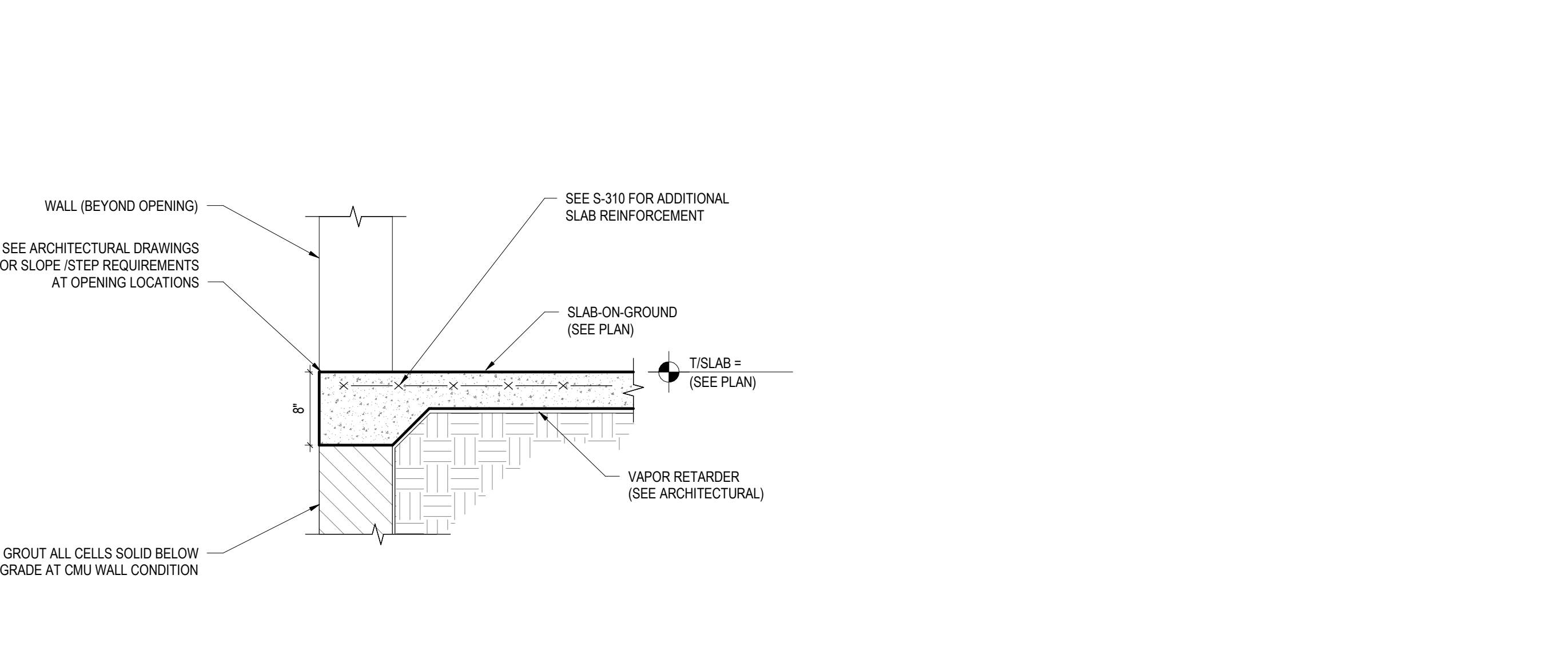
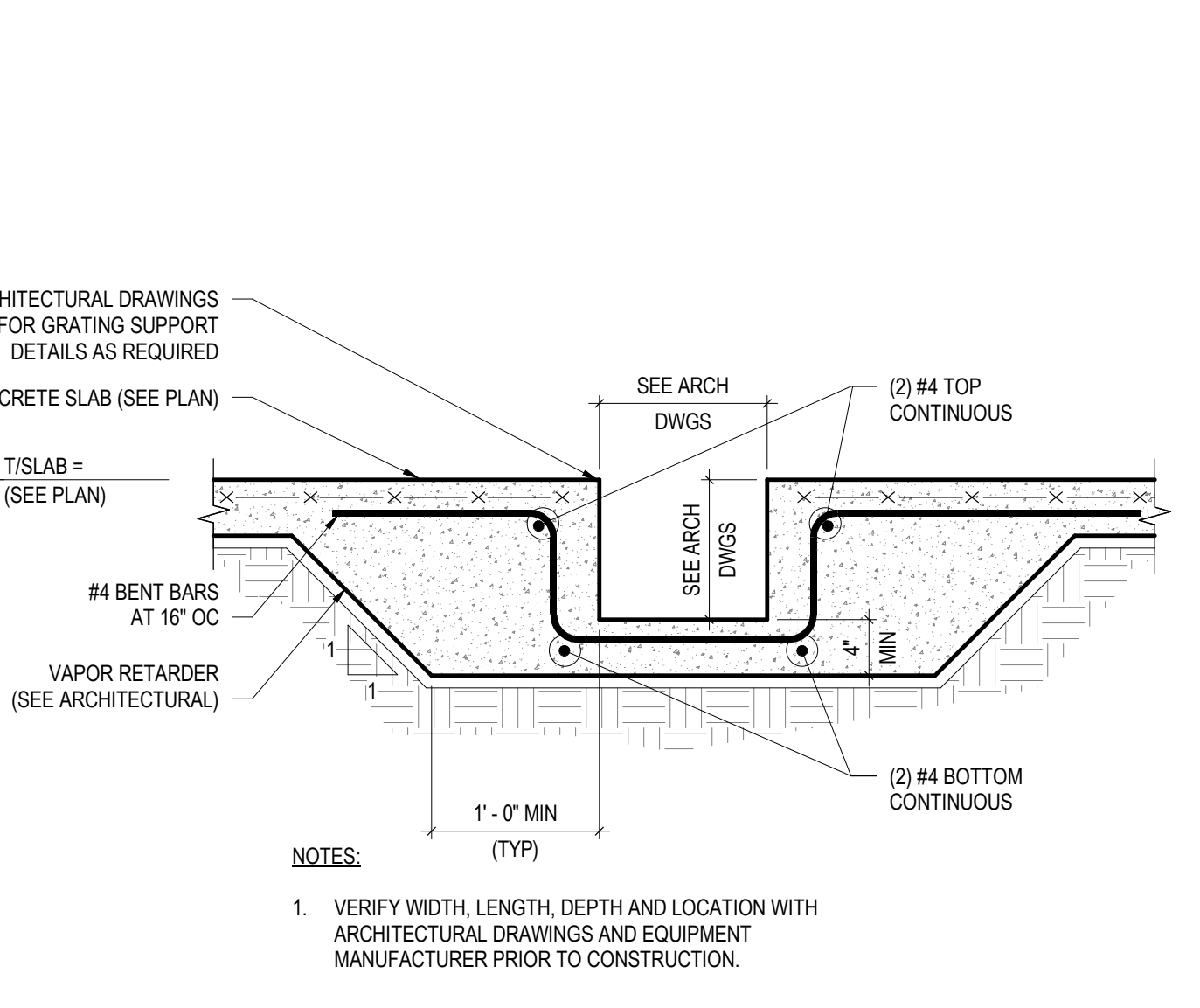
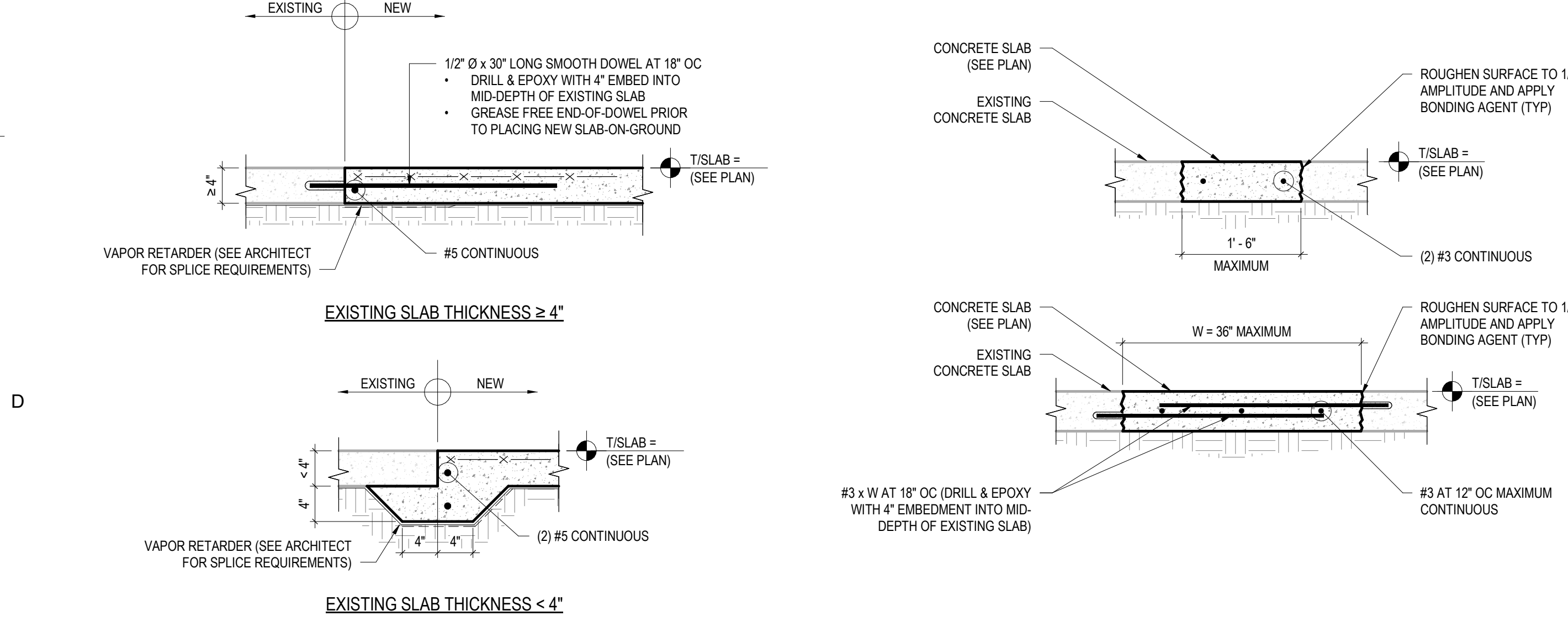


1 SLAB STEP DETAILS
3/4" = 1'-0"
1. COORDINATE ALL SLAB STEPS WITH ARCHITECT

2 CURB DETAILS
1" = 1'-0"

3 HOUSEKEEPING PAD DETAILS
1/2" = 1'-0"

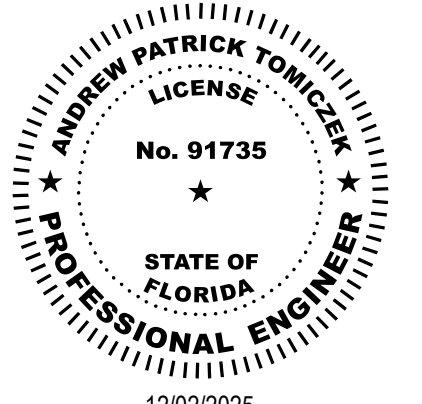
4 SLAB THICKNESS TRANSITION
1" = 1'-0"



5 TIE-IN TO EXISTING SLAB-ON-GROUND
1" = 1'-0"

7 TRENCH DRAIN DETAIL
1" = 1'-0"

8 TURNDOWN AT OPENINGS
1" = 1'-0"



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

REVISIONS: NO. REASON DATE

| NO. | REASON | DATE |
|-----|--------|------|
| | | |
| | | |
| | | |

PROJECT TEAM
PRINCIPAL IN CHARGE: ANDREW TOMICZEK
PROJECT MANAGER: ANDREW TOMICZEK
DESIGN TEAM: JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO.: 814.C6328.01

SHEET TITLE: SLAB-ON-GROUND DETAILS

SHEET NUMBER: S311

A

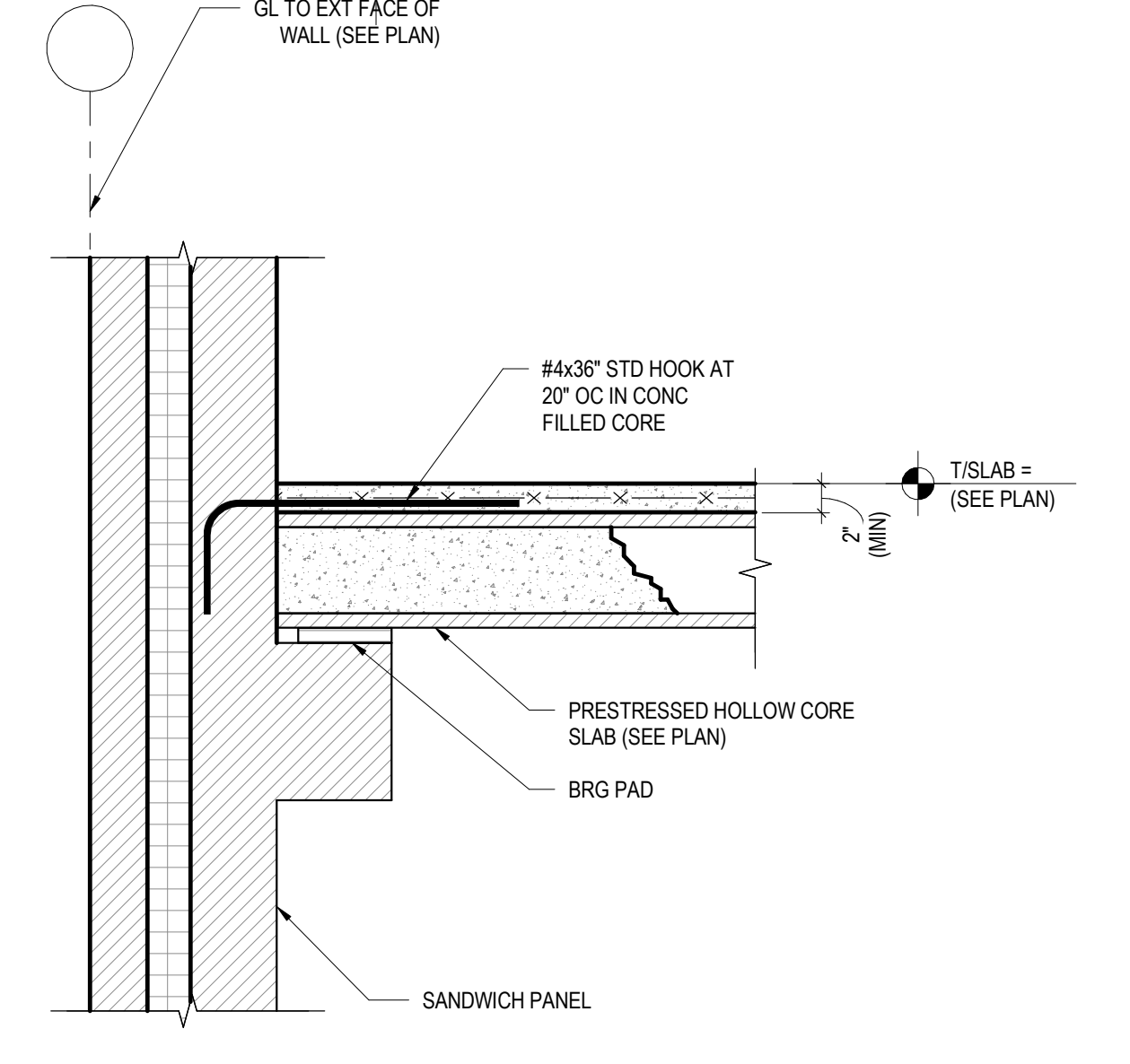
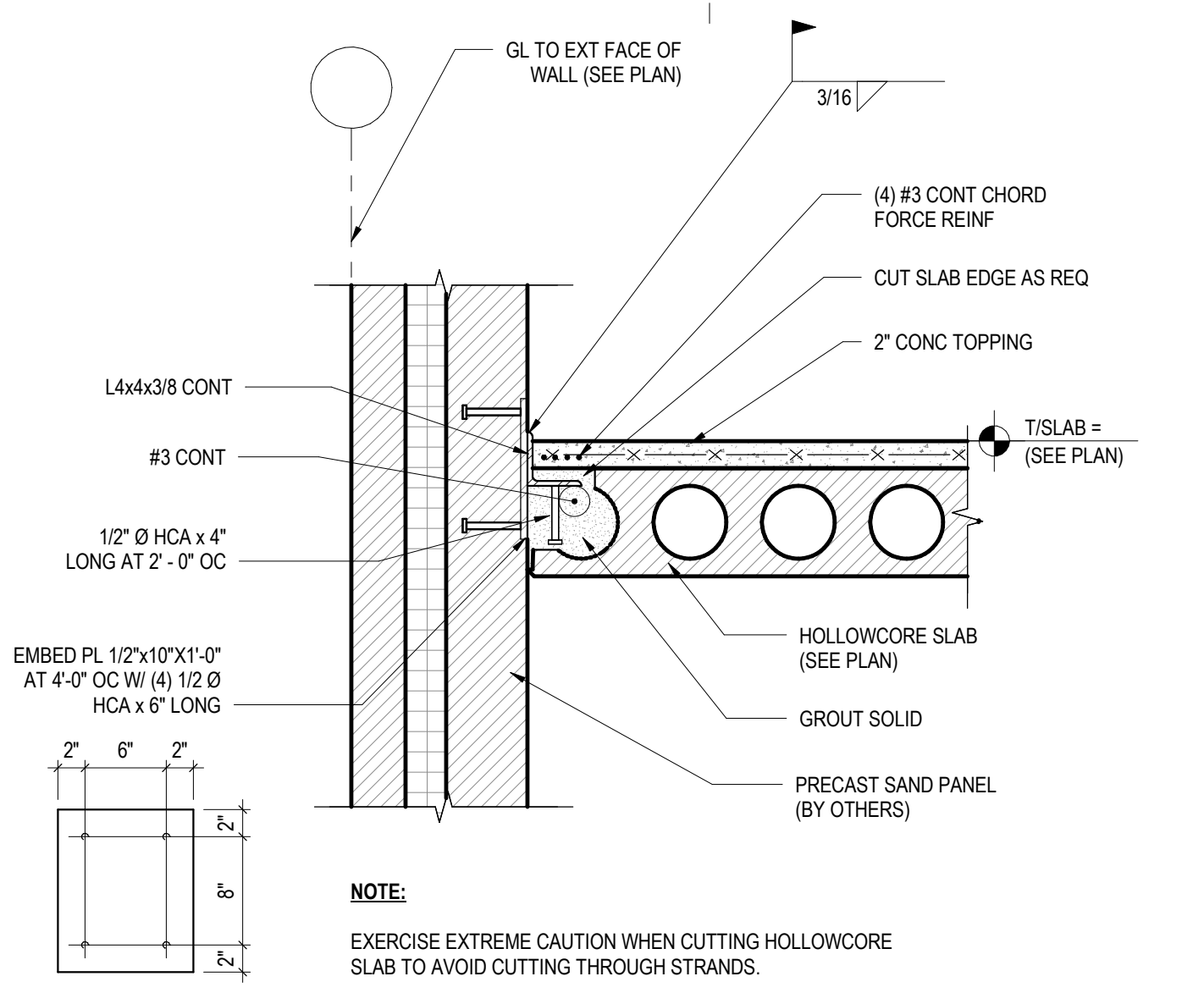
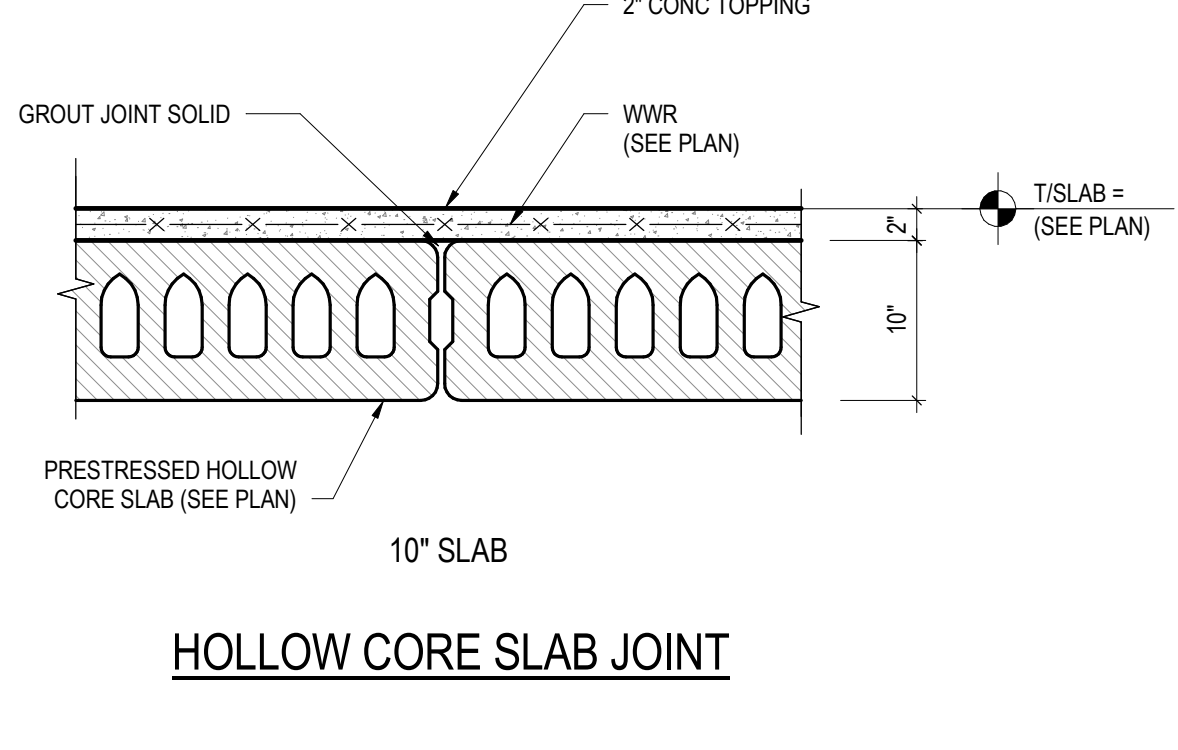
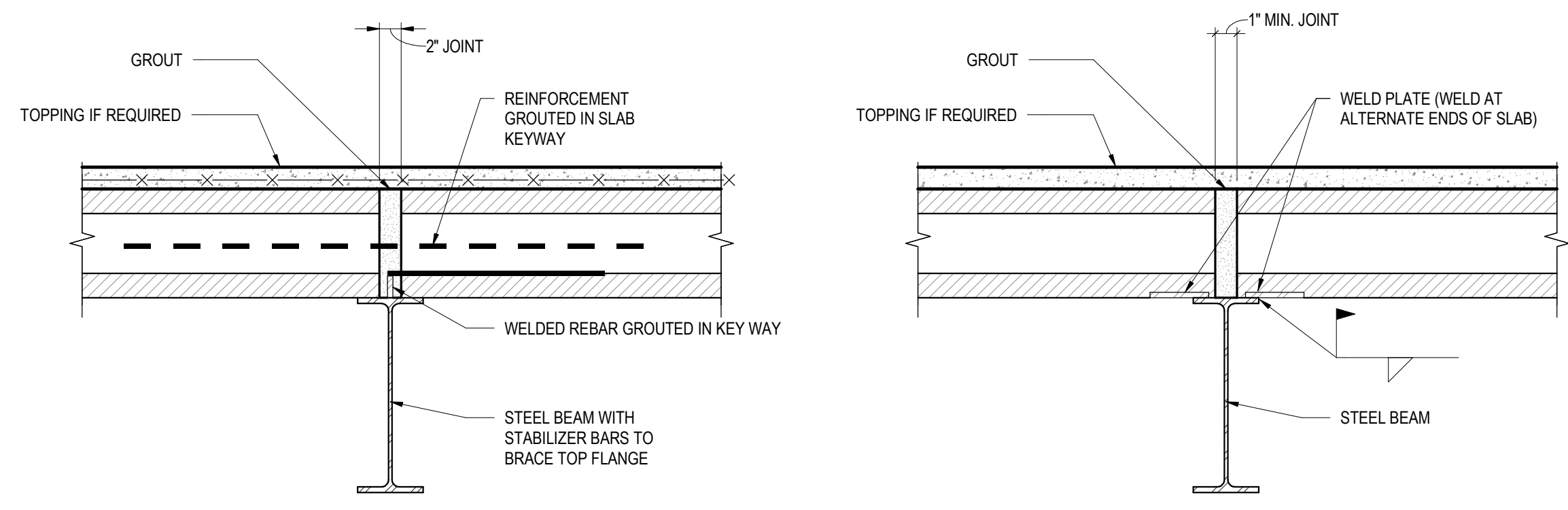
B

C

D

E

F

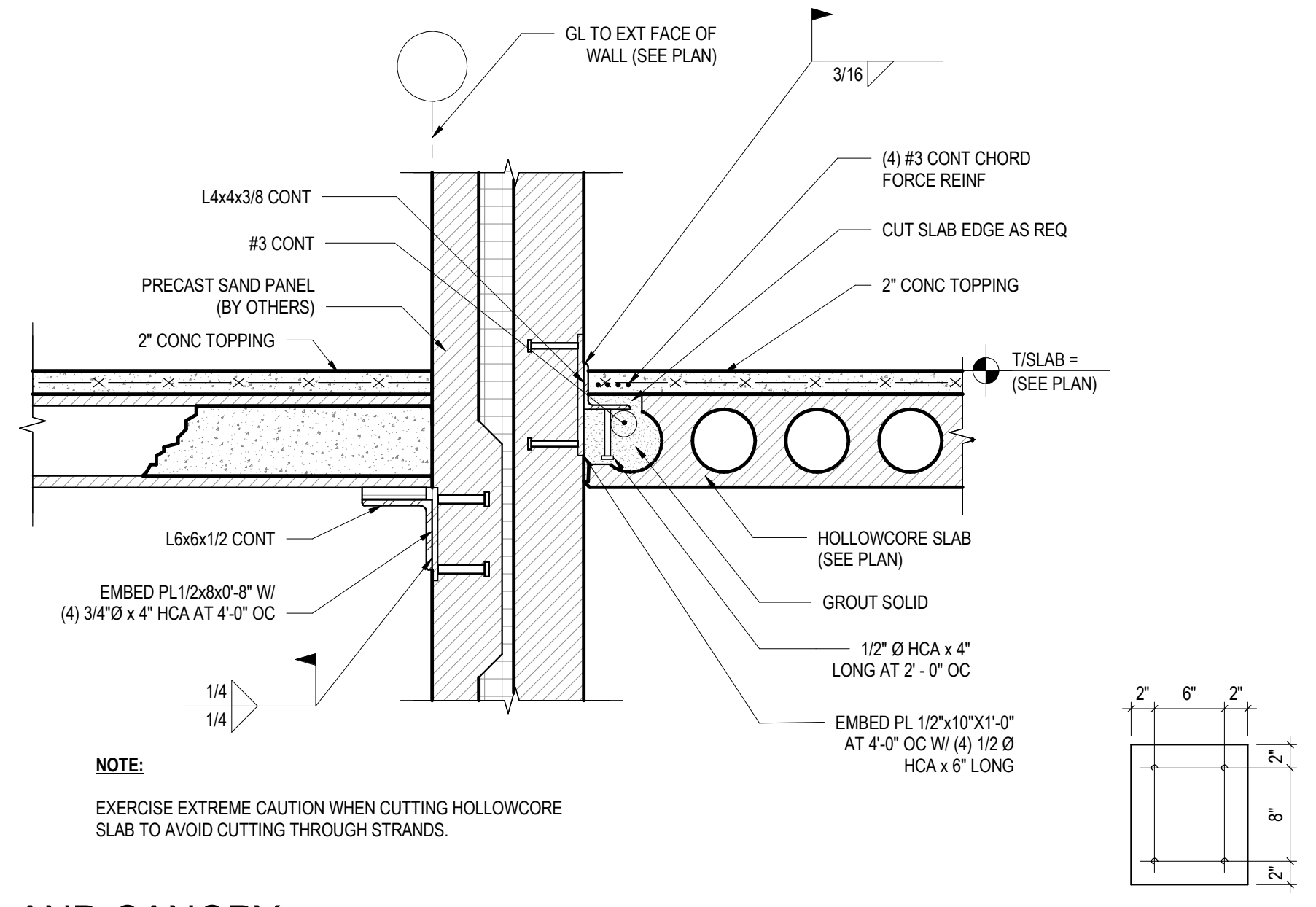
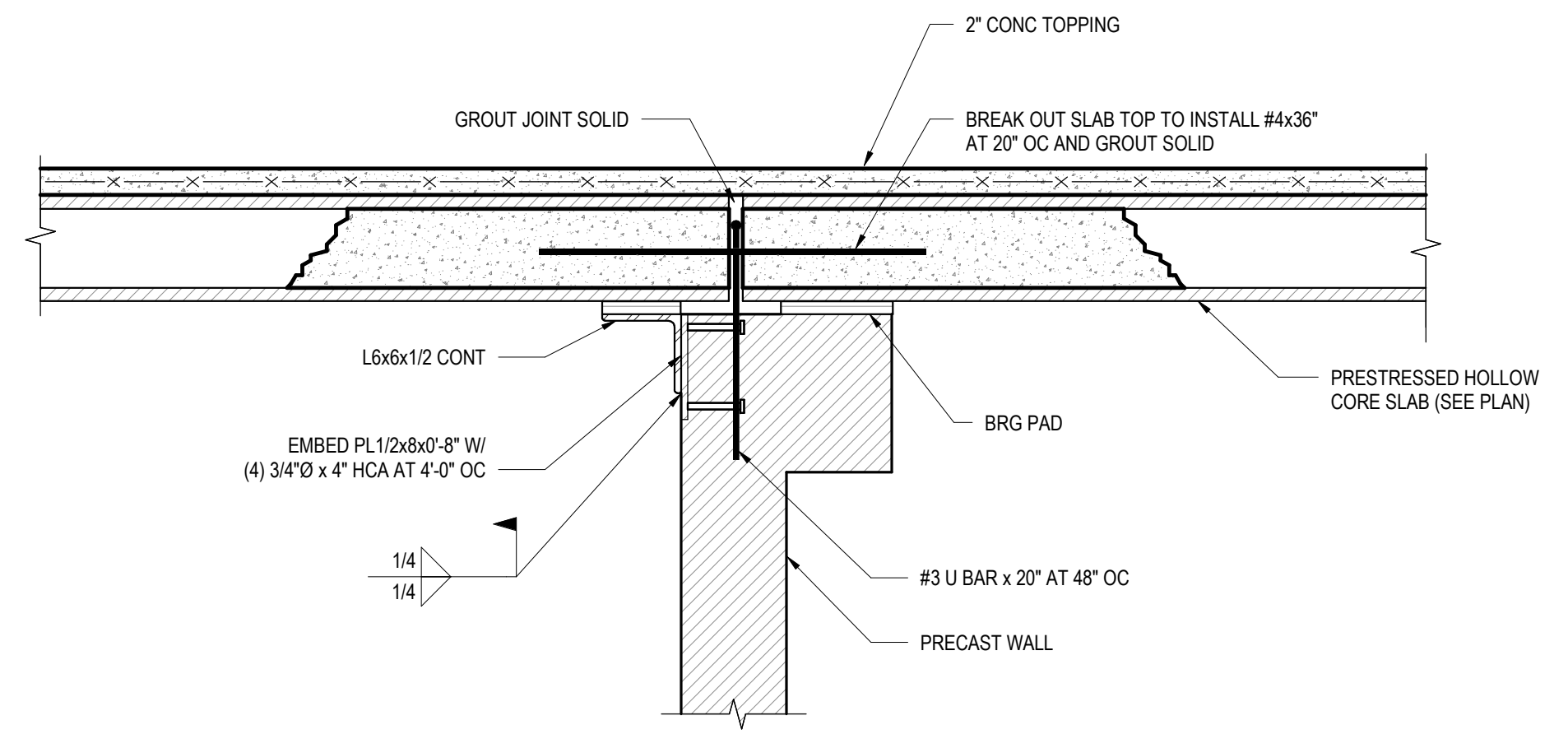


1
S360
HOLLOW CORE PERPENDICULAR TO STEEL BEAM
1\"/>

2
S360
DETAIL
1\"/>

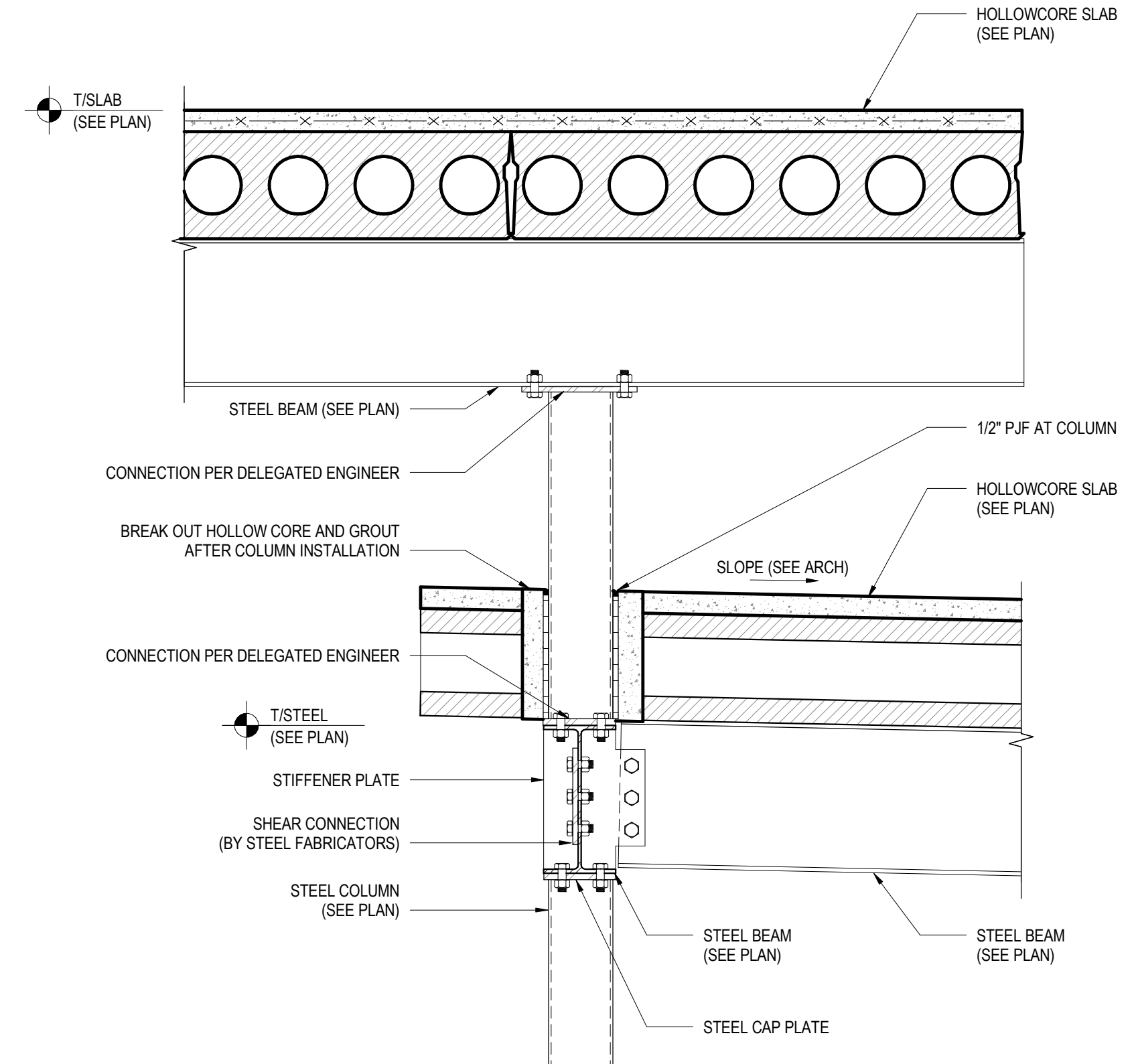
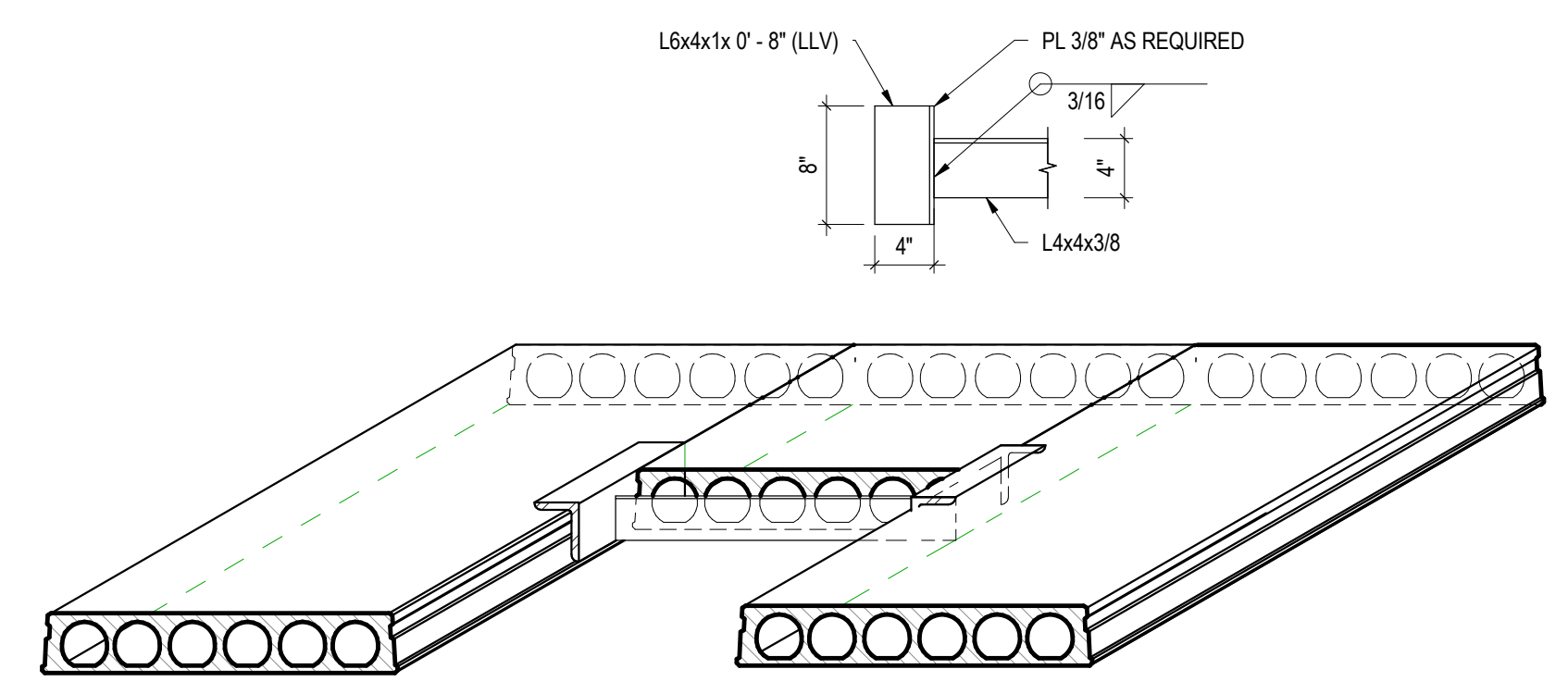
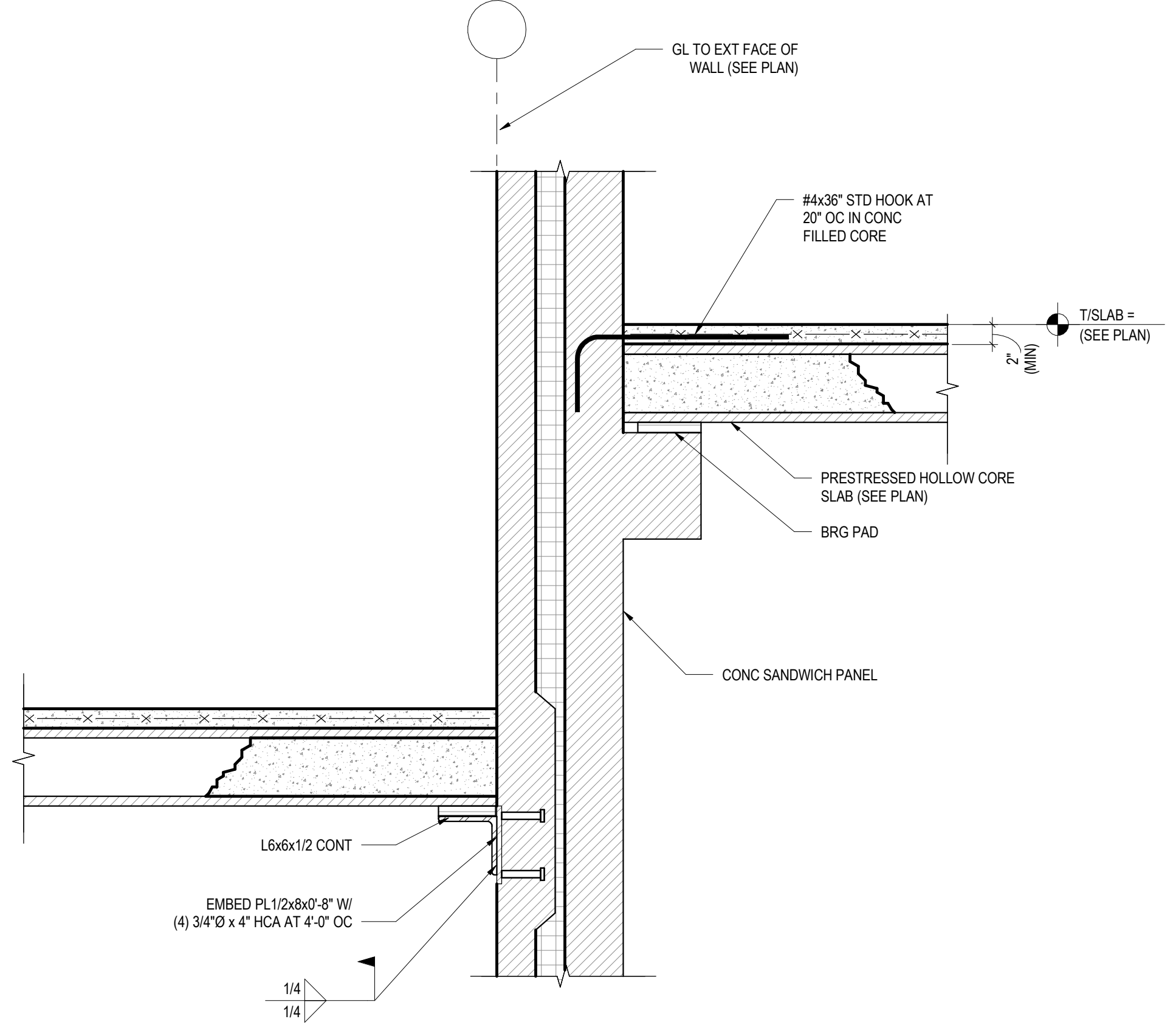
3
S360
HOLLOW CORE NON-BEARING WALL SAND PANEL
1\"/>

4
S360
HOLLOW CORE AT EXTERIOR WALL BEARING (SAND PANEL)
1\"/>



5
S360
HOLLOW CORE SLAB AT INTERNAL WALL BEARING
1\"/>

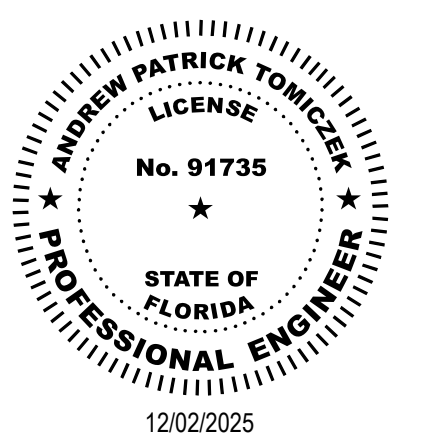
6
S360
HOLLOW CORE SLAB AND CANOPY
1\"/>



7
S360
HOLLOW CORE SANDWICH PANEL CANOPY
1\"/>

8
S360
TYPICAL HOLLOWCORE SLAB OPENING
12\"/>

9
S360
COLUMN PENETRATION THROUGH HOLLOW CORE PLANK
1\"/>



12/02/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ISSUE FOR
100% CONSTRUCTION DOCUMENTS

ISSUE DATE
12.03.25

| NO. | REASON | DATE |
|-----|--------|------|
| | | |
| | | |
| | | |

PROJECT TEAM
PRINCIPAL IN CHARGE
ANDREW TOMICZEK
PROJECT MANAGER
ANDREW TOMICZEK
DESIGN TEAM
JEZERINAC GROUP

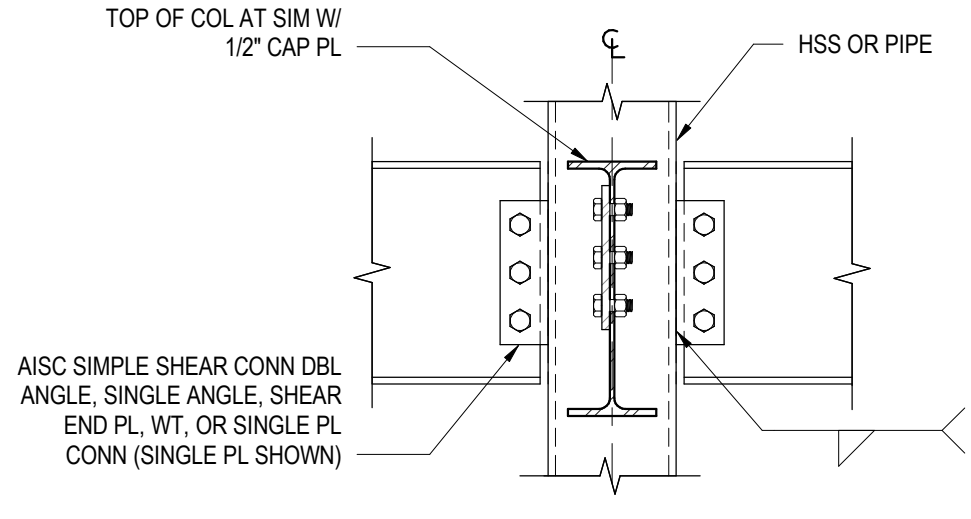
FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO.
814.C6328.01

SHEET TITLE
TYPICAL HOLLOW CORE DETAILS

SHEET NUMBER
S360

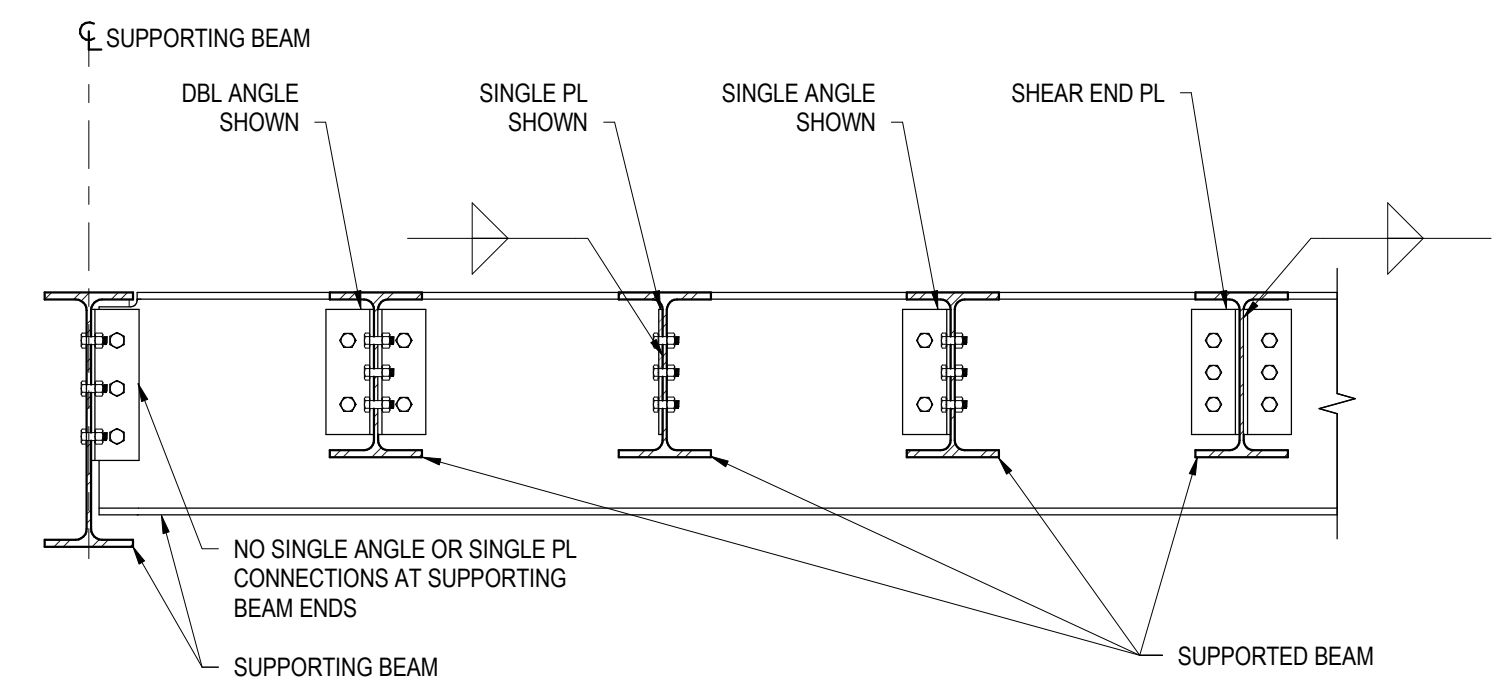
F
E
D
C
B
A



NOTE:

- CONTRACTOR'S CALCULATIONS SHALL VERIFY HSS/PIPE WALL THICKNESS IS ADEQUATE FOR CONNECTION TYPE CHOSEN (PER AISC).

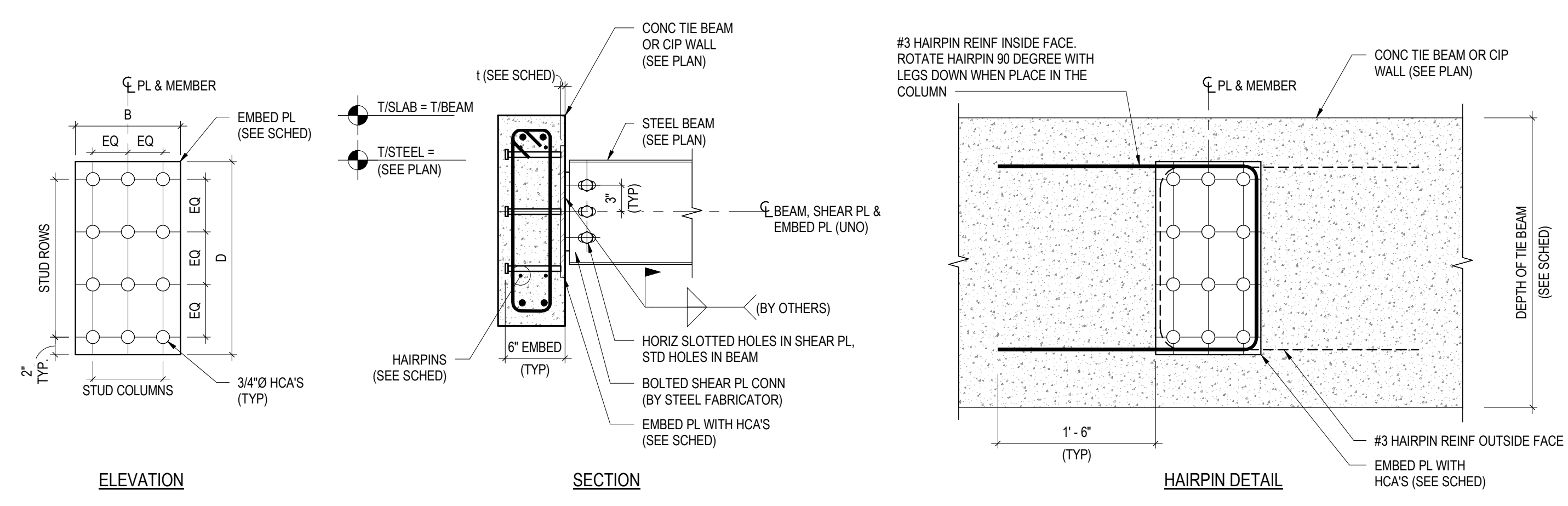
1
S510 **TYPICAL SHEAR CONNECTION**
1" = 1'-0"



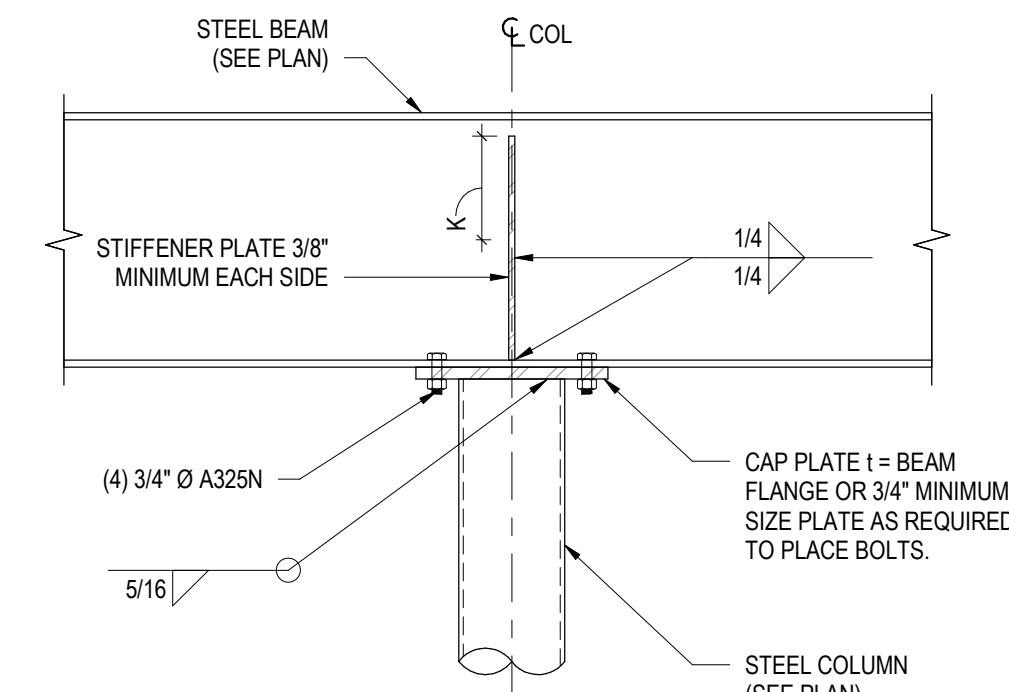
NOTES:

- SUPPORTED BEAMS PRIMARILY SUPPORT DISTRIBUTED LOADS FROM SLABS OR DECKING.
- SUPPORTING BEAMS SUPPORT SIGNIFICANT POINT LOADS FROM ONE OR MORE SUPPORTED BEAMS OR FROM COLUMNS BEING TRANSFERRED. SUPPORTING BEAMS MAY BE SUPPORTED BY COLUMNS OR BY OTHER SUPPORTING BEAMS.
- FOR AISC SIMPLE SHEAR CONNECTIONS AT SUPPORTED BEAM ENDS, DOUBLE ANGLE, SINGLE PLATE, SINGLE ANGLE, OR SHEAR END PLATE MAY BE USED UNLESS NOTED OTHERWISE.

2
S510 **BEAM-TO-BEAM SHEAR CONNECTION**
1" = 1'-0"



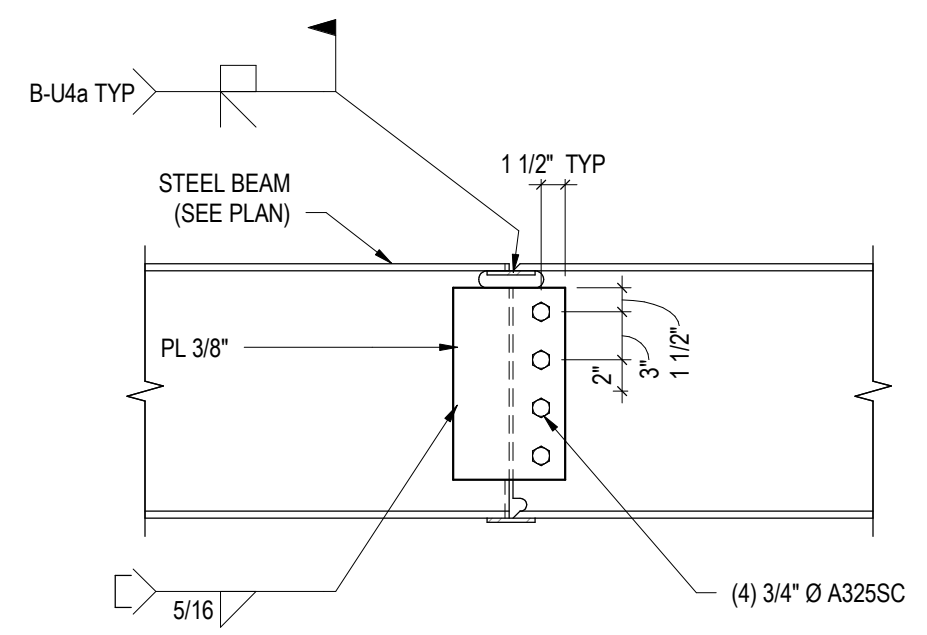
3
S510 **EMBED PLATE SCHEDULE AND DETAILS**
1" = 1'-0"



NOTES:

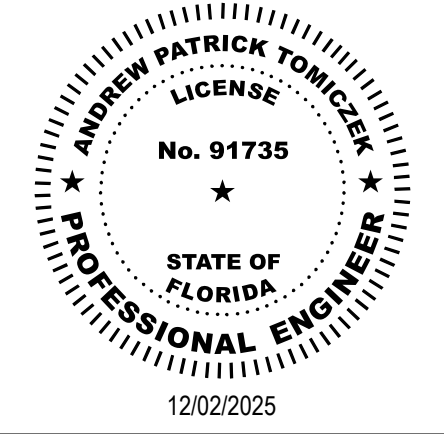
- WHERE BEAM FRAMES INTO COLUMN CENTER LINE, PROVIDE BOLTED CONNECTION TO STIFFENER PLATE.

4
S510 **'W' BEAM OVER HSS COLUMN**
1" = 1'-0"



5
S510 **BEAM SPLICE (MOMENT CONNECTION)**
1" = 1'-0"

Autodesk Docs://FPL Columbia Storm Processing Facility/814C632801-FPL Columbia Storm Processing Facility_S_v24_R1.rvt 12/2/2025 9:51:09 AM



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ANDREW P. TOMICZEK, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

100% CONSTRUCTION DOCUMENTS

ISSUE DATE: 12.03.25

| NO. | REASON | DATE |
|-----|--------|------|
| | | |

PROJECT TEAM
PRINCIPAL IN CHARGE: ANDREW TOMICZEK
PROJECT MANAGER: ANDREW TOMICZEK
DESIGN TEAM: JEZERINAC GROUP

FPL Columbia Storm Processing Facility Phase 2
1185 NW 25A
LAKE CITY, FL 32055

PROJECT NO: 814.C6328.01

SHEET TITLE: TYPICAL STEEL FRAMING DETAILS

SHEET NUMBER: S510