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ALL CONSTRUCTION IN ASSOCIATION WITH THIS PROJECT SHALL COMPLY WITH THE STATE ADOPTED CODES LISTED BELOW:

- 2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), INCLUDING APPENDIX J AND C
- 2020 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC)
- 2021 EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC)
- 2021 EDITION OF THE INTERNATIONAL MECHANICAL CODE (IMC)
- 2021 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
- 2021 EDITION OF THE INTERNATIONAL FUEL GAS CODE (IFGC)
- 2021 INTERNATIONAL FIRE CODE (IFC)
- ICC/ANSI A117.1-2009

UTAH STATE AMENDMENTS TO THE ABOVE MENTIONED CODES.

1. DEFERRED SUBMITTALS ARE THOSE PORTIONS OF THE DESIGN, AND OF THE PROJECT THAT ARE NOT SUBMITTED AT THE TIME OF THE BUILDING PERMIT APPLICATION, AND ARE TO BE SUBMITTED TO THE DESIGN PROFESSIONAL AND BUILDING OFFICIAL PRIOR TO DOING THE WORK.
2. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL (AE URBIA, INC.) WHO SHALL REVIEW AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTIFICATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE PROJECT. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTED DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
3. THE FOLLOWING ARE DEFERRED SUBMITTAL ITEMS:
 - a. FIRE SPRINKLER DRAWINGS/FIRE ALARM
 - b. BUCKLING RESTRAINED BREACES & GUSSET PLATES
 - c. OPEN WEBB STEEL JOISTS
4. FIRE PERMITS SHALL BE IN ACCORDANCE WITH IFC SECTIONS 105.1.1 THROUGH 105.1.6. THE FOLLOWING ITEM(S) REQUIRE A SEPARATE FIRE PERMIT:
 - a. UNDERGROUND WATER MAINS, LATERALS, FIRE HYDRANTS,
 - b. AUTOMATIC FIRE SPRINKLER SYSTEMS,
 - c. OCCUPANT NOTIFICATION (FIRE ALARM), INTERCONNECTION WITH FIRE PROTECTION SYSTEMS, AND APPROVED REMOTE STATION.
5. PROVIDE THE TILT UP SHOP DRAWINGS TO THE BUILDING DEPARTMENT ON A DEFERRED SUBMITTAL.
6. WEATHERS SEALS ON LOADING DOCK DOORS WILL BE DEFERRED W/ TENANT IMPROVEMENTS.



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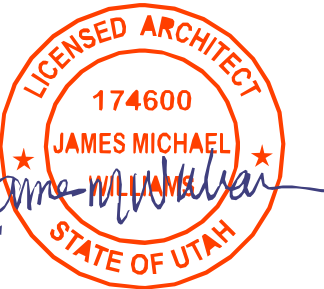
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ES001	BUILDING 5 SITE PHOTOMETRIC PLAN



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RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule		
MARK	DESCRIPTION	Revision Date
1	CITY COMMENT	05/15/2025

AE2022.290

COVER PAGE

DATE: **04/23/2025**

MEET #:

G000

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GENERAL PROJECT NOTES

DEFINITIONS

- 1. PROVIDE:**
MEANS TO PROVIDE, FURNISH AND INSTALL, A COMPLETE SYSTEM AND READY FOR OPERATIONS AND USE FOR PURPOSE INTENDED INCLUDES THOSE ITEMS SPECIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE ITEMS THAT ARE REQUIRED TO PROVIDE A COMPLETE SYSTEM. THE CONTRACTOR AND SUB CONTRACTORS ARE REQUIRED TO PROVIDE THE FULL AND COMPLETE SYSTEM.
- 2. FURNISH:**
MEANS TO SUPPLY, PURCHASE, PROCURE AND DELIVER COMPLETE WITH RELATED ACCESSORIES, READY FOR ASSEMBLY, APPLICATION, INSTALLATION, AND SIMILAR OPERATIONS, AS APPLICABLE IN EACH INSTANCE.
- 3. INSTALL:**
MEANS TO CONSTRUCT, ASSEMBLE, ERECT, MOUNT, ANCHOR, PLACE, CONNECT, APPLY AND SIMILAR OPERATIONS, COMPLETE WITH RELATED ACCESSORIES, AS APPLICABLE IN EACH INSTANCE.
- 4. EQUIVALENT:**
MEANS "EQUIVALENT AS ACCEPTED BY THE ARCHITECT," WITH RESPECT TO PRODUCTS, EQUIVALENT MEANS A LIKE DEGREE OF FEATURES, ATTRIBUTES, PERFORMANCES, OR QUALITIES DEEMED ESSENTIAL TO THE DESIGN INDICATED INSTEAD, THE TERM INTENDED TO MEAN ARCHITECT WILL CONSIDER SUBSTITUTION PROPOSALS FOR THE PRODUCT. DO NOT ASSUME THAT SUBSTITUTE PRODUCTS ARE ACCEPTABLE. SUBSTITUTIONS MADE BY THE CONTRACTOR WITHOUT FULL AND FINAL APPROVAL, MAY REQUIRE TO BE REMOVED IF NOT DEEMED ACCEPTABLE BY THE ARCHITECT. ALL COSTS ASSOCIATED TO REMOVAL OF SUBSTITUTION NOT APPROVED, AND INSTALLATION OF ACCEPTED PRODUCTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL NOTES

- 1. SITE VISITS**
VISITS TO THE JOB SITE BY ANY REPRESENTATIVE OF THE ARCHITECT DO NOT CONSTITUTE APPROVAL OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS, AND ARE MERELY FOR THE PURPOSE OF OBSERVING THE WORK PERFORMED.
- 2. DISCREPANCIES IN THE FIELD**
THE CONTRACTOR SHALL NOTIFY ENGINEER / ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND / OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED.
- 3. FIELD MEASUREMENTS**
VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS. ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.
- 4. SCALE OF DRAWINGS**
DO NOT SCALE DRAWINGS. ARCHITECT SHALL NOT BE RESPONSIBLE FOR DIMENSIONS, TAKE-OFFS OR CALCULATIONS BASED ON DIGITAL MEDIA. REFER TO PRINTED DIMENSIONS ONLY. DRAWINGS OF A LARGER SCALE TAKE PRECEDENCE OVER DRAWINGS OF A SMALLER SCALE.
- 5. CONTRACT DOCUMENTS AT SITE**
THE CONTRACTOR SHALL MAINTAIN CURRENT PERMIT DRAWINGS; SHOP DRAWINGS; REVISED DRAWINGS; CLARIFICATION DRAWINGS, ADDENDA; CHANGE ORDERS; BULLETINS; INSPECTIONS; TEST CERTIFICATIONS AND RECORDS; PRODUCT SUBMITTAL DATA AND SAMPLES. FIELD OFFICE SHALL CONTAIN A CURRENT COPY OF ALL GOVERNING BUILDING CODES]. MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR ARCHITECT'S REVIEW. ALL DRAWINGS MUST BE CLEARLY MARKED AS TO THE FINAL APPROVED DRAWINGS.
- 6. RECORD DRAWINGS (AS BUILTS)**
THE CONTRACTOR SHALL MAINTAIN ACCURATELY DIMENSIONED RECORDS OF ALL UNDERGROUND LINES, SERVICES, AND UTILITIES, AS WELL AS ANY DISCREPANCIES OR REQUIRED CHANGES IN THE CONTRACT DOCUMENTS, AT THE END OF THE PROJECT, FORWARD TO ARCHITECT FOR FUTURE RECORDS. ONE DIGITAL COPY OF COMPLETE RECORD DRAWINGS TO OWNER IN PDF FORMAT AFTER COMPLETING FINAL PUNCH LIST.
- 7. CONFLICTING DIMENSIONS**
WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES; DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES, PRIOR TO CONTINUING WITH WORK.
- 8. SHOP DRAWING AND SUBMITTAL REVIEW**
SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER / ARCHITECT AND OWNER PRIOR TO ORDERING, FABRICATION OR ERECTION FOR ANY PREFABRICATED OR MANUFACTURED - DESIGNED COMPONENTS.
- 9. SUPPORTING STRUCTURES**
SIZES, LOCATIONS, LOADS, AND ANCHORAGE OF EQUIPMENT SHALL BE VERIFIED IN THE FIELD WITH EQUIPMENT MANUFACTURERS (SUPPLIERS) PRIOR TO FABRICATION OR INSTALLATION OF SUPPORTING STRUCTURES.
- 10. TEMPORARY BRACING**
TEMPORARY BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING WIND. SUCH BRACING SHALL BE LEFT IN PLACE AS LONG AS LONG AS MAY BE REQUIRED FOR SAFETY, OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE COMPLETED. ALL BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. DESIGN LOADS**
DURING AND AFTER CONSTRUCTION THE CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOAD.
- 12. INTENT OF THE DOCUMENTS**
DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR THE PROPER COMPLETION OF THE PROJECT, SUITABLE FOR THE INTENDED USE OF THE OWNER. ITEMS NOT EXPRESSLY SET FORTH WITHIN THE DRAWINGS AND SPECS, BUT WHICH ARE REASONABLY IMPLIED FOR COMPLETION OF A COMPLETE SYSTEM, OR NECESSARY, FOR THE PROPER PERFORMANCE OF THE WORK SHALL BE INCLUDED.
- 13. DRAWINGS AND SPECIFICATIONS**
SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY AND SUPPLEMENTAL TO THE DRAWINGS. NO RELATIVE IMPORTANCE OF DRAWINGS VERSUS SPECIFICATIONS HAS BEEN ESTABLISHED AND NONE SHOULD BE ASSUMED, BUT THE MOST STRINGENT CONDITIONS SHOULD BE ASSUMED FOR ALL BIDDING AND CONSTRUCTION REQUIREMENTS. IN THE EVENT OF DISCREPANCIES OR CONFLICTS, THE ARCHITECT SHALL BE CONSULTED IN ORDER TO RENDER AN INTERPRETATION. BIDDING, PRICING OR CONSTRUCTION DONE PRIOR TO RECEIVING FINAL BUILDING DEPARTMENT PERMITS IS AT THE CONTRACTORS OWN RISK. CHANGES TO THE DRAWINGS MAY BE REQUIRED AS PART OF THE PLAN CHECK AND/ OR OWNER REVIEW PROCESS. J.M. WILLIAMS AND ASSOCIATES/AE URBIA AND, ITS CONSULTING ENGINEERS WILL NOT BE HELD LIABLE FOR, NOR COMPENSATE FOR, CHANGES TO THESE DRAWINGS BEFORE FINAL JURISDICTION AND OWNER APPROVAL IS OBTAINED.
- 14. WORK NOT INCLUDED**
ANY ITEM INDICATED ON THE DRAWINGS AS "N.I.C." (NOT IN CONTRACT), OR OTHERWISE DESIGNATED TO BE DONE BY OTHERS IS NOT A PART OF THE CONTRACT. INSTALLATION AND/OR BACKING MAY BE REQUIRED FOR SOME EQUIPMENT FURNISHED BY OWNER OR OWNER'S SUBCONTRACTOR. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.
- 15. FURNISHINGS BY OWNER**
ALL FURNITURE, PLANTS, INTERIOR SIGNAGE, FILES / FILING CABINETS, APPLIANCES, OFFICE EQUIPMENT TO BE FURNISHED, INSTALLED AND PAID FOR BY THE OWNER / TENANT, UNLESS NOTED OTHERWISE.
- 16. CODE COMPLIANCE**
ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES:
a. PLUMBING:
ALL PLUMBING WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE, AND LOCAL ORDINANCES. ALL PLUMBING WORK AND FIXTURES MUST MEET THE APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT/ENGINEER, TENANT AND THE BUILDING OFFICIAL.
b. HVAC:
ALL HVAC WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL MECHANICAL CODE, AND LOCAL ORDINANCES. HVAC WORK, UNITS, AND CONTROLS, MUST MEET THE APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT/ENGINEER, TENANT, AND THE BUILDING OFFICIAL.
c. ELECTRICAL:
ALL ELECTRICAL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ICC ELECTRICAL CODE AND LOCAL ORDINANCES. ALL ELECTRICAL WORK, FIXTURES, SWITCHES, ETC., MUST MEET APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT / ENGINEER, TENANT AND BUILDING OFFICIAL.
d. REST ROOMS, ETC., SHALL COMPLY WITH THE LATEST ADA REQUIREMENTS, NATIONAL AND LOCAL.
e. CONSTRUCTION MUST BE IN COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE.
f. CONSTRUCTION MUST BE IN COMPLIANCE WITH THE CURRENT INTERNATIONAL FIRE CODE.
- 17. REFERENCE STANDARDS**
CONFORM WITH ASSOCIATION, TRADE, FEDERAL, COMMERCIAL, ASTM, AND OTHER SIMILAR STANDARDS REFERENCED WITHIN INDIVIDUAL SECTIONS, EXCEPT WHERE MORE EXPLICIT OR STRINGENT REQUIREMENTS ARE INDICATED, OR REQUIRED BY APPLICABLE CODES. REFERENCE STANDARDS HAVE SAME FORCE AND EFFECT AS IF BOUND INTO CONTRACT DOCUMENTS, SHOULD SPECIFIED REFERENCE STANDARDS CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING.
- 18. APPROVAL**
ALL WORK MUST MEET THE APPROVAL OF THE BUILDING OWNERS, THE TENANT (IF APPLICABLE), THE DESIGNER, AND THE BUILDING AND ZONING DEPARTMENTS.
- 19. CHANGES**
ANY AND ALL CHANGES OR VARIATIONS FROM THESE DOCUMENTS MUST BE APPROVED IN WRITING BY THE OWNERSHIP PRIOR TO MAKING THEM.
- CONTRACTOR REQUIREMENTS**
- 1 EXISTING CONDITIONS**
THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING SITE CONDITIONS, UTILITIES, CONNECTIONS, LOCATIONS, ETC., AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2 EXISTING UTILITIES**
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.
- 3 CODE COMPLIANCE**
THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL NATIONAL, STATE AND LOCAL, AND RELATED CODES FOR STANDARD CONSTRUCTION PRACTICES.
- 4 INSTALLATION STANDARDS**
ALL MANUFACTURED MATERIALS AND PRODUCTS SHALL BE APPLIED, INSTALLED, CONNECTED, CLEANED AND CONDITIONED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. ALL REFERENCES TO STANDARDS OR TO MANUFACTURER'S SPECIFICATIONS SHALL BE TO THE LATEST EDITIONS OR LATEST AMENDMENTS.
- 5 INSPECTIONS**
ANY SPECIAL INSPECTIONS, TESTS, AND OTHER SERVICES SPECIFIED OR REQUIRED ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE PAID BY THE OWNER. REFER TO INDIVIDUAL SELECTIONS FOR ADDITIONAL REQUIREMENTS. EMPLOYMENT OF TESTING LABORATORY SHALL IN NO WAY RELIEVE CONTRACTOR OF OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.
- 6 PROJECT LOG**
MAINTAIN DAILY LOG CONTAINING ALL INFORMATION REGARDING CONSTRUCTION OPERATIONS AND OTHER OCCURRENCES PERTAINING TO THE PROJECT. MAKE LOG AVAILABLE FOR ARCHITECT'S REVIEW.
- 7 WORK PROGRESS SCHEDULE**
MAINTAIN AN UPDATED WORK PROGRESS SCHEDULE POSTED IN A VISIBLE PLACE LOCATED IN FIELD OFFICE. UPDATE SCHEDULE DAILY TO REFLECT WORK PROGRESS.
- 8 BUILDING PERMITS**
THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.
- 9 FINAL APPROVALS**
CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.
- 10 REQUIRED LICENSES**
ADDITIONAL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.
- 11 WORKMAN'S COMPENSATION**
ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.
- 12 SAFETY**
CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES, AND SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.

13. CONTRACTOR'S FIELD OFFICE

- PROVIDE AND MAINTAIN A FIELD OFFICE ON THE PREMISES WHERE DIRECTED. OFFICE SHALL BE OF NEAT, SUBSTANTIAL CONSTRUCTION. PROVIDE HANGING PLAN FILES AND MAINTAIN WITH ALL CURRENT DRAWINGS.
a. STORAGE STRUCTURE: PROVIDE AND MAINTAIN, WHERE DIRECTED, A WATERIGHT STORAGE STRUCTURE FOR ALL MATERIALS WHICH MIGHT BE DAMAGED BY WEATHER, INCLUDING STORAGE FACILITIES FOR CONCRETE TEST SAMPLES, OR OTHER MATERIAL SAMPLES REQUIRED FOR WORK.
b. COSTS: PAY COSTS FOR A LOCAL BUSINESS TELEPHONE FOR USE BY CONTRACTOR, OWNER AND ARCHITECT THROUGHOUT CONTRACT PERIOD.
c. COMMUNICATION EQUIPMENT: PROVIDE A TELEPHONE ON SITE. ASSIGN A RESPONSIBLE PERSON TO ANSWER ALL TELEPHONE CALLS IN EVENT THE SUPERINTENDENT IS ABSENT FROM THE PREMISES. PROVIDE APPROVED MEANS TO ESTABLISH URGENT COMMUNICATIONS [CELLULAR TELEPHONE OR PAGER].

14. TEMPORARY FACILITIES

PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES. PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY. DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS. PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.

15. STORAGE AND PROTECTION

STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERTIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

16. FIELD QUALITY CONTROL

EMPLOY ONLY EXPERIENCED INSTALLERS AND FURNISH EVIDENCE OF EXPERIENCE IF REQUESTED. USE OF ANY SUBCONTRACTOR OR INSTALLER IS SUBJECT TO OWNER'S APPROVAL. EMPLOY FULL-TIME, COMPETENT SUPERINTENDENT AS WELL AS NECESSARY ASSISTANTS. SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR AND ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR.

17. SOURCE QUALITY CONTROL

PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS, UNLESS MORE STRINGENT CRITERIA ARE SPECIFIED IN INDIVIDUAL SECTIONS. USE OF ANY SUPPLIER IS SUBJECT TO OWNER'S APPROVAL.

18. PRODUCT HANDLING

TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DELIVER PRODUCTS IN UNDAMAGED CONDITION, IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINERS OR PACKING, WITH IDENTIFYING LABELS INTACT AND LEGIBLE. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS OF CONTRACT DOCUMENTS. QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.

19. COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS

HANDLE, INSTALL, ERECT, CONNECT, CONDITION, USE, ADJUST, AND CLEAN PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND IN CONFORMITY WITH SPECIFIED REQUIREMENTS, INCLUDING EACH STEP IN SEQUENCE. DO NOT OMIT PREPARATORY STEPS OR INSTALLATION PROCEDURES. UNLESS SPECIFICALLY MODIFIED OR EXEMPTED BY CONTRACT DOCUMENTS, SHOULD JOB CONDITIONS OR SPECIFIED REQUIREMENTS CONFLICT WITH MANUFACTURER'S INSTRUCTIONS, REQUEST CLARIFICATION IN WRITING FROM ARCHITECT BEFORE PROCEEDING. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH PROPER APPEARANCE.

20. MANUFACTURER'S FIELD SERVICES

WHEN SPECIFIED IN INDIVIDUAL SECTIONS, REQUIRE MATERIAL OR PRODUCT SUPPLIERS OR MANUFACTURERS TO PROVIDE QUALIFIED STAFF PERSONNEL TO OBSERVE SITE CONDITIONS, CONDITIONS OF SURFACES, QUALITY OF WORKMANSHIP, AND CONDITIONS OF INSTALLATION AS APPLICABLE AND TO INITIATE ADDITIONAL INSTRUCTIONS WHEN NECESSARY.

21. SUBSTITUTIONS

PROPOSALS FOR SUBSTITUTION OF MATERIALS, EQUIPMENT, AND METHODS WILL ONLY BE CONSIDERED WHEN ACCOMPANIED BY FULL AND COMPLETE TECHNICAL DATA AS WELL AS ANY OTHER INFORMATION REQUIRED TO EVALUATE THE PROPOSED SUBSTITUTION. SUBSTITUTIONS ARE UNACCEPTABLE UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. IN THE EVENT OF SUBSTITUTION PROPOSALS AFTER THE CONTRACT HAS BEEN AWARDED, ALL SUCH PROPOSALS SHALL BE ACCOMPANIED BY SUBSTANTIAL COST SAVINGS FOR THE OWNER.

22. AVAILABILITY OF PRODUCTS

VERIFY PRIOR TO CONSTRUCTION START THAT ALL SPECIFIED ITEMS WILL BE AVAILABLE IN TIME FOR INSTALLATION DURING ORDERLY AND TIMELY PROGRESS OF THE WORK. IN THE EVENT SPECIFIED ITEM OR ITEM WILL NOT BE SO AVAILABLE, NOTIFY THE ARCHITECT PRIOR TO START OF CONSTRUCTION. COST OF DELAYS BECAUSE OF NON-AVAILABILITY OF SPECIFIED ITEMS OR SUBSTITUTED ITEMS, WHEN THE CONTRACTOR COULD HAVE AVOIDED SUCH DELAYS, WILL BE BORNE BY THE CONTRACTOR.

23. PRODUCTS AND MATERIALS

PROVIDE PRODUCTS AND MATERIALS SPECIFIED. REQUEST ARCHITECTS SELECTION OF COLORS AND ACCESSORIES IN SUFFICIENT TIME TO AVOID DELAYING PROGRESS OF THE WORK.

24. VERIFICATION OF WORK

CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS. CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES.

25. CONFORMANCE WITH DOCUMENTS

ANY AND ALL CHANGES OR VARIATIONS FROM THESE DOCUMENTS MUST BE APPROVED IN WRITING PRIOR TO MAKING THEM.

26. NON-CONFORMING WORK

ANY WORK THAT DOES NOT CONFORM TO THE CONTRACT DOCUMENTS SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

27. PRODUCT IDENTIFICATIONS

NAMES, PLATES, TRADEMARKS, LOGOS, AND OTHER IDENTIFYING MARKS ON PRODUCTS ARE NOT PERMITTED ON SURFACES EXPOSED TO VIEW IN PUBLIC AREAS, INTERIOR OR EXTERIOR. PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT NOT EXPOSED TO PUBLIC VIEW ARE EXCLUDED FROM FOREGOING LIMITATION. REQUIRED UL OR FM LABELS ARE ALSO EXCLUDED.

28. PROTECTION OF ADJACENT WORK

PROVIDE TEMPORARY PROTECTION FOR ADJACENT AREAS TO PREVENT DAMAGE BY INSTALLATION OF NEW WORK OR DEMOLITION OF EXISTING CONSTRUCTION. PROMPTLY REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNER. PROTECT ADJACENT AREAS FROM CONTAMINATION BY CONSTRUCTION DUST AND DEBRIS. PROVIDE TEMPORARY BARRICADES AS NECESSARY TO ENSURE PROTECTION OF THE PUBLIC. MAINTAIN EGRESS WITHIN AND AROUND CONSTRUCTION AREAS.

29. DAMAGED PRODUCTS

DO NOT USE PRODUCTS IN WORK, WHICH HAVE DETEIORATED, BECOME DAMAGED, OR ARE OTHERWISE UNFIT FOR USE. RESTORE UNITS DAMAGED DURING INSTALLATION. REPLACE UNITS, WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.

30. SECURITY

PROVIDE FACILITIES TO PROTECT WORK FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT. CONDUCT OPERATIONS IN MANNER TO AVOID RISK OF LOSS, THEFT, OR DAMAGE BY VANDALISM.

31. TEMPORARY CONTROLS

- a. HEAT:
PRIOR TO ENCLOSURE, PROVIDE HEATING AS NECESSARY TO PROTECT MATERIALS, PRODUCTS, AND FINISHES FROM DAMAGE DUE TO TEMPERATURE OR HUMIDITY. ENCLOSURE IS DEFINED AS STATE OF CONSTRUCTION WHEN EXTERIOR WALLS ARE ERECTED, DOORS AND WINDOWS ARE INSTALLED AND GLAZED, ROOF DECK AND ROOFING ARE COMPLETE, AND WHEN OTHER OPENINGS IN EXTERIOR ENVELOPE ARE EQUIPPED WITH TEMPORARY CLOSURES. EXCEPT WHERE INDICATED OTHERWISE IN INDIVIDUAL SPECIFICATION SECTIONS, MAINTAIN MINIMUM AMBIENT TEMPERATURE OF 50 DEGREES F IN AREAS WHERE CONSTRUCTION IS IN PROGRESS.
- b. VENTILATION:
VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.
- c. BARRIERS AND CLOSURES:
PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATION.
- d. FIRE PROTECTION:
COMPLY WITH LOCAL FIRE PROTECTION CODE AND GOVERNING AUTHORITIES. PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION INCLUDING, WITHOUT LIMITATION, FIRE EXTINGUISHERS AND OTHER APPROPRIATE EQUIPMENT FOR FIRE EXTINGUISHING READY FOR IMMEDIATE USE. MAINTAIN ANY REQUIRED FIRE ALARM SYSTEMS IN OPERATION. DURING CONSTRUCTION, DISTRIBUTE EQUIPMENT AROUND SITE AND PARTICULARLY IN IMMEDIATE VICINITY OF PERFORMANCE OF WELDING OR SIMILAR HAZARDOUS WORK.

32. INTERRUPTION OF SERVICES

INTERRUPTIONS TO ANY SERVICE FOR THE PURPOSE OF MAKING OR BREAKING A CONNECTION SHALL BE MADE ONLY AFTER CONSULTATION WITH THE OWNER AND SHALL BE AT SUCH TIME AND OF SUCH DURATION AS MAY BE DIRECTED.

33. EXCAVATIONS OR TRENCHING

KEEP THE INTERVALS BETWEEN EXCAVATION OR TRENCHING, INSTALLATION OF CONDUIT OR PIPING, AND BACK FILLING OPERATIONS TO AN ABSOLUTE MINIMUM. PROVIDE SUITABLE TEMPORARY COVERS FOR EXCAVATIONS OR TRENCHING CROSSING ROADWAYS, WALKS, OR OTHER TRAFFIC WAYS AS REQUIRED BY GOVERNING AGENCIES.

34. CUTTING AND PATCHING

DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE FIRE PERFORMANCE, DECREASE ACOUSTICAL PERFORMANCE, DECREASE ENERGY PERFORMANCE, DECREASE OPERATIONAL LIFE, OR DECREASE SAFETY FACTORS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. CUT WITH TOOLS APPROPRIATE FOR MATERIALS TO BE CUT. PATCH WITH MATERIALS AND METHODS TO PRODUCE PATCH THAT IS NOT VISIBLE FROM A DISTANCE OF THREE FEET.

35. COORDINATION AND CLEARANCES

- VERIFY AND COORDINATE CLEARANCES, DIMENSIONS, AND INSTALLATION OF ADJOINING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, CONDUITS, OR OTHER MECHANICAL OR ELECTRICAL ITEMS OR APPARATUS. VERIFY DIMENSIONS FOR PRODUCTS TO BE FITTED INTO WORK.
a. ATTACHMENTS AND CONNECTIONS:
PROVIDE ATTACHMENT AND CONNECTION DEVICES METHODS FOR SECURING AND ANCHORING WORK. SECURE IN PLACE WITH DEVICES DESIGNATED AND SIZED TO WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, OR DISFIGUREMENT.
b. EXPANSION AND MOVEMENT:
ALLOW FOR EXPANSION OF MATERIALS AND BUILDING MOVEMENT.
c. ISOLATION OF DISSIMILAR ITEMS:
ISOLATE EACH UNIT OF WORK FROM INCOMPATIBLE WORK AS NECESSARY TO PREVENT DETERIORATION AND ELECTROLYTIC ACTION.
d. MAINTENANCE:
CLEAN AND PERFORM MAINTENANCE ON INSTALLED WORK AS FREQUENTLY AS NECESSARY THROUGH REMAINDER OF CONSTRUCTION PERIOD. LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.
e. ADJUSTMENTS: ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.

36. EXAMINATION OF CONDITIONS

EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT COMMENCE WORK OVER UNSATISFACTORY CONDITIONS DETRIMENTAL TO PROPER AND TIMELY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OF INSTALLATION CONSTITUTES ACCEPTANCE OF CONDITIONS AND COSTS OF ANY CORRECTIVE MEASURES ARE RESPONSIBILITY OF CONTRACTOR.

37. BACKING SUPPORT

CONTRACTOR SHALL PROVIDE BACKING SUPPORT OF ALL WALL, CEILING, AND PARTITION MOUNTED ITEMS SUCH AS TABLE BRACKETS, LIGHT FIXTURES, ARTIFACTS, SHELVING, EQUIPMENT, AND TELEVISIONS, COORDINATE LOCATIONS AND REQUIREMENTS WITH THE PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS.

38. SECURE OPENINGS

EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.

39. GLAZING REQUIREMENTS

GLASS AND GLAZING FOR ALL WINDOWS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES. IN ADDITION ALL WINDOWS MUST MEET THE "AAMA" WINDOW STANDARDS FOR INSTALLATION. THE CONTRACTOR SHALL OBTAIN, AND SHALL FOLLOW ALL REQUIREMENTS OF THE "AAMA" STANDARDS IN ADDITION TO THE MANUFACTURER SPECIFICATIONS AND ARCHITECTURAL DETAILS INCLUDED WITHIN THE DRAWINGS.

40. ROOFING REQUIREMENTS

ROOFING WORK SHALL BE PERFORMED AND ALL PENETRATIONS THROUGH THE ROOFING MEMBRANE SHALL BE PATCHED OR FLASHED AS PER THE MANUFACTURER'S STANDARDS.

41. ROOF ACCESS

ROOF OBSTRUCTIONS SUCH AS TELEVISION ANTENNAE, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.

42. FINISH FLAME SPREAD REQUIREMENTS

INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.

43. GYPSUM REQUIREMENTS

GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.

44. EQUIPMENT IN STRUCTURAL SLAB

PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBER THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.

45. FIRE EXTINGUISHERS

VERIFY FIRE EXTINGUISHER REQUIREMENTS AND LOCATIONS WITH FIRE MARSHAL AND OWNER'S REPRESENTATIVE.

46. INSECT CONTROL

CONTRACTOR SHALL SEAL ALL GAPS, HOLES, AND CRACKS IN BUILDING CONSTRUCTION AS REQUIRED TO CONTROL INFILTRATION OF INSECTS.

47. DISPOSAL OF TRASH AND EXCESS EXCAVATION

DISPOSE OF TRASH, AND DEBRIS AT DESIGNATED AREAS OFF THE PREMISES AT NO ADDITIONAL COST TO THE OWNER. BURNING OF TRASH AND DEBRIS ON THE PREMISES IS PROHIBITED. COORDINATE TRASH REMOVAL WITH LANDLORD WHERE APPLICABLE.

48. COORDINATION

ELECTRICAL, MECHANICAL, AND PLUMBING SYSTEM ARE SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL WORK TO AVOID CONFLICTS BETWEEN TRADES. THE CONTRACTOR SHALL PERFORM ALL WORK TO PROVIDE COMPLETE FUNCTIONING SYSTEMS IN ACCORDANCE WITH THE INTENT INDICATED AND CODES AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION.

49. CLEANING MATERIALS AND EQUIPMENT

PROVIDE ALL REQUIRED PERSONNEL, EQUIPMENT, AND MATERIALS NEEDED TO MAINTAIN THE SPECIFIED STANDARD OF CLEANLINESS. USE ONLY THE CLEANING MATERIALS AND EQUIPMENT WHICH ARE COMPATIBLE WITH THE SURFACE BEING CLEANED, AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL.

50. LOADS ON STRUCTURE

DURING AND AFTER CONSTRUCTION THE CONTRACTOR AND / OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOAD.

51. FIRE RATED ASSEMBLIES

RATED ASSEMBLIES SHALL BE CONTINUOUS BOTH HORIZONTALLY AND VERTICALLY AND SHALL EXTEND FROM RATED ASSEMBLY TO RATED ASSEMBLY. FIRE CAULK ALL PENETRATIONS.

TOLERANCES

1. TOLERANCES AND ALLOWABLE DEVIATIONS

- INSTALL WORK TRUE TO LINE, PLUMB, AND LEVEL, EXCEPT WHERE SPECIFIED OTHERWISE. WORK EXECUTED WITHIN THE FOLLOWING TOLERANCE WILL BE ACCEPTABLE.
a. TRUE TO LINE:
ALLOWED DEVIATION FROM AN ABSOLUTELY STRAIGHT LINE OF SIGHT WITHIN PLUS OR MINUS 1/8 INCH IN 10 FT., AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
b. PLUMB:
ALLOWED DEVIATIONS FROM AN ABSOLUTELY VERTICAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
c. LEVEL:
ALLOWED DEVIATIONS FROM AN ABSOLUTELY HORIZONTAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
d. ALLOWED DEVIATIONS FROM AN ABSOLUTELY FLAT IF WITHIN PLUS OR MINUS 1/16 INCH IN ONE SQUARE FOOT, WITHIN PLUS OR MINUS 1/8 INCH IN AN AREA 10 FEET BY 10 FEET, AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE AREA OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.

PROJECT CONTRACT CLOSEOUT

1. SUBSTANTIAL COMPLETION

AT SUBSTANTIAL COMPLETION OF THE PROJECT, SCHEDULE AND ATTEND A PUNCH LIST WALK THROUGH OF REMAINING WORK FOR REVIEW WITH THE ARCHITECT AND OWNER. COMPLETE ALL DEFECTS AND OMISSIONS NOTED IN THE FINAL PUNCHLIST PROMPTLY, IN THE TIME PERIOD AGREED UPON WITH THE OWNER, AT NO ADDITIONAL EXPENSE TO THE OWNER.

2. CERTIFICATE OF OCCUPANCY

PROVIDE THE FINAL CERTIFICATE OF OCCUPANCY FROM THE BUILDING DEPARTMENT.

3. PERMITS/INSPECTION CARDS

FURNISH COPIES OF PERMITS AND SIGNED INSPECTION CARDS FOR EACH OF THE FOLLOWING AGENCIES: BUILDING DEPARTMENT; PLUMBING/MECHANICAL DEPARTMENT; ELECTRICAL DEPARTMENT; FIRE DEPARTMENT; HEALTH DEPARTMENT; OTHERS AS REQUIRED.

4. MAINTENANCE MANUALS AND WARRANTIES

FURNISH (2) COPIES FOR EACH UNIT OF ALL MANUALS, MAINTENANCE INSTRUCTIONS, CONTRACTORS AND MANUFACTURER'S PRINTED WARRANTIES, AND INSTRUCTIONS FOR OPERATION OF ALL EQUIPMENT SPECIFIED HEREIN OR SHOWN ON DRAWINGS, TRAIN OWNER'S PERSONNEL IN USE OF BUILDING SYSTEMS.

5. TOUCH-UP MATERIAL

FURNISH OWNER WITH ONE GALLON OF EACH PAINT AND STAIN USED PER UNIT. PROVIDE AN ADDITIONAL 2 PERCENT OF QUANTITY INSTALLED OF ALL FINISH MATERIAL INCLUDING CEILING PANELS, TILE, AND SHEET GOODS.

6. SUBCONTRACTORS

PROVIDE THE OWNER THE NAMES, ADDRESSES, AND PHONE NUMBERS OF ALL SUBCONTRACTORS. FINAL UNCONDITIONAL LIEN RELEASES, AND WARRANTIES FROM EACH.

7. FINAL CLEANING AND REPAIRS

REMOVE TEMPORARY FACILITIES AND PROVIDE FINAL CLEANING AND TOUCH-UP. RESTORE PORTIONS OF BUILDING, SITE IMPROVEMENTS, LANDSCAPING AND OTHER ITEMS DAMAGED BY CONSTRUCTION OPERATIONS TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL EXPENSE TO THE OWNER.

8. CLOSEOUT DOCUMENTS

PROVIDE THE OWNER WITH A COMPACT DISK OF ALL RECORD DRAWINGS IN PDF FORMAT, COPY OF ALL SHOP DRAWINGS AND PRODUCT SUBMITTALS, SERVICE CONTRACTS, HVAC AIR BALANCE REPORT, AND WASTELINE VIDEO INSPECTION REPORT.

LEGEND OF ABBREVIATIONS

AB	ANCHOR BOLT(S)	JT	JOINT
ABV	ABOVE	JST	JOIST
APPROX	APPROX		
ARCH	ARCHITECT(URAL)	K	KIPS
		KLF	KIP PER FOOT
BLDG	BUILDING	KSF	KIP PER SQUARE FOOT
BLK	BLOCKING		
BLW	BELOW	LBS	POUNDS
BN-X	BEAM	LF	LINEAL FOOT
B-N	BOUNDARY NAILING		
BOT	BOTTOM	MAX	MAXIMUM
BRG	BEARING	MECH	MECHANICAL
BTWN	BETWEEN	MFR	MANUFACTURER
		MIN	MINIMUM
		MISC	MISCELLANEOUS
		MTL	METAL
C.J.	CONST/CONTROL JOINT		
CLR	CLEAR	O.C.	ON CENTER
COL	COLUMN	O.F.	OUTSIDE FACE
CONC	CONCRETE	OPP	OPPOSITE
CONT	CONTINUOUS		
CTR	CENTER	PCF	POUNDS PER CUBIC FT
CW-X	CONCRETE WALL	PERP	PERPENDICULAR
		PLF	POUNDS PER LINEAL FT
		PSI	POUNDS PER SQ INCH
		PSF	POUNDS PER SQ FOOT
DBL	DOUBLE	REINF	REINFORCEMENT
DIA	DIAMETER	REQD	REQUIRED
DIM	DIMENSION		
DN	DOWN	SBP-X	STEEL BASE PLATE
DWG	DRAWING	SC-X	STEEL COLUMN
		SCP-X	STEEL CAP PLATE
EA	EACH	SI	SPECIAL INSPECTION
EAF	EACH FACE	SM	SIMILAR
EEXP	EXPANSION JOINT	SLAB	ON GRADE
ELEC	ELECTRICAL	SQ	SQ SQUARE
ELEV	ELEVATION	SW-X	SW-X SHEAR WALL
EQU	EQUAL		
EW	EACH WAY		
EXIST	EXISTING		
EXP	EXPANSION		
EXT	EXTERIOR		
FC-X	CONTINUOUS FOOTING		
FIN	FINISHING		
FIN	FINISH	T&B	TOP AND BOTTOM
FLR	FLOOR	TEMP	TEMPERATURE
FR	RECTANGULAR FOOTING	T.O.P	TOP OF
FR-X	SQUARE FOOTING	T.O.P OF FOOTING	TOP OF FOOTING
FT	FEET	TOW	TOP OF WALL
FTG	FOOTING	TYP	TYPICAL
HORIZ HT	HORIZONTAL HEIGHT	UNO	UNLESS NOTED OTHERWISE
		VERT	VERTICAL
I.F.	INTERIOR FACE		
INCH	INCHES	w/	WITH
INT	INTERIOR	WF	WELDED WIRE FABRIC
		WVF	WELDED WIRE FASC
		WWM	WELDED WIRE MESH

RODERICK CATALYST BLDG #7
NEW OFFICE WAREHOUSE – BUILDING SHELL
2021 IBC CODE ANALYSIS

Code Item Reference	Code Requirement	Actual Building	Comments
Occupancy Chapter 3	B/S-1/S-2/F-1/F-2	B/S-1/S-2/F-1/F-2	Office, Warehouse, Industrial
Construction Type Chapter 6	III-B	III-B	New Building Shell for future tenants.
Allowable Height Table 504.3	75'	H<75'	Ok
Allowable Stories Table 504.4	2	1	Ok
Allowable Area Section 507 if unlimited Otherwise table 506.2	Unlimited	68,154 SF	Ok
Frontage Increase 509.3 frontage increase	NA	NA	NA
Mixed Use Section 508	NA	NA	Non-separated use per 508.3
Max. Area of Ext. Wall Unprotected openings Table 705.8	No Limit	No Limit	Ok
Automatic Sprinkler Systems Section 903	Yes	Yes	NFPA-13 ESFR (See footnote below)
Max. Floor Area Allowances per Occupant Table 1004.5	Load Factors: 150 Office 500 Warehouse	Preliminary occupant load: 6,815/150 = 46 61,339/500 = 123 Total occupants: 169	Note: Actual occupant load to be determined with each future tenant improvement.
Min. Number of Exits Section 1006	2	13	Ok
Common Path Table 1006.2.1	B: 100' max S: 100' max F: 100' max	Less than maximum See plan	Ok
Exit Access Travel Table 1017.2	w/ Sprinkler: S-1, F-1: 400' S-2, F-2: 400' B: 300' Chapter 11	Less than maximum See plan	Section 1017.2.2: S-1, F-1 increase
Accessibility			Ok
Ventilation, Temperature, Lighting	Chapter 12 and Mechanical code		Ok
Min. Roofing Class. Table 1505.1	C	C	Ok
Plumbing Facilities Table 2902.1 Water Closets Lavatories Drinking Fountain Service Sink Fire Extinguishers	Note: Actual plumbing fixture count to be determined with each future tenant improvement.	Note: Actual plumbing fixture count to be determined with each future tenant improvement.	1:25 first 50, 1:50 / 1:100 1:40 first 80, 1:80 / 1:100 1:100 / 1:1,000 1/1 Per Fire Marshal
Energy Efficiency	Chapter 13	International Energy Conservation Code	Ok

Note: Building area is approximate and portrays gross building area for code compliance only. Additional area plans can be provided at the request of the owner for BOMA calculations, etc. The contractor shall be responsible for determining building areas for bidding purposes.

NFPA-13 ESFR Automatic Sprinkler System to be designed for rack storage class 1-4 commodities and various group "A" plastics.

FIRE-RESISTANCE RATING
REQUIREMENTS (hours)

Building Element	Type III-B
Structural Frame Including Columns, Girders, Trusses	0
Bearing Walls	2-hr
Exterior Interior	0
Nonbearing Walls and Partitions Exterior Interior	0
Floor Construction Including supporting Beams and Joists	0
Roof Construction Including supporting Beams and Joists	0

Corridor fire-resistance rating = 0 hr per table 1020.2

INTERIOR WALL AND CEILING
FINISH REQUIREMENTS

Sprinkled	Group S, F	Group B
Exit enclosures and exit passageways	C	B
Corridors	C	C
Rooms and enclosed spaces	C	C

See Table 803.13
Class A flame spread 0-25; Smoke developed 0-450
Class B flame spread 26-75; Smoke developed 0-450
Class C flame spread 76-200; Smoke developed 0-450

BUILDING AIR BARRIER

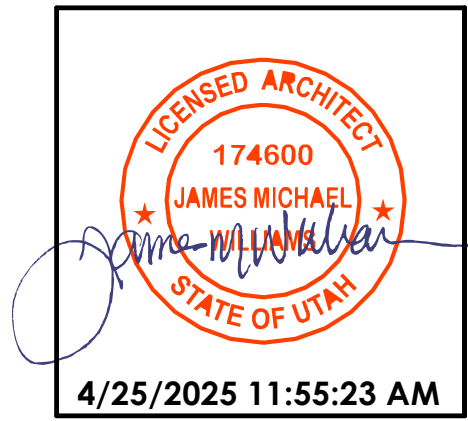
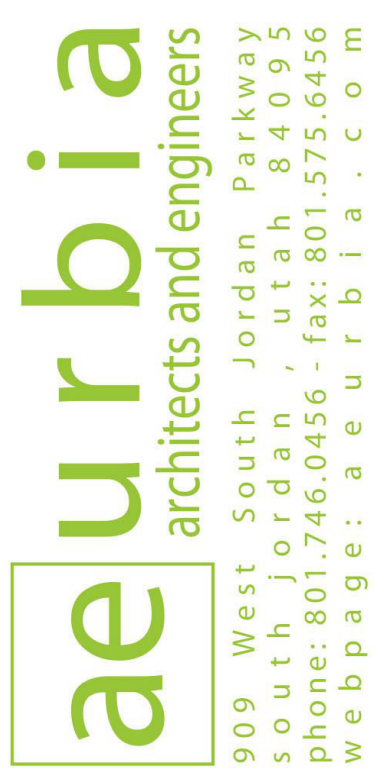
LOCATION	TYPE	COMMENTS
WALLS	PRE-CAST CONCRETE	SEE DETAIL 88.9/A504 FOR JOINT CONDITION.
ROOF	GFR FACED POLYISOCYANURATE	SEAMS TO BE TAPED

1. SEE DETAILS ON A503 FOR JOINT CONDITION.
2. SEAMS TO BE TAPED.

BUILDING INSULATION

LOCATION	VALUE	INS Thickness	TYPE	COMMENTS
FOUNDATION	N/A	3"	NOT REQ'D PER CODE ANALYSIS	
EXTERIOR WALLS	R-11	1.75"	DOW THERMAX WHITE FINISH INSULATION	
ROOF	R-30	4.2"	GFR FACED POLYISOCYANURATE	

1. WALL TO ROOF CONNECTION DETAILED AT A504
2. WALL INSULATION TO HAVE TAPED JOINTS. INSULATION TO RUN FROM FLOOR TO ROOF DECK. PROVIDE "J" TRACK OVER OPENING AS REQ'D.



RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK DESCRIPTION	

AE2022.290

CODE
ANALYSIS &
COMCHECK'S

DATE: 04/23/2025

SHEET #:

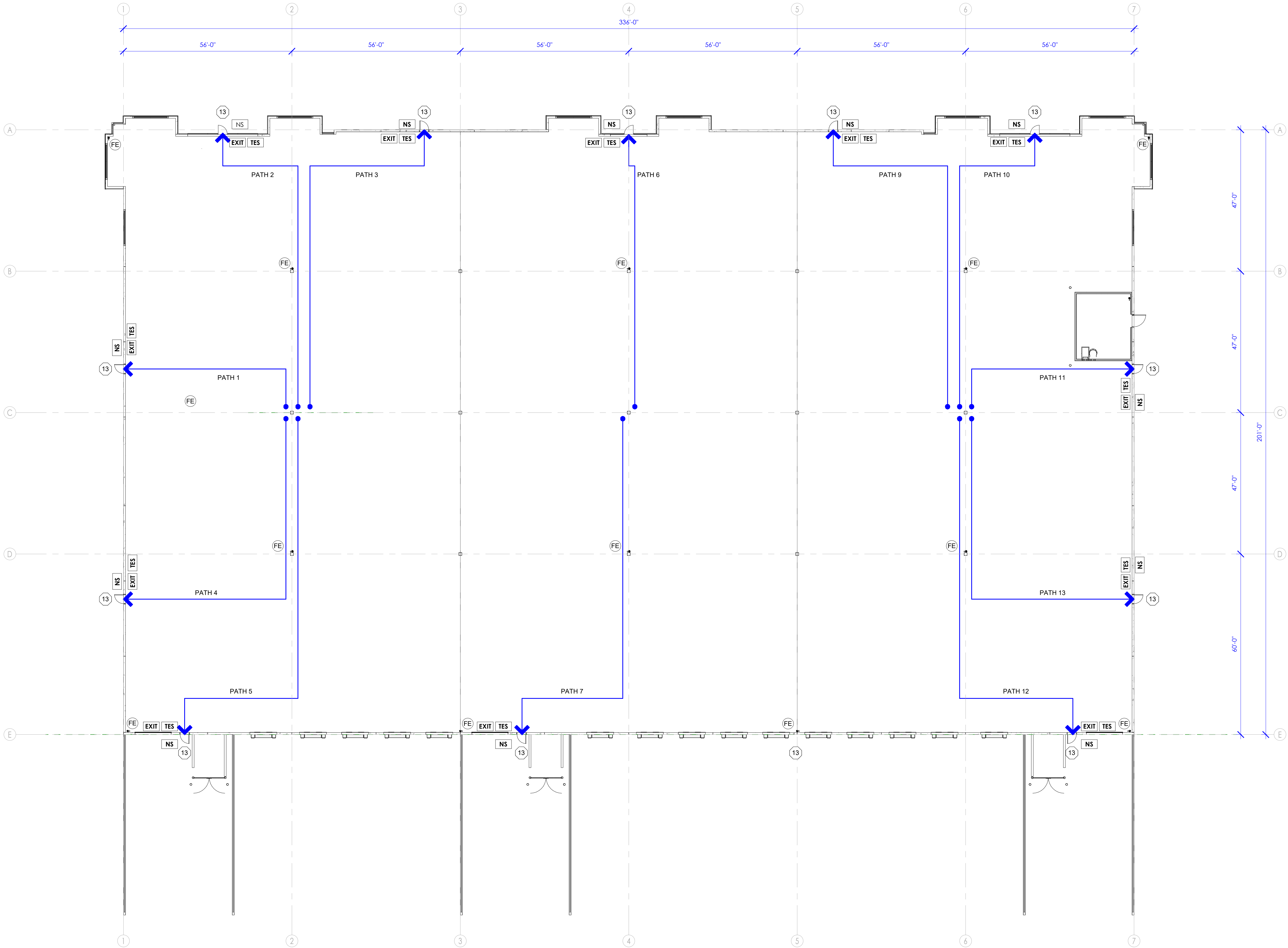
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EGRESS PATHS		
PATH	COMMON PATH	TRAVEL DISTANCE
PATH 1	0"	66' - 6"
PATH 2	0"	115' - 10"
PATH 3	0"	130' - 0"
PATH 4	0"	114' - 0"
PATH 5	0"	142' - 8"
PATH 6	0"	92' - 4"
PATH 7	0"	138' - 6"
PATH 9	0"	130' - 0"
PATH 10	0"	115' - 10"
PATH 11	0"	66' - 6"
PATH 12	0"	142' - 8"
PATH 13	0"	114' - 0"

SIGNAGE LEGEND:	
	= EXIT SIGN
	= MISC. ROOM SIGN
	= NO SMOKING SIGN
	= STAIRWAY IDENTIFICATION SIGN
	= FIRE RISER ROOM SIGN
	= REST ROOM SIGN
	= EGRESS DIRECTIONAL SIGN
	= FLOOR IDENTIFICATION SIGN
	= MAXIMUM OCCUPANCY SIGN
	= ACCESSIBLE AND INACCESSIBLE SIGN
	= TACTILE EXIT SIGN

EGRESS PLAN LEGEND:	
	= COMMON PATH OF EGRESS
	= EXIT ACCESS TRAVEL
	= EXIT LOCATION SEE ELECTRICAL PLANS FOR LOCATION OF EXIT SIGNAGE
	= OCCUPANT LOAD (OCCUPANCY GROUP)
	= FIRE EXTINGUISHER
	= 90 MIN. FIRE RATED DOOR
	= UNRATED FIRE SEPARATION - SMOKE
	= 2 HOUR FIRE SEPARATION
	= AREA FOR ASSITED RESCUE



LEVEL 01 EGRESS PLAN
G003 1/16" = 1'-0"

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REGISTERED ARCHITECT
174600
JAMES MICHAEL
4/25/2025 11:55:25 AM

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

MARK	REVISION	SCHEDULE	REVISION DATE

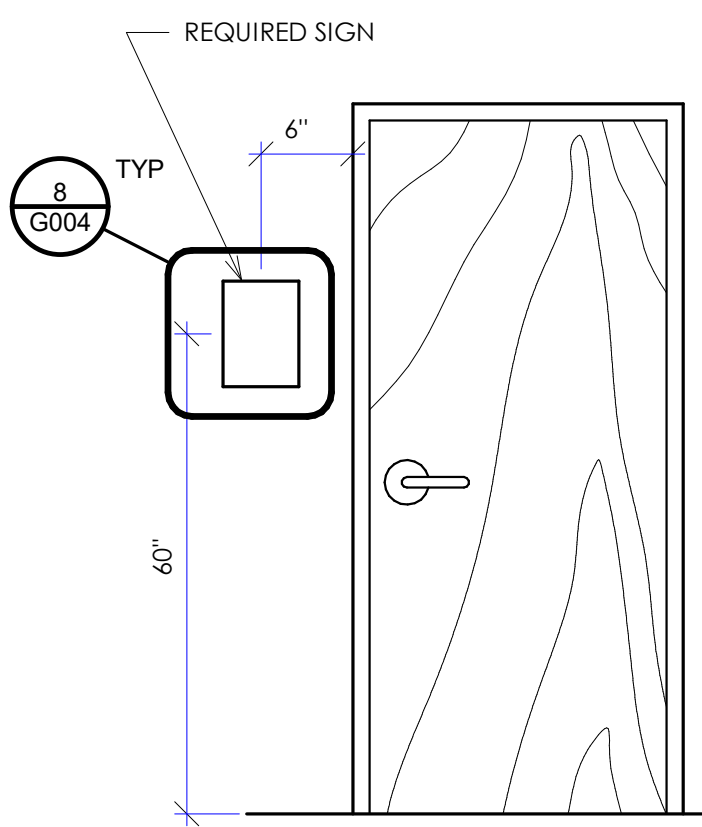
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EGRESS PLAN

DATE: 04/23/2025

SHEET #:

G003

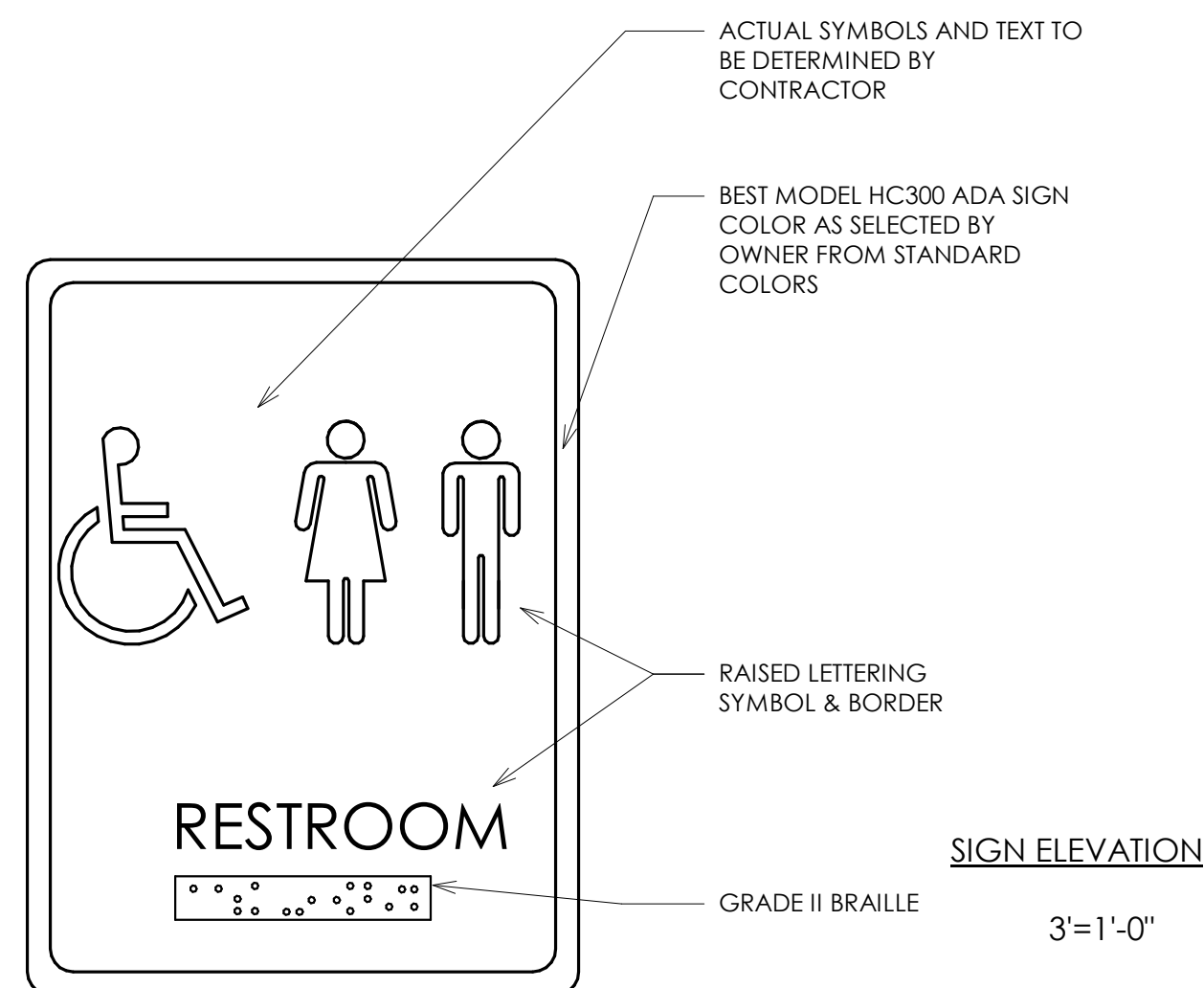
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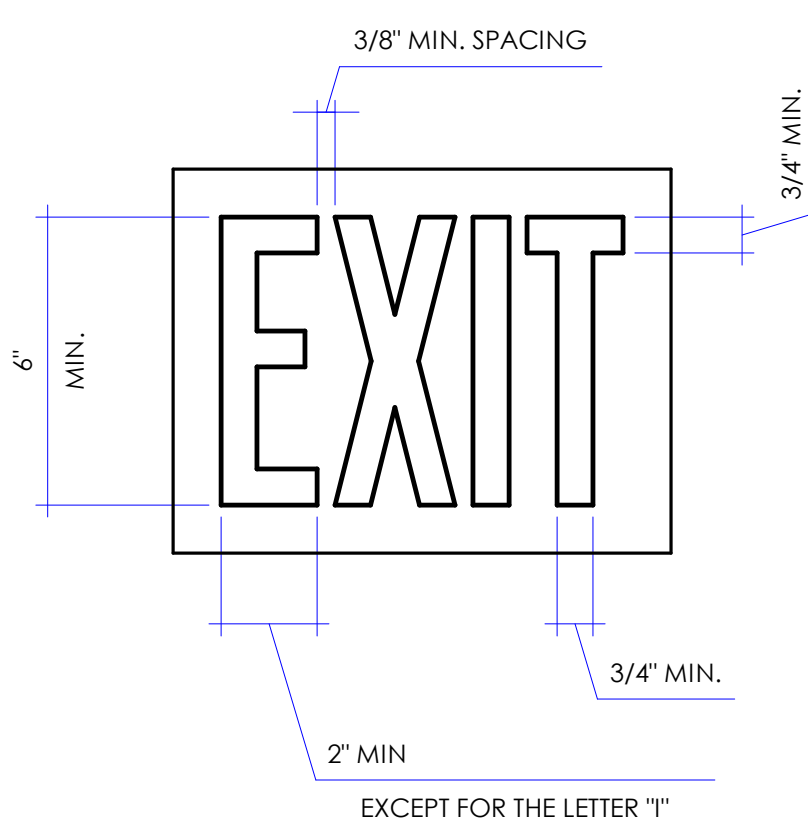
7 RESTROOM SIGN

G004



8 REQUIRED SIGN

G004



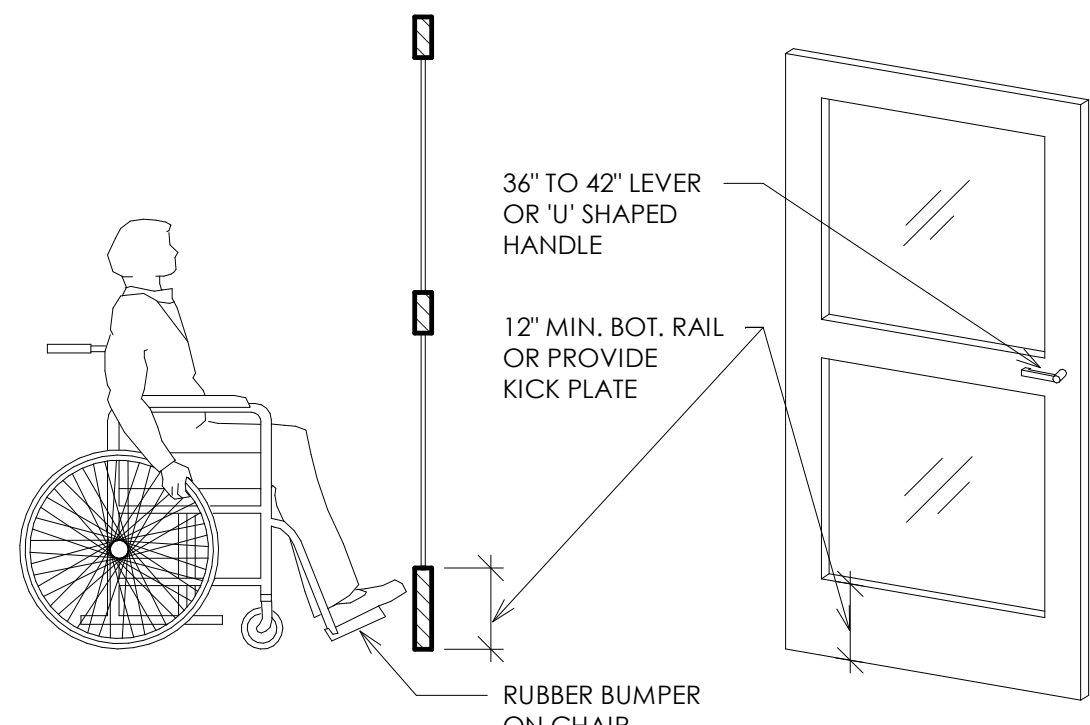
- NOTES:
1. PROVIDE INTERNALLY LIT SIGN POWERED BY EMERGENCY POWER SYSTEM.
 2. SIGN TO REMAIN ILLUMINATED AT ALL TIMES.

9 EXIT SIGN DETAIL

G004

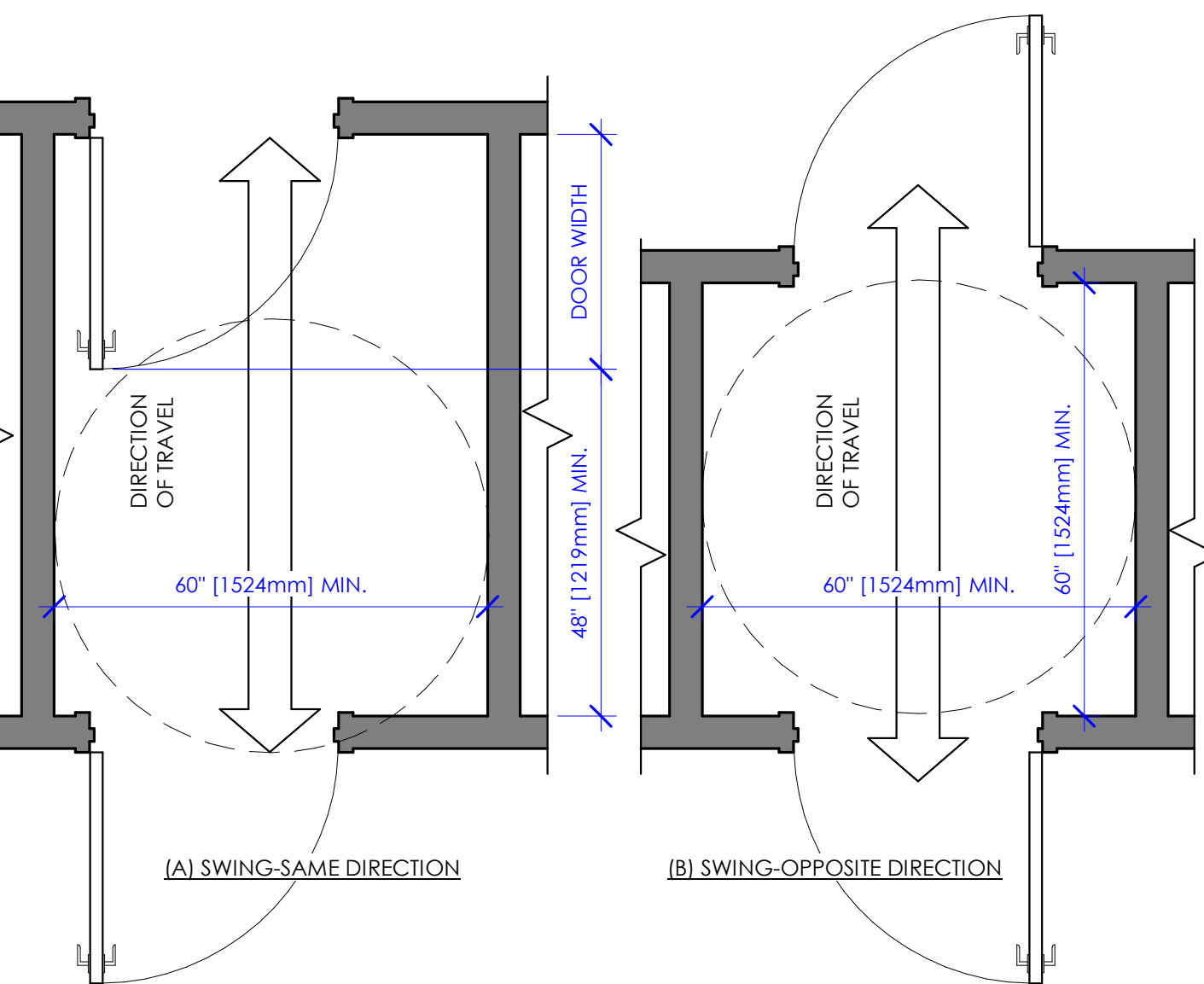
- LETTERS AND NUMBER:**
1. CHARACTER WIDTH TO BE 55-110% OF THE CHARACTER HEIGHT. STROKE THICKNESS TO BE 10-15% OF CHARACTER HEIGHT.
 2. CONTRAST CHARACTERS AND SYMBOLS WITH BACKGROUND. CHARACTERS ARE TO BE SANS SERIF FONT. SEE DETAIL BELOW FOR SIGN LAYOUT.
- SIGNS / PICTOGRAMS:**
4. PICTOGRAMS / PICTORIAL SYMBOL SIGNS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION SHALL BE 6" MINIMUM HEIGHT.
 5. CHARACTERS AND BACKGROUNDS SHALL BE OF NON-GLARE, CONTRASTING COLORS.
 6. SIGNS / PICTOGRAMS SHALL BE INSTALLED ON THE WALL ADJACENT TO DOOR LEADING TO THE ROOM OR SPACE THEY DESCRIBE AND AT 60" AFF TO SIGN CENTERLINE AND WHERE A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE DOOR SWING AREA.
 7. VERTICAL CLEARANCE AT SUSPENDED SIGNS WITH MINIMUM HEADROOM. OF 80" REQUIRE MINIMUM 3" CHARACTER HEIGHT MEASURED BY USING UPPERCASE "X". CHARACTERS AND NUMBERS SHALL BE SIZED ACCORDING TO VIEWING DISTANCE FROM WHICH READ. LOWER CASE CHARACTERS PERMITTED.
- SIGN LOCATIONS:**
8. ALL ACCESSIBLE ENTRANCES IDENTIFIED WITH MINIMUM OF ONE STANDARD SIGN.
 9. ADDITIONAL DIRECTIONAL SIGNS ALONG ACCESSIBLE PATH OF TRAVEL ARE REQUIRED.
 10. BUILDING REMODELED TO PROVIDE ACCESSIBLE SANITARY FACILITIES FOR PUBLIC USE SHALL HAVE INFORMATION POSTED IN THE LOBBY AS PART OF THE BUILDING DIRECTORY.
- INTERNATIONAL SYMBOL OF ACCESSIBILITY:**
11. STANDARD USED TO IDENTIFY ACCESSIBLE FACILITIES.
 12. WHITE FIGURE ON BLUE BACKGROUND. COLOR 15090 ON FEDERAL STANDARD 595A.
 13. WHEN ENFORCING AGENCY DETERMINES, IF APPROPRIATE, SPECIAL DESIGNS AND COLORS MAY BE APPROVED.
- BRAILLE:**
14. USE CONTRASTED GRADE 2 BRAILLE.
 15. SEE DETAIL BELOW FOR SPACING & SIZE.
 16. DOTS TO BE RAISED MINIMUM 0.025 INCH ABOVE BACKGROUND.

- DOOR TYPE:**
1. MINIMUM 1'0" HIGH SMOOTH SURFACE AT DOOR BOTTOM, EITHER ATTACHED PANEL OR BOTTOM RAIL.
- HARDWARE:**
2. OPEN FROM INSIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT.
 3. OPEN BY SINGLE EFFORT LEVER-TYPE DEVICE (NOT REQUIRING GRASPING).
 4. MOUNTED 36" TO 42".
 5. MAXIMUM 8.5 LBS EFFORT TO OPERATE EXTERIOR DOOR, 5 LBS FOR INTERIOR.



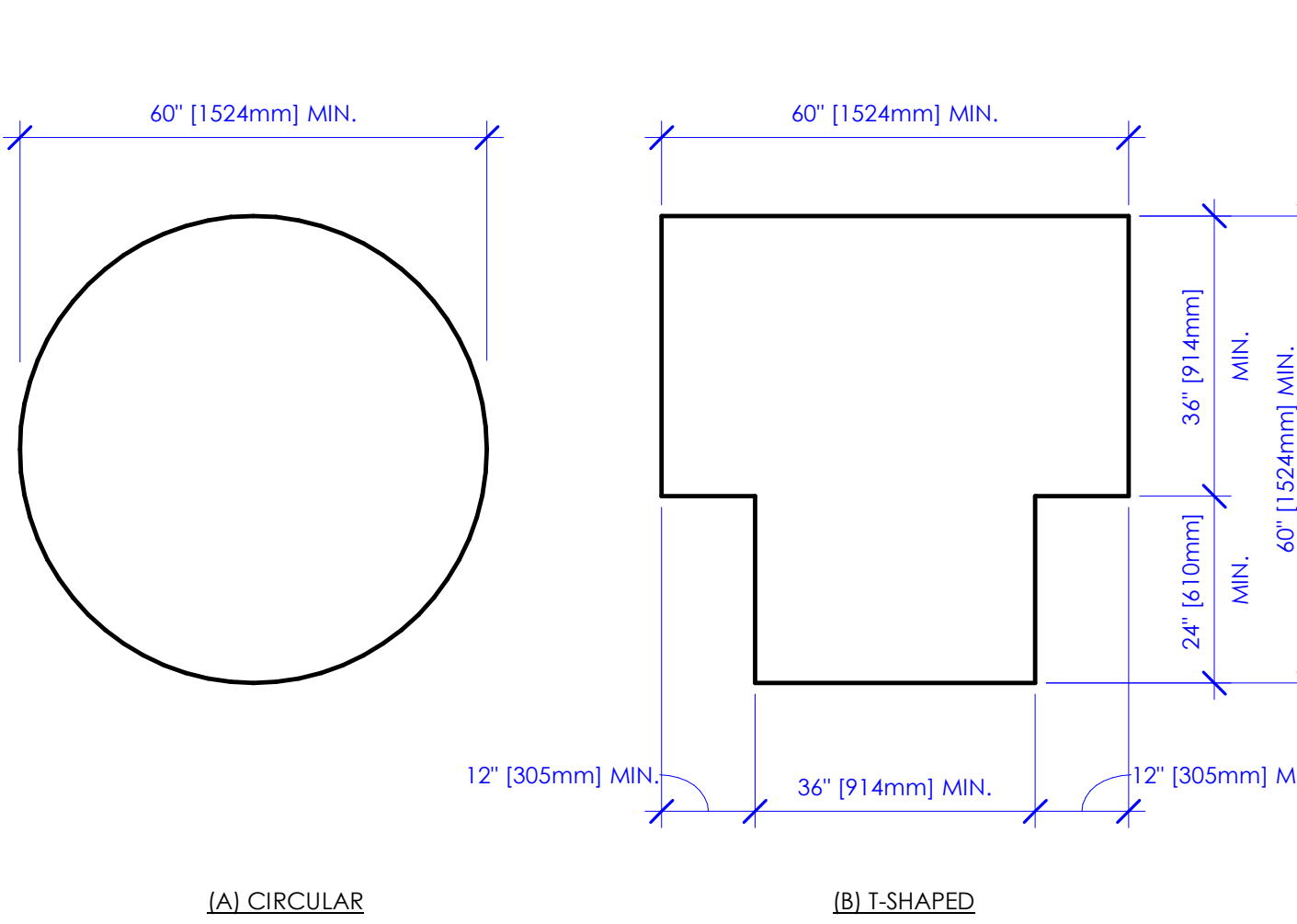
1 ADA DOOR REQUIREMENTS

G004



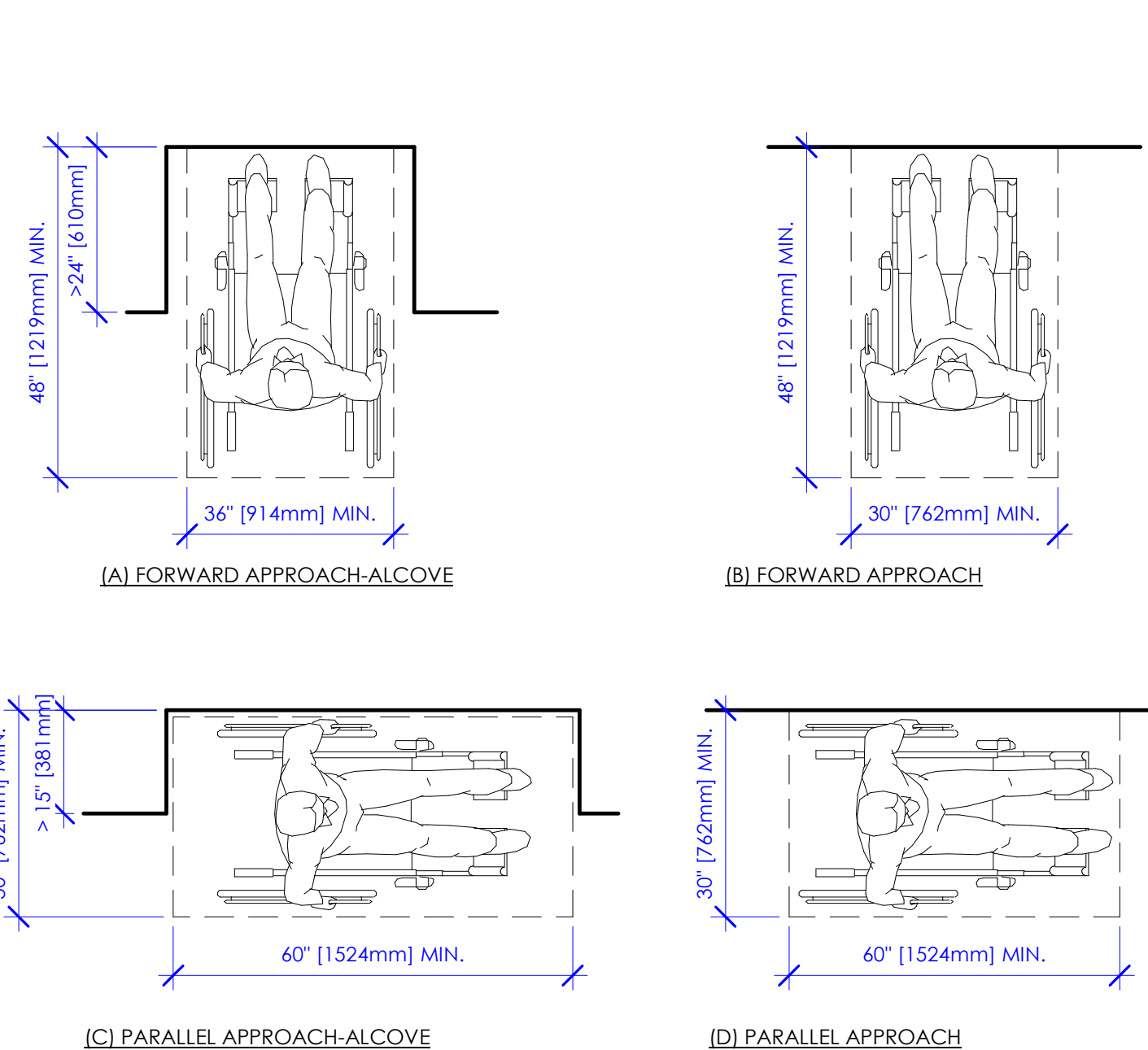
2 CLEARANCES FOR DOORS IN SERIES

G004



3 TURNING FLOOR CLEARANCES

G004

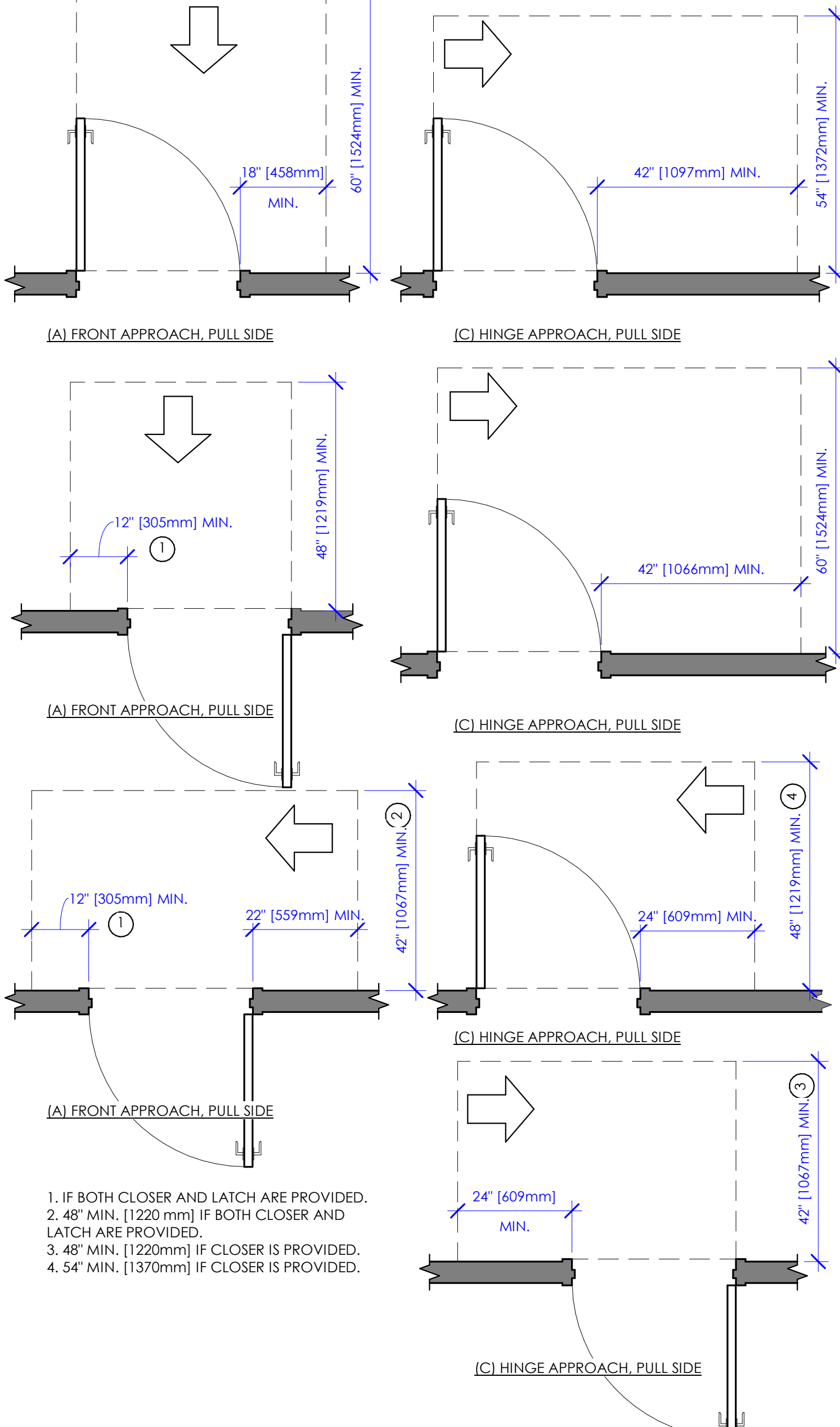


4 TYPICAL FLOOR CLEARANCES

G004

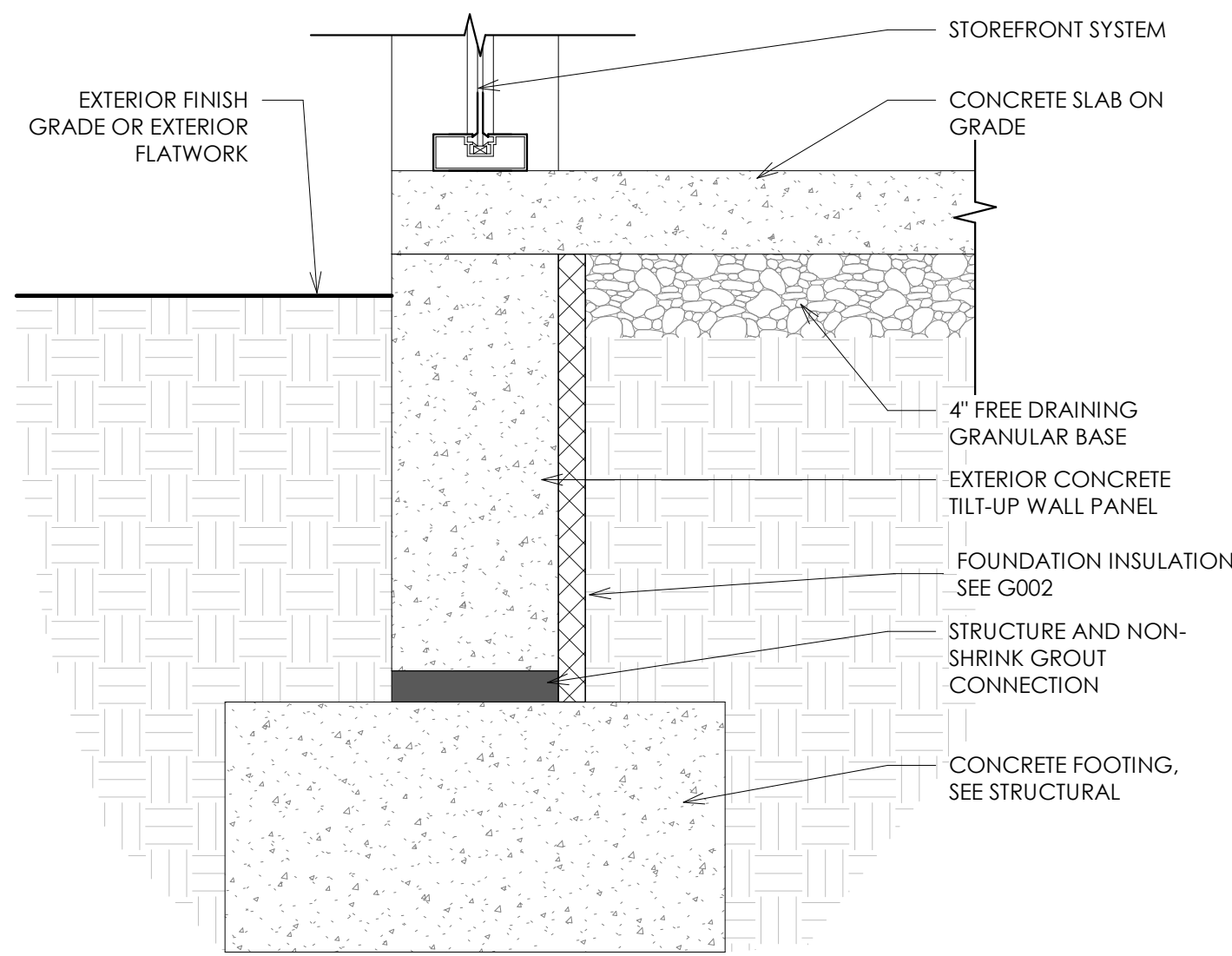
5 TYPICAL SIGNAGE DIMENSIONS & LAYOUT

G004

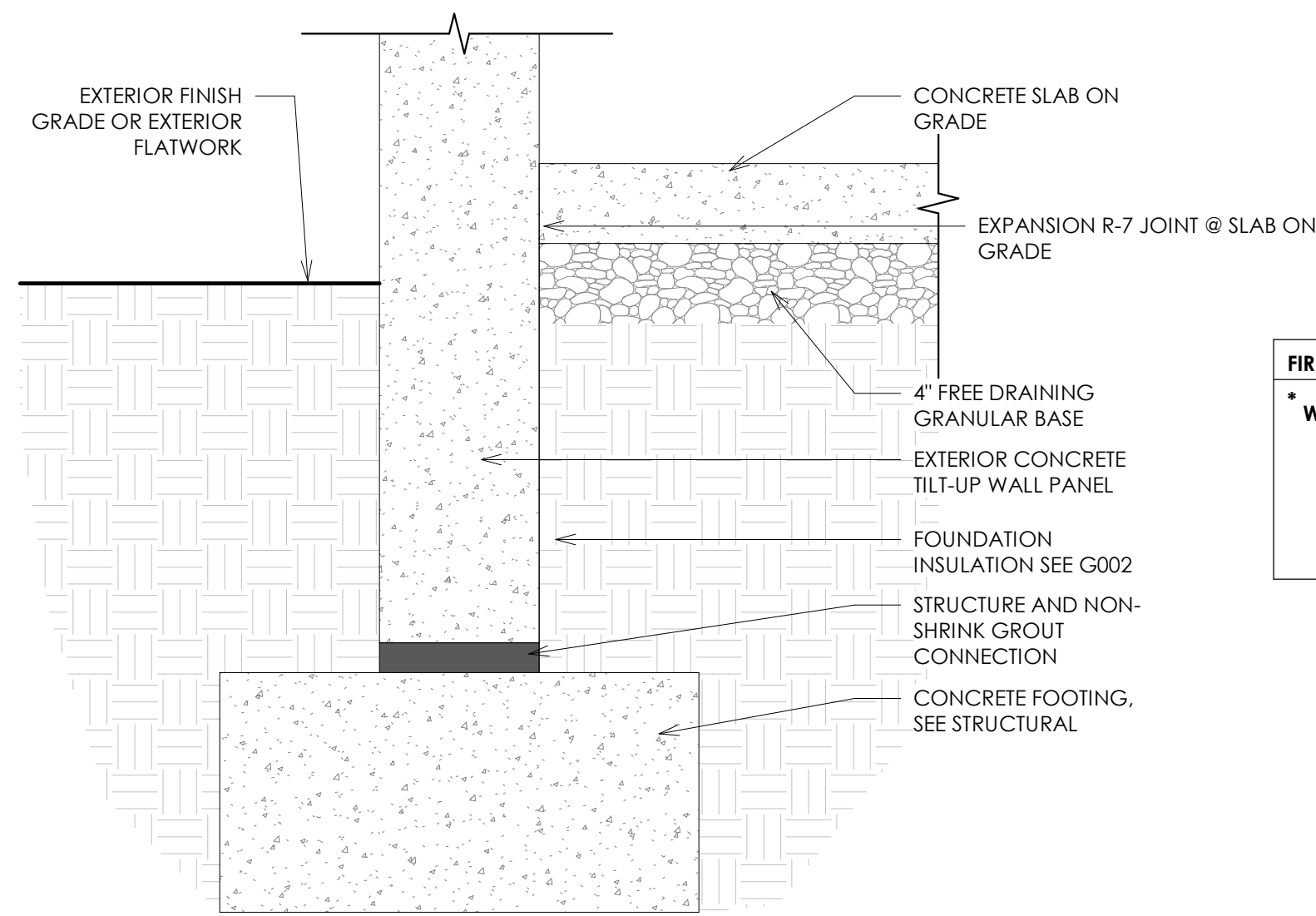


6 MANEUVERING CLEARANCES @ MANUAL SWNG. DR.

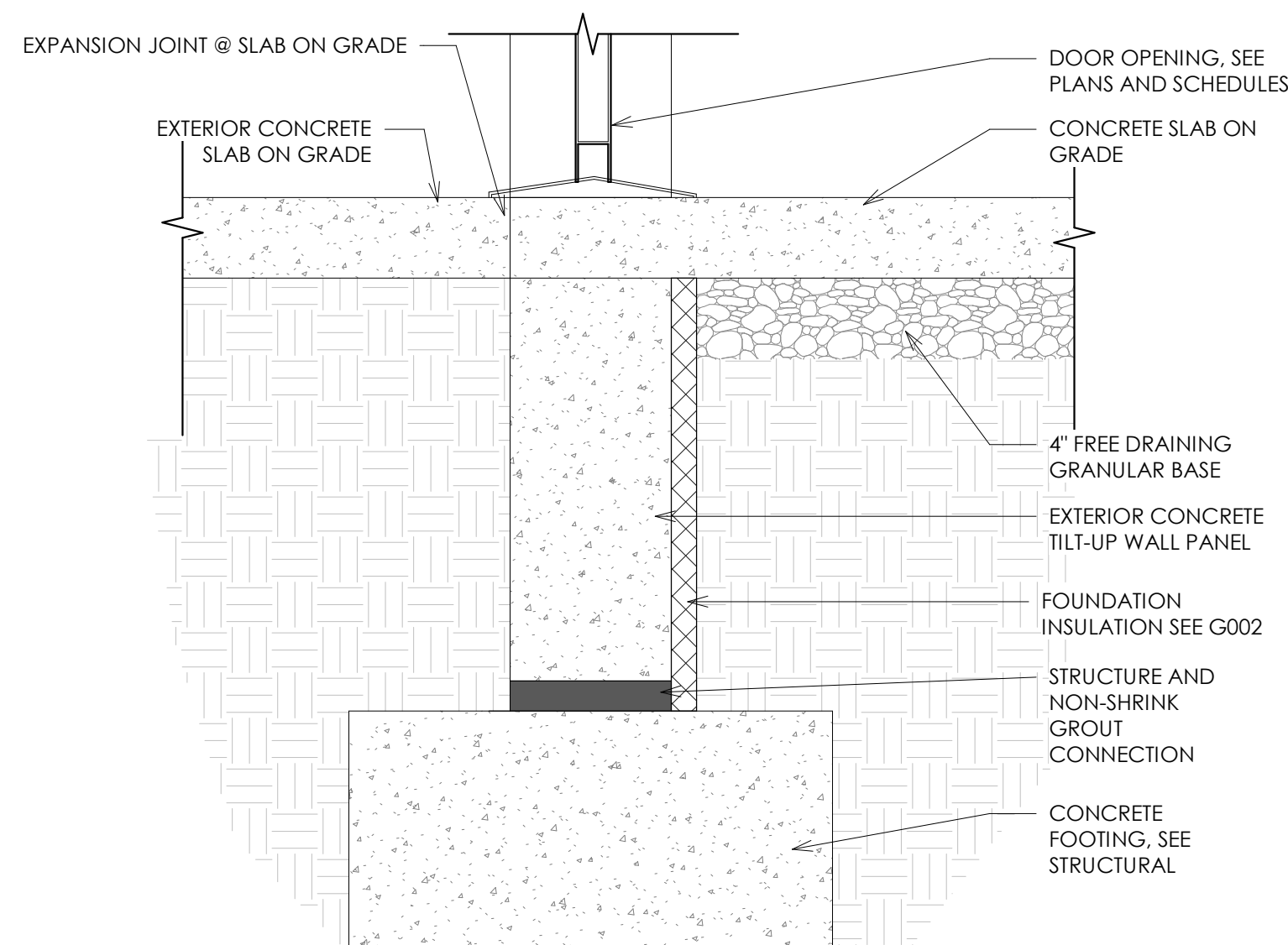
G004



7
G005 INSULATION AT SLAB WAREHOUSE
1 1/2" x 1'-0"



4
G005 INSULATION AT SLAB WAREHOUSE
1 1/2" x 1'-0"



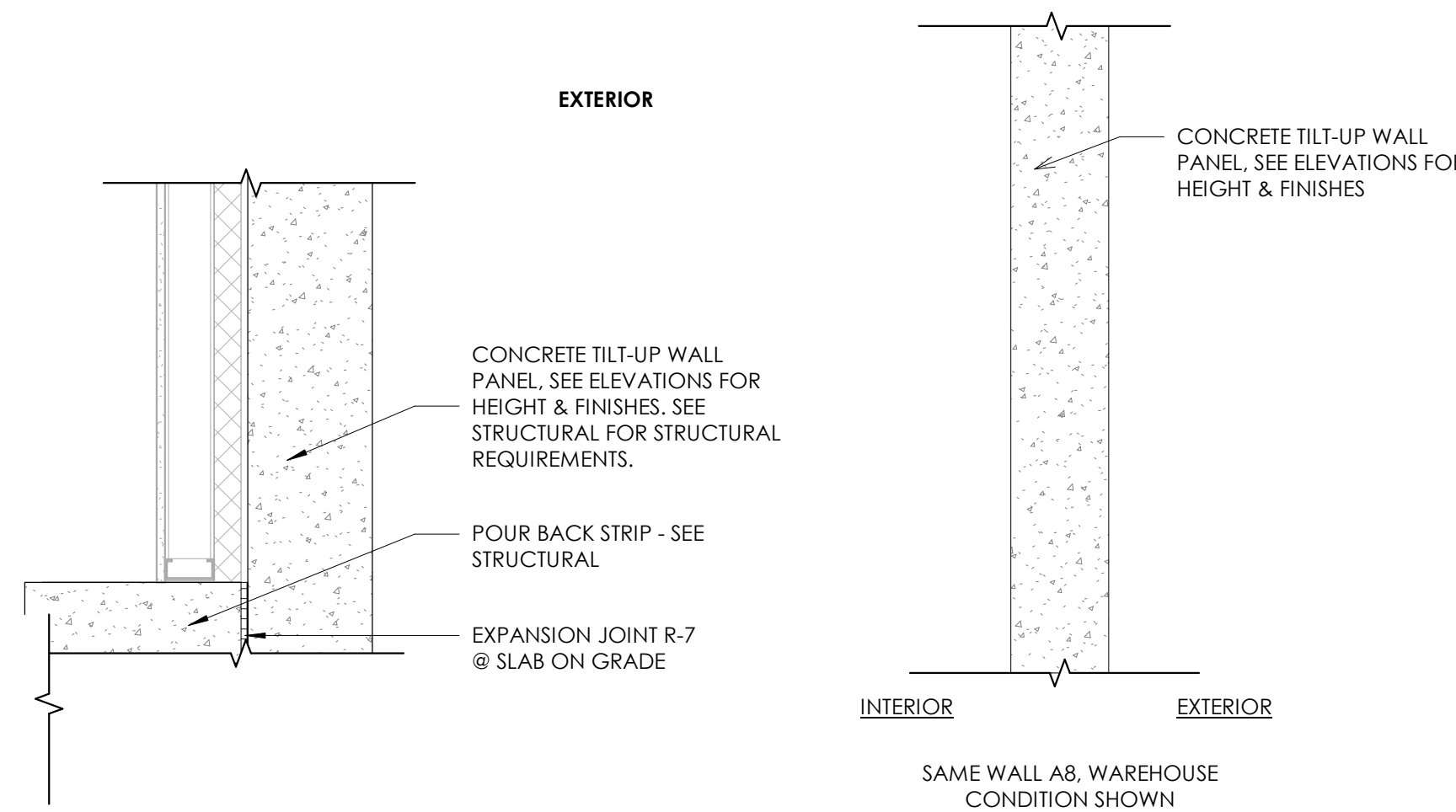
5
G005 INSULATION AT SLAB OPENING
1 1/2" x 1'-0"

FIRE RATING	4 HOUR RATED
* WALL DEPTH	
A7.4	7-1/4" CONCRETE TILT-UP WALL
A8.4	8" CONCRETE TILT-UP WALL
A9.4	9-1/4" CONCRETE TILT-UP WALL
A11.4	11" CONCRETE TILT-UP WALL
A12.4	12" CONCRETE TILT-UP WALL

1
G005 A WALL DETAIL - CONCRETE TILT-UP
1" x 1'-0"

INTERIOR

EXTERIOR

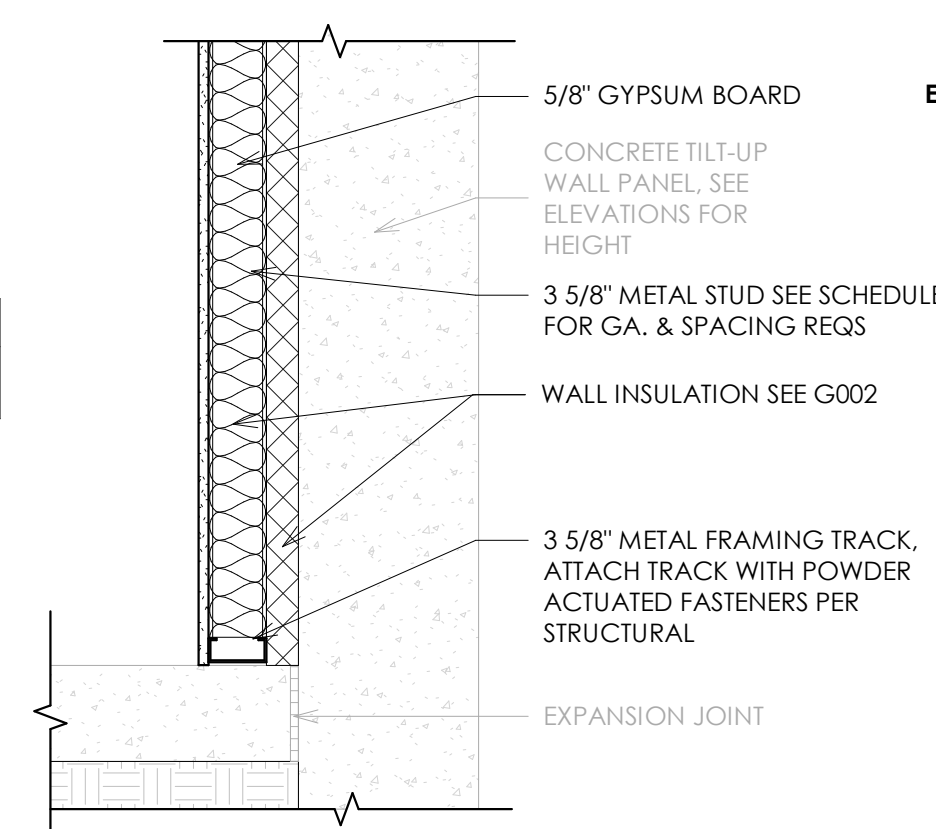


FIRE RATING	NON-RATED
* STUD WIDTH	
B4.0	3-5/8" METAL STUD

2
G005 B WALL DETAIL - 3-5/8" METAL STUD EXTERIOR FURRING
1" x 1'-0"

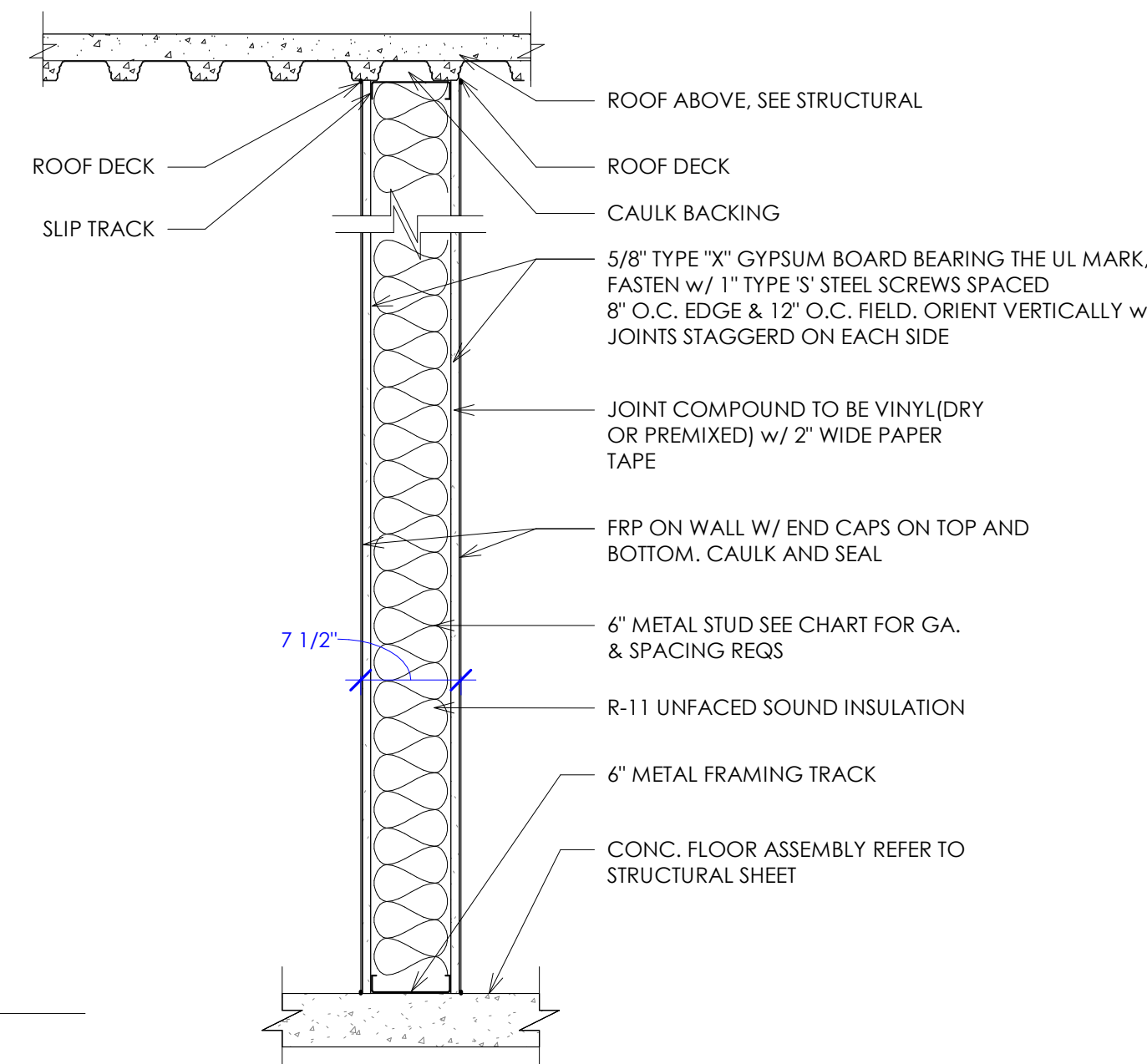
INTERIOR

EXTERIOR



FIRE RATING	NON-RATED
* STUD WIDTH	
C4.0	3-5/8" METAL STUD
C6.0	6" METAL STUD

3
G005 C WALL DETAIL - METAL STUD INTERIOR PARTITION
1" x 1'-0"



STUD WIDTH	3-5/8"
FIRE RATING	NON-RATED
* STUD GAUGE & SPACING REQ.	<ol style="list-style-type: none"> 3-5/8" X 20 GA. STEEL STUDS AT 24" O.C. (MAX HT. 17'-4") 3-5/8" X 16 GA. STEEL STUDS AT 24" O.C. (MAX HT. 22'-10") 3-5/8" X 20 GA. STEEL STUDS AT 16" O.C. (MAX HT. 21'-3") 3-5/8" X 18 GA. STEEL STUDS AT 16" O.C. (MAX HT. 24'-5")
STC:	N/A
WALL DESCRIPTION:	INTERIOR WALL

STUD WIDTH	6"
FIRE RATING	NON-RATED
* STUD GAUGE & SPACING REQ.	<ol style="list-style-type: none"> 6" X 20 GA. STEEL STUDS AT 24" O.C. (MAX HT. 23'-4") 6" X 16 GA. STEEL STUDS AT 24" O.C. (MAX HT. 34'-2") 6" X 14 GA. STEEL STUDS AT 24" O.C. (MAX HT. 36'-7") 6" X 20 GA. STEEL STUDS AT 16" O.C. (MAX HT. 28'-7") 6" X 18 GA. STEEL STUDS AT 16" O.C. (MAX HT. 34'-5") 6" X 18 GA. STEEL STUDS AT 12" O.C. (MAX HT. 39'-8")
STC:	N/A
WALL DESCRIPTION:	INTERIOR WALL

STUD WIDTH	6"
FIRE RATING	1 HOUR
* STUD GAUGE & SPACING REQ.	<ol style="list-style-type: none"> 6" X 20 GA. STEEL STUDS AT 24" O.C. (MAX HT. 23'-4") 6" X 16 GA. STEEL STUDS AT 24" O.C. (MAX HT. 34'-2") 6" X 14 GA. STEEL STUDS AT 24" O.C. (MAX HT. 36'-7") 6" X 20 GA. STEEL STUDS AT 16" O.C. (MAX HT. 28'-7")
STC:	
WALL DESCRIPTION:	FULL HEIGHT 1 HOUR FIRE RATED INTERIOR WALL

ae urbia
architects and engineers
909 West South Jordan Parkway
South Jordan, Utah 84095
phone: 801.746.0456 - fax: 801.575.6456
web page: aeurbia.com

174600
JAMES MICHAEL
STATE OF UTAH
4/25/2025 11:55:27 AM

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	DESCRIPTION

AE2022.290

WALL TYPES

DATE: 04/23/2025

SHEET #:

G005

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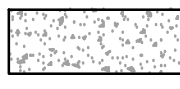
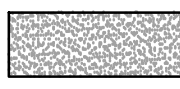
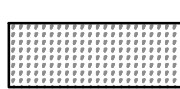
RODERICK CATALYST-BUSINESS PARK BUILDING #7

LOT 7, RODERICK CATALYST – PHASE 3 SUBDIVISION

68 EAST 1600 SOUTH
AMERICAN FORK, UTAH 84003

JANUARY 12, 2024
REVISED MAY 9, 2024
REVISED JUNE 19, 2024
REVISED JULY 9, 2024
REVISED APRIL 24, 2025

LEGEND

----	PROPERTY LINE	☼	EXISTING FIRE HYDRANT
----	EASEMENT LINE	☼	PROPOSED FIRE HYDRANT
-4240.0-	PROPOSED GRADE CONTOURS	☼	EXISTING STREET LIGHT
-4240.0-	EXISTING GRADE CONTOURS	☼	PROPOSED STREET LIGHT
=====	EXISTING CURB	☼	PROPOSED PARKING LOT LIGHT
=====	PROPOSED CURB AND GUTTER	☼	
=====	PROPOSED CURB WALL	☼	
=====	REVERSE PAN CURB & GUTTER	☼	
---SS---	EXISTING SEWER	☼	
---SS---	PROPOSED SEWER	☼	
---W---	EXISTING WATER	☼	
---W---	PROPOSED WATER	☼	
---F---	EXISTING FIRE LINE	☼	
---F---	PROPOSED FIRE LINE	☼	
---SD---	EXISTING STORM DRAIN	☼	
---SD---	PROPOSED STORM DRAIN	☼	
---RD---	EXISTING ROOF DRAIN	☼	
---G---	EXISTING GAS	☼	
---G---	PROPOSED GAS	☼	
---OHP---	EXISTING OVERHEAD POWER	☼	
---UGP---	EXISTING UNDERGROUND POWER	☼	
---UGP---	PROPOSED UNDERGROUND POWER	☼	
---T---	EXISTING TELEPHONE LINE	☼	
---T---	PROPOSED TELEPHONE LINE	☼	
---FO---	EXISTING FIBER OPTIC LINE	☼	
---FO---	PROPOSED FIBER OPTIC LINE	☼	
	PROPOSED CONCRETE	☼	
	PROPOSED ASPHALT	☼	
	PROPOSED LANDSCAPING	☼	



VICINITY MAP
NOT TO SCALE

SHEET INDEX

△ CV	COVER SHEET
{ A1 }	ALTA SURVEY
{ A2 }	ALTA SURVEY
GN	GENERAL NOTES
C1.0	SITE PLAN
C2.0	GRADING PLAN
C2.1	DRAINAGE PLAN
C3.0	UTILITY PLAN
C4.0	DETAIL SHEET
C4.1	DETAIL SHEET
C5.0	DETAIL SHEET
C6.0	EROSION CONTROL PLAN (SWPPP)
C6.1	EROSION CONTROL DETAIL SHEET

PROJECT CONSTRUCTION NOTES:

1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION, 1-800-662-4111.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. SEE SOILS REPORT FOR PAVEMENT SECTION DETAILS, INSTALLATION SPECIFICATIONS AND ALL SITE EARTHWORK REQUIREMENTS. NOTIFY CITY ENGINEER IF RUTTING/PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT BETWEEN THESE PLANS AND THE CITY STANDARDS AND SPECIFICATIONS OCCURS, THE CITY STANDARDS AND SPECIFICATIONS SHALL GOVERN.
5. ALL HANDICAP PARKING STALLS TO BE INSTALLED PER ADA STANDARDS. SLOPE ON ANY ADA STALL IS TO BE LESS THAN 2% IN ALL DIRECTIONS.
6. CONTRACTOR TO VERIFY PRIOR TO ANY CONSTRUCTION THAT THE BUILDING AND BUILDING LOCATION SHOWN ON CIVIL DRAWINGS MATCHES THE ARCHITECTURAL PLANS.
7. CONTRACTOR TO VERIFY, WITH ARCHITECT, THAT F.F. ELEVATION SHOWN ON CIVIL PLANS EQUALS THE ARCHITECTS 100.0' ELEVATION.
8. CONTRACTOR TO REPLACE IN KIND ANY AREAS THAT ARE DAMAGED DURING CONSTRUCTION.
9. INSTALL ALL SIDEWALKS PER CITY STANDARDS OR APWA PLAN NO. 231, 235, AND 236 WHERE APPLICABLE.
10. INSTALL ALL CONCRETE PAVEMENT JOINTS PER CITY STANDARDS OR APWA PLAN NO. 261.
11. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL PER AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS. SEE AMERICAN FORK CITY STANDARD PLAN NO. 15.22
12. ALL CATCH BASINS AND MANHOLES TO BE INSTALLED PER CITY STANDARDS.
13. ALL STORM DRAIN PIPING TO BE CUT OFF FLUSH WITH INSIDE WALL OF DRAINAGE BOX. INSIDE WALL TO BE GROUTED SMOOTH WITH A NON-SHRINK GROUT.
14. FOR STORM DRAIN INLET BOXES AND MANHOLES THE I.E. IN AND I.E. OUT ELEVATIONS ARE THE SAME UNLESS OTHERWISE CALLED OUT ON THE PLANS
15. ALL WATER LINES TO HAVE A MINIMUM 4' OF COVER WITH A MINIMUM VERTICAL CLEARANCE OF 1' OF COVER BETWEEN OTHER UTILITY LINES (1.5' VERTICAL SEPARATION WITH SEWER).
16. THRUST BLOCKS TO BE INSTALLED PER AMERICAN FORK CITY PLAN NO. 15.21
17. CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS AND CABLE TV SERVICES WITH THE RESPECTIVE UTILITY COMPANY.
18. THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITY PIPES, LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED AND SHOWN FROM SURVEYED INFORMATION AND EXISTING UTILITY LOCATIONS PROVIDED BY OTHERS. THERE IS NO GUARANTEE. THAT ALL EXISTING UTILITY INFORMATION IS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE STAKES AND FIELD VERIFYING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITY PIPES, LINES AND STRUCTURES, PRIOR TO CONSTRUCTION.
19. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
20. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL SITE DEMOLITION REQUIRED TO COMPLETE THIS PROJECT.
21. NOTIFY CITY ENGINEER IF RUTTING/PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.

General Notes:

CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS AND CABLE TV SERVICES WITH THE RESPECTIVE UTILITY COMPANY.

ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT BETWEEN THESE PLANS AND THE CITY STANDARDS AND SPECIFICATIONS OCCURS, THE CITY STANDARDS AND SPECIFICATIONS SHALL GOVERN.

THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITY PIPES, LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED AND SHOWN FROM SURVEYED INFORMATION AND FIELD PLUMB UTILITY LOCATION PROVIDED BY OTHERS. THERE IS NO GUARANTEE THAT THE EXISTING UTILITY INFORMATION IS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE STAKES AND FIELD VERIFYING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITY PIPES, LINES AND STRUCTURES, PRIOR TO CONSTRUCTION.

FEMA NOTE:

FEMA NOTE:
THIS PROJECT LIES IN A FEMA DESIGNATED FLOOD ZONE AE WHICH IS DEFINED AS AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN.
PER MAP NO. 49049C0306F, EFFECTIVE DATE: JUNE 19, 2020.
A FLOOD PLAIN DEVELOPMENT PERMIT IS REQUIRED. THE BASE FLOOD ELEVATION IS 4498 IN NAVD 88. THIS SURVEY FOR THIS PROJECT WAS DONE IN NGVD 29 AND THE BASE FLOOD ELEVATION IN THIS VERTICAL DATUM IS 4495.

DEMOLITION NOTE:

DEMOLITION NOTE:
CONTRACTOR TO VISIT SITE AND DETERMINE ALL NECESSARY DEMOLITION REQUIRED TO INSTALL
PROPOSED IMPROVEMENTS AND TO FIELD VERIFY ALL NECESSARY DEMOLITION HAS BEEN
COMPLETED PRIOR TO CONSTRUCTION.

BENCHMARK

BENCHMARK
FOUND BRASS CAP MONUMENT
FOR THE NORTHEAST CORNER OF
SECTION 35, T52, R1E, SLB&M
ELEVATION: 4499.77
THE DATUM FOR THIS PROJECT
IS NGVD 29

PERVIOUS AREA PERCENTAGE	16.05%
IMPERVIOUS AREA PERCENTAGE	83.95%

BASIS OF BEARING

BASIS OF BEARING:
THE BASIS OF BEARING FOR THIS PROJECT IS S89°30'39"E. 2673.60' FROM THE NORTH QUARTER CORNER OF SECTION 36, TO THE NORTHWEST CORNER OF SECTION 36. SEE SHEET C1.0 FOR VISUAL REPRESENTATION.

CIVIL ENGINEER:



10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - PH: 801-949-6296

OWNER:

RODERICK ENTERPRISES
1214 VINE STREET
SALT LAKE CITY, UTAH 84121
CONTACT PERSON: MIKE RODERICK
PH: (801) 506-5005

ARCHITECT:

AE URBIA
909 WEST SOUTH JORDAN PARKWAY
SOUTH JORDAN, UTAH 84095
CONTACT PERSON: SHAWN EATON
PH: (801) 746-0456

DESIGNER: T L H		PROJECT ENGINEER: T L H	
NO.	REVISIONS	BY	DATE
1	1	1	06/09/24
2	2	2	06/19/24
3	3	3	07/09/24
4	4	4	04/24/25

**CIVIL ENGINEERING
+ SURVEYING**

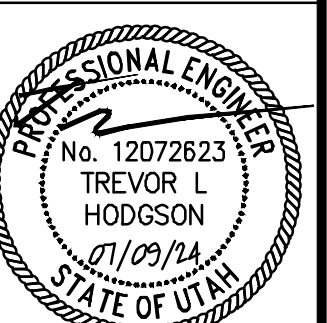


10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - 801-949-6296

RODERICK CATALYST – BUSINESS PARK BUILDING #7
68 EAST 1600 SOUTH AMERICAN FORK UT 84003

668 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

COVER SHEET



SHEET NO.

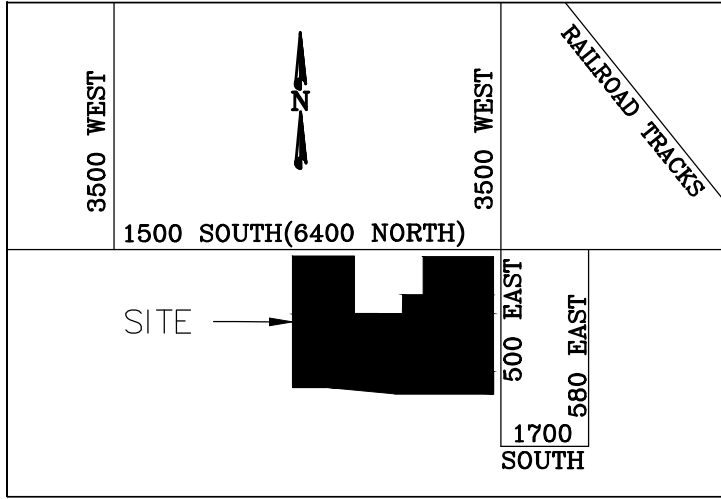
CV

PROJECT ID:	DATE:
E23-125	01/12/24
FILE NAME:	SCALE:
PRJ-RC7	1"=30'



ALTA-NSPS LAND TITLE SURVEY

LOCATED IN THE NORTHEAST QUARTER OF SECTION 35
AND THE NORTHWEST QUARTER OF SECTION 36,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH

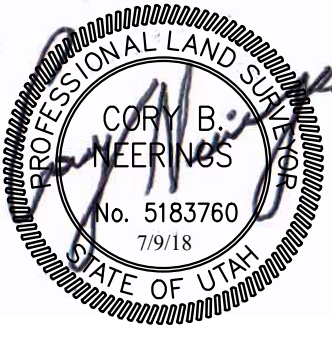


VICINITY MAP
(N.T.S.)

SURVEYOR'S CERTIFICATE

TO: **RODERICK ENTERPRISES, A UTAH LIMITED PARTNERSHIP**
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 5 and 11 from Table A. The field work was completed June 12, 2018.



CORY B. NEERINGS
PLS 5183760

TITLE COMMITMENT DESCRIPTION

Parcel 1

Beginning at a point North 89 deg. 30'39" West 928.16 feet along the section line and South 150.55 feet from the North quarter corner of Section 36, Township 5 South, Range 1 East, Salt Lake Base and Meridian, and running thence South 00 deg. 20'40" West 1260.92 feet to the beginning of a non-tangent curve to the right, having a radius of 23.00 feet; thence along the arc of said curve a length of 4.11 feet, passing through a central angle of 10 deg. 14'22", chord bears South 33 deg. 07'51" West 4.10 feet; thence North 89 deg. 14'38" West 1212.30 feet; thence South 00 deg. 46'58" West 3.00 feet; thence North 89 deg. 14'38" West 131.63 feet; thence North 00 deg. 59'20" East 1012.28 feet; thence South 89 deg. 30'39" East 147.62 feet; thence North 00 deg. 29'21" East 258.89 feet; thence South 89 deg. 01'37" East 1186.55 feet to the point of beginning.

Contains 38.079 Acres

Parcel 2

Beginning at a point located North 89°48'53" West along section line 238.41 feet and South 134.24 feet from the Northeast Corner of Section 35, Township 5 South, Range 1 East, Salt Lake Base and Meridian; thence along a boundary line agreement recorded as Entry 134125:2005 the following two courses and distances: 1) South 0°16'24" East 659.33 feet, and 2) South 89°19'28" East 637.59 feet; thence South 0°59'20" West 614.83 feet; thence North 89°14'38" West 279.74 feet; thence along the arc of a 1464.00 foot radius curve to the right 53.85 feet through a central angle of 2°6'27" (chord bears North 88°11'25" West 53.85 feet); thence North 87°08'11" West 770.37 feet to the beginning of a curve. Said curve turning to the right through an angle of 03°06'32", having a radius of 500.00 feet and a length of 27.13 feet, and whose long chord bears North 85°34'55" West for a distance of 27.13 feet; thence North 84°01'39" West 149.22 feet to the beginning of a curve. Said curve turning to the left through an angle of 05°47'14", having a radius of 572.00 feet and a length of 57.77 feet, and whose long chord bears North 86°55'16" West for a distance of 57.75 feet; thence North 89°48'53" West 453.61 feet; thence North 00°56'07" East 432.47 feet; thence South 75°49'03" East 0.80 feet; thence North 00°20'01" East 73.87 feet; thence North 0°56'07" East 9.67 feet; thence along the Easterly boundary of Adams Boat Storage Plat "A" the following four courses and distances: 1) South 89°59'02" East 3.93 feet, 2) North 0°00'58" East 478.50 feet, 3) North 89°59'02" West 11.48 feet, and 4) North 1°26'58" East 236.56 feet; thence North 56°06'13" East 15.91 feet; thence South 0°56'07" West 1.38 feet; thence South 88°59'22" East 43.05 feet; thence along the arc of a 2461.50 foot radius curve to the right 65.83 feet through a central angle of 1°31'56" (chord bears South 88°13'24" East 65.82 feet); thence South 87° 42'26" East 149.59 feet; thence along the arc of a 2538.50 radius curve to the left 77.87 feet through a central angle of 1°45'27" (chord bears South 88°20'09" East 77.86 feet); thence South 89°12'53" East 803.38 feet to the point of beginning.

Contains 41.768 Acres

BASIS OF BEARINGS

BASIS OF BEARINGS IS SOUTH 89°30'39" EAST BETWEEN THE NORTHWEST CORNER AND NORTH QUARTER CORNER OF SECTION 36, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN

SURVEYOR'S NARRATIVE

I WAS ASKED BY THOSE LISTED IN THE CERTIFICATION ABOVE TO PERFORM A SURVEY IN CONFORMANCE WITH THE MINIMUM STANDARDS FOR AN ALTA/NSPS SURVEY. THE SUBJECT PROPERTY IS COMPRISED OF TWO PARCELS AS IDENTIFIED IN THE COMMITMENT FOR TITLE INSURANCE PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, ORDER NO. 7-041885 (REVISED #1) WITH AN EFFECTIVE DATE OF JUNE 21, 2018 AT 7:45 A.M. AND IS ACCORDINGLY IDENTIFIED HEREON.

SURVEY NOTES

1. THE UNDERGROUND PIPES AS SHOWN ON THIS MAP ARE BASED ON PHYSICAL EVIDENCE OBSERVED ABOVE GROUND.
2. THE BENCHMARK FOR THIS SURVEY WAS ESTABLISHED AS NGVD 29 ELEVATION 4502.22' AT THE UTAH COUNTY BRASS CAP REFERENCE MONUMENT FOR THE NORTHEAST CORNER OF SECTION 35.
3. RECORD BEARINGS AND DISTANCES ARE SHOWN IN PARENTHESIS.
4. PROPERTY CORNERS WERE NOT SET FOR THIS SURVEY.

TITLE COMMITMENT

THE FOLLOWING IS A LIST OF THE ITEMS SET FORTH IN SCHEDULE B OF SAID TITLE REPORT:

1 - 10 **NOT ADDRESSED ON THIS SURVEY**

11 The land described herein is located within the boundaries of American Fork City, and is subject to any assessments levied thereby.

SURVEY FINDINGS: AFFECTS ALL OF THE SUBJECT PROPERTY

12 The land described herein is located within the boundaries of the Central Utah Water Conservancy District, the North Utah County Water Conservancy District, the Timpanogos Special Service District, and the Utah Valley Dispatch Special Service District, and is subject to any assessments levied thereby.

SURVEY FINDINGS: AFFECTS ALL OF THE SUBJECT PROPERTY

13a Subject to the Terms and Conditions in that certain Ordinance recorded January 5, 2016 as Entry No. 858:2016.

SURVEY FINDINGS: AFFECTS BOTH PARCELS AS SHOWN HEREON

13b Subject to the Terms and Conditions in that certain Deed of Dedication recorded November 20, 2017 as Entry No. 114822:2017.

SURVEY FINDINGS: AFFECTS THE RIGHT-OF-WAY AS DESCRIBED IN EXCEPTION 1a AS SHOWN HEREON. PORTION OF SAID RIGHT-OF-WAY WAS CONVEYED TO THE SUBJECT PROPERTY

14 Rights of Way and Easements for any roads, ditches, canals, pipelines, transmission lines, power telephone, sewer, gas, fiber optic, cable, water, cable or other utility lines now existing over, under or across said property.

SURVEY FINDINGS: ANY FINDINGS SHOWN HEREON

15 Subject to the Terms and Conditions in that certain Easement recorded April 24, 1978 as Entry No. 15260 in Book 1639 at Page 610.

SURVEY FINDINGS: AFFECTS THE NORTHEAST PORTION OF PARCEL 1. DESCRIPTION DOES NOT CLOSE. PLOTTED AND SHOWN HEREON AS DESCRIBED

16 Subject to the Terms and Conditions in that certain Grant of Easement recorded January 5, 2016 as Entry No. 850:2016.

SURVEY FINDINGS: AFFECTS A NORTHERLY PORTION OF BOTH PARCELS AS SHOWN HEREON

17 Subject to the Terms and Conditions in that certain Grant of Easement recorded January 5, 2016 as Entry No. 851:2016.

SURVEY FINDINGS: AFFECTS A EASTERLY PORTION OF BOTH PARCEL 1 AS SHOWN HEREON

18 Subject to the Terms and Conditions in that certain Grant of Easement recorded January 5, 2016 as Entry No. 852:2016.

SURVEY FINDINGS: AFFECTS THE PORTION OF PARCEL 2 AS SHOWN HEREON

19 Subject to the Terms and Conditions in that certain Grant of Easement recorded January 5, 2016 as Entry No. 853:2016.

SURVEY FINDINGS: AFFECTS A PORTION OF PARCEL 2 AS SHOWN HEREON

20 Intentionally deleted

21 Subject to the Terms and Conditions in that certain Application for Assessment and Taxation of Agricultural Land recorded May 3, 2016 as Entry No. 38621:2016.

SURVEY FINDINGS: AFFECTS ALL OF PARCEL 1

22 Subject to the Terms and Conditions in that certain Application for Assessment and Taxation of Agricultural Land recorded December 13, 2017 as Entry No. 123322:2017.

SURVEY FINDINGS: AFFECTS PORTIONS OF PARCEL 2

23 Matters as disclosed by that certain Survey dated January 3, 2011, prepared by Hill & Argyle, Registered Surveyor, Project No. 10215.

SURVEY FINDINGS: ANY FINDINGS SHOWN HEREON

24 Improvements from adjoining land appear to encroach onto subject land.

SURVEY FINDINGS: ANY FINDINGS SHOWN HEREON

25 Any water rights, claims or title to water in and under the land.

SURVEY FINDINGS: NOTHING TO PLOT

26 Subject to any prior reservation of any minerals in or under said land in that certain Special Warranty Deed recorded December 18, 2015 as Entry No. 113609:2015.

SURVEY FINDINGS: AFFECTS ALL OF PARCEL 2

27 Subject to the Terms and Conditions in that certain Notice of Interest and Agreement recorded April 6, 2018 as Entry No. 32351:2018.

SURVEY FINDINGS: AFFECTS ALL OF THE SUBJECT PROPERTY

28 Any water rights, claims or title to water in and under the land.

SURVEY FINDINGS: NOTHING TO PLOT

SURVEY FINDINGS - ENCROACHMENTS

- A. PROPERTY LINE RUNS ALONG BOUNDARY LINE AGREEMENT 134125:2005
- B. PROPERTY LINE RUNS ALONG BOUNDARY LINE AGREEMENT 134125:2005
- C. PROPERTY LINE AND BOUNDARY LINE AGREEMENT 134125:2005 OVERLAP 1.65 FEET
- D. PROPERTY LINE HAS 1.55 FOOT GAP BETWEEN BOUNDARY LINE AGREEMENT 134125:2005
- E. FENCES, CORRALS AND OTHER FEATURES OVERLAP THE SUBJECT PROPERTY UP TO 40 FEET
- F. FENCE AND PROPERTY LINE OVERLAP 3.40 FEET
- G. FENCE AND PROPERTY LINE OVERLAP 1.0 FEET



LEGEND ENGINEERING

52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

Recorder

REVISION:

DATE: 7/9/18

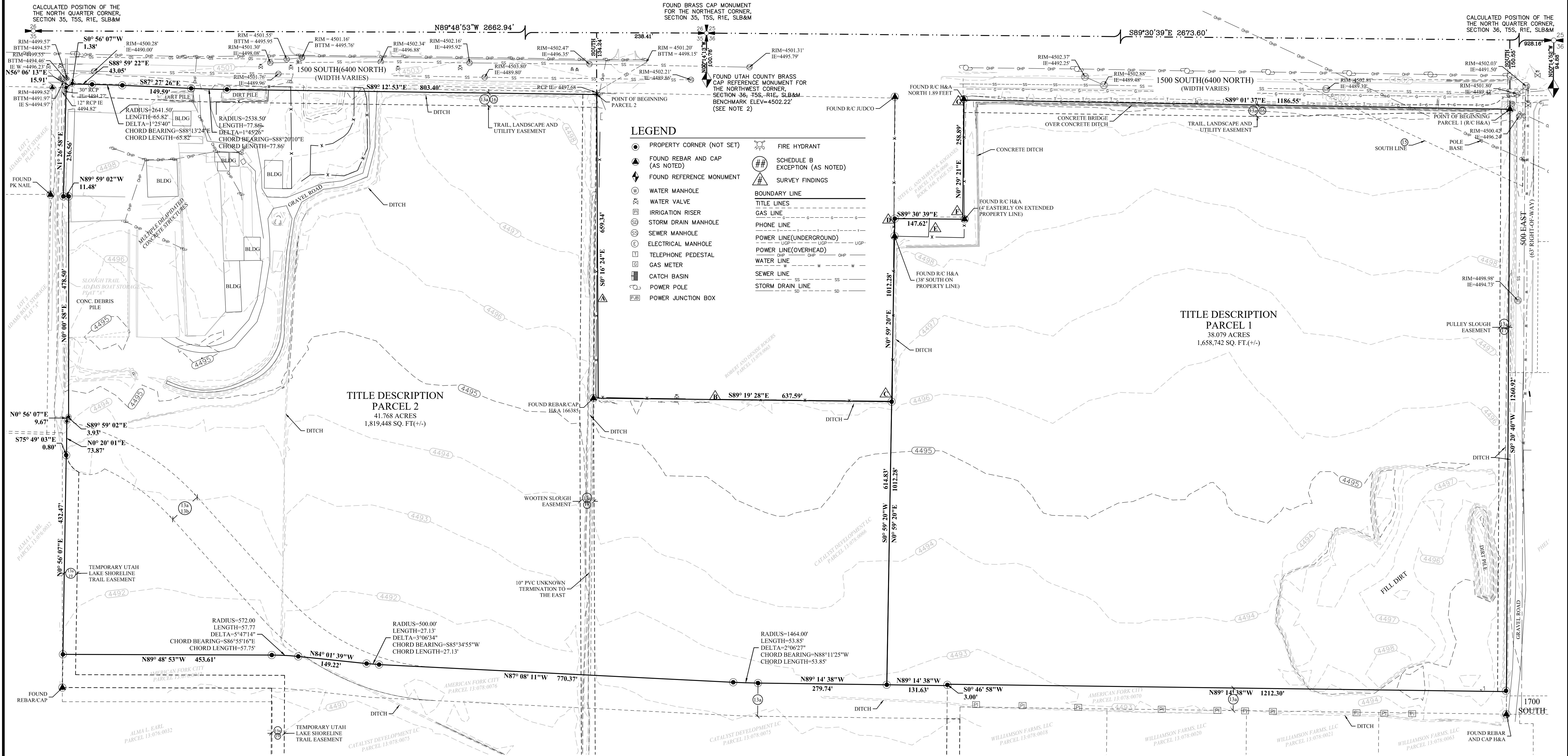
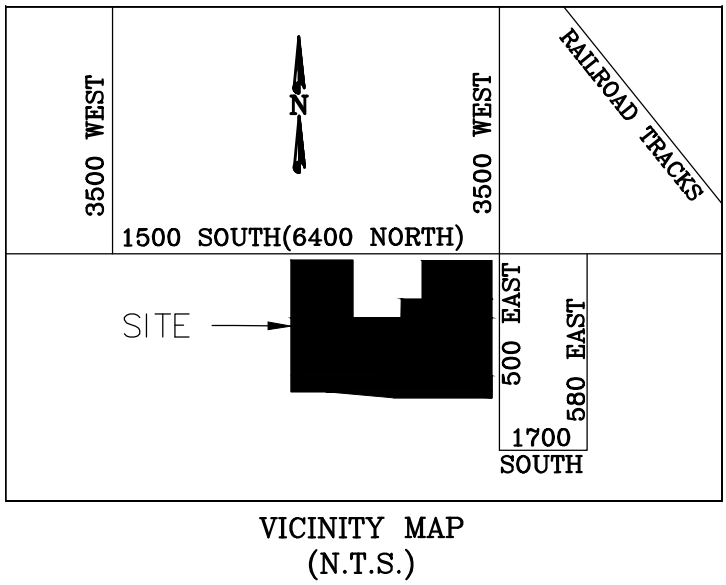
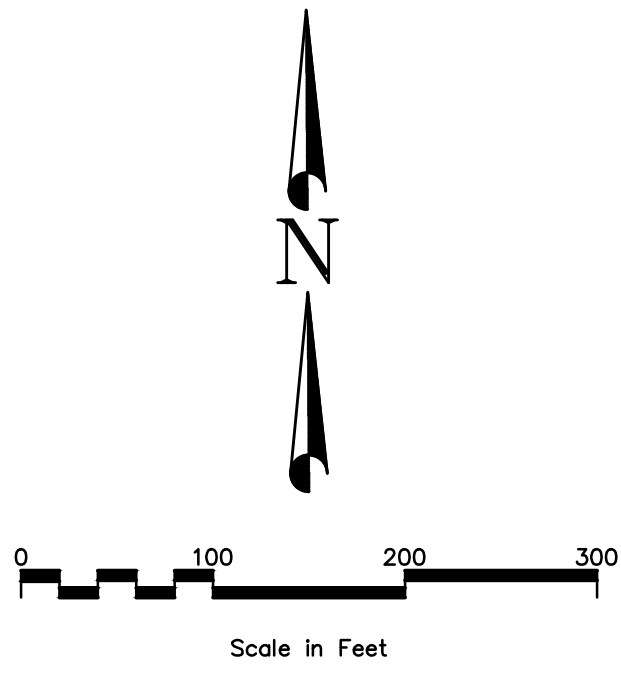
SCALE: NONE

PAGE: 1 OF 2

PROJECT: S18-049

ALTA-NSPS LAND TITLE SURVEY

LOCATED IN THE NORTHEAST QUARTER OF SECTION 35
AND THE NORTHWEST QUARTER OF SECTION 36,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH



LEGEND

- | | | | |
|---|--------------------------------|----|---------------------------------|
| ● | PROPERTY CORNER (NOT SET) | ⚡ | FIRE HYDRANT |
| ▲ | FOUND REBAR AND CAP (AS NOTED) | ## | SCHEDULE B EXCEPTION (AS NOTED) |
| ◆ | FOUND REFERENCE MONUMENT | ⚠ | SURVEY FINDINGS |
| W | WATER MANHOLE | — | BOUNDARY LINE |
| ⊕ | WATER VALVE | — | TITLE LINES |
| ⊕ | IRRIGATION RISER | — | GAS LINE |
| ⊕ | STORM DRAIN MANHOLE | — | PHONE LINE |
| ⊕ | SEWER MANHOLE | — | POWER LINE(UNDERGROUND) |
| ⊕ | ELECTRICAL MANHOLE | — | POWER LINE(OVERHEAD) |
| ⊕ | TELEPHONE PEDESTAL | — | WATER LINE |
| ⊕ | GAS METER | — | SEWER LINE |
| ⊕ | CATCH BASIN | — | STORM DRAIN LINE |
| ⊕ | POWER POLE | | |
| ⊕ | POWER JUNCTION BOX | | |

TITLE DESCRIPTION
PARCEL 1
38.079 ACRES
1,658,742 SQ. FT.(+/-)

TITLE DESCRIPTION
PARCEL 2
41.768 ACRES
1,819,448 SQ. FT.(+/-)



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Recorder

REVISION:	
DATE:	7/9/18
SCALE:	1" = 100'
PAGE:	2 OF 2
PROJECT:	S18-049

GENERAL NOTES

1. City of American Fork, A.P.W.A, Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of American Fork Item Numbers unless otherwise noted.
2. The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
3. The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.
4. The Contractor shall notify the City of American Fork, Public Works Department in writing at least 7 working days prior to beginning construction and request a pre-construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre-construction meeting.
5. The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
6. Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City of American Fork, Public Works Department, that documents "as _ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the construction drawings.
7. The Contractor shall restrict construction activity to public right_of_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
8. The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.
9. Non_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
10. The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross_sections that existed before construction.
11. Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
12. Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) must be approved by the City Engineer.
13. All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
14. All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
15. All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of American Fork. Precast concrete products without proof of inspection shall not be approved for installation.
16. All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.
17. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.
18. All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 _ inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.
19. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
20. Permits to construct in the right-of-way of existing streets must be obtained from the City of American Fork, Public Works Department before commencing construction.
21. The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
22. Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.
23. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City of American Fork standard construction drawings.
24. Any modification to the work shown on drawings must have prior written approval by the City Engineer.
25. Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition
26. Public street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a green background.
27. Private street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a blue background
28. Notify City Engineer if rutting/pumping occurs during construction activities.

UTILITIES

The following utilities are known to be located within the limits of this project:		
COMPANY	CONTACT	PHONE
CULINARY WATER/P.I.	JAY BREMS	(801)763-3060
SEWER/STORM DRAIN	ASHTON HARDY	(801)763-3060
CITY INSPECTOR	DEE HOWARD	(801)763-3060
SWPPP INSPECTOR	HARLAN NIELSON	(801)763-3060
AF FIBER	WILL DAVIS	(801)897-9826
AF FIRE MARSHALL	MAT SACCO	(801)763-3045
AF IRRIGATION COMPANY	ERNIE JOHN	(801)471-6576
BLUE STAKE UT 811		(800)662-4111
COMCAST	ELYSIA VALDEZ	(801)401-3017
CENTURY LINK	BILL WESTFALL	(435)623-4252
DOMINION ENERGY	TRENT JOHNSON	(801)853-6548
T.S.S.D.	DAVID BARLOW	(801)756-5231
MITCHELL HOLLOW IRRIGATION CO.	DALE JONES	(801)768-8150
ROCKY MOUNTAIN POWER	TERIA WALKER	(801)756-1310

2. The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800_662-4111) at least 2 working days before start of construction.
3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of American Fork and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.
2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.
3. At all other hours the Contractor shall maintain minimum one _ lane two _ way traffic. Traffic circulation must be supervised by a Certified Flagger.
4. Steady _ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.
6. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.
7. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.
8. Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

EROSION AND SEDIMENT CONTROL

1. The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
2. The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.
3. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.
4. A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.
5. The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
6. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
7. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
8. Disturbed areas that will remain un-worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.
9. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

WATER LINE

1. All water line materials shall be provided and installed according to current specifications of the City of American Fork, Water Department.
2. All public water pipe with a diameter 3 inches to 8 inches shall be Ductile Iron, Class 53. Public water pipe 12 inches in diameter or larger shall be Ductile Iron, Class 54.
3. Only fire hydrants conforming to City of American Fork standards will be approved for use.
4. Public water lines shall be disinfected by the City of American Fork, Water Department. Requests for water line chlorination shall be made through the City of American Fork, Water Department. The cost for chlorination shall be paid for by the Contractor.
5. All water lines shall be disinfected according to City of American Fork Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).
6. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of American Fork, Water Department.
7. The Contractor shall be responsible for all costs associated with the disinfection of all water lines construction per this plan. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications.
8. The Contractor shall paint all fire hydrants according to City of American Fork standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.
9. No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City of American Fork, Water Department and have been accepted by the Public Works Department.
10. The Contractor shall notify the City of American Fork, Water Department at (801) 763 3060 at least 24 hours before tapping into existing water lines.
11. All water main stationing shall be based on street centerline stationing.
12. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
13. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.
14. All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

SANITARY SEWER

1. Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of American Fork, Public Works Department and the Utah Department of Health Code and Regulations.
2. The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.
3. Pipe for 6-inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of American Fork Construction Inspection Division quality control requirements.
4. All manhole lids shall be provided with continuous self_sealing gaskets.
5. The approved construction drawings shall show where bolt_down lids are required.
6. Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of American Fork sanitary manhole standard drawing. Manhole lids shall include the word SEWER.
7. All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.
8. At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.
9. Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.
10. Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited according to the American Fork Code of Ordinances.
11. All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.
12. Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.
13. Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.
14. The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.
15. All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.
16. All sanitary sewer mains and lateral must be inspected and approved by the City inspector before trench backfilling is completed.
17. All lateral connections shall be insert-a-tee of WYE at ten o'clock positioning to the center of the main line and shall be encased in concrete after inspection is made.

STORM SEWER

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro _ seeded and hydro _ mulched according to the City of American Fork Standard Specifications.
2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
3. Granular backfill shall be compacted granular material according to American Fork City Standard Specifications.
4. All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5. Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.
6. Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.
7. Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

STRIPING AND SIGNING

1. All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.
2. All signing must be done following MUTCD Manual recommendations, current edition.
3. Only sand-blasting is allowed for removal of existing striping.
4. Contractor is responsible for removal of conflicting existing striping.
5. Materials used for striping must comply with the Utah Department of Transportation standard specifications.

MAIL DELIVERY

1. The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.
2. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.
3. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
4. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

1. The Contractor shall make proper arrangements with the American Fork City, Water Department for the use of fire hydrants when used for work performed under this project's approval.

1
CITY COMMENTS

2
CITY COMMENTS

3
CITY COMMENTS

4
OWNER COMMENTS

05/09/24

06/19/24

07/09/24

07/24/25

BY

DATE

PROJECT ENGINEER: TLH

CIVIL ENGINEERING

SURVEYING

CIR

10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - 801-949-0296

RODERICK CATALYST – BUSINESS PARK BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

GENERAL NOTES

PROFESSIONAL ENGINEER

2

No. 12072623

TREVOR L. HODGSON

07/09/24

STATE OF UTAH

SHEET NO.

GN

PROJECT ID: E23-125

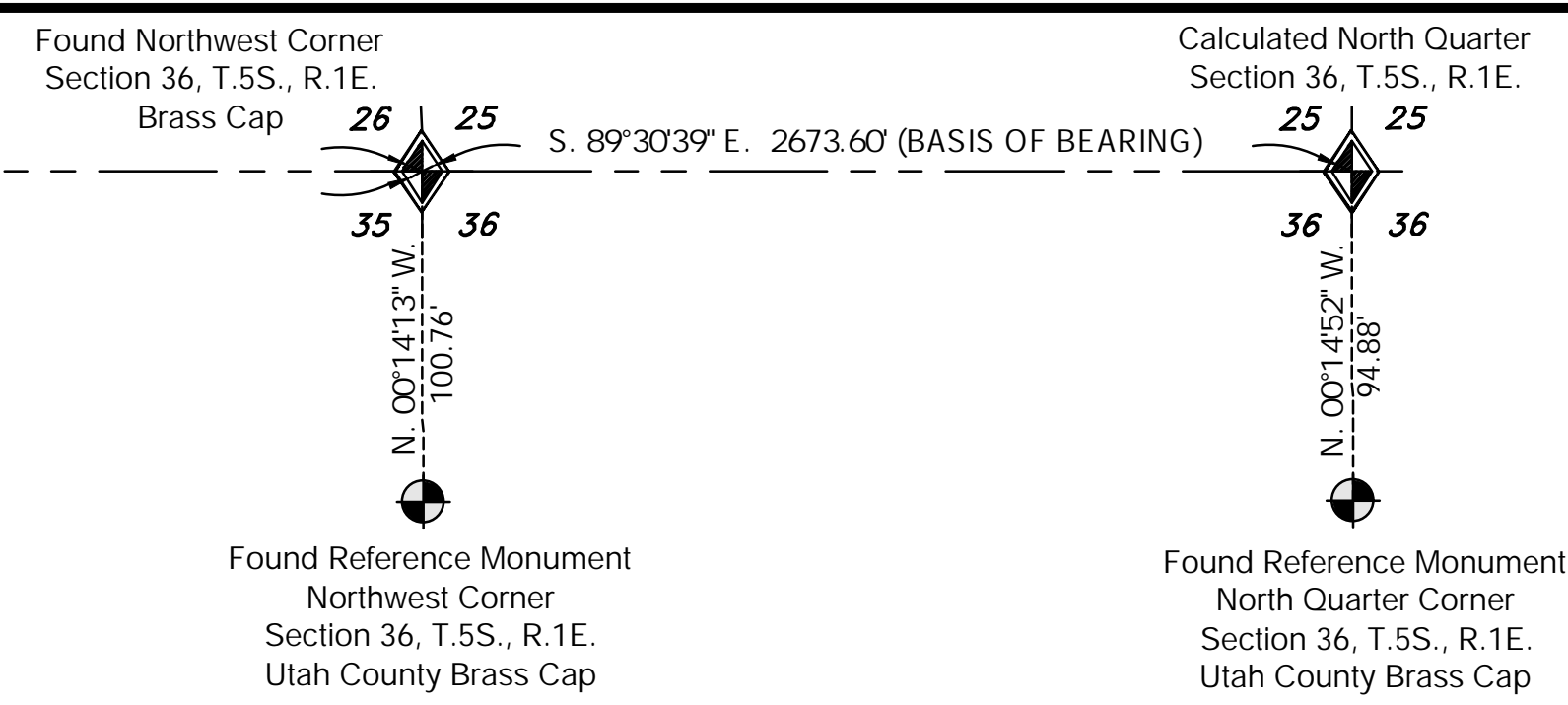
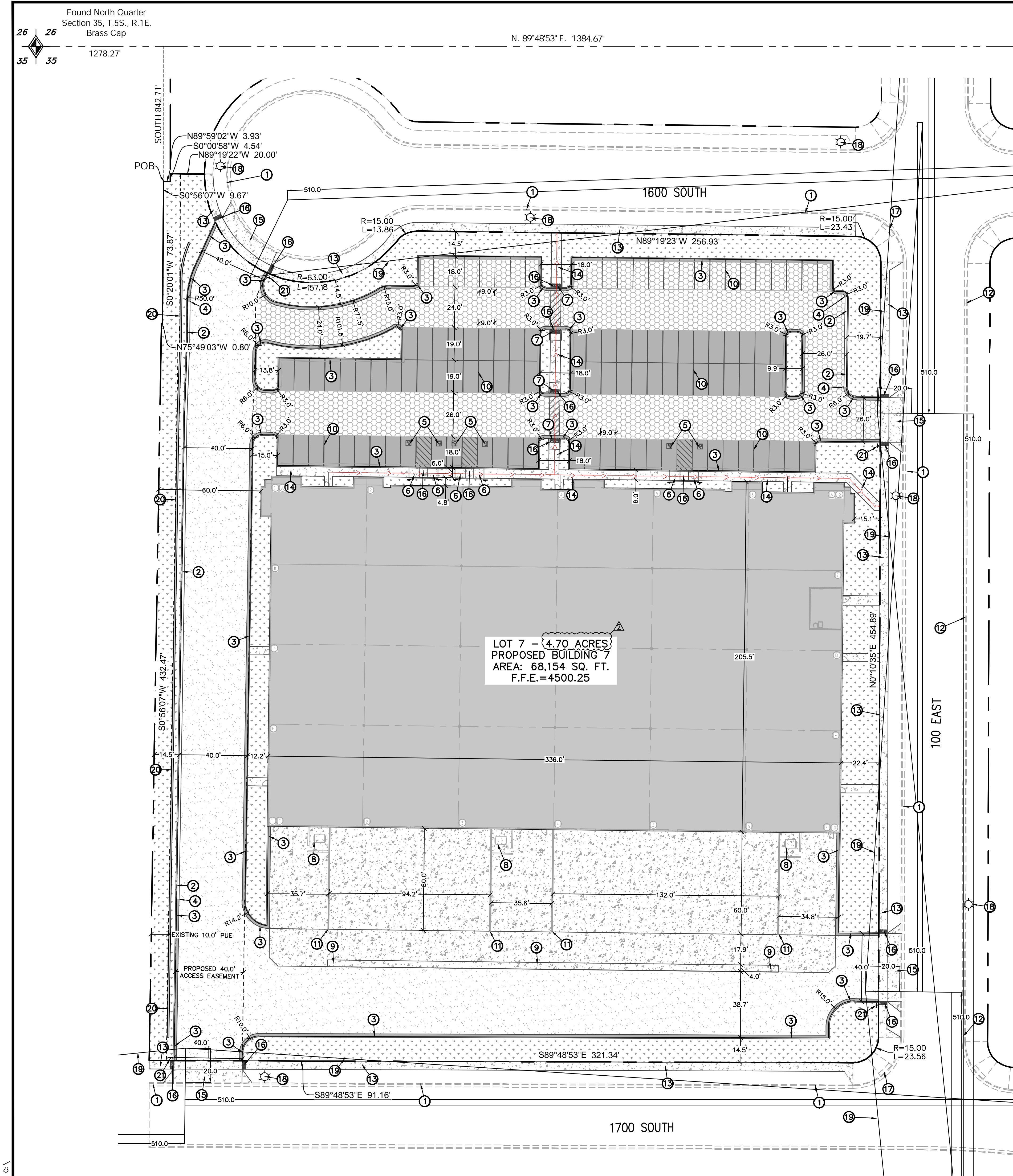
DATE: 01/12/24

FILE NAME: PRJ-RC7

SCALE:

Blue Stakes of UTAH 811

Shortlines.org



- SHEET LEGEND**
- ADA ROUTE
 - PROPOSED CONCRETE SECTION (TRUCK DRIVE LANE 10/C4.0)
 - PROPOSED ASPHALT SECTION (TRUCK DRIVE LANE 11/C4.0)
 - PROPOSED ASPHALT SECTION (PRIMARY ROADWAY 14/C4.0)
 - PROPOSED ASPHALT SECTION (PARKING AREA 15/C4.0)

- SITE PLAN NOTES:**
- CURB & GUTTER INSTALLED AS PART OF SUBDIVISION IMPROVEMENTS.
 - PROPOSED 24" CURB & GUTTER. SEE DETAIL 1/C4.0.
 - PROPOSED 24" REV PAN CURB & GUTTER. SEE DETAIL 2/C4.0.
 - PROVIDE A SMOOTH TRANSITION FROM CURB & GUTTER TO REV. PAN CURB & GUTTER.
 - ALL HANDICAP STALLS SHALL HAVE SLOPES OF LESS THAN 2% IN ALL DIRECTIONS AND ARE VAN ACCESSIBLE. SEE DETAIL 12/C4.0 AND 13/C4.0 FOR ADA SIGN DETAILS AND PLACEMENT
 - ADA RAMP ARE TO BE INSTALLED PER CITY AND ADA STANDARDS AND SPECIFICATIONS. SEE DETAIL 3/C4.0.
 - ADA RAMP ARE TO BE INSTALLED PER CITY AND ADA STANDARDS AND SPECIFICATIONS. SEE DETAIL 4/C4.0.
 - PROPOSED TRASH ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
 - PROPOSED 4' WIDE ROLL GUTTER. SEE DETAIL 9/C4.0.
 - ALL PARKING LOT STRIPING TO BE REFLECTIVE YELLOW (TYP.) PER M.U.T.C.D. STANDARDS.
 - PROPOSED DOCK WALL. SEE STRUCTURAL PLANS FOR DETAILS.
 - CURB & GUTTER INSTALLED AS PART OF BUILDING 6 IMPROVEMENTS.
 - PROPOSED 5' SIDEWALK PER APWA STANDARD PLAN NO. 231. SEE DETAIL SHEET C4.0. SIDEWALK TO BE 6" THICK AT DRIVE APPROACHES AND 4" AT ALL OTHER LOCATIONS.
 - PROPOSED 6' SIDEWALK PER APWA STANDARD PLAN NO. 231. SEE DETAIL SHEET C4.0. SIDEWALK TO BE 6" THICK AT DRIVE APPROACHES AND 4" AT ALL OTHER LOCATIONS.
 - PROPOSED FLARED DRIVE APPROACH PER AMERICAN FORK STANDARD 15.9. SEE DETAIL SHEET C5.0.
 - INSTALL DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238. SEE DETAIL SHEET C4.0.
 - PROPOSED CORNER ADA RAMP PER AMERICAN FORK STANDARDS.
 - STREET LIGHT INSTALLED AS PART OF SUBDIVISION IMPROVEMENTS.
 - SIGHT TRIANGLE.
 - RETAINING WALL INSTALLED AS PART OF SUBDIVISION IMPROVEMENTS SEE SHEET C2.0 FOR ELEVATIONS.
 - INSTALL STOP SIGN PER MUTCD STANDARD R1-1.



LOT 7 AREAS:

	SQ. FT. / ACRES
LOT 7	204,763 SQ. FT. / 4.70 ACRES
BUILDING 7 FOOTPRINT	68,154 SQ. FT. / 1.56 ACRES
PROPOSED ASPHALT	68,080 SQ. FT. / 1.56 ACRES
PROPOSED LANDSCAPING	32,864 SQ. FT. / 0.75 ACRES
PROPOSED CONCRETE	35,666 SQ. FT. / 0.82 ACRES
PERVIOUS AREA PERCENTAGE	16.05%
IMPERVIOUS AREA PERCENTAGE	83.95%

LOT 7 PARKING REQUIREMENTS:

	SQ. FT.	CITY REQ'T
OFFICE	10,000 SQ. FT.	40.00 (4/1000)
WAREHOUSE	58,154 SQ. FT.	58.15 (1/1000)
TOTAL REQUIRED:		99
TOTAL PROVIDED:		112
ACCESSIBLE SPACES		6 (5 REQ'D 101 TO 150)

REFERENCED CODED:
- OFF-STREET PARKING STANDARDS OF THE AMERICAN FORK CITY, UTAH
CODE (FOR CITY REQUIREMENTS)



CIVIL ENGINEERING + SURVEYING

CIR

10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - 801-949-0296

RODERICK CATALYST - BUSINESS PARK BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

SITE PLAN

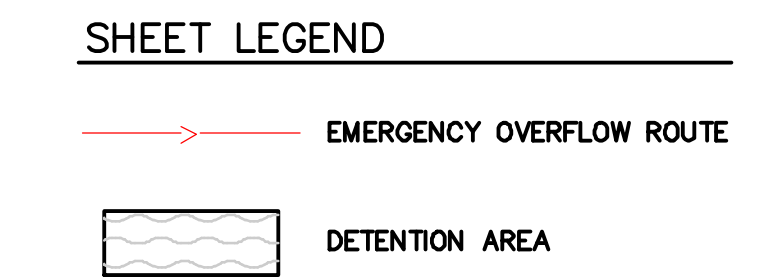
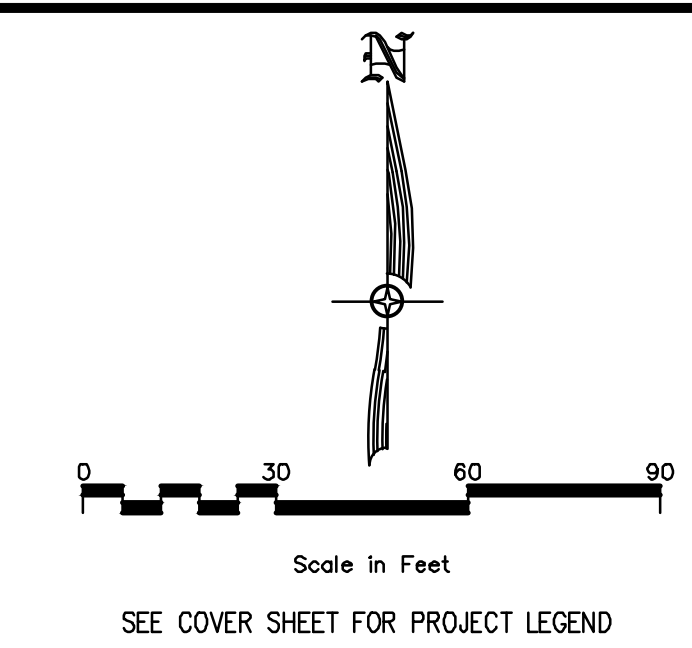
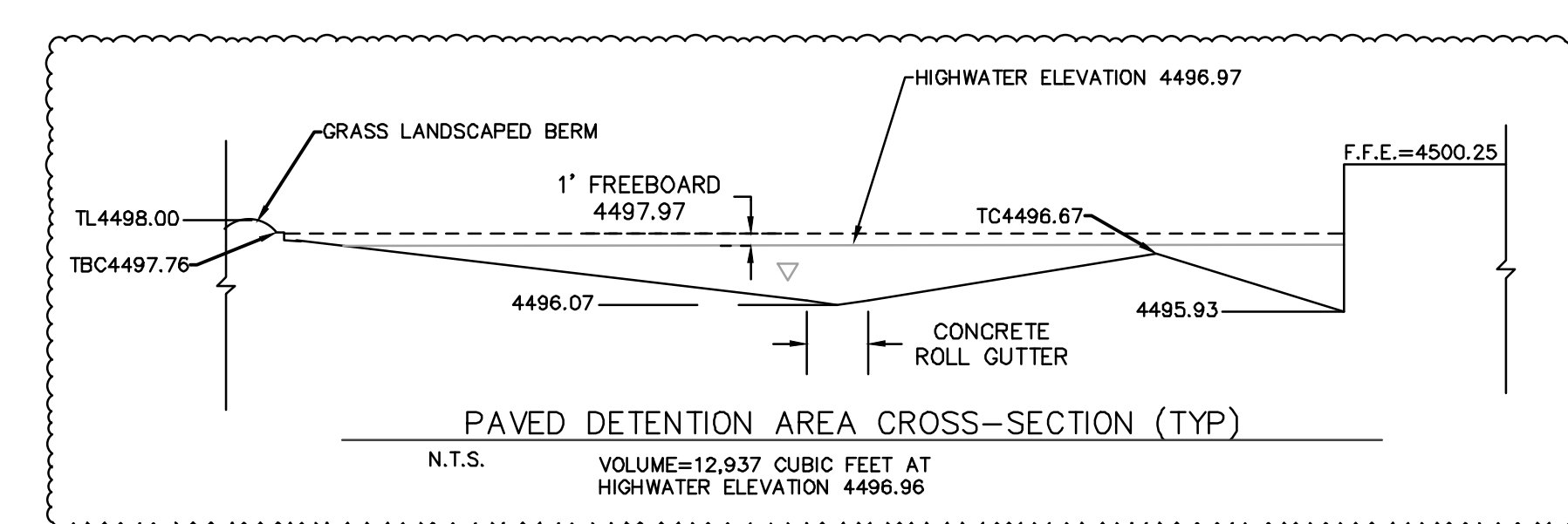
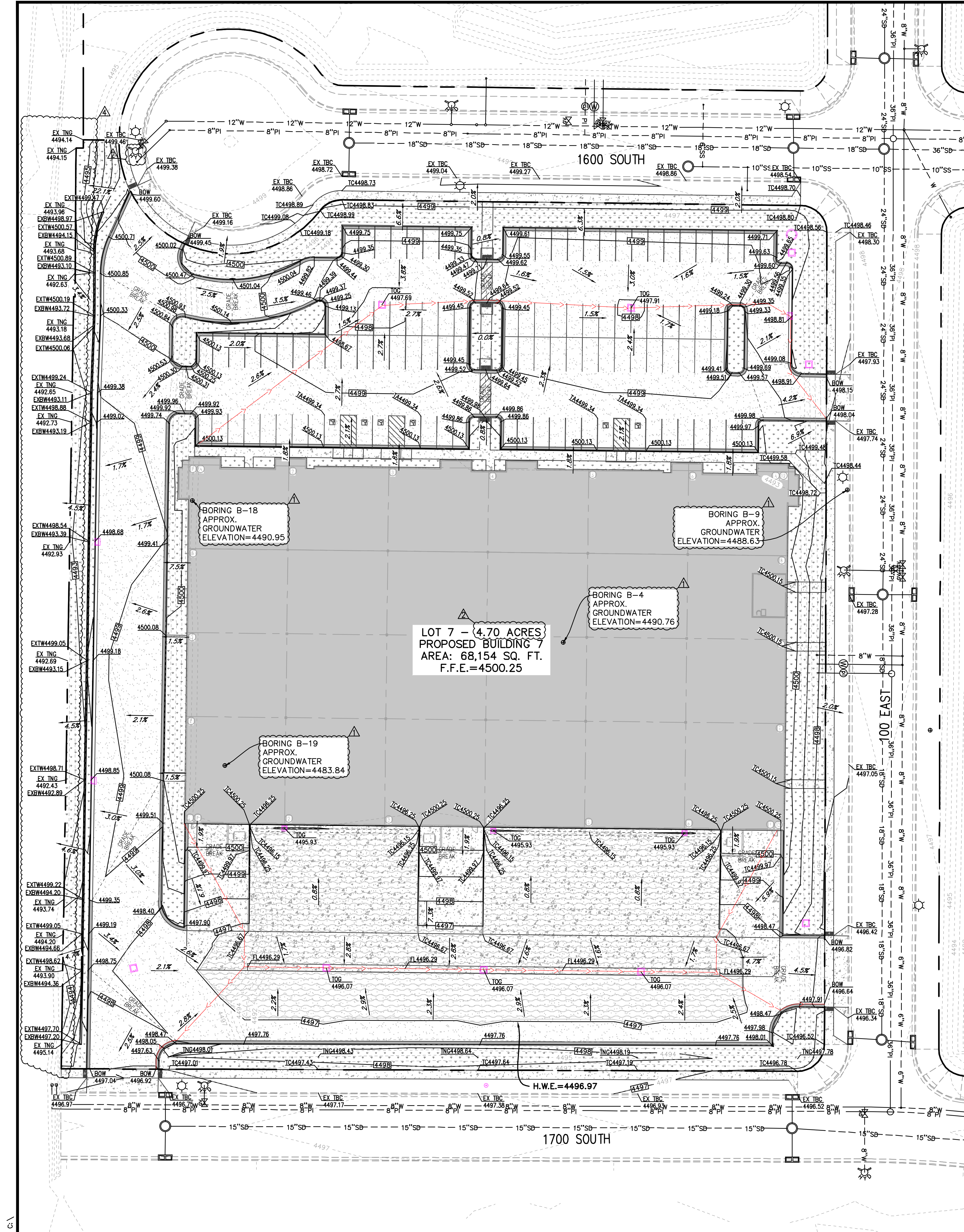
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2	CITY COMMENTS		05/19/24
3	CITY COMMENTS		07/09/24
4	OWNER COMMENTS		07/24/25

DESIGNER: TLH
PROJECT ENGINEER: TLH

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L. HODGSON
07/09/24
STATE OF UTAH

SHEET NO. **C1.0**

PROJECT ID: E23-125
DATE: 01/12/24
FILE NAME: PRJ-RC7
SCALE: 1"=30'



GRADING NOTE:
AVERAGE EDGE OF ASPHALT ELEVATION IN ADJACENT 1600 SOUTH = 4498.50
AVERAGE EDGE OF ASPHALT ELEVATION IN ADJACENT 100 EAST = 4497.36
AVERAGE EDGE OF ASPHALT ELEVATION IN ADJACENT 1700 SOUTH = 4496.73
BOTTOM OF FOOTING ELEVATION = 4493.85

NOTE:
WALL AT WEST SIDE OF SITE TO BE INSTALLED AS PART OF SUBDIVISION IMPROVEMENTS

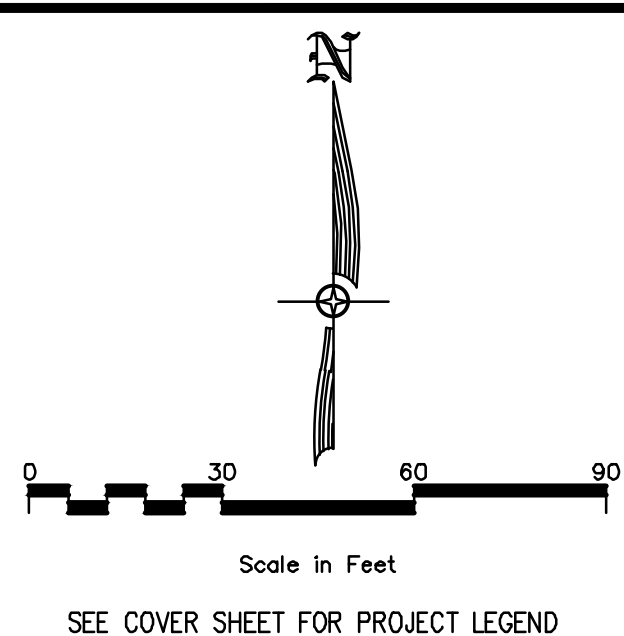
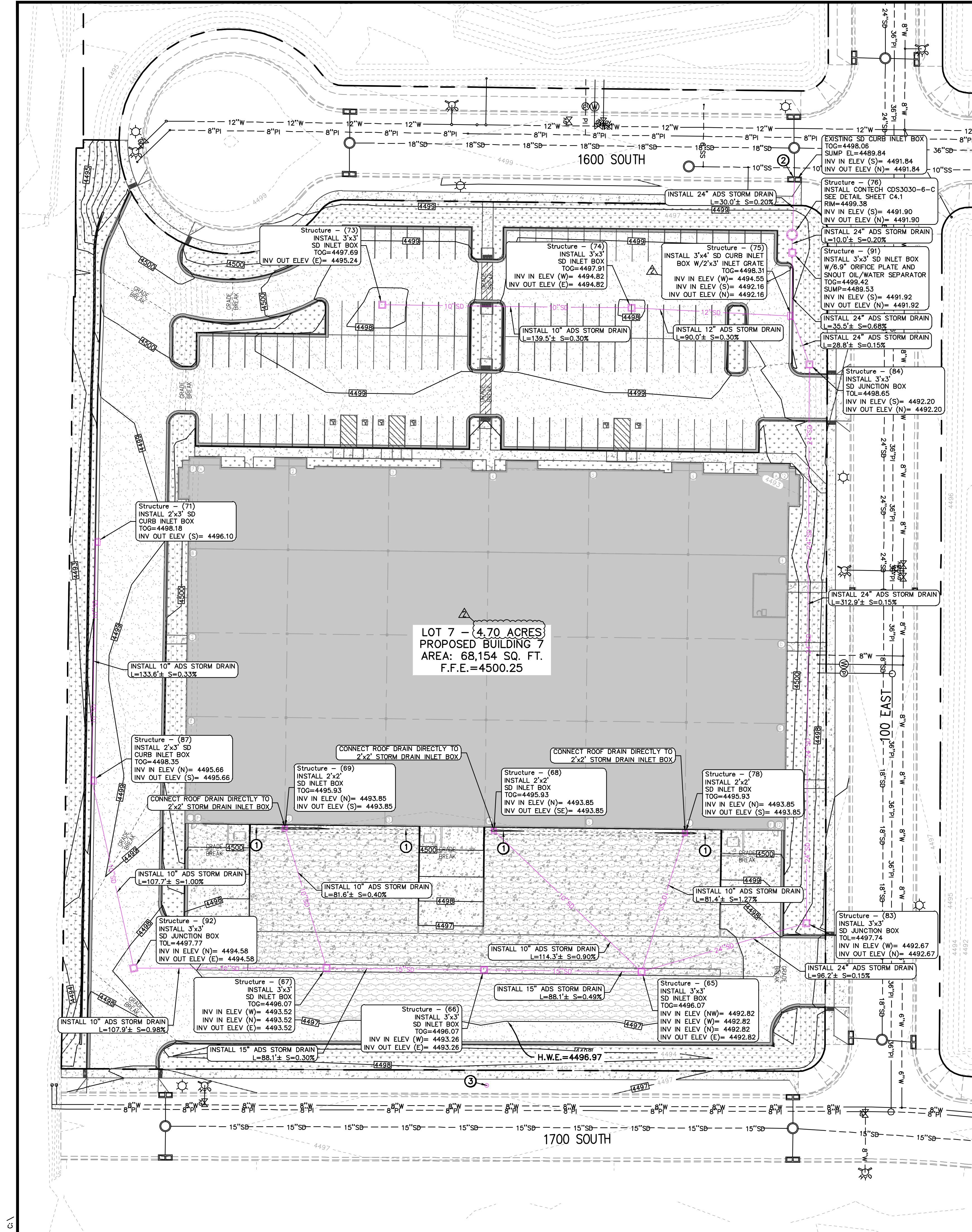
CIVIL ENGINEERING + SURVEYING	
10718 SOUTH BECKSTEAD LANE, STE. 102 SOUTH JORDAN, UT 84095 - 801-949-6266	
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2	CITY COMMENTS
3	CITY COMMENTS
4	CITY COMMENTS
NO	REVISIONS
BY	DATE
DESIGNER: TLH PROJECT ENGINEER: TLH	

RODERICK CATALYST – BUSINESS PARK BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003
GRADING PLAN

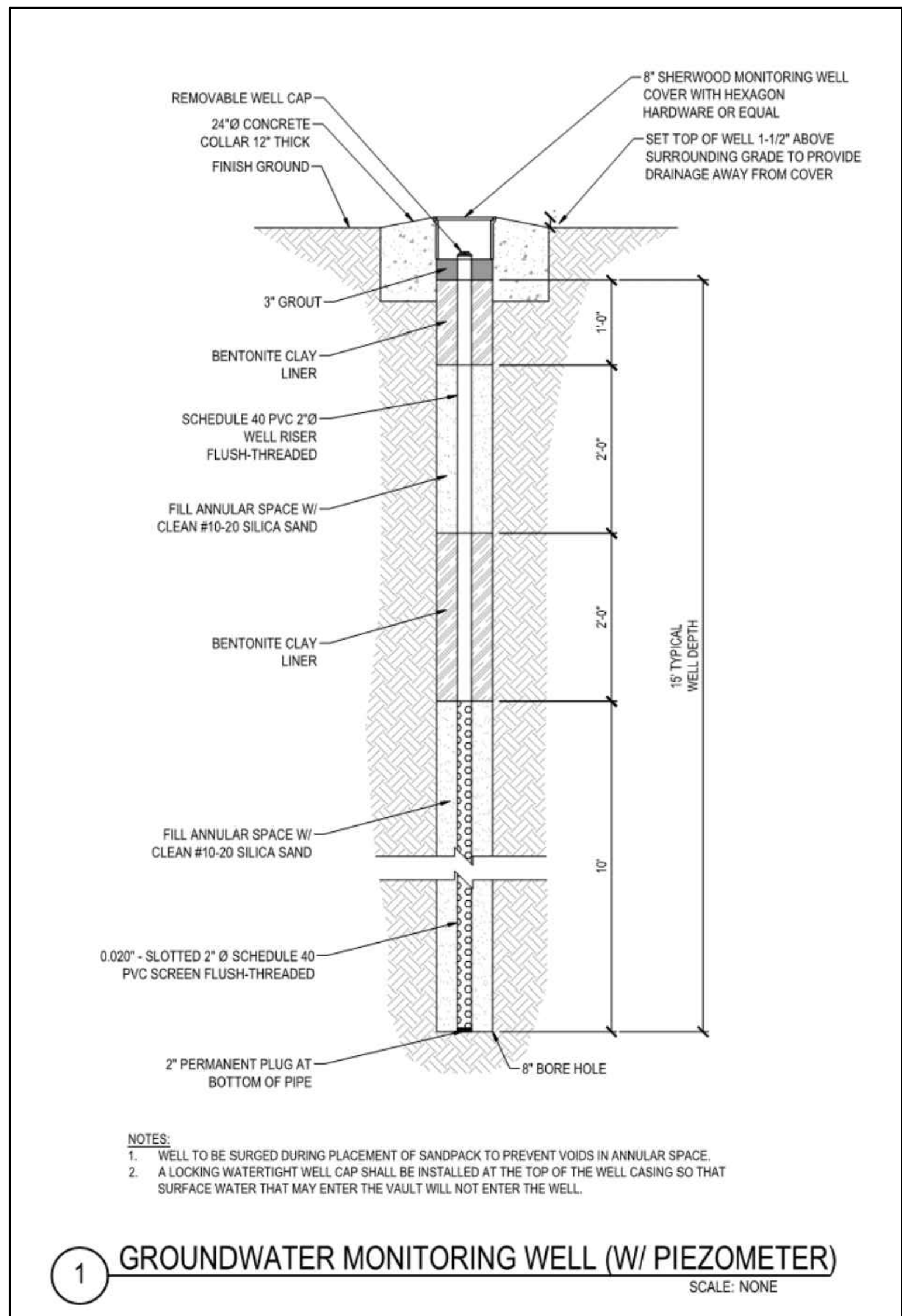
PROFESSIONAL ENGINEER
No. 12072623
TREVOR L. HODGSON
STATE OF UTAH

SHEET NO. C2.0
PROJECT ID: E23-125
DATE: 01/12/24
FILE NAME: PRJ-RC7
SCALE: 1"=30'





- DRAINAGE PLAN NOTES:**
- SEE DETAIL 5/C4.0 FOR TYPICAL DOCK AREA GRADING AND SHEET C2.0 FOR ELEVATIONS. 4' FROM BUILDING 4' BELOW FINISHED FLOOR ELEVATION. CONCRETE WITHIN 4' OF BUILDING TO BE FORMED TO DIRECT STORM WATER RUNOFF TOWARDS PROPOSED INLET BOXES.
 - CONNECT PROPOSED 24" STORM DRAIN PIPE TO EXISTING STORM DRAIN INLET BOX AT (E=4491.84).
 - INSTALL GROUNDWATER MONITORING WELL (W/PIEZOMETER). SEE DETAIL 1 THIS SHEET.



1		CITY COMMENTS		05/09/24	REVISIONS	BY	DATE
2		CITY COMMENTS		05/19/24			
3		CITY COMMENTS		07/09/24			
4		OWNER COMMENTS		04/24/25			
NO					DESIGNER: TLH	PROJECT ENGINEER: TLH	

CIVIL ENGINEERING + SURVEYING

CIR

10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - 801-949-0296

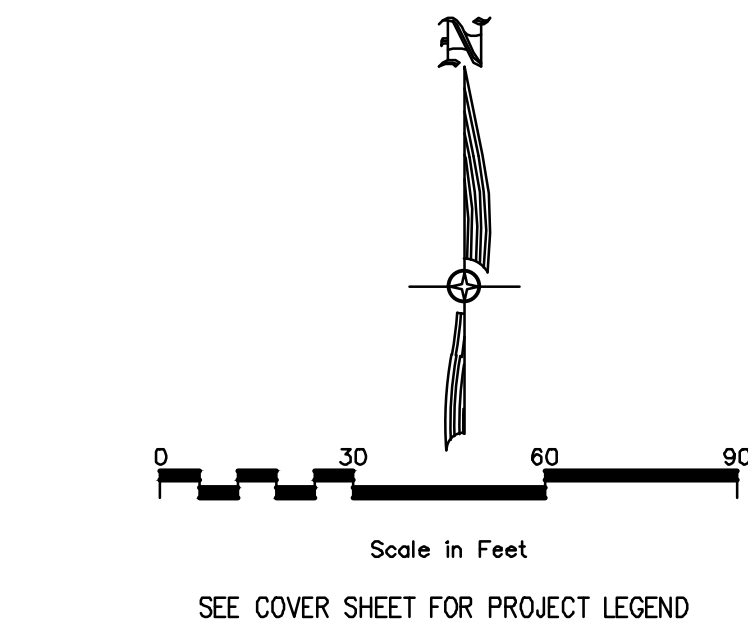
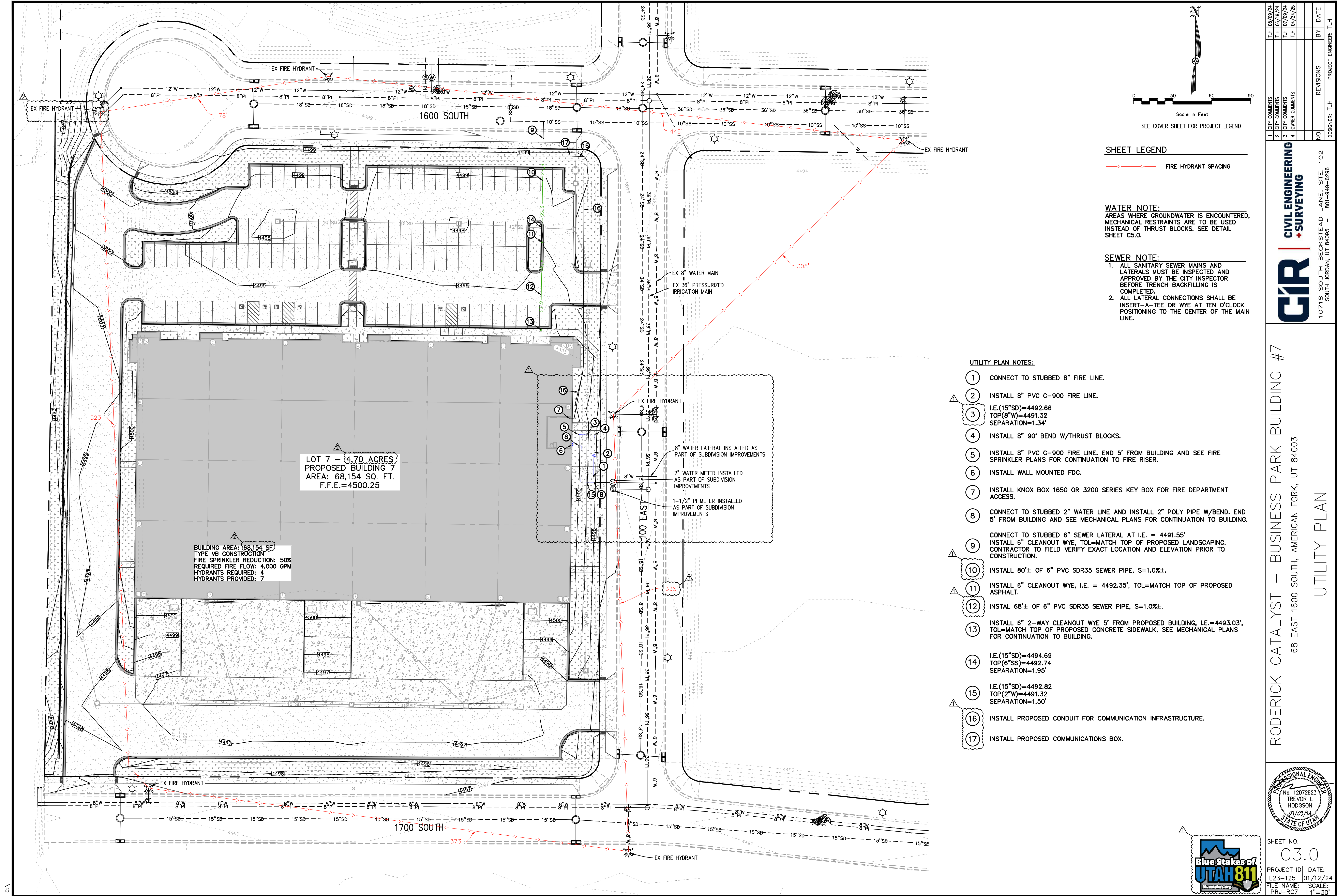
RODERICK CATALYST – BUSINESS PARK BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

DRAINAGE PLAN

SHEET NO. C2.1

PROJECT ID: E23-125 DATE: 01/12/24
FILE NAME: PRJ-RC7 SCALE: 1"=30'

PROFESSIONAL ENGINEER
TREVOR E. HODGSON
07/10/24
STATE OF UTAH



SHEET LEGEND

→ FIRE HYDRANT SPACING

WATER NOTE:
AREAS WHERE GROUNDWATER IS ENCOUNTERED, MECHANICAL RESTRAINTS ARE TO BE USED INSTEAD OF THRUST BLOCKS. SEE DETAIL SHEET C5.0.

SEWER NOTE:
1. ALL SANITARY SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY INSPECTOR BEFORE TRENCH BACKFILLING IS COMPLETED.
2. ALL LATERAL CONNECTIONS SHALL BE INSERT-A-TEE OR WYE AT TEN O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE.

- UTILITY PLAN NOTES:**
1. CONNECT TO STUBBED 8" FIRE LINE.
 2. INSTALL 8" PVC C-900 FIRE LINE.
 3. I.E.(15"SD)=4492.66
TOP(8"W)=4491.32
SEPARATION=1.34'
 4. INSTALL 8" 90° BEND W/THRUST BLOCKS.
 5. INSTALL 8" PVC C-900 FIRE LINE. END 5' FROM BUILDING AND SEE FIRE SPRINKLER PLANS FOR CONTINUATION TO FIRE RISER.
 6. INSTALL WALL MOUNTED FDC.
 7. INSTALL KNOX BOX 1650 OR 3200 SERIES KEY BOX FOR FIRE DEPARTMENT ACCESS.
 8. CONNECT TO STUBBED 2" WATER LINE AND INSTALL 2" POLY PIPE W/BEND. END 5' FROM BUILDING AND SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.
 9. CONNECT TO STUBBED 6" SEWER LATERAL AT I.E. = 4491.55'
 10. INSTALL 80'± OF 6" PVC SDR35 SEWER PIPE, S=1.0%±.
 11. INSTALL 6" CLEANOUT WYE, I.E. = 4492.35', TOL=MATCH TOP OF PROPOSED ASPHALT.
 12. INSTAL 68'± OF 6" PVC SDR35 SEWER PIPE, S=1.0%±.
 13. INSTALL 6" 2-WAY CLEANOUT WYE 5' FROM PROPOSED BUILDING, I.E.=4493.03', TOL=MATCH TOP OF PROPOSED CONCRETE SIDEWALK, SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.
 14. I.E.(15"SD)=4494.69
TOP(6"SS)=4492.74
SEPARATION=1.95'
 15. I.E.(15"SD)=4492.82
TOP(2"W)=4491.32
SEPARATION=1.50'
 16. INSTALL PROPOSED CONDUIT FOR COMMUNICATION INFRASTRUCTURE.
 17. INSTALL PROPOSED COMMUNICATIONS BOX.

10/09/24

10/09/24

10/09/24

10/09/24

CITY COMMENTS

CITY COMMENTS

CITY COMMENTS

CITY COMMENTS

NO

NO

NO

NO

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PROJECT ENGINEER: TLH

PROJECT ENGINEER: TLH

PROJECT ENGINEER: TLH

PROJECT ENGINEER: TLH

CIVIL ENGINEERING

SURVEYING

CIR

10718 SOUTH BECKSTEAD LANE, STE. 102

SOUTH JORDAN, UT 84095 - 801-949-0296

UTILITY PLAN

68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

RODERICK CATALYST - BUSINESS PARK BUILDING #7

PROFESSIONAL ENGINEER

2

No. 12072623

TREVOR L. HODGSON

STATE OF UTAH

SHEET NO.

C3.0

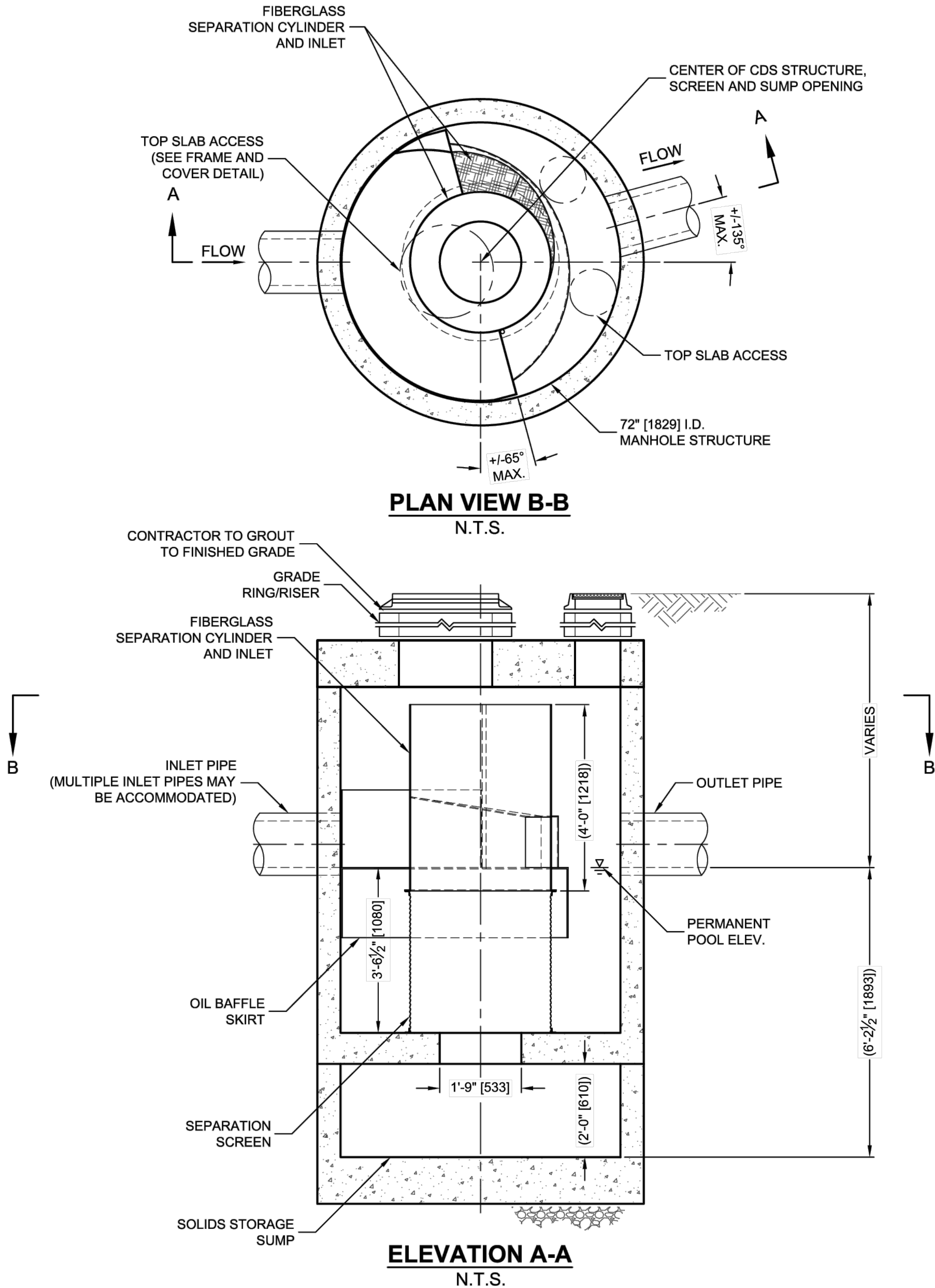
PROJECT ID: E23-125

DATE: 01/12/24

FILE NAME: PRJ-RC7

SCALE: 1"=30'

I:\STORMWATER\COMPOFS\22 CDS\40 STANDARD DRAWINGS\INLINE (CDS-C)\DWG\CDS3030-6-C-DTL.DWG 5/13/2014 5:03 PM



CDS3030-6-C DESIGN NOTES

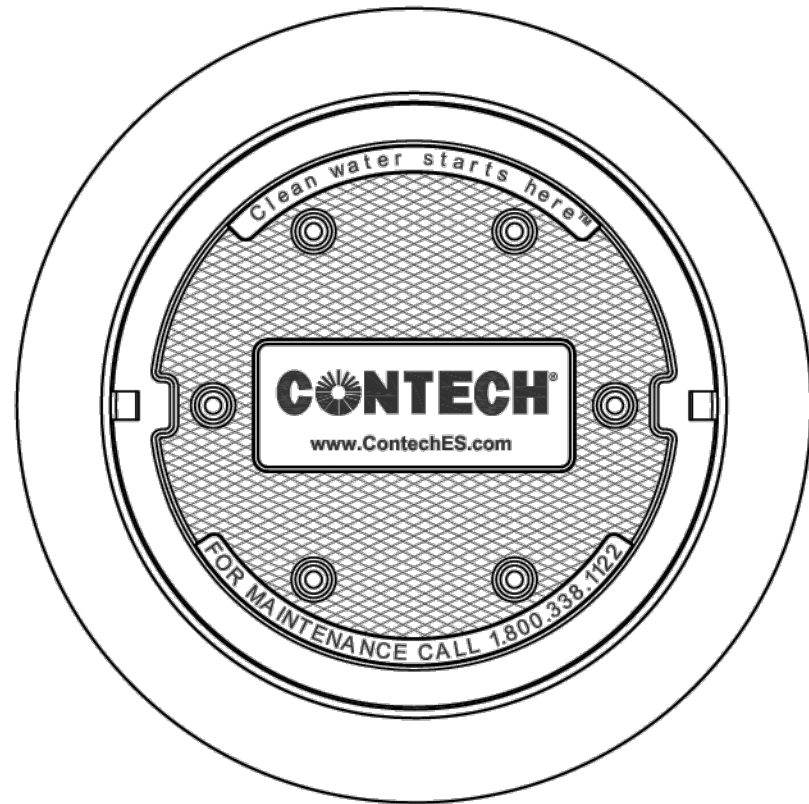
CDS3030-6-C RATED TREATMENT CAPACITY IS 3.0 CFS [85.0 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 20.0 CFS [566 L/s]. IF THE SITE CONDITIONS EXCEED 20.0 CFS [566 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS3030-6-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES
- SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
- SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

TREATMENT CAPACITY IS 3.0 CFS, MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 20.0 CFS.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	*
PEAK FLOW RATE (CFS OR L/s)	*
RETURN PERIOD OF PEAK FLOW (YRS)	*
SCREEN APERTURE (2400 OR 4700)	*

PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*

RIM ELEVATION	*
---------------	---

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 308) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS3030-6-C
INLINE CDS
STANDARD DETAIL

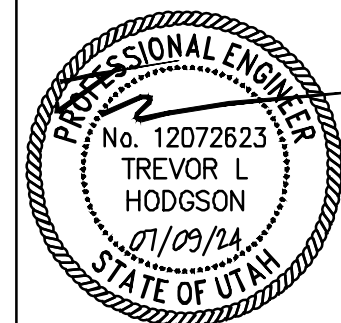
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**CIVIL ENGINEERING
+ SURVEYING**

CIR

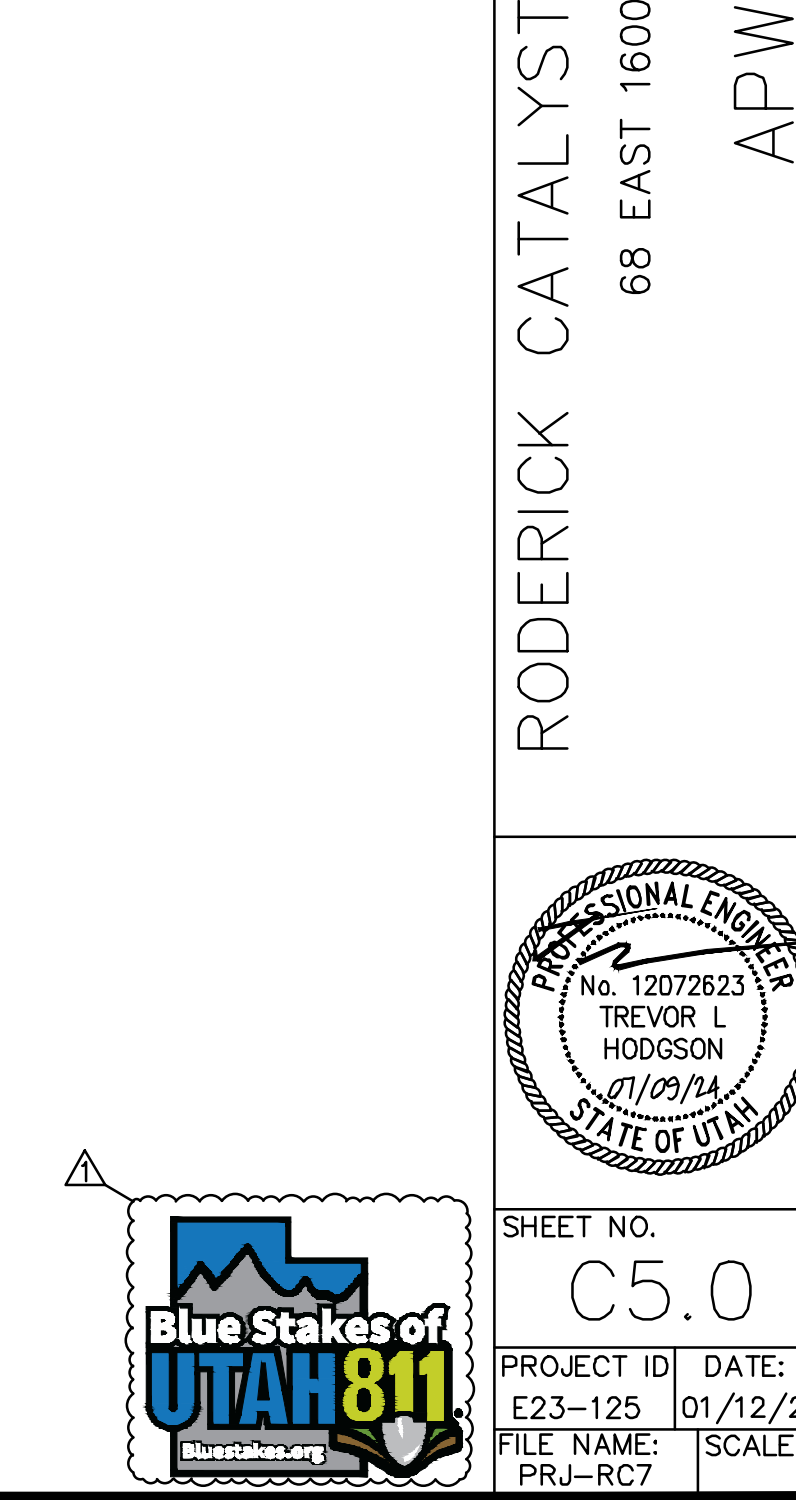
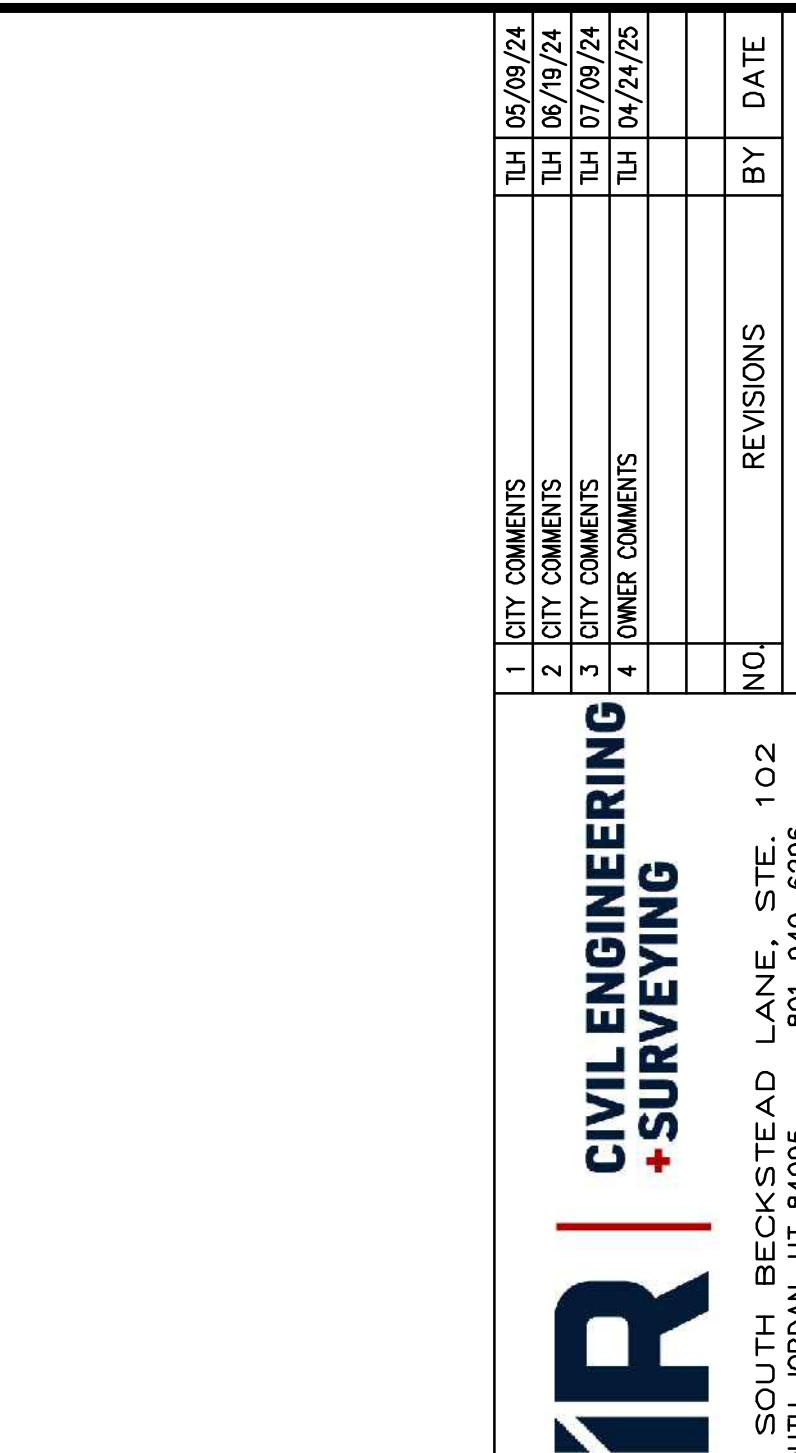
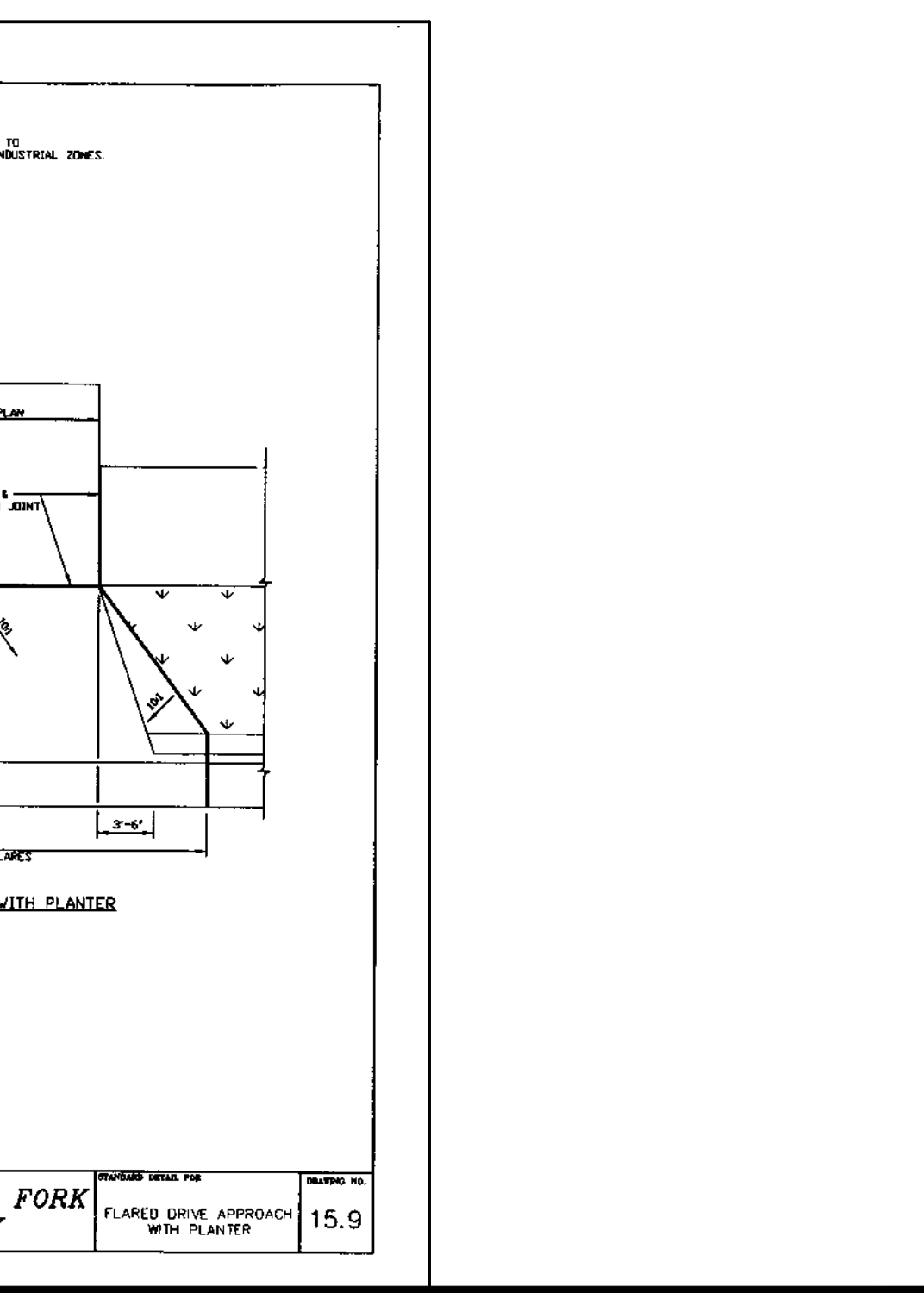
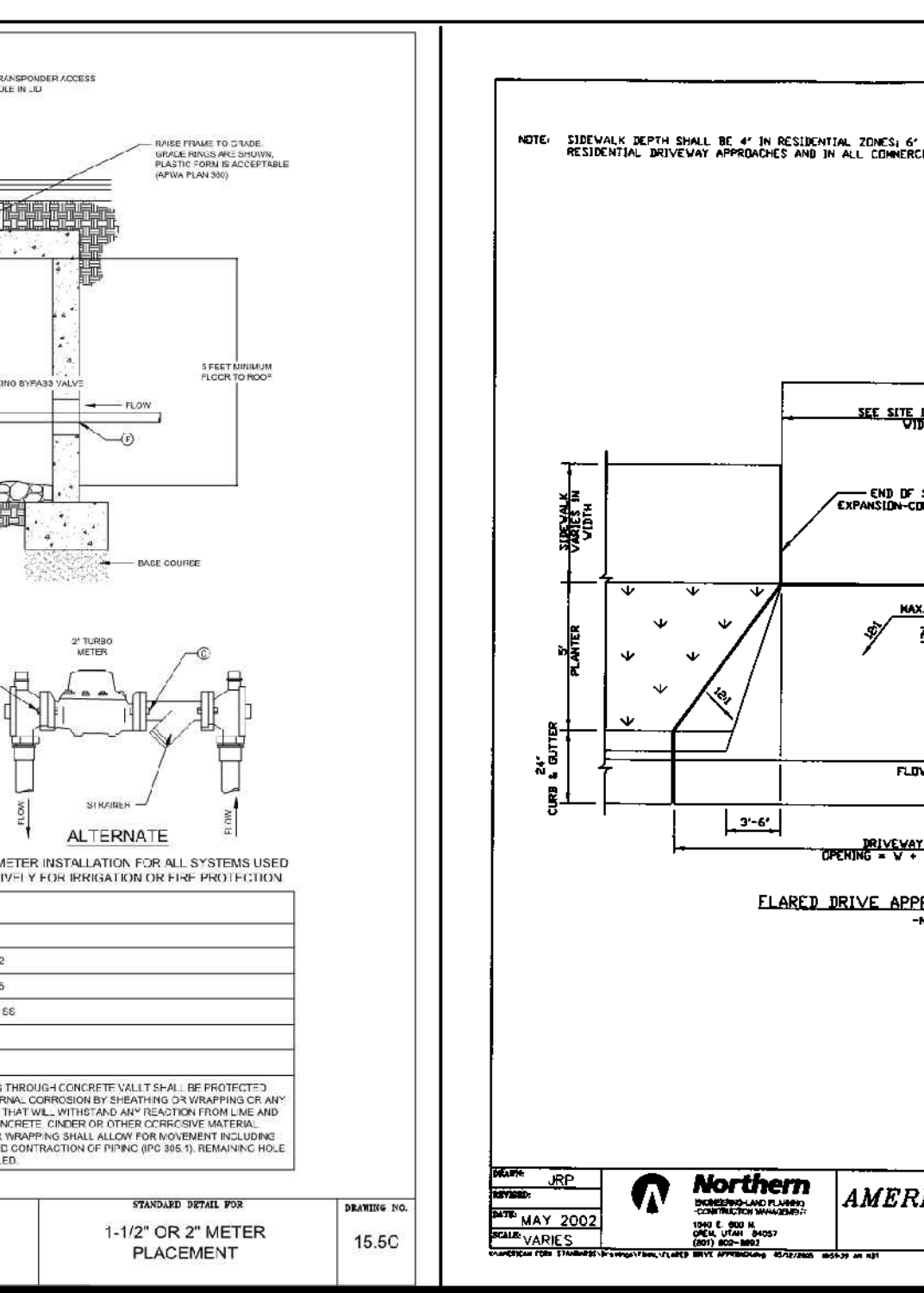
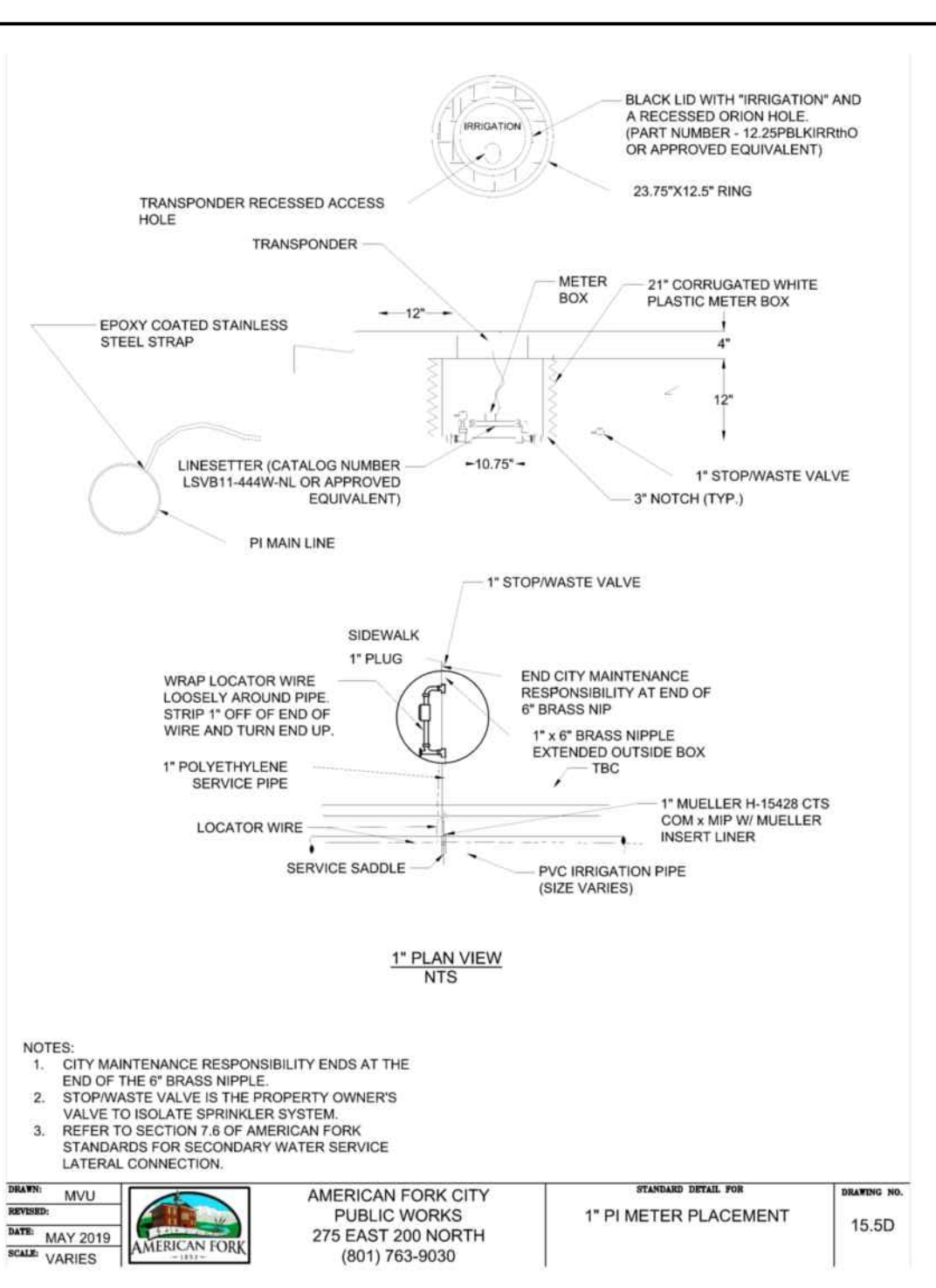
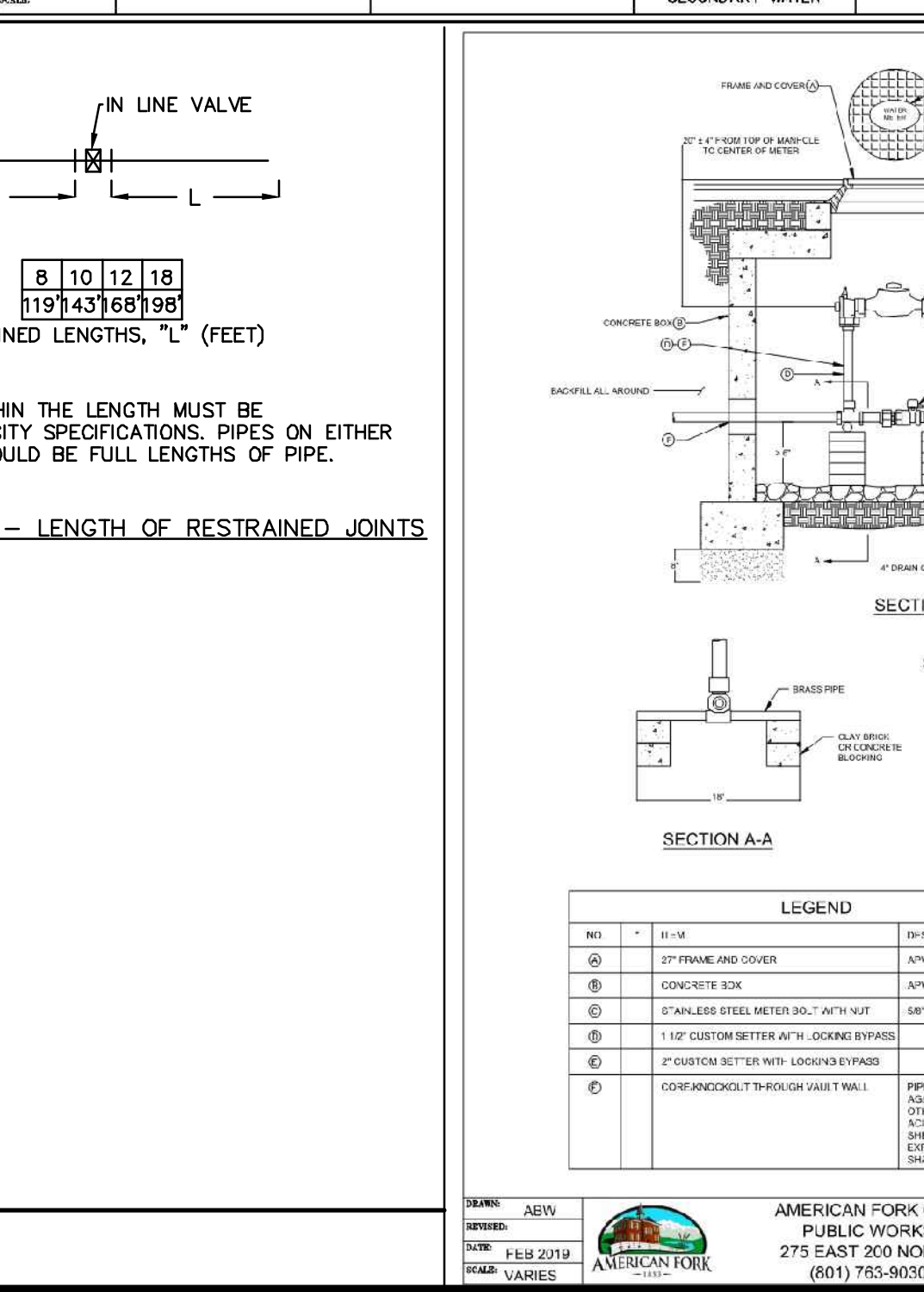
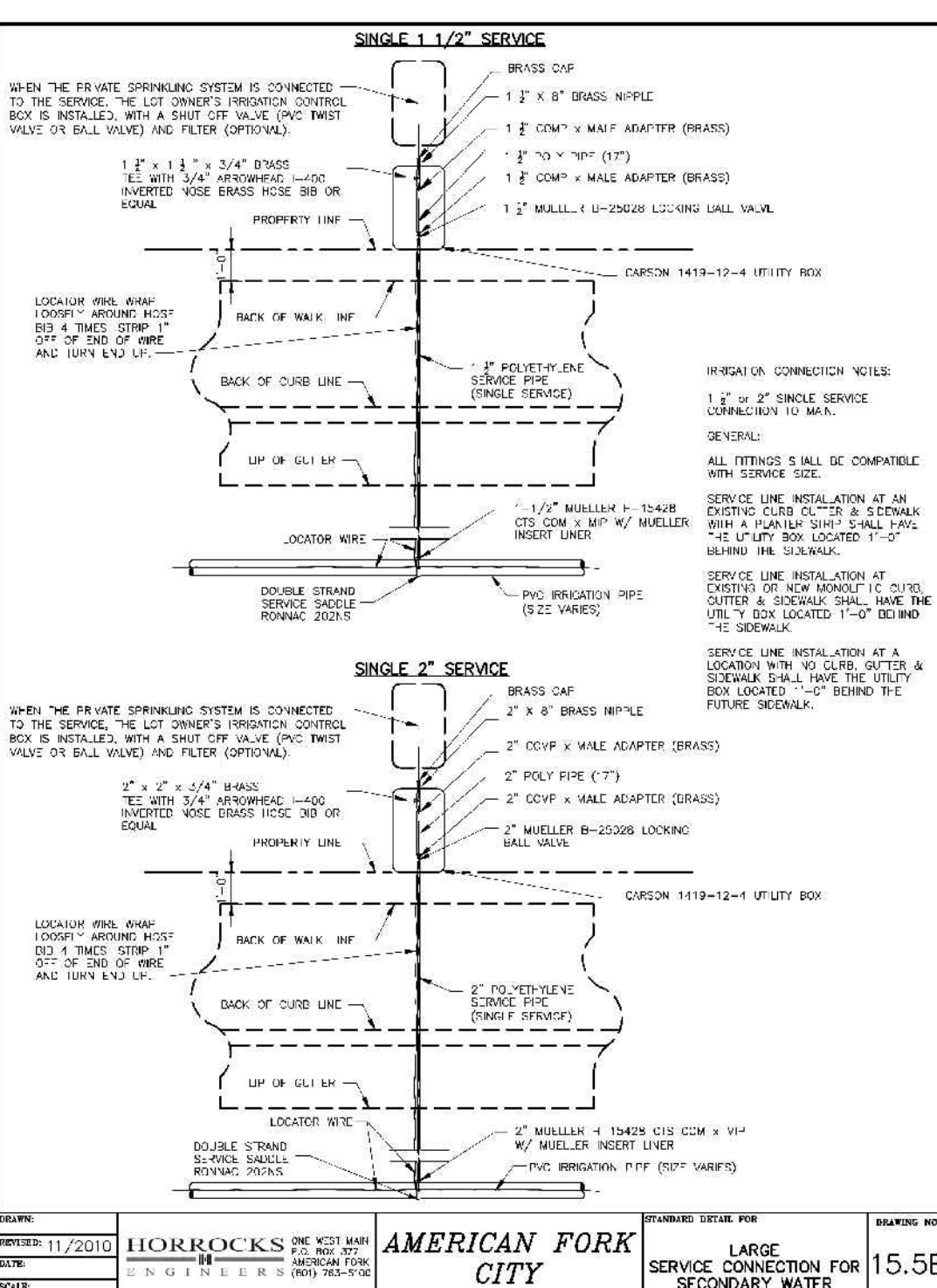
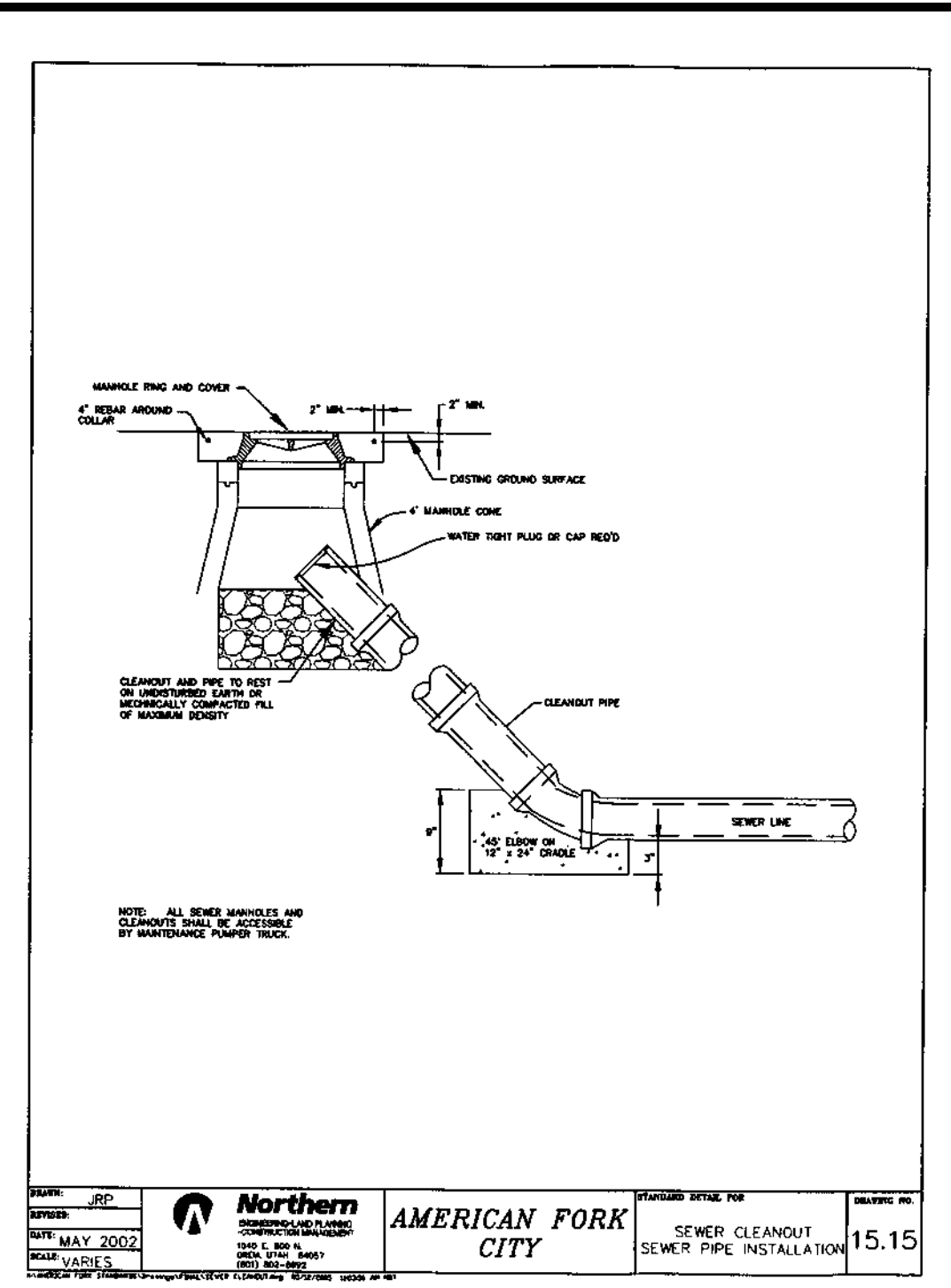
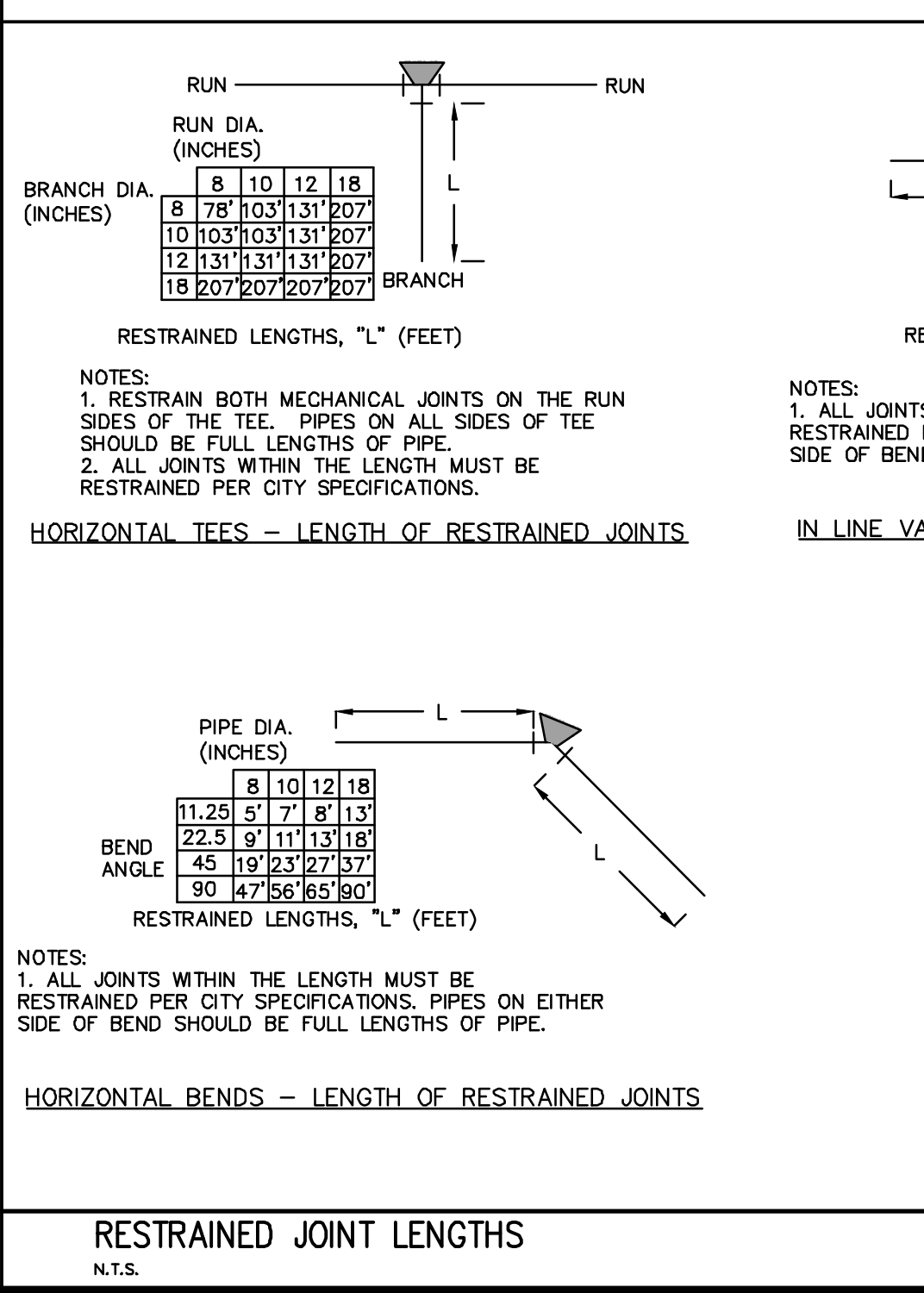
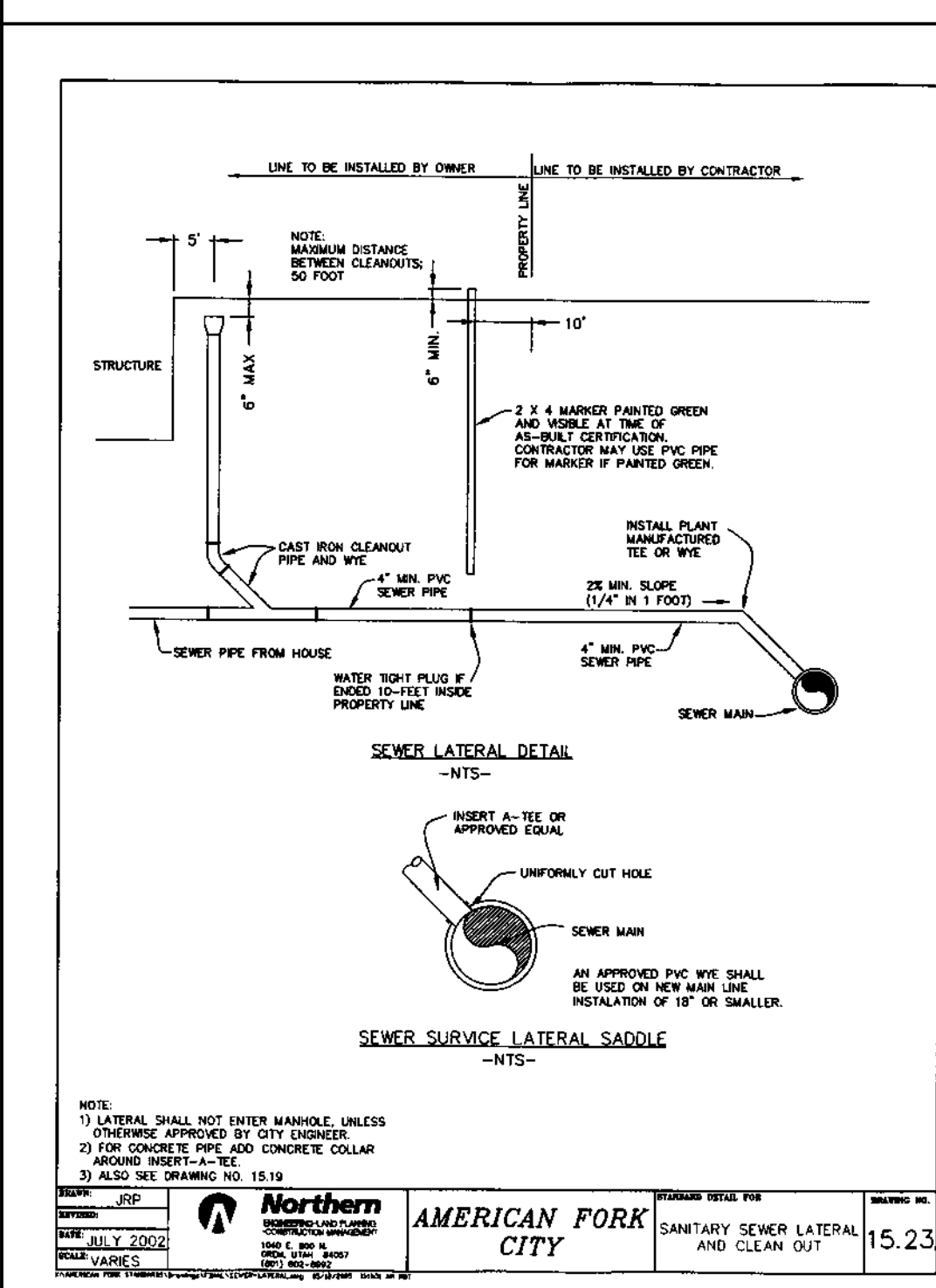
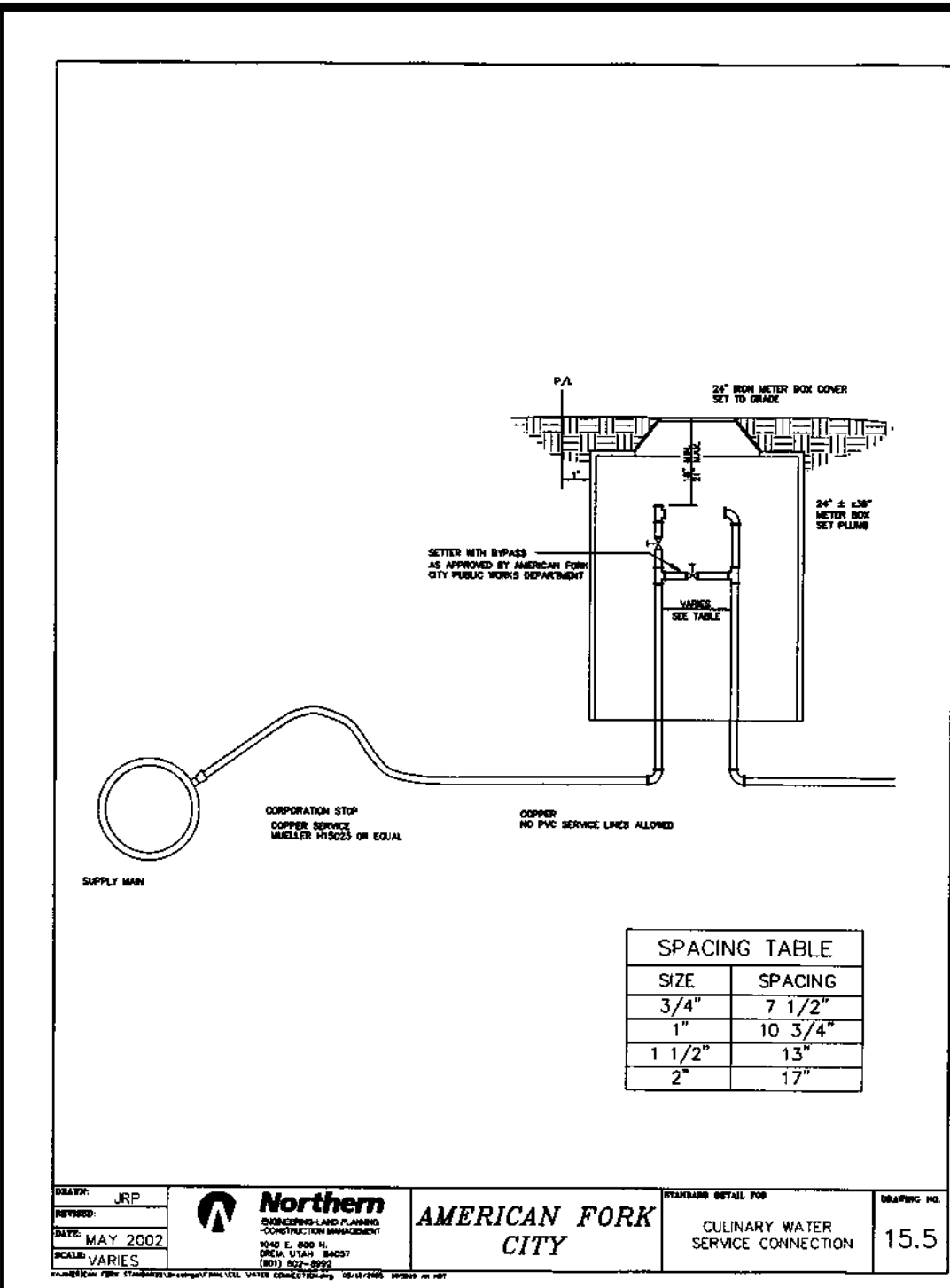
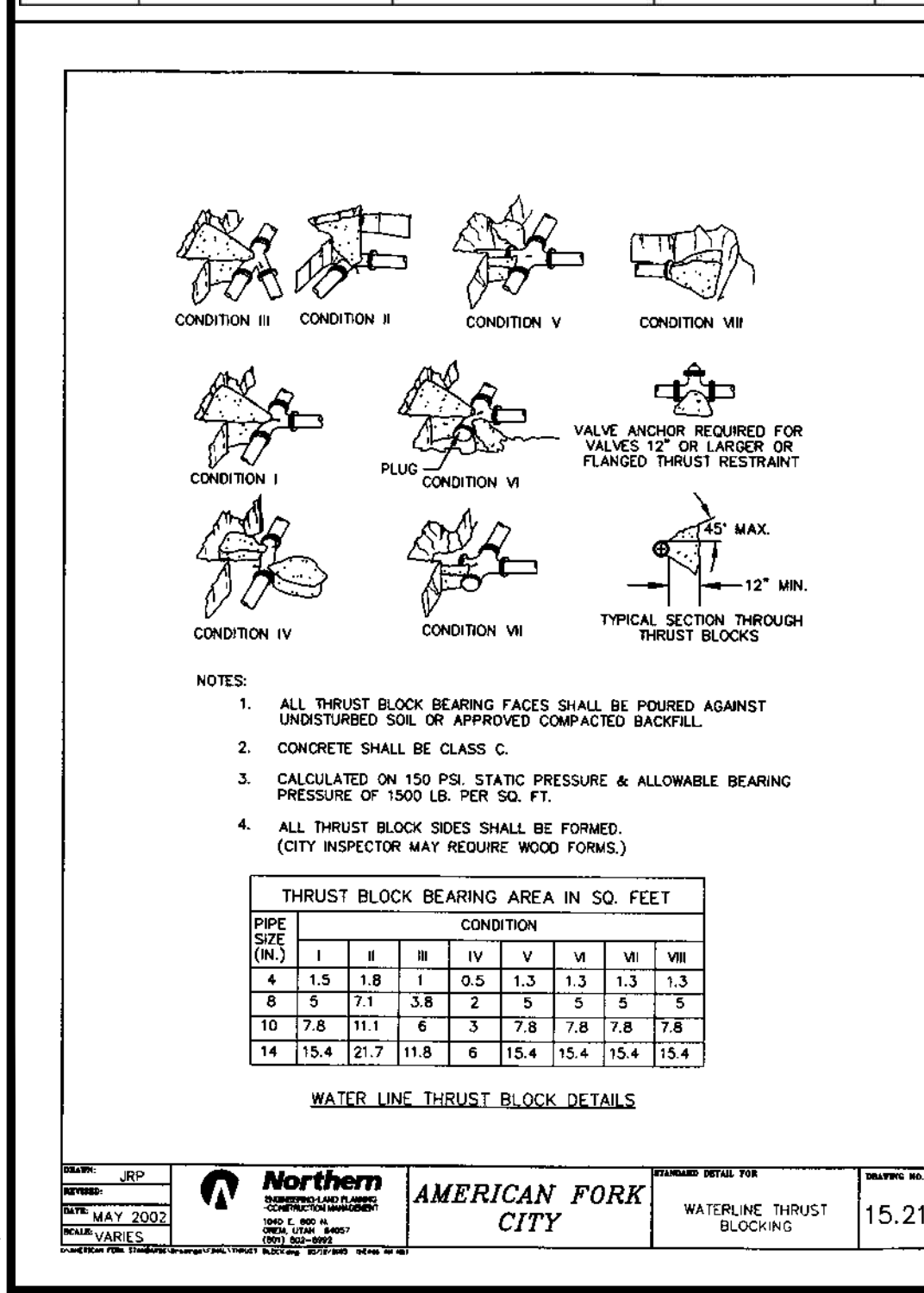
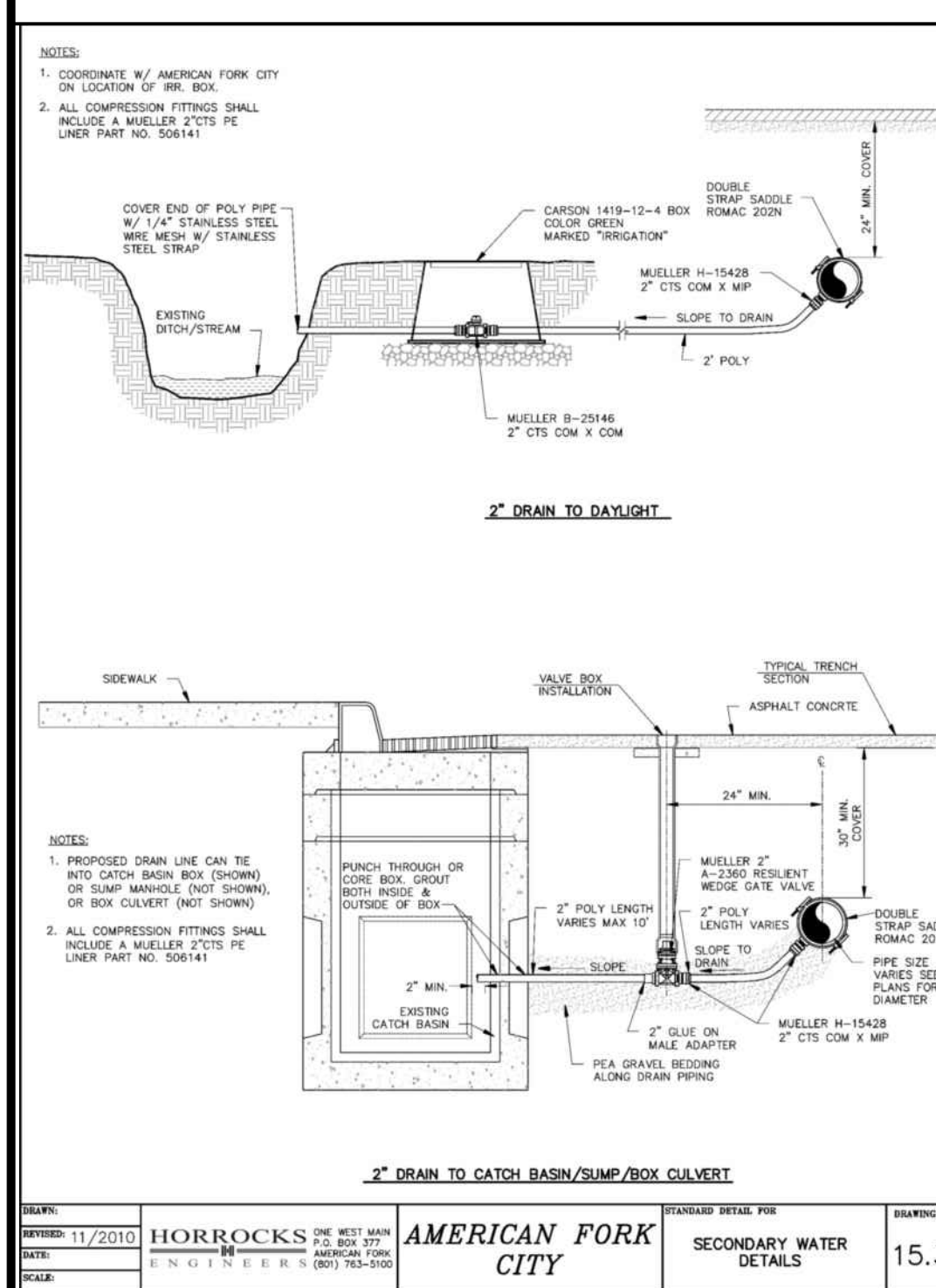
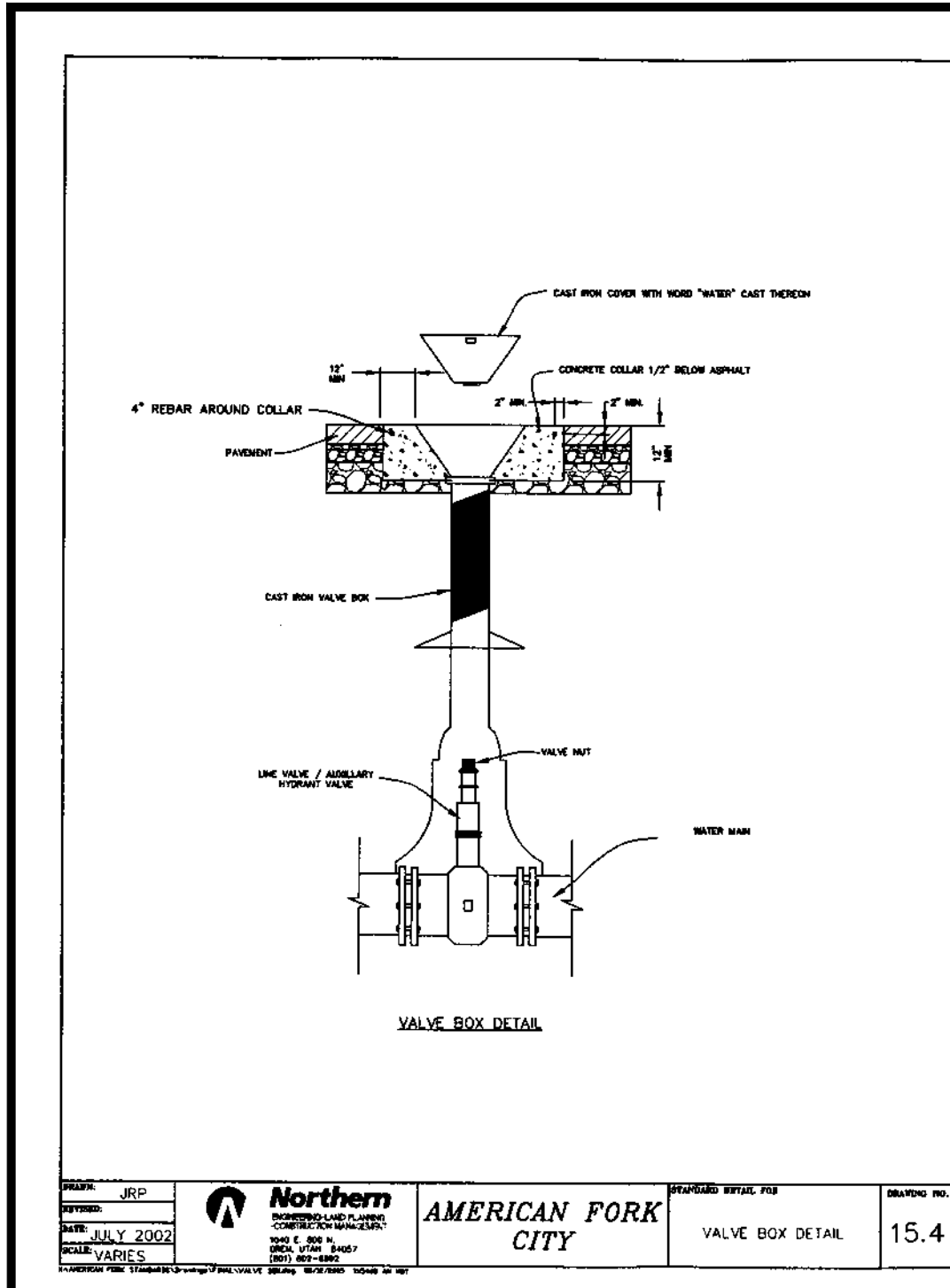
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SOUTH JORDAN, UT 84095 - 801-949-0296

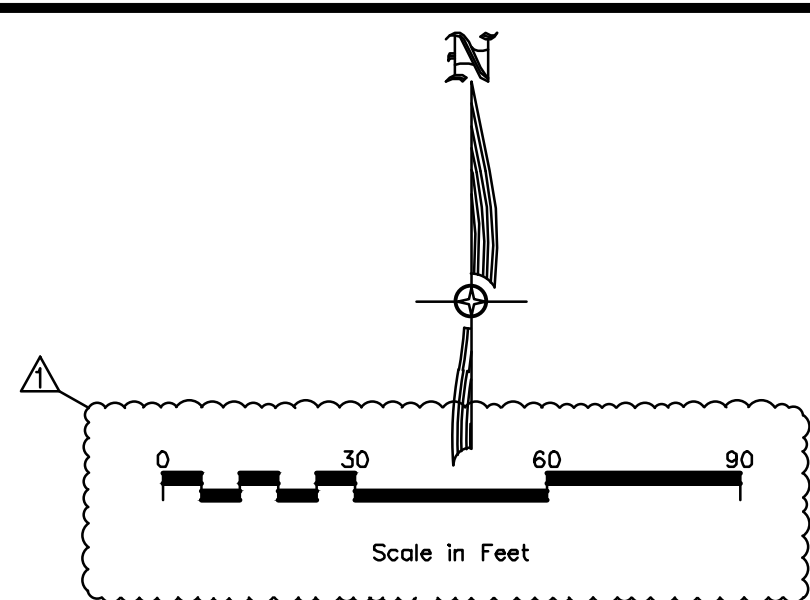
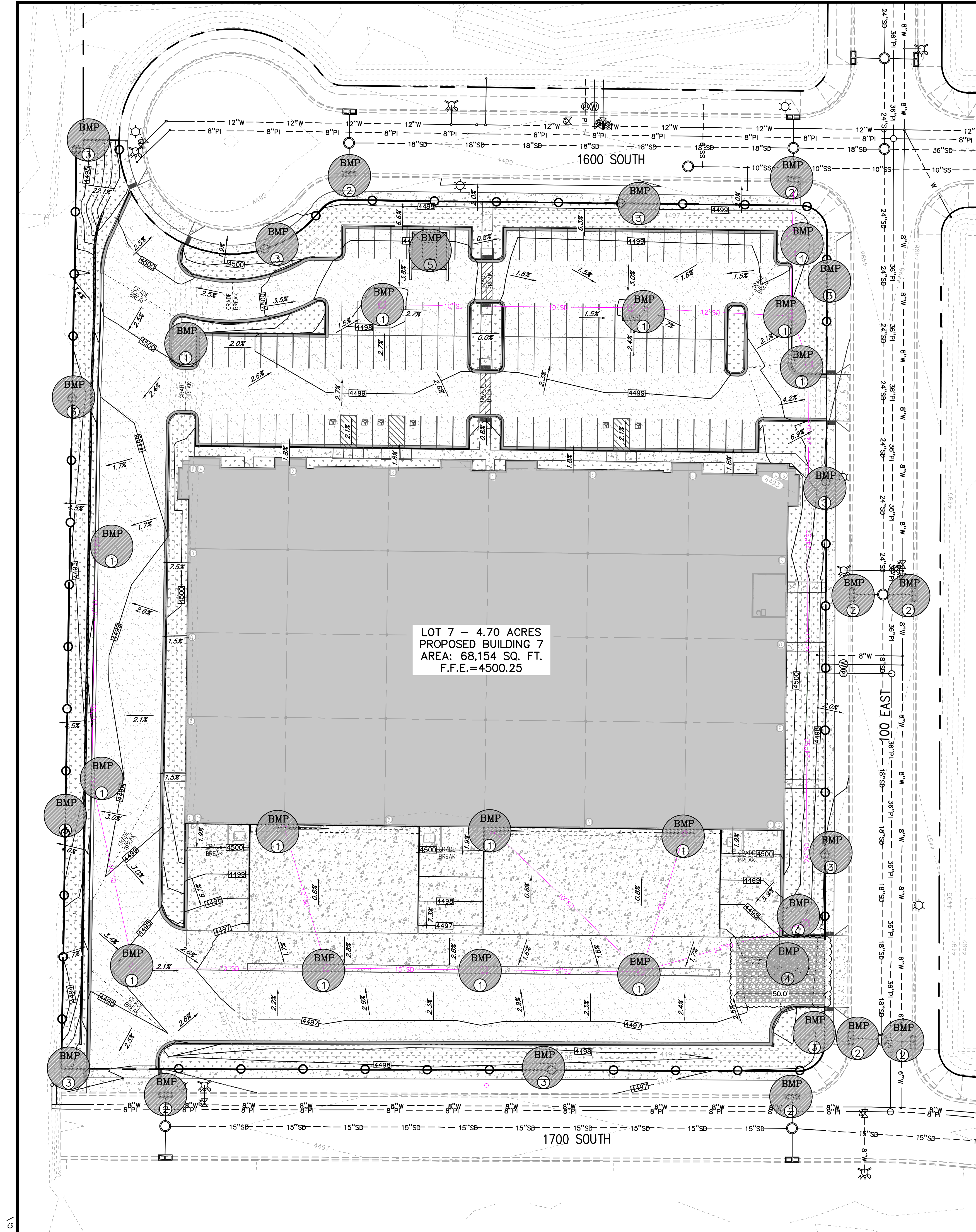
RODERICK CATALYST – BUSINESS PARK BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003
DETAIL SHEET



SHEET NO.	C4.1
PROJECT ID	E23-125
DATE	01/12/24
FILE NAME	PRJ-RC7
SCALE	







- LEGEND**
- SILT FENCE
 - WHEEL WASH AREA
 - BMP AREA
 - CONCRETE WASHOUT

- DURING CONSTRUCTION**
1. ALL EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE INSPECTED AND MAINTAINED REGULARLY (MINIMUM ONCE A WEEK) AND AFTER EVERY STORM EVENT
 2. CONTRACTOR TO KEEP LAND DISTURBANCE TO MINIMUM TO CONTROL RUNOFF FROM THE SITE
 3. LIMIT LAND CLEARING AND RESTORE ALL GRADING AS SOON AS POSSIBLE
 4. STAGED SEEDING TO RE-VEGETATE CUT AND FILL SLOPES AS THE WORK IS IN PROGRESS
 5. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND OTHER EROSION
 6. MAINTENANCE OF STREET: STREETS TO BE KEPT CLEAN AND FREE FROM DEBRIS
 7. CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION
 8. CONTRACTOR TO HAVE WATER TRUCK AVAILABLE AS WATER SOURCE FOR WHEEL WASH AREA, OR ALTERNATE WATER SOURCE MAY BE USED IF APPROVED BY CITY
 9. IF GROUND WATER IS ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES AND REQUIRES PUMPING OFF THE PROJECT, THE CONTRACTOR IS TO FILTER THE WATER THROUGH THE USE OF SAND BAGS AND/OR GEO FABRIC. THIS IS TO BE DONE PRIOR TO IT BEING INTRODUCED INTO THE PUBLIC STORM DRAIN SYSTEM.
 10. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE KEPT ON THE SITE DURING ALL CONSTRUCTION ACTIVITY
- POST CONSTRUCTION**
1. EROSION CONTROL STRUCTURES MAY BE REMOVED ONCE FINAL LANDSCAPING IS IN PLACE
 2. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS BEEN ESTABLISHED
 3. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE
 4. THE FOLLOWING PRECAUTIONS SHALL BE PERFORMED:
 - A) PERIODIC INSPECTION OF CATCH BASIN SEDIMENT TRAPS AND CLEANING WHEN THE BASIN IS MORE THAN 1/4 FULL. INSPECTION SHALL BE DONE AFTER EVERY MAJOR RAINFALL AND EVERY 6 MONTHS AS A MINIMUM. DISPOSAL OF ANY GREASE OR OIL MUST BE DONE IN ACCORDANCE WITH CURRENT ENVIRONMENTAL REGULATIONS
 - B) LITTER, DEBRIS AND CHEMICALS MUST BE PICKED UP AND KEPT IN A CONTAINED LOCATION TO PREVENT POLLUTION OF STORM WATER DISCHARGE
 - C) PARKING AREAS SHALL BE KEPT FREE FROM AUTOMOBILE FLUIDS THAT COULD WASH INTO THE STORM DRAIN SYSTEM

BMP CALLOUTS

1. PLACE A SILT FENCE AROUND THE PERIMETER OF THE INLET, ONCE PAVEMENT AND/OR CURB HAS BEEN INSTALLED PLACE GRAVEL BAGS AROUND THE INLET. GRAVEL BAGS TO BE USED ON PAVED OR CONCRETE SURFACES AND SILT FENCE TO BE USED ON UNIMPROVED SURFACES.
NOTE: IN HIGH TRAFFIC AREAS CONTRACTOR TO USE INSERT FILTER FABRIC. IF INLET HAS CURB OPENING, THE FILTER FABRIC IS TO BE EXTENDED UP TO COVER THE CURB OPENING AND GRAVEL BAGS PLACED IN GUTTER AT EACH SIDE OF OPENING TO KEEP FILTER FABRIC SNUG AGAINST CURB WALL.
2. PLACE GRAVEL BAGS AS NECESSARY TO PREVENT SEDIMENT FROM DRAINING INTO EXISTING CATCH BASINS.
SEE NOTE IN CALLOUT 1.
3. INSTALL TYPICAL SILT FENCE, SILT FENCE TO BE INSTALLED PERPENDICULAR TO STORM WATER FLOW. INSTALLATION TO BE DONE SO AS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
NOTE: CONTRACTOR TO USE VEGETATIVE BUFFER AND OR CUT BACK INSTEAD OF SILT FENCE WHERE POSSIBLE.
4. CONTRACTOR TO INSTALL A MINIMUM OF 6" DEEP GRAVEL (3" TO 6") OF SUFFICIENT SIZE (MINIMUM OF 50' IN LENGTH AND 20' WIDE) AS TO PROVIDE A WHEEL WASH AREA TO PREVENT THE TRACKING OF MUD OFFSITE. THE LOCATION OF WHEEL WASH MAY VARY FROM LOCATION SHOWN ON PLANS SO AS TO PROVIDE THE BEST PROTECTION AGAINST TRACKING MUD OFFSITE. CONTRACTOR TO MAINTAIN AND CLEAN WHEEL WASH AREA AS NEEDED TO PREVENT THE TRACKING OF MUD OFFSITE.
5. CONTRACTOR TO INSTALL CONCRETE WASHOUT AREA. THE LOCATION MAY VARY FROM LOCATION SHOWN ON PLANS.



CIVIL ENGINEERING
+ SURVEYING

C1R

10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 - 801-949-0296

1 CITY COMMENTS

2 CITY COMMENTS

3 CITY COMMENTS

4 OWNER COMMENTS

NO

REVISIONS

BY

DATE

DESIGNER: TLH

PROJECT ENGINEER: TLH

RODERICK CATALYST – BUSINESS PARK BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

EROSION CONTROL PLAN (SWPPP)

PROFESSIONAL ENGINEER

2

No. 12072623

TREVOR HODGSON

01/12/24

STATE OF UTAH

SHEET NO.

C6.0

PROJECT ID: E23-125

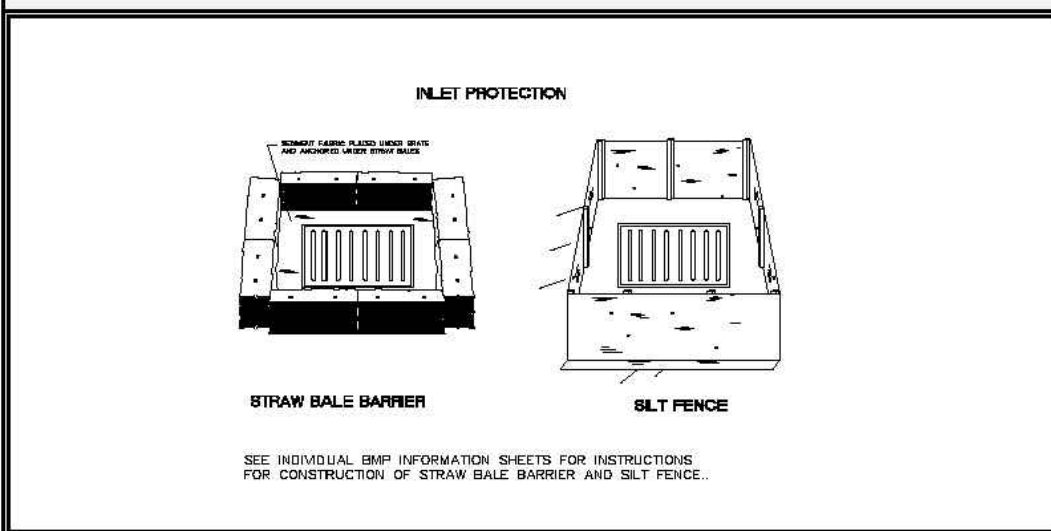
DATE: 01/12/24

FILE NAME: PRJ-RC7

SCALE: 1"=30'

BMP: Inlet Protection - Silt Fence or Straw Bale

IPS



DESCRIPTION:
Sediment barrier erected around storm drain inlet.

APPLICATION:
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

INSTALLATION/APPLICATION CRITERIA:

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction.

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires shallow slopes adjacent to inlet.

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches 4-inches in depth.
- Repair or realign barrier/fence as needed.
- Look for bypassing or undercutting and recompact soil around barrier/fence as required.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

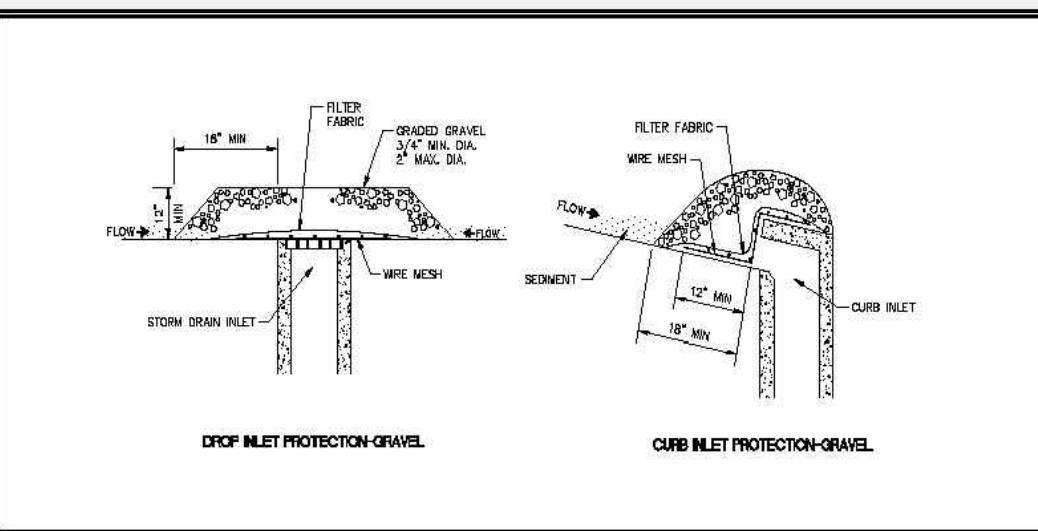
- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

BMP: Inlet Protection - Gravel

IPG



DESCRIPTION:
Placement of gravel filter over inlet to storm drain to filter storm water runoff.

APPLICATION:
Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

INSTALLATION/APPLICATION CRITERIA:

- Place wire mesh (with 1/2 inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
- Place graded gravel, to a minimum depth of 12-inches, over the filter fabric and extending 18-inches past the grate in all directions.

LIMITATIONS:

- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

MAINTENANCE:

- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- Remove sediment accumulated when it reaches 4-inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

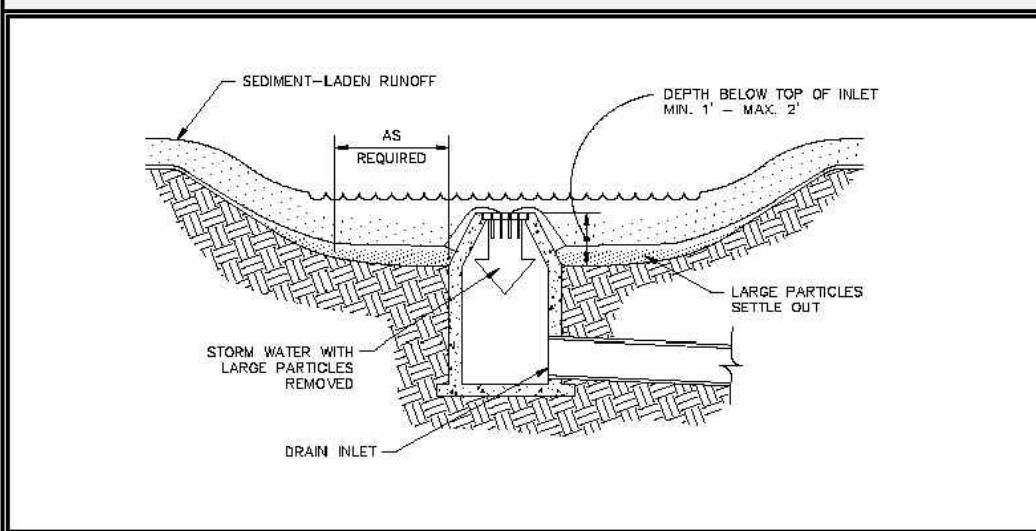
- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

BMP: Inlet Protection - Excavated

IPE



DESCRIPTION:
An area excavated around a storm drain inlet to impound water below the inlet.

APPLICATION:
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

INSTALLATION/APPLICATION CRITERIA:

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, excavate adjacent area 1 to 2 feet lower than the grate elevation. Size of excavated area should be based on soil type and contributing acreage.

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires flat area adjacent to inlet.

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches one half of the excavated sump below the grate.
- Repair side slopes as required.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

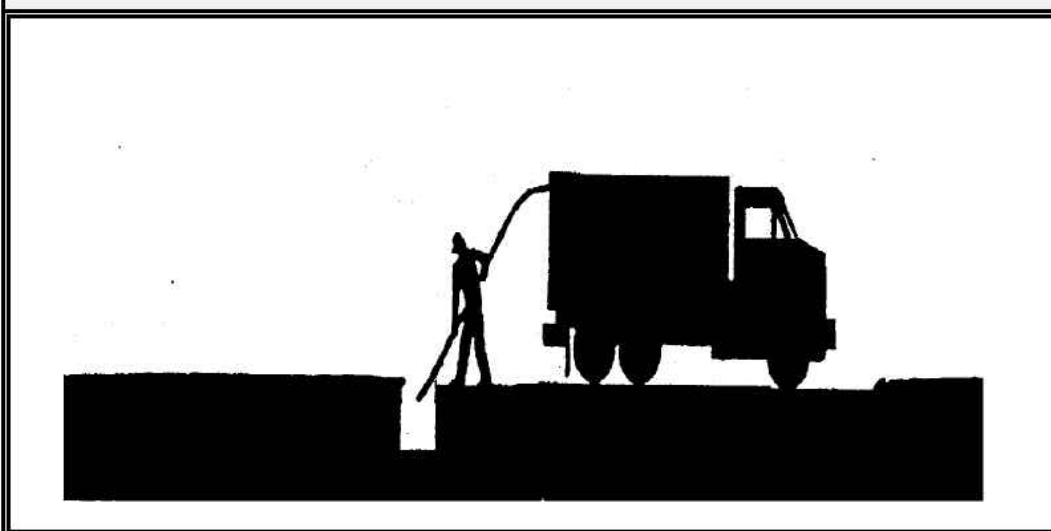
- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

BMP: Catch Basin Cleaning

CBC



DESCRIPTION:
Maintain catch basin and stormwater inlets on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, and restore the catch basins' sediment trapping capacity. A catch basin is distinguished from a stormwater inlet by having at its base a sediment sump designed to catch and retain sediments below the overflow point. This information sheet focuses on the cleaning of accumulated sediments from catch basins.

APPROACH:
Regular maintenance of catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the key to effective catch basins are:

- At least annual inspections.
- Prioritize maintenance to clean catch basins and inlets in areas with the highest pollutant loading.
- Clean catch basins in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.

LIMITATIONS:
There are no major limitations to this best management practice.

MAINTENANCE:
Regular maintenance of public and private catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the keys to effective catch basins are:

- Annual/monthly inspection of public and private facilities to ensure structural integrity, a clean sump, and a sterilizing of catch basins and inlets.
- Keep logs of the number of catch basins cleaned.
- Record the amount of waste collected.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Floatable Materials
- Bacteria & Viruses

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

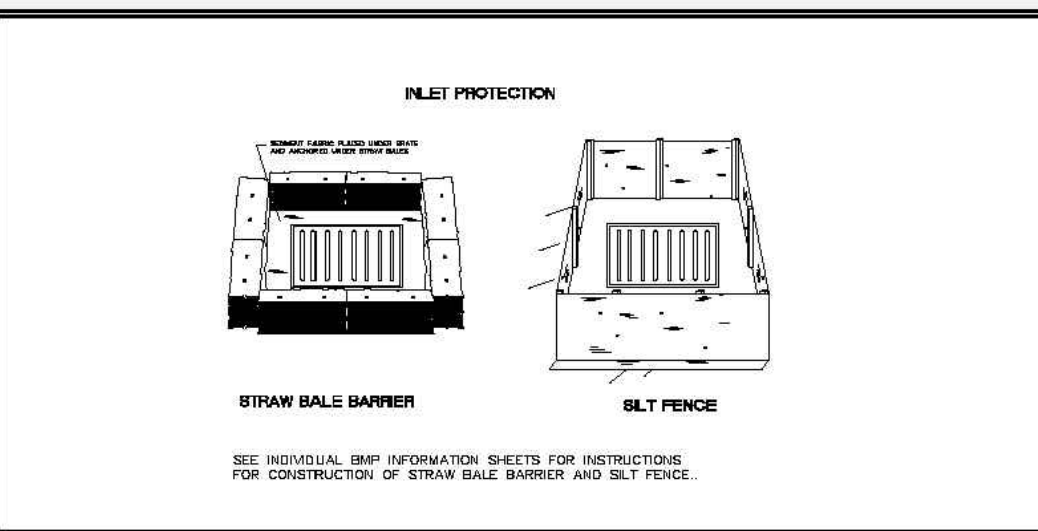
- Capital Costs
- O&M Costs
- Regulatory
- Training
- Staffing
- Administrative

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

BMP: Inlet Protection - Silt Fence or Straw Bale

IPS



DESCRIPTION:
Sediment barrier erected around storm drain inlet.

APPLICATION:
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

INSTALLATION/APPLICATION CRITERIA:

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction.

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires shallow slopes adjacent to inlet.

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches 4-inches in depth.
- Repair or realign barrier/fence as needed.
- Look for bypassing or undercutting and recompact soil around barrier/fence as required.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

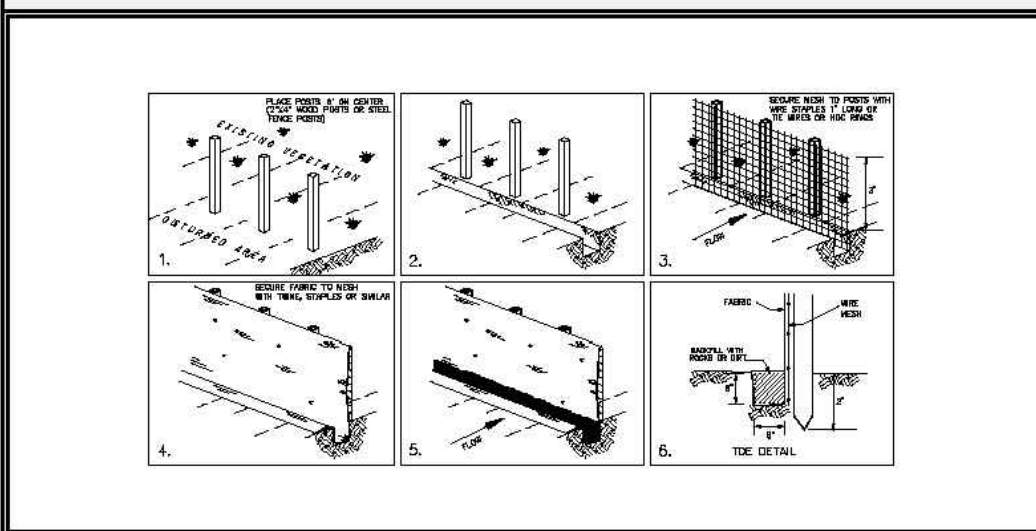
- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

BMP: Silt Fence

SF



DESCRIPTION:
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

APPLICATION:

- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier near top of stream bank
- Inlet protection: place fence surrounding catchbasins

INSTALLATION/APPLICATION CRITERIA:

- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Clut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- Backfill trench over filter fabric to anchor.

LIMITATIONS:

- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

MAINTENANCE:

- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shortcutting.
- Remove accumulated sediment when it reaches 1/2 the height of the fence.



ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

■ High Impact
■ Medium Impact
□ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High ■ Medium □ Low

American Fork City Storm Water Management Program-2004

RODERICK CATALYST – BUSINESS PARK BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UT 84003

EROSION CONTROL DETAIL SHEET

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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CIVIL ENGINEERING + SURVEYING

CIR

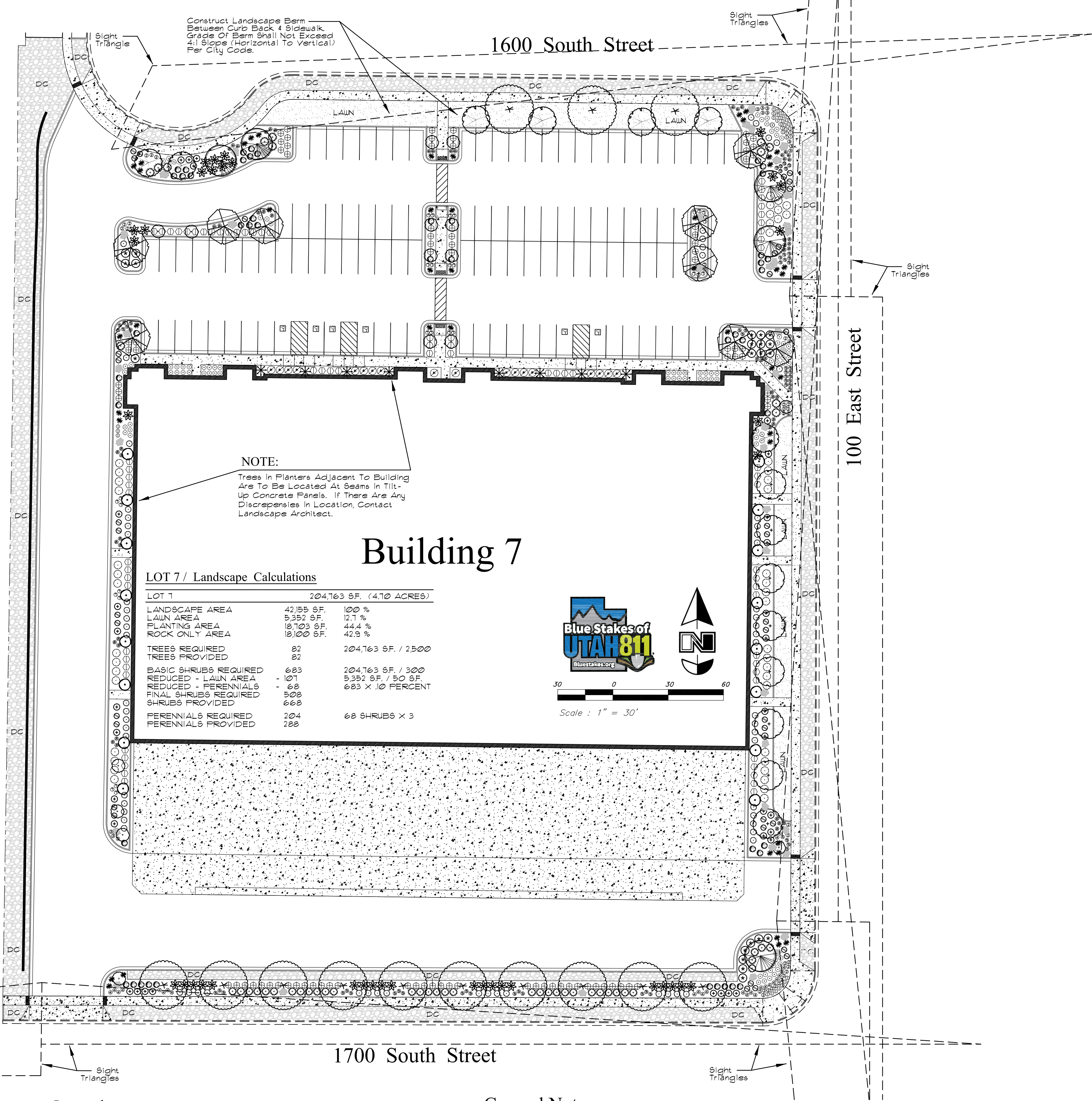
10718 SOUTH BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095 – 801-948-6296


PROFESSIONAL ENGINEER

2 No. 12072623
TREVOR HODGSON
01/09/24
STATE OF UTAH

SHEET NO.	C6.1
PROJECT ID	E23-125
DATE	01/12/24
FILE NAME	PRJ-RC7
SCALE	





Legend		
Symbol	Description	Remarks
	Landscape Boulder / 3'-4' Minimum Diameter Size	Boulder Material To Match That Previously Used On Buildings 4 & 5 Of This Same Project.

General Notes

- All bidding landscape contractors shall have a minimum of 5 years experience in the installation of commercial landscape and irrigation projects, and be able to supply the necessary staff to perform all tasks associated with these drawings, and in a professional and timely manner.
- The landscape contractor, at all times, shall have personnel on-site experienced in being able to interpret the drawings correctly, and accurately measure the design layout using the specified scales.
- The contractor shall verify the exact location of all existing and proposed utilities, and all site conditions prior to beginning work. The contractor shall coordinate his work with the project manager and all other contractors working on the site.
- The finish grade of all planting areas shall be smooth, even and consistent, free of any humps, depressions or other grading irregularities. The finish grade of all landscape areas shall be graded consistently 1/2" below all walks, curbs, etc.
- The contractor shall provide all materials, labor and equipment required for the proper completion of all landscape work as specified and shown on the drawings.
- All plant materials shall be approved prior to planting. The Owner/Landscape Architect has the right to reject any and all plant material not conforming to the specifications.
- The contractor shall plant all plants per the planting details, stake/guy as shown. The top of the rootballs shall be planted flush with the finish grade.

Plant List (TREES)

%	Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
15.9	13		Celtis occidentalis	Common Hackberry	2 1/2" Caliper 10'-12" Height	Full Head, Crown Straight Trunk
19.5	16		Koeleruteria paniculata 'G.C.'	Golden Candle Rain Tree	2" Caliper 8'-10" Height	Full Head, Crown Straight Trunk
8.5	7		Malus 'Spring Snow'	Spring Snow Crab	2" Caliper 8'-10" Height	Full Head, Crown Straight Trunk
9.8	8		Picea abies 'Cupressina'	Columnar Norway Spruce	10' Min. Height Uniform Thick	Full Throughout Specimen
6.1	5		Prunus virginiana 'Canada Red'	Canadian Red Cherry	2" Caliper 8'-10" Height	Full Head, Crown Straight Trunk
9.8	8		Pyrus calleryana 'Chanticleer'	Chanticleer Flowering Pear	2" Caliper 8'-10" Height	Full Head, Crown Straight Trunk
19.5	16		Quercus x. warei 'Nadler'	Kindred Spirit Oak	2" Caliper 10'-12" Height	Full Head, Crown Straight Trunk
10.9	9		Zelcova serrata 'Musashino'	Musashino Zelcova	2 1/2" Caliper 10'-12" Height	Full Head, Crown Straight Trunk
100	82		** Plant quantities are provided for convenience in the bidding and budgeting process ONLY!! The contractor shall supply and install all plant materials either shown or noted on the plans.			

Plant List (SHRUBS)

%	Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
5.7	36		Berberis thun. 'Crimson Pygmy'	Crimson Pygmy Barberry	5 Gallon	15"-18" Height
3.3	21		Euonymus alatus 'Compacta'	Dwarf Burning Bush	5 Gallon	18"-24" Height
2.9	18		Hydrangea panic. 'Limeight'	Limeight Hydrangea	5 Gallon	24"-30" Height
5.9	37		Physocarpus opul. 'Diablo'	Summer Wine Ninebark	5 Gallon	24"-30" Height
13.5	85		Pinus mugo 'Slowmound'	Slowmound Mugo Pine	5 Gallon	18"-24" Spread
5.1	32		Potentilla frut. 'Gold Drop'	Gold Drop Cinquefoil	5 Gallon	15"-18" Height
6.9	44		Prunus besseyi 'Faunee Buttes'	Faunee Buttes Sandcherry	5 Gallon	15"-18" Height
11.4	72		Rhamnus frangula 'Columnaris'	Tallhedge Buckthorn	5 Gallon	15"-18" Height
7.4	47		Rhus aromatic 'Low Grow'	Grow Low Sumac	5 Gallon	18"-24" Spread
7.3	46		Rosa 'Red Knock Out'	Red Knock Out Rose	5 Gallon	18"-24" Height
13.3	84		Spiraea bumalda 'Goldflame'	Goldflame Spiraea	5 Gallon	15"-18" Height
10.3	65		Spiraea japonica 'Neon Flash'	Neon Flash Spiraea	5 Gallon	15"-18" Height
7.0	44		Yucca filamentosa 'Ivory Tower'	Ivory Tower Yucca	5 Gallon	15"-18" Height
TOTAL	100	631	** Plant quantities are provided for convenience in the bidding and budgeting process ONLY!! The contractor shall supply and install all plant materials either shown or noted on the plans.			

Plant List (PERENNIALS)

%	Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
14.5	35		Hemerocallis 'Little Grapette'	Little Grapette Day Lily	1 Gallon	Full Can
11.5	28		Hemerocallis 'Stella d'Oro'	Stella d'Oro Day Lily	1 Gallon	Full Can
4.5	11		Iris pallida 'Variegata Aurea'	Variegated Yellow Iris	1 Gallon	Full Can
11.2	27		Lavandula angustifolia	English Lavender	1 Gallon	Full Can
8.7	21		Nepata x. 'Walker's Low'	Walker's Low Catmint	1 Gallon	Full Can
8.3	20		Rudbeckia fugida 'Goldstrum'	Black-Eyed Susan	1 Gallon	Full Can
12.8	31		Salvia nem. 'East Friesland'	East Friesland Salvia	1 Gallon	Full Can
14.5	35		Salvia nem. 'Pink Profusion'	Pink Profusion Salvia	1 Gallon	Full Can
14.0	34		Veronica x. 'Georgia Blue'	Georgia Blue Speedwell	1 Gallon	Full Can
TOTAL	100	242	** Plant quantities are provided for convenience in the bidding and budgeting process ONLY!! The contractor shall supply and install all plant materials either shown or noted on the plans.			

Planting Notes

- All lawn areas shall receive a 4 inch depth of topsoil, all shrub planting areas adjacent to the building shall receive an 8 inch depth of topsoil, all other shrubs areas an eight inch depth of topsoil. Topsoil material is not available on-site, and must be imported from an approved local source. All topsoil material shall be of a sandy loam mix.
- Prior to placement of topsoil, all subgrade areas shall be loosened by scarifying the soil to a depth of 6 inches, by the use of mechanical means, in order to create a transition layer between existing and new soils.
- All lawn areas shall be sodded using high grade material of a water conservative mixture, and shall be composed of drought tolerant Bluegrass & Fescue. Prior to installation, all areas shall receive a starter fertilizer applied at the rate recommended by the manufacturer.
- All plant material holes shall be dug twice the diameter of the rootball and 6 inches deeper. Excavated material shall be removed from the site.
- Plant backfill mixture shall be composed of 3 parts topsoil to 1 part humus additive, and shall be rotary mixed on-site prior to installation.
- Plant fertilizer shall be 'Agrifom' brand 21 gram tablets used as per manufacturers recommendations.
- All trees located in lawn areas shall receive an 'Arbor Guard' trunk protector, or equal, and have a 36 inch diameter sod-free ring. All trees shall be staked for wind protection, unless otherwise indicated.
- Upon completion of planting operations, all shrub pits and tree wells shall receive a four inch depth of fine ground bark mulch mixture as a cover. The overall shrub beds themselves shall receive a 4" depth of decorative stone surfacing over Pro-5 weed barrier fabric. The decorative stone material to be 'BID' shall match what has been previously installed on Catalyst buildings 4, 4 & 5, and per legend. This material is available from local sources. Contact the Owner or general contractor for all supplier information.
- In decorative stone beds, cut the fabric from around the water well of each plant, then apply fine ground bark inside water well. The remainder of the planter bed shall receive the depth of decorative stone.
- Landscape maintenance shall be required for a period through the second mowing of the lawn (30 days minimum) and shall include mowing, weeding, pruning and one fertilization. In addition to the initial maintenance period, the landscape contractor shall provide a separate price as an additive alternate to extend the maintenance period through the one-year warranty period. The one-year contract will be between the landscape contractor and the Owner.
- The contractor shall comply with all warranties and guarantees set forth by the Owner, and in no case shall that period be less than one year following the date of completion and final acceptance.

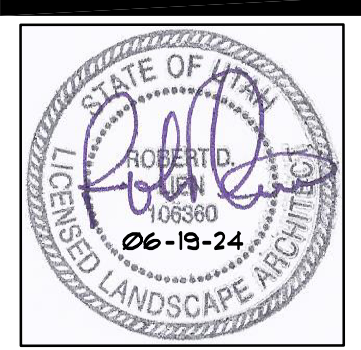
Sub-Grade Requirements

- LAWN AREAS : Six (6) inches below finish grade. This will allow for the installation of a four inch depth of topsoil along with the sodding material, leaving it slightly below finish grade and concrete areas.
- SHRUB AREAS (Between Walk & Building) : Twelve (12) inches below finish grade. This will allow for the installation of an eight inch depth of topsoil along with a four inch depth of bark mulch or colored stone, leaving it slightly below finish grade and concrete areas.
- SHRUB AREAS (Beyond Building Planters) : Eight (8) inches below finish grade. This will allow for the installation of a four inch depth of topsoil along with a four inch depth of bark mulch or colored stone, leaving it slightly below finish grade and concrete areas.
- PERENNIAL-ANNUAL COLOR AREAS : Sixteen (16) inches below finish grade. This will allow for the installation of a twelve inch depth of premium topsoil along with a four inch depth of bark mulch or compost product, leaving it slightly below finish grade and concrete areas.
- PRODUCT COORDINATION : Early on in the construction process, the landscape contractor shall meet with the earthwork/grading contractor in order to ensure that the proper sub-grade elevations (prior to topsoil installation) will be provided.

Submittal Requirements

- The contractor shall provide to the Owner/Engineer product samples of all landscape materials such as boulders, decorative stone, bark mulches, weed barrier fabric, soil amendments & import topsoil in order to obtain approval to be used on the project, and prior to shipment to the site. Failure to provide this in a timely manner will in no way affect or delay the construction schedule and time for project completion.
- All plant materials shall be secured for the project a minimum of 60 days prior to shipment to the site. The contractor shall provide to the Owner/Engineer written confirmation of this a minimum of 30 days prior to planting of the project. No substitutions will be considered following this time period.

RDL Design Company, Inc.
1020 East Yale Avenue
Salt Lake City, Utah 84105
Phone : 801-647-3114
Email : rldesign@comcast.net



STAMP

Catalyst Business Park Building #7

For Roderick Enterprises
68 East 1600 South
American Fork, Utah 84003

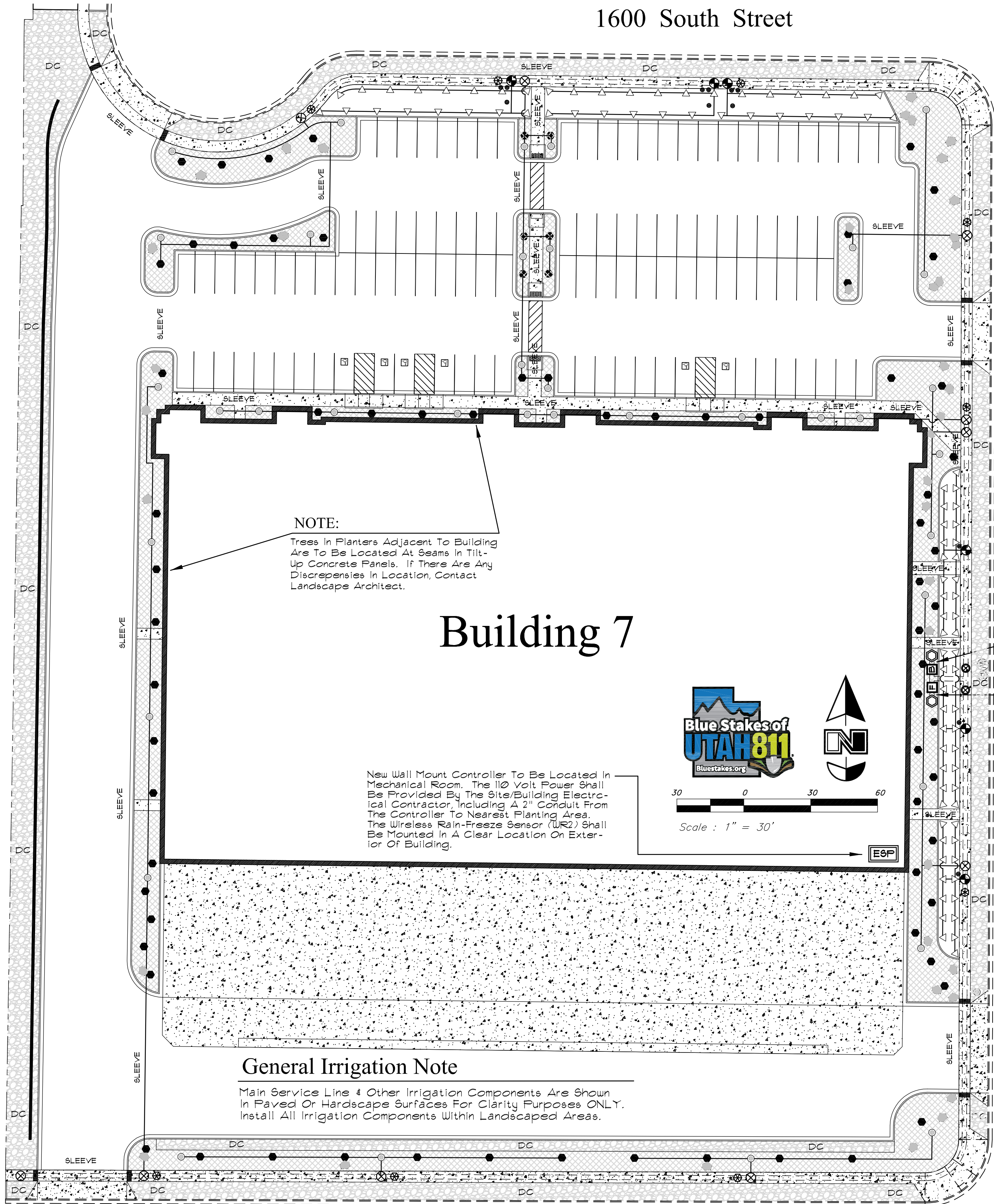
PROJECT:	
DRAWN BY:	RDL
CHECK BY:	RDL
ISSUE DATE:	02-06-24
REVISIONS:	04-29-24
	05-24-24
	06-12-24
	06-19-24

SHEET TITLE

Landscape Planting Plan

SHEET NUMBER

L-1



Building 7

General Irrigation Note

Main Service Line & Other Irrigation Components Are Shown In Paved Or Hardscape Surfaces For Clarity Purposes ONLY. Install All Irrigation Components Within Landscaped Areas.

General Irrigation Note

Main Service Line & Other Irrigation Components Are Shown In Paved Or Hardscape Surfaces For Clarity Purposes ONLY. Install All Irrigation Components Within Landscaped Areas.

Sprinkler List

Symbol	Model-Number	Description	Remarks
▽ ○	Rainbird RD-04-P45-NP	Pop-Up Sprayhead Sprinkler	Provide MPR Series Nozzle As Required
●		Tree Location	Drip Line Rings / Quantity As Required
⊙	Rainbird 150-FESB-R	Remote Control Valve	1 1/2" Size In Valve Box With Gravel Sump
⊕	Rainbird 100-FESB-R	Remote Control Valve	1" Size In Valve Box With Gravel Sump
⊗	Rainbird XCZ-100-PRBR	Drip Control Zone Kit	1" Size In Valve Box With Gravel Sump
⊗	Apollo (Or Equal) Brass	Line Size Isolation Ball Valve	Install In Valve Box With Gravel Sump
⊗	Rainbird 33DNP	Quick Coupler Valve	3/4" Size In Valve Box With Gravel Sump
⊙	Rainbird (Or Equal)	PVC To PE Pipe Connection	Install Throughout Various Planting Beds
E6P	Rainbird E6P-LXD	2 Wire Modular Controller	Provide Decoders For Control Valves
S	Rainbird WR2-RFC	Wireless Rain-Freeze Sensor	Mount In Clear Location On Building
⬡	Mueller Oriseal Mark II	Stop & Waste Valve	2" Size / Install Inside Curb Box
F	Amiad 2T-S	Secondary Water Filter	Install Above Grade With StrongBox
B	Wilkins 2-315-RPZ	Reduced Pressure Backflow	2" / Install Above Grade With StrongBox
==	Schedule 40 PVC	Main Service Line	2" Size Throughout
—	Schedule 40 PVC	Lateral Circuit Line / Lawn	Pipe Size As Required / 1" Min. Size
—	Schedule 40 PVC	Lateral Circuit Line / Shrub	Pipe Size As Required / 3/4" Min. Size
▨	Netafim HCVR-RU	Techline In-Line Drip Line	Emitter Spacing 4 GPH As Site Requires

Emitter Installation Guide

PLANT SIZE	EMITTER DEVICE	QUANTITY
1 Gallon Shrub Plant Material	XB-20PC (2 Gal./Hr.)	Two Each
5 Gallon Shrub Plant Material	XB-20PC (2 Gal./Hr.)	Three Each
15 Gallon Tree Or Shrub Plant Material	FC-05 (5 Gal./Hr.)	Three Each
Calipered Plant Material	FC-05 (5 Gal./Hr.)	Six Each

Final selection of emitter type and quantity to be the responsibility of the irrigation contractor, in order to provide the optimum amount of precipitation to each plant, in addition to complying with project warranties.

Sleeving Installation Notes

Contractor shall coordinate the installation of sleeving with the installation of concrete flatwork and paving. All sleeving is by contractor unless otherwise noted. Install sleeving based upon the sizing guide below:

PIPE SIZE / WIRE QUAN.	REQUIRED SLEEVING
1/2" - 1 1/4" Piping	1-2" PVC Sleeves
1 1/2" - 2" Piping	1-4" PVC Sleeves
1-25 Control Wires	1-2" PVC Sleeves

General Notes

- The contractor shall verify the exact location of all existing and proposed utilities, and all site conditions prior to beginning construction. The contractor shall coordinate their work with the project manager and all other contractors working on the site.
- The contractor shall verify the exact location and size of the irrigation waterline stub, and the available water pressure at the point of connection. Any conflicts from what is shown on the plans shall be brought to the attention of the engineer for a resolution.
- The contractor shall be responsible for the installation of all irrigation sleeveings under paving and other hard surface areas, whether shown on the plan, or required otherwise. This shall also include the installation of electrical conduit(s) from the controller location to the nearest planting area.
- The controller shall be hardwired to the available 120 volt power source, with all work being performed per state and local codes. The controller shall be located in a convenient location as determined by the Owner and site/building contractor.
- The contractor shall provide all materials, labor and equipment required for the proper completion of all irrigation work as specified and shown on the drawings.

Submittal Requirements

- The contractor shall provide to the Owner/Engineer product data sheets of all irrigation materials such as control valves, control wire, quick coupler valves, control valve boxes, controller(s), pvc piping, drip tube piping, drip emitters & backflow prevention devices in order to obtain approval to be used on the project, and prior to any shipment to the site. Failure to provide this in a timely manner will in no way affect or delay the construction schedule and time for project completion.
- All irrigation materials shall be located for the project a minimum of 60 days prior to shipment to the site. The contractor shall provide to the Owner/Engineer written confirmation of this a minimum of 30 days prior to beginning work on the project. No substitutions will be considered following this time period.

Irrigation Controller Valve Schedule

VALVE DATA				HYDRAULIC DATA			
•	Size	Sta. •	Head Type	Landscape Zone	Prec. Rate-inch/hr	GPM	PSI
1	1.0"	1	Drip	Plantings-Misc.	NA	5.0	30
2	1.0"	2	Drip	Plantings-Misc.	NA	5.0	30
3	1.0"	3	Drip	Plantings-Misc.	NA	5.0	30
4	1.0"	4	Drip	Plantings-Misc.	NA	5.0	30
5	1.0"	5	Drip	Plantings-Misc.	NA	5.0	30
6	1.0"	6	Drip	Plantings-Misc.	NA	5.0	30
7	1.0"	7	Drip	Plantings-Misc.	NA	5.0	30
8	1.0"	8	Drip	Plantings-Misc.	NA	5.0	30
9	1.0"	9	Drip	Plantings-Misc.	NA	5.0	30
10	1.0"	10	Drip	Plantings-Misc.	NA	5.0	30
11	1.5"	11	Spray	Lawn	1.58	30	30
12	1.5"	12	Spray	Lawn	1.58	30	30
13	1.5"	13	Spray	Lawn	1.58	30	30
14	1.0"	14	Spray	Lawn	1.58	20	30
15	1.0"	15	Spray	Lawn	1.58	20	30
16	1.0"	16	Spray	Lawn	1.58	20	30

NOTE: Minimum static water pressure at the point of connection required is 50 psi. If water pressure is above 80 p.s.i., install pressure reduction valve, & set to an operating pressure of 60 psi at connection point.

RDL Design Company, Inc.
1020 East Yale Avenue
Salt Lake City, Utah 84105
Phone : 801-647-3114
Email : rdl.design@comcast.net



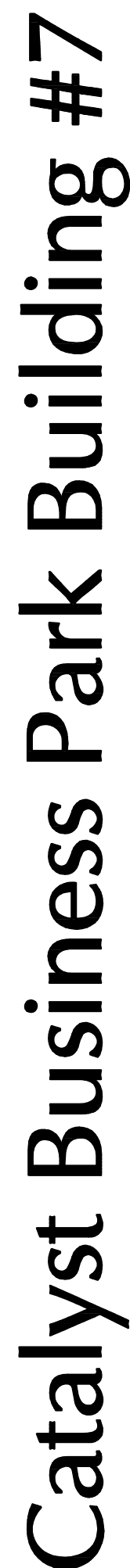
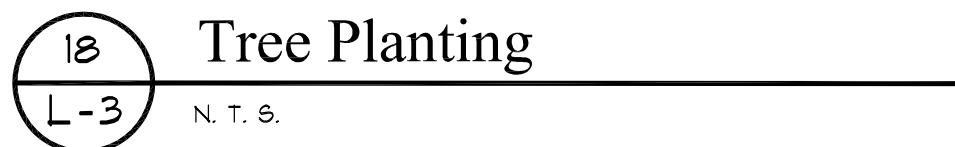
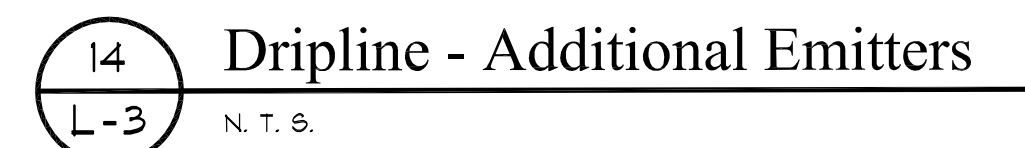
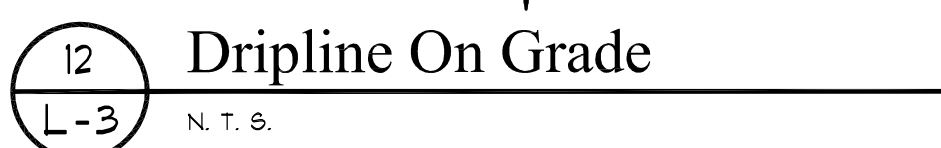
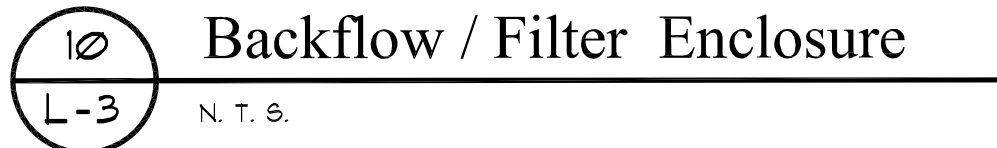
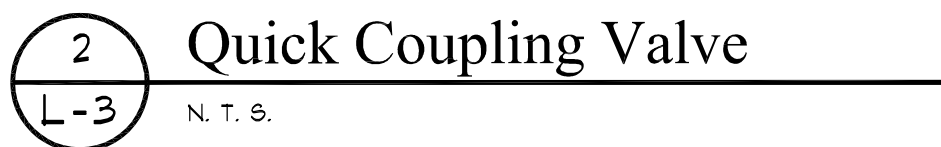
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Catalyst Business Park Building #7

For Roderick Enterprises
68 East 1600 South
American Fork, Utah 84003

PROJECT:
DRAWN BY: RDL
CHECK BY: RDL
ISSUE DATE: 02-06-24
REVISIONS: 04-29-24
06-12-24
06-19-24

SHEET TITLE
Irrigation
Sprinkler
Plan
SHEET NUMBER



For Roderick Enterprises
68 East 1600 South American Fork, Utah 84003

PROJECT: _____

DRAWN BY: RDL

CHECK BY: RDL

ISSUE DATE: 02-06-24

REVISIONS: 04-29-24

06-12-24

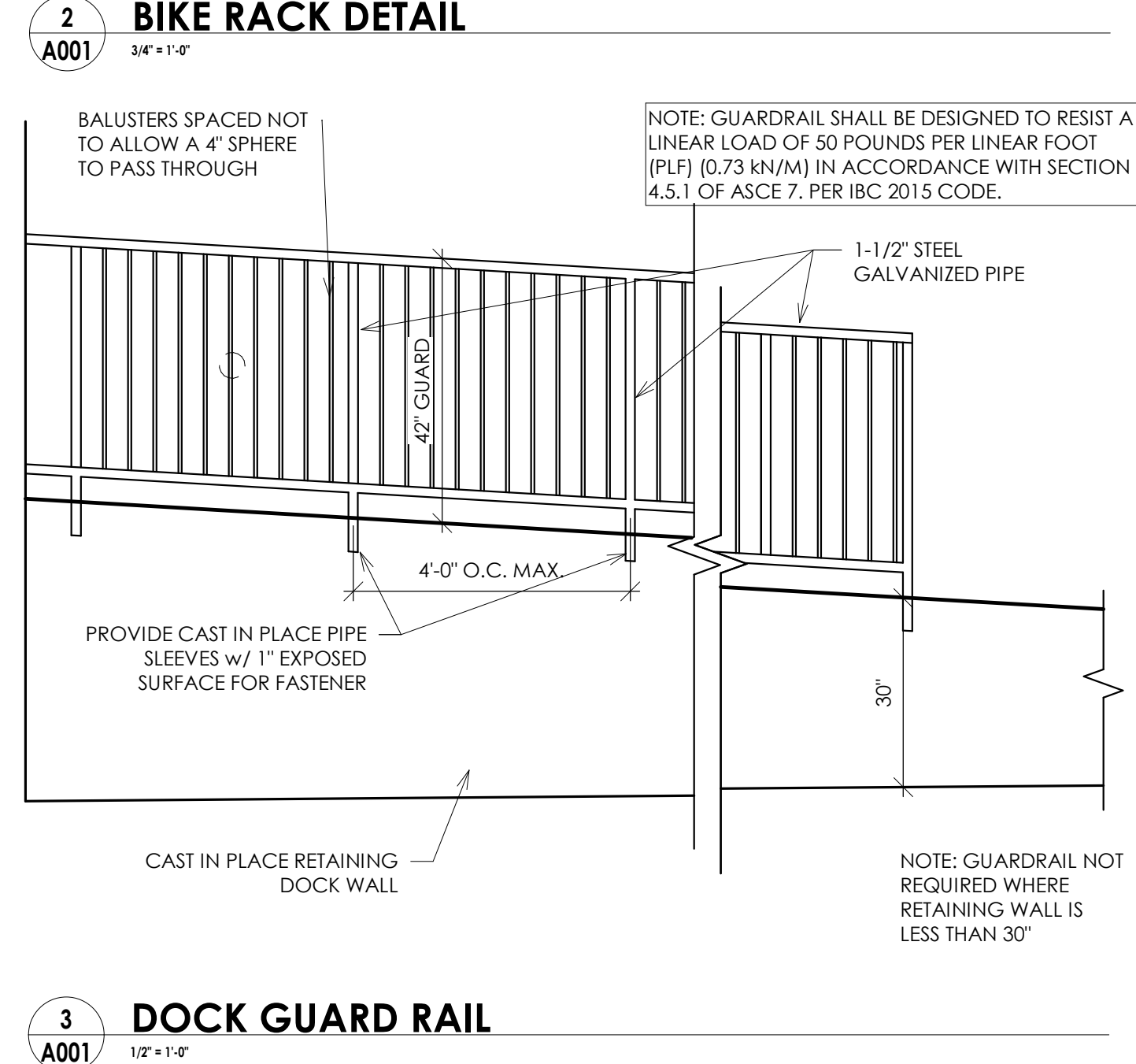
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SHEET TITLE

Installation Details Plan

SHEET NUMBER

L-3



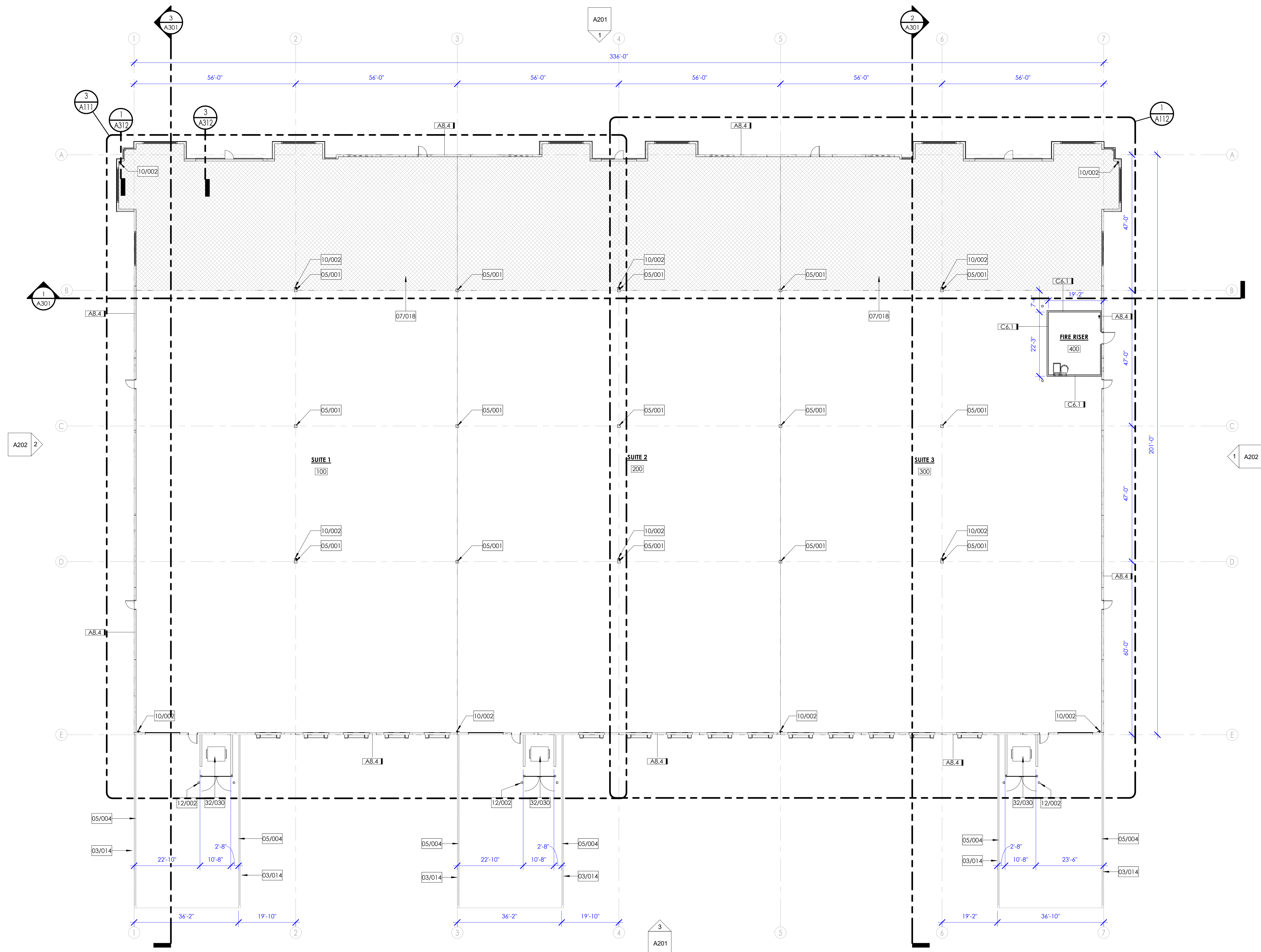
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	= STOREFRONT WALL TAGS
	= KEYNOTE TAGS
	= ROOM NUMBER
	= WALL TYPE TAGS: SEE WALL TYPES ON G005
	"6" = STUD SIZE (OR CONCRETE THICKNESS)
	"0" = FIRE RATING IN HOURS
	= DETAILS CALL-OUTS TAGS
	= SECTION CUTS TAGS

GENERAL NOTES

1. INTERIOR DIMENSION AT FACE OF STUD. EXTERIOR DIMENSIONS AT FACE OF TILT-UP PANEL.
2. PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY ALL COLORS AND MATERIALS.
3. INSTALL ALL MATERIALS PER MANUFACTURERS RECOMMENDATION.
4. ALL GYP. BOARD SURFACES TO BE TAPED, SANDED, AND PRIMED.
5. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS.
6. COORDINATE ALL WINDOWS HEAD HEIGHTS AND SIZES WITH ELEVATIONS AND SCHEDULES.
7. FIRE RATED ASSEMBLIES SHALL BE CONTINUOUS BOTH HORIZONTALLY AND VERTICALLY AND SHALL EXTEND FROM RATED ASSEMBLY TO RATED ASSEMBLY. FIRE CAULK ALL PENETRATIONS.
8. FIRE EXTINGUISHERS, SMOKE DETECTORS, OTHER EMERGENCY DEVICE LOCATIONS, AND RATINGS SHALL BE APPROVED BY FIRE MARSHAL PRIOR TO INSTALLATION.
9. FRAMING CONTRACTOR SHALL PROVIDE ADDITIONAL BLOCKING THROUGHOUT THE PROJECT AS REQUIRED TO ACCOMMODATE WALL-MOUNTED FURNISHINGS, ARTWORK, ETC.
10. DOORS SHALL BE LOCATED 4" OFF OF ADJACENT WALL UNLESS NOTED OTHERWISE.
11. CONTRACTOR IS TO PROVIDE SUBMITTALS AND SHOP DRAWINGS ON ALL KEYNOTED ITEMS FOR APPROVAL FROM OWNER/ARCHITECT.
12. PRIOR TO ORDERING ANY EXTERIOR FINISHES, THE CONTRACTOR IS TO VERIFY ALL COLORS AND TYPES OF MATERIALS WITH OWNER/ARCHITECT.
13. ALL ASPECTS OF THIS PROJECT SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE ASSOCIATED DETAILS - SEE G004. IF CONFLICTS OCCUR WHICH MAKE COMPLIANCE WITH THE ADA IMPOSSIBLE, NOTIFY ARCHITECT IMMEDIATELY BEFORE CONTINUING THE WORK.
14. ALL FURNITURE/APPLIANCES SHALL BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR, U.N.C.O.

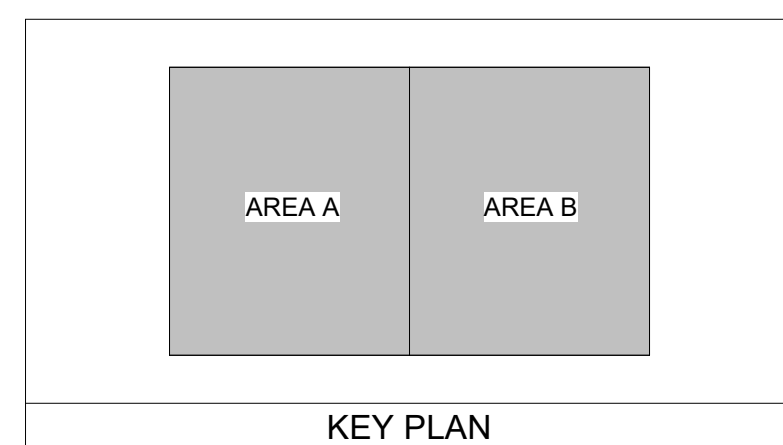
KEYNOTE LEGEND

03/014	DOCK CONCRETE RETAINING WALL
05/001	STRUCTURAL STEEL COLUMN - SEE STRUCTURAL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
07/018	PROVIDE 10 MIL VAPOR BARRIER UNDER SLAB
10/002	FIRE EXTINGUISHER, STANDARD. FIRE MARSHAL TO APPROVE ALL FINAL LOCATIONS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL
32/030	DUMPSTER ENCLOSURE, SEE SHEET 8/A001



1 LEVEL 01 FLOOR PLAN
A101 1/16" = 1'-0"

0 8' 16' 24'
GRAPHIC SCALE



RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

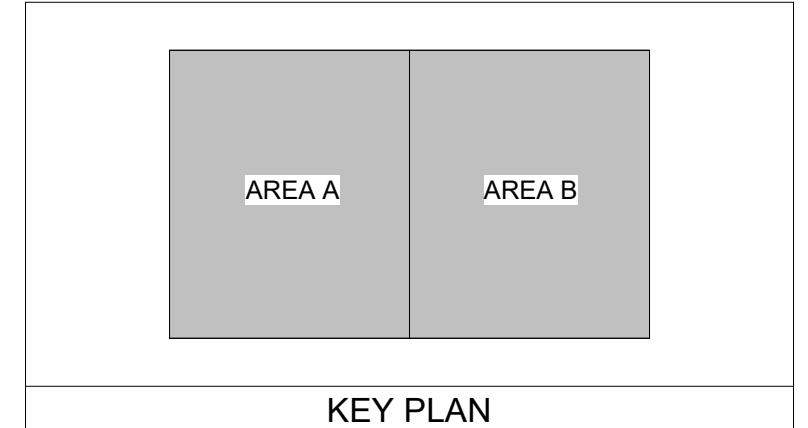
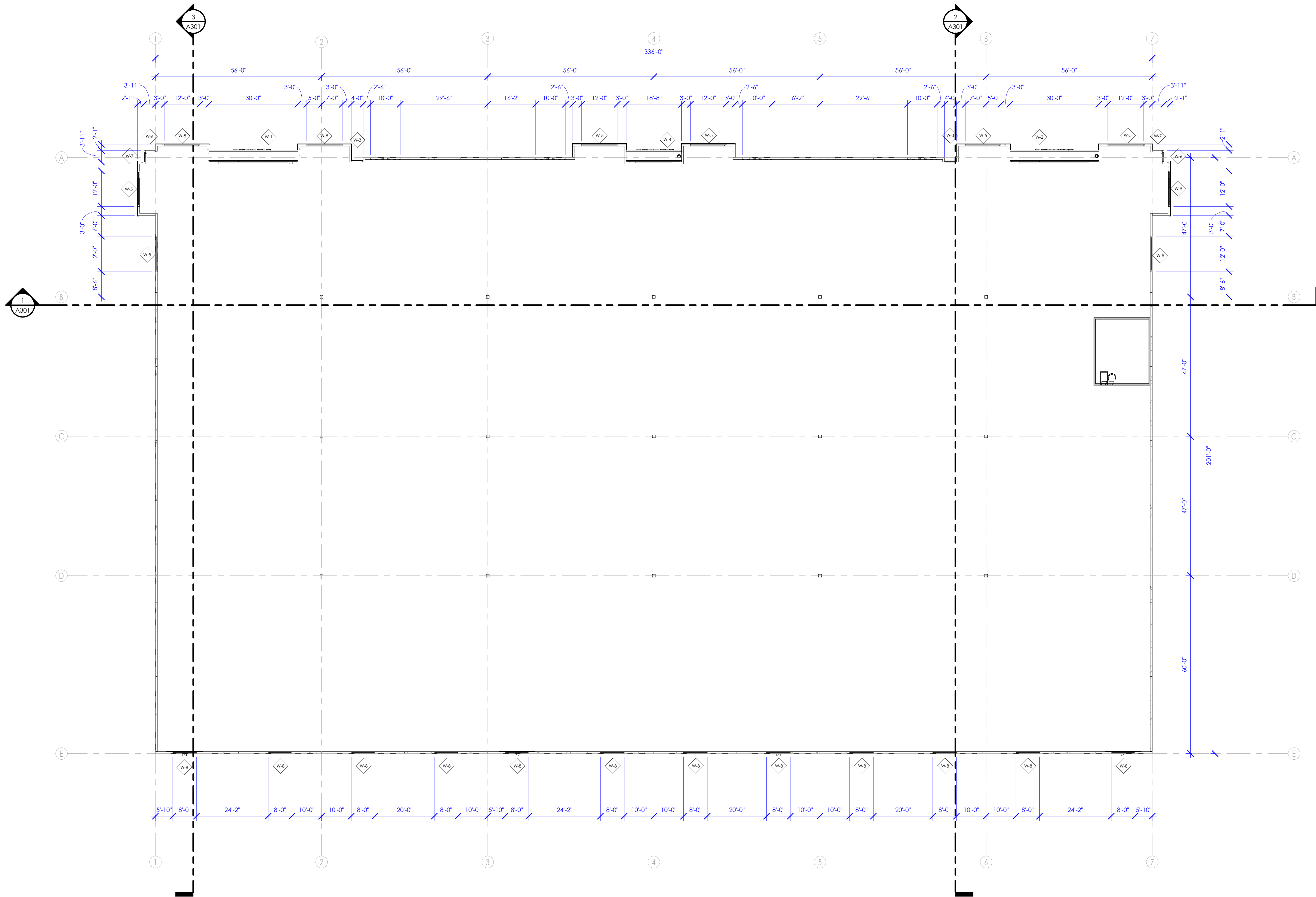
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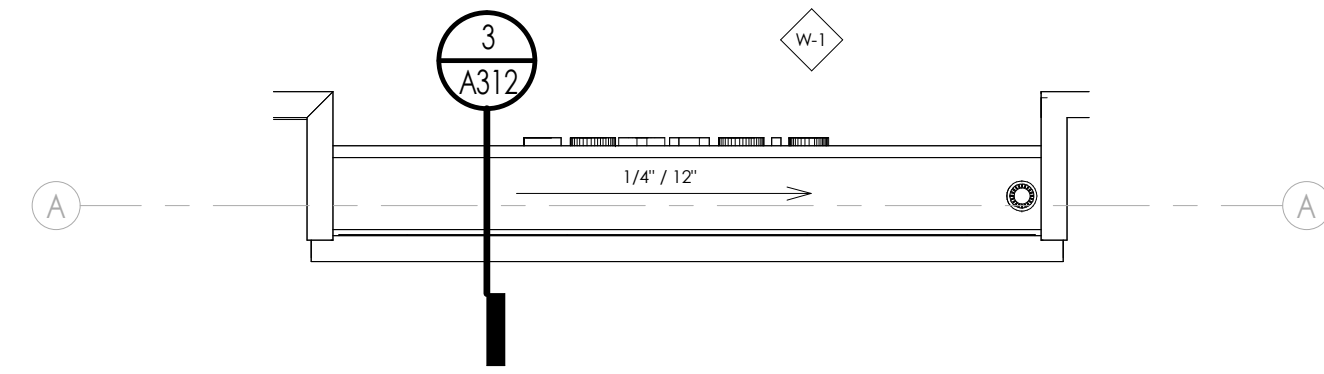
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LEVEL 01
FLOOR PLAN -
OVERALL

DATE: 04/23/2025

SHEET #:








A101



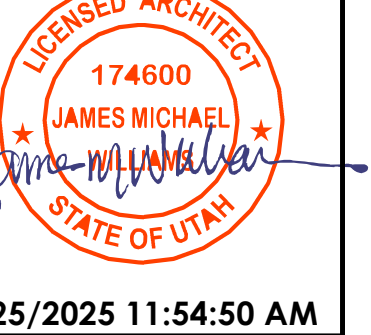


2 ENLARGED CANOPY ROOF - TYP
A103 1/8" = 1'-0"

1. PROVIDE FULL MANUFACTURERS WARRANTY ON MATERIALS AND 5 YEAR WARRANTY MIN. ON LABOR. UNO
2. ALL COLORS, ASSEMBLIES AND MATERIALS MUST MEET APPROVAL OF OWNER AND DESIGN PROFESSIONAL
3. PROVIDE PRODUCT SUBMITTALS FOR PRE APPROVAL PRIOR TO ORDERING AND INSTALLATION
4. FOR TYPICAL ROOF FLASHING DETAILS, SEE SHEET A503
5. PROVIDE STEP FLASHING, COUNTER FLASHING, Drip Edges AS REQ'D, CAULK AND SEAL. ROOFING TO EXTEND 18" MIN. UP ADJACENT WALLS AND DISCONTINUITIES TYPICAL.
6. INSTALL ROOF PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. MANUFACTURER TO INSPECT INSTALLATIONS AS REQ'D FOR WARRANTY. PROVIDE 1/4" PER FOOT MIN. SLOPE.
7. FOR ALL PLUMBING PENETRATIONS REFER TO DETAILS ON A503 AND PLUMBING DRAWINGS.
8. FOR WISC. ROOF DETAILS SEE A503
9. TYPICAL MINIMUM ROOF SLOPE @ 1/4" MIN. PER FOOT ALL PLACES.
10. SEE MECHANICAL PLAN FOR ROOF MOUNTED EQUIPMENT AND CURBS. ET.

LEGEND	
	= DOOR TAGS
	= STOREFRONT WALL TAGS
	= KEYNOTE TAGS
	= ROOM NUMBER
	= WALL TYPE TAGS; SEE WALL TYPES ON G005
	"C" = WALL TYPE
	"x" = STUD SIZE (OR CONCRETE THICKNESS)
	"0" = FIRE RATING IN HOURS
	 = DETAILS CALL-OUTS TAGS
	 = SECTION CUTS TAGS

KEYNOTE LEGEND	
05/023	METAL PARAPET WALL CAP
05/026	ACM PANEL BY MANUFACTURE
07/002	45 MIL TPO ROOF OVER RIGID INSULATION ON METAL DECK - PROVIDE SUBMITTAL FOR APPROVAL (PROVIDE ALTERNATE BID FOR 60 MIL OPTION)
08/003	ROOF HATCH ACCESS, PROVIDE SUBMITTAL FOR APPROVAL
22/005	ROOF DRAINS, SEE MECHANICAL FOR TYPE AND SIZE



RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

MARK	DESCRIPTION	Revision Date

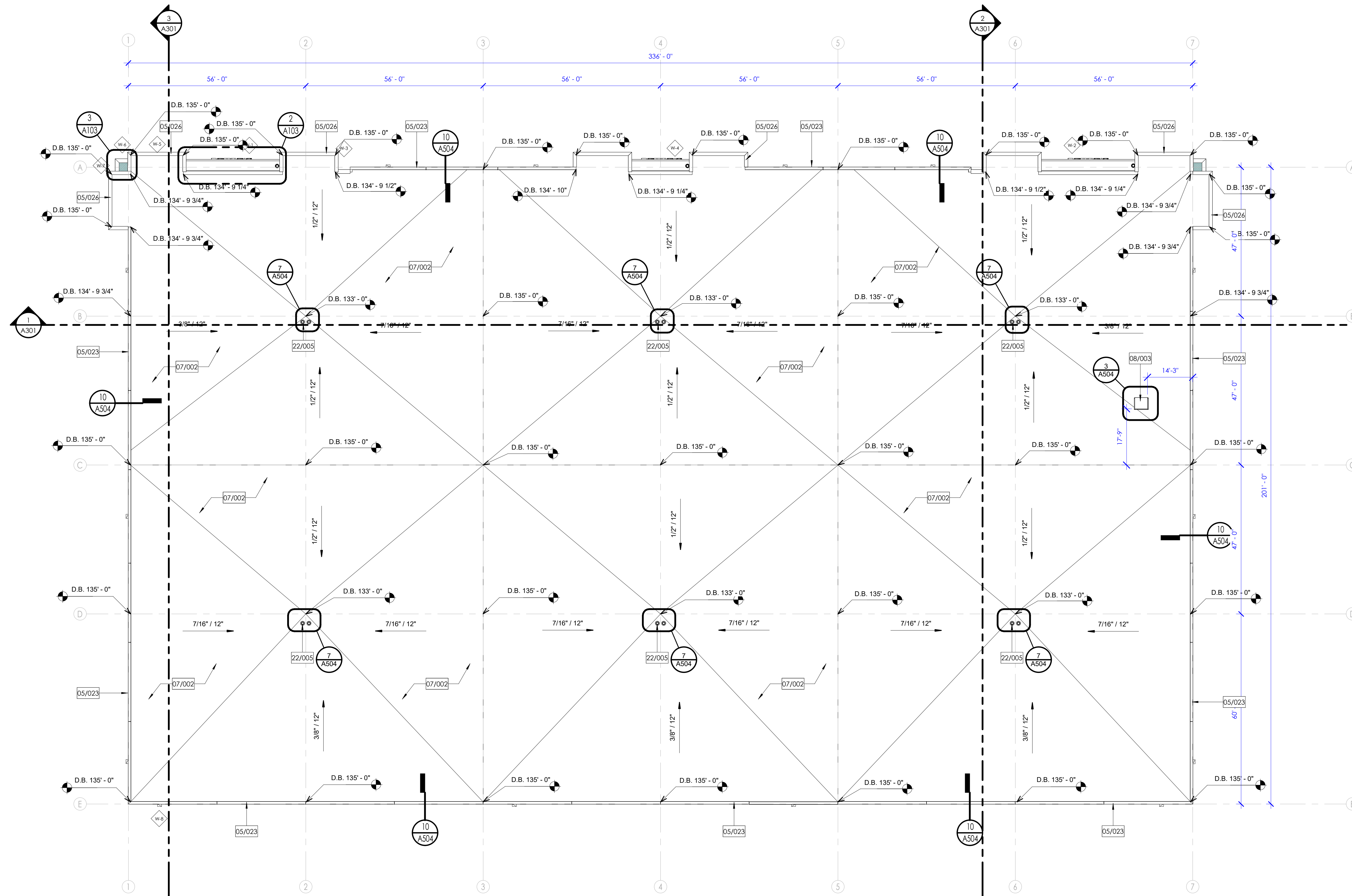
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ROOF PLAN

DATE: 04/23/2025

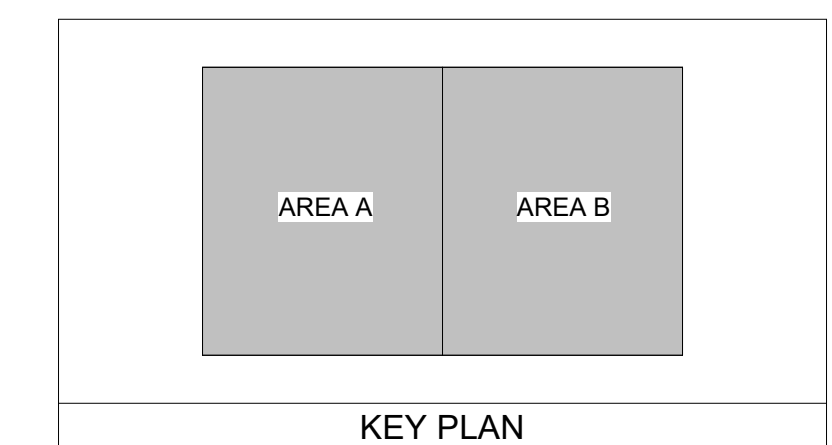
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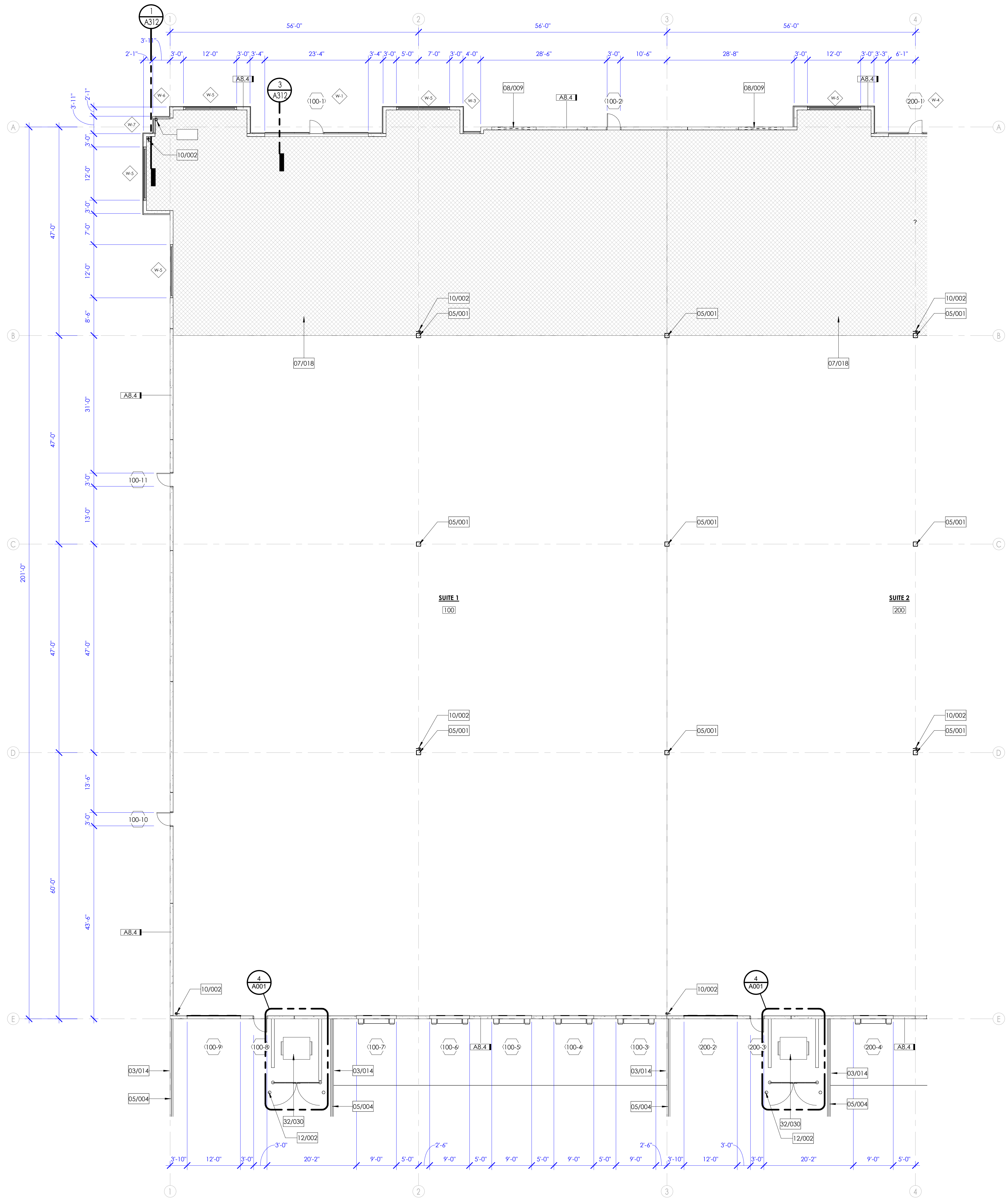
A103

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1
A103 **ROOF PLAN**
1/16" = 1'-0"





3
A111
ENLARGED LEVEL 01 FLOOR PLAN - AREA A
3/32" = 1'-0"

GENERAL NOTES

1. INTERIOR DIMENSION AT FACE OF STUD. EXTERIOR DIMENSIONS AT FACE OF TILT-UP PANEL.
2. PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY ALL COLORS AND MATERIALS.
3. INSTALL ALL MATERIALS PER MANUFACTURERS RECOMMENDATION.
4. ALL GYP. BOARD SURFACES TO BE TAPED, SANDED, AND PRIMED.
5. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS.
6. COORDINATE ALL WINDOWS HEAD HEIGHTS AND SIZES WITH ELEVATIONS AND SCHEDULES.
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8. FIRE EXTINGUISHERS, SMOKE DETECTORS, OTHER EMERGENCY DEVICE LOCATIONS, AND RATINGS SHALL BE APPROVED BY FIRE MARSHAL PRIOR TO INSTALLATION.
9. FRAMING CONTRACTOR SHALL PROVIDE ADDITIONAL BLOCKING THROUGHOUT THE PROJECT AS REQUIRED TO ACCOMMODATE WALL-MOUNTED FURNISHINGS, ARTWORK, ETC.
10. DOCKS SHALL BE LOCATED 6" OFF OF ADJACENT WALL UNLESS NOTED OTHERWISE.
11. CONTRACTOR IS TO PROVIDE SUBMITTALS AND SHOP DRAWINGS ON ALL KEYNOTED ITEMS FOR APPROVAL FROM OWNER/ARCHITECT.
12. PRIOR TO ORDERING ANY EXTERIOR FINISHES, THE CONTRACTOR IS TO VERIFY ALL COLORS AND TYPES OF MATERIALS WITH OWNER/ARCHITECT.
13. ALL ASPECTS OF THIS PROJECT SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE ASSOCIATED DETAILS - SEE 0304. IF CONFLICTS OCCUR WHICH MAKE COMPLIANCE WITH THE ADA IMPOSSIBLE, NOTIFY ARCHITECT IMMEDIATELY BEFORE CONTINUING THE WORK.
14. ALL FURNITURE/APPLIANCES SHALL BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. U.N.O.

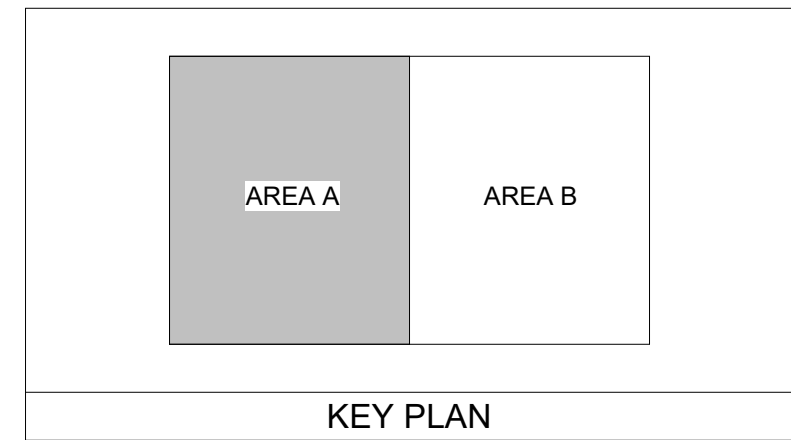
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	= STOREFRONT WALL TAGS		= SECTION CUTS TAGS
	= KEYNOTE TAGS		
	= ROOM NUMBER		
	= WALL TYPE TAGS; SEE WALL TYPES ON 0005		
	"C" = WALL TYPE		
	"6" = STUD SIZE (OR CONCRETE THICKNESS)		
	"0" = FIRE RATING IN HOURS		

KEYNOTE LEGEND

03/014	DOCK CONCRETE RETAINING WALL
05/001	STRUCTURAL STEEL COLUMN - SEE STRUCTURAL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
07/018	PROVIDE 10 MIL VAPOR BARRIER UNDER SLAB
08/009	K.O.P. - SEE PANEL ELEVATION SHEETS
10/002	FIRE EXTINGUISHER, STANDARD. FIRE MARSHAL TO APPROVE ALL FINAL LOCATIONS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL
32/030	DUMPSTER ENCLOSURE, SEE SHEET 8/A001

0 8' 16' 24'
GRAPHIC SCALE



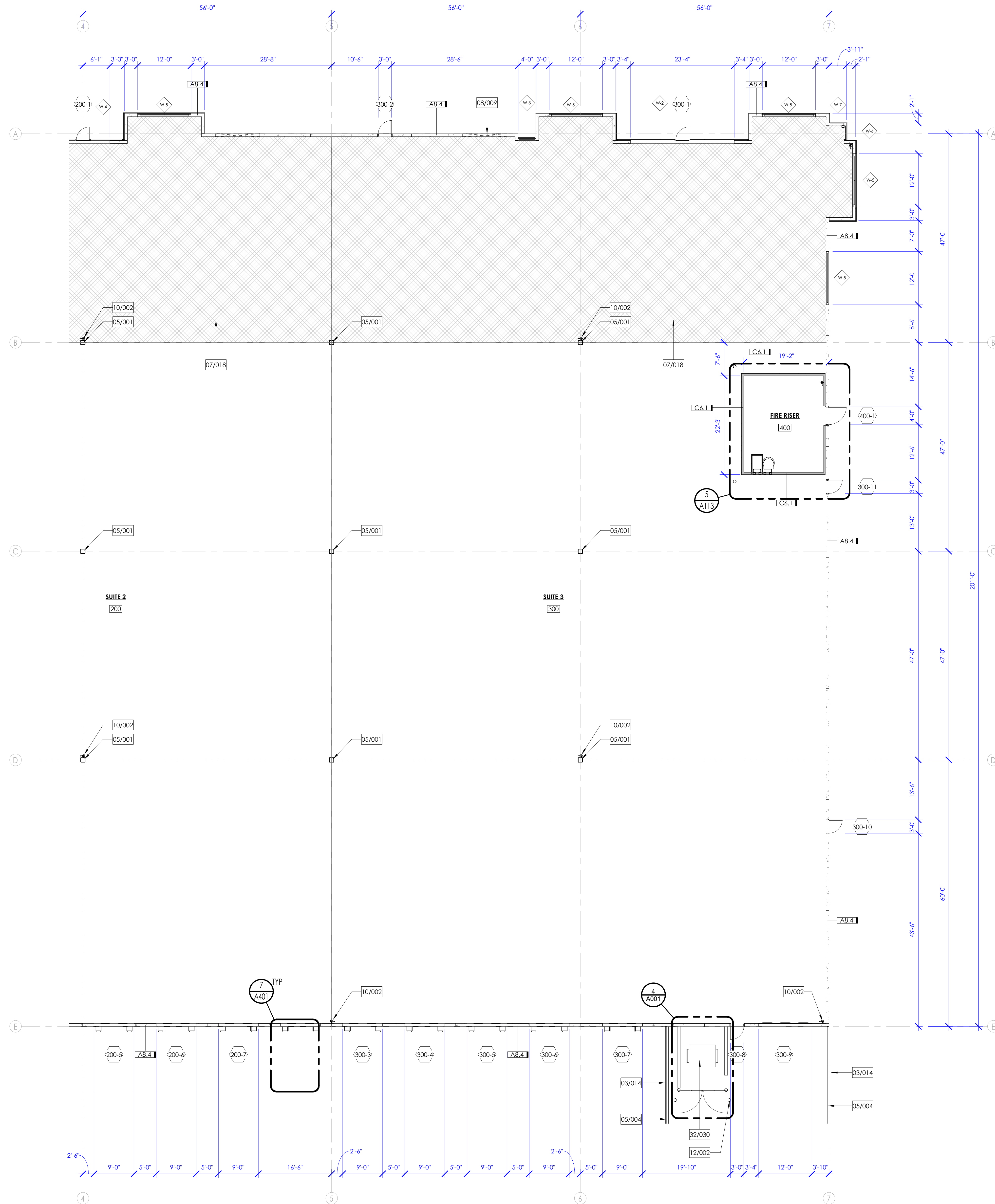
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architects and engineers
909 West South Jordan Parkway
South Jordan, Utah 84095
phone: 801.746.0456 - fax: 801.575.6456
web page: aeurbia.com

174600
JAMES MICHAEL
STATE OF UTAH
4/25/2025 11:54:52 AM

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision	Schedule	Revision Date
MARK	DESCRIPTION	

AE2022.290
ENLARGED
LEVEL 01
FLOOR PLAN -
AREA A
DATE: 04/23/2025
SHEET #:
A111
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1
A112 **ENLARGED LEVEL 01 FLOOR PLAN - AREA B**
3/32" = 1'-0"

GENERAL NOTES

1. INTERIOR DIMENSION AT FACE OF STUD. EXTERIOR DIMENSIONS AT FACE OF TILT-UP PANEL.
2. PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY ALL COLORS AND MATERIALS.
3. INSTALL ALL MATERIALS PER MANUFACTURERS RECOMMENDATION.
4. ALL GYP. BOARD SURFACES TO BE TAPED, SANDED, AND PRIMED.
5. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS.
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7. FIRE RATED ASSEMBLIES SHALL BE CONTINUOUS BOTH HORIZONTALLY AND VERTICALLY AND SHALL EXTEND FROM RATED ASSEMBLY TO RATED ASSEMBLY. FIRE CAULK ALL PENETRATIONS.
8. FIRE EXTINGUISHERS, SMOKE DETECTORS, OTHER EMERGENCY DEVICE LOCATIONS, AND RATINGS SHALL BE APPROVED BY FIRE MARSHAL PRIOR TO INSTALLATION.
9. FRAMING CONTRACTOR SHALL PROVIDE ADDITIONAL BLOCKING THROUGHOUT THE PROJECT AS REQUIRED TO ACCOMMODATE WALL-MOUNTED FURNISHINGS, ARTWORK, ETC.
10. DOCKS SHALL BE LOCATED 6" OFF OF ADJACENT WALL UNLESS NOTED OTHERWISE.
11. CONTRACTOR IS TO PROVIDE SUBMITTALS AND SHOP DRAWINGS ON ALL KEYNOTED ITEMS FOR APPROVAL FROM OWNER/ARCHITECT.
12. PRIOR TO ORDERING ANY EXTERIOR FINISHES, THE CONTRACTOR IS TO VERIFY ALL COLORS AND TYPES OF MATERIALS WITH OWNER/ARCHITECT.
13. ALL ASPECTS OF THIS PROJECT SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE ASSOCIATED DETAILS - SEE G004. IF CONFLICTS OCCUR WHICH MAKE COMPLIANCE WITH THE ADA IMPOSSIBLE, NOTIFY ARCHITECT IMMEDIATELY BEFORE CONTINUING THE WORK.
14. ALL FURNITURE/APPLIANCES SHALL BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. U.N.O.

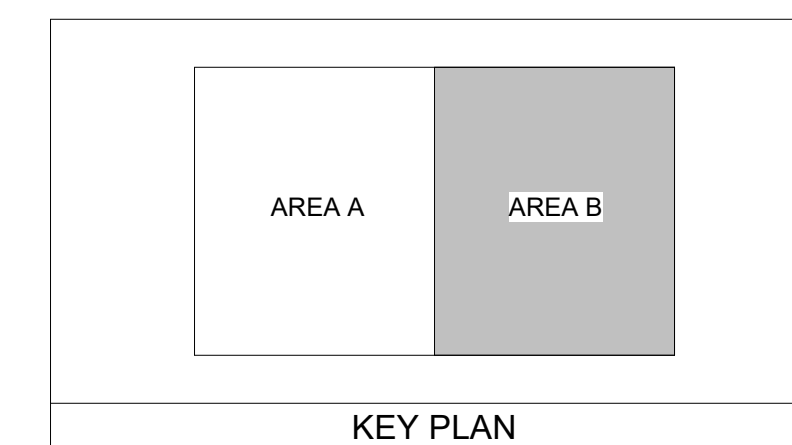
LEGEND

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	= STOREFRONT WALL TAGS		= SECTION CUTS TAGS
	= KEYNOTE TAGS		
	= ROOM NUMBER		
	= WALL TYPE TAGS; SEE WALL TYPES ON G005		
	"6" = STUD SIZE (OR CONCRETE THICKNESS)		
	"0" = FIRE RATING IN HOURS		

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
03/014	DOCK CONCRETE RETAINING WALL
05/001	STRUCTURAL STEEL COLUMN - SEE STRUCTURAL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
07/018	PROVIDE 10 MIL VAPOR BARRIER UNDER SLAB
08/009	K.O.P. - SEE PANEL ELEVATION SHEETS
10/002	FIRE EXTINGUISHER, STANDARD. FIRE MARSHAL TO APPROVE ALL FINAL LOCATIONS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL
32/030	DUMPSTER ENCLOSURE, SEE SHEET 8/A001

0 8' 16' 24'
GRAPHIC SCALE



ae urbia
architects and engineers
909 West South Jordan Parkway
South Jordan, Utah 84095
phone: 801.746.0456 - fax: 801.575.6456
web page: aeurbia.com

174600
JAMES MICHAEL
STATE OF UTAH
4/25/2025 11:54:53 AM

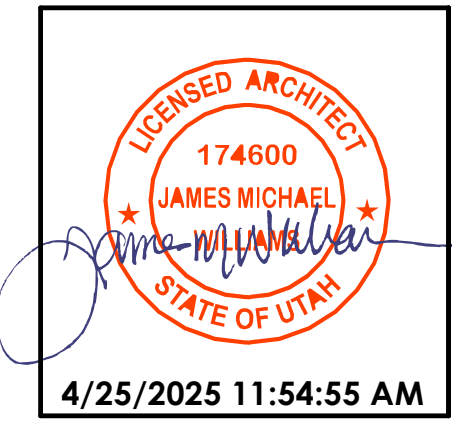
RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision	Schedule	Description	Revision Date
MARK			

AE2022.290
ENLARGED LEVEL 01 FLOOR PLAN - AREA B
DATE: **04/23/2025**
SHEET #:
A112
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KEYNOTE LEGEND	
03/010	CONCRETE SLAB ON GRADE - SEE STRUCTURAL FOR THICKNESS AND REINFORCING
05/013	PAINTED ROOF ACCESS LADDER - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
05/018	POWDER COATED ROOF ACCESS LADDER WITH CAGE
08/003	ROOF HATCH ACCESS, PROVIDE SUBMITTAL FOR APPROVAL
10/002	FIRE EXTINGUISHER, STANDARD. FIRE MARSHAL TO APPROVE ALL FINAL LOCATIONS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL



RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2022.290

ENLARGED FIRE RISER

DATE: **04/23/2025**

SHEET #:

A113

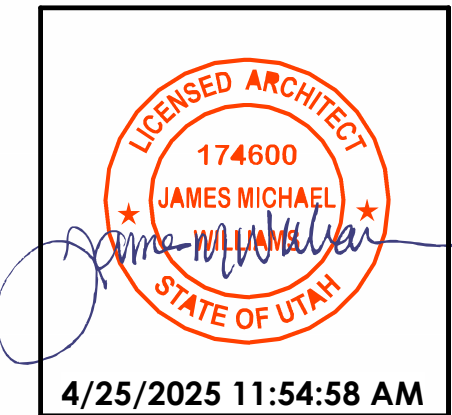
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PROVIDE MOUNTING DETAILS FOR WALL-MOUNTED EXTERIOR SIGNS. ALL POLE-MOUNTED SIGNS AND MONUMENT SIGNS EXCEEDING 6 FT. TALL MUST BE ENGINEERED. AWNINGS THAT PROJECT 2FT OR MORE REQUIRE ENGINEERING CALCULATIONS.

ae urbia
architects and engineers

909 West South Jordan Parkway
South Jordan, Utah 84095
phone: 801.746.0456 - fax: 801.575.6456
web page: aeurbia.com



RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2022.290

**NORTH &
SOUTH
ELEVATION**



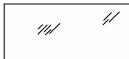
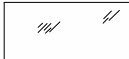
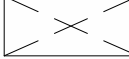
DATE: **04/23/2025**

SHEET #:

A201

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EXTERIOR ELEVATION COLOR:

	= PAINTED CONCRETE TILT UP PANEL, SHERWIN WILLIAMS (CLIFFSIDE GRAY); ELASTOMERIC, SMOOTH FINISH.
	= PAINTED CONCRETE TILT UP PANEL, SHERWIN WILLIAMS (CHARCOAL SLATE); ELASTOMERIC, SMOOTH FINISH
	= GREYLITE III / SOLARBAN 60 (3) W/ REFLECTIVE COATING.
	= GREYLITE II w/ #3-820 HARMONY GRAY SPANDRAL (MONOLITHIC) W/ REFLECTIVE COATING.
	= KNOCK OUT PANEL FOR FUTURE, PAINT SIMILAR TO SURROUNDING PANEL

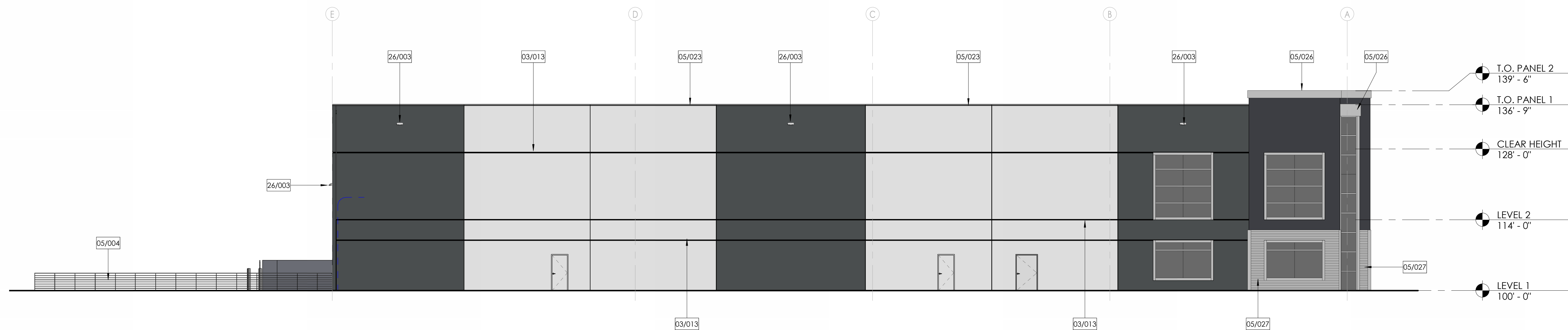
GENERAL EXTERIOR FINISH NOTES:

1. ALL EXTERIOR CONCRETE WALLS THAT REQUIRE PAINTING SHALL BE SACK AND PATCHED PRIOR TO PAINTING.
2. REFER TO ELECTRICAL SHEETS FOR ALL EXTERIOR LIGHTING AND COORDINATE ALL NECESSARY POWER LOCATIONS APPROPRIATELY.
3. SEE DETAILS ON A502 FOR TYPICAL CONCRETE REVEALS AND PANEL JOINTS.
4. CAULK AND SEAL ALL EXTERIOR JOINTS WITH APPROVED POLYURETHANE SEALANT.
5. REFER TO MECHANICAL COM-CHECK FOR GLAZING STANDARDS.

FOR FUTURE TENANTS:

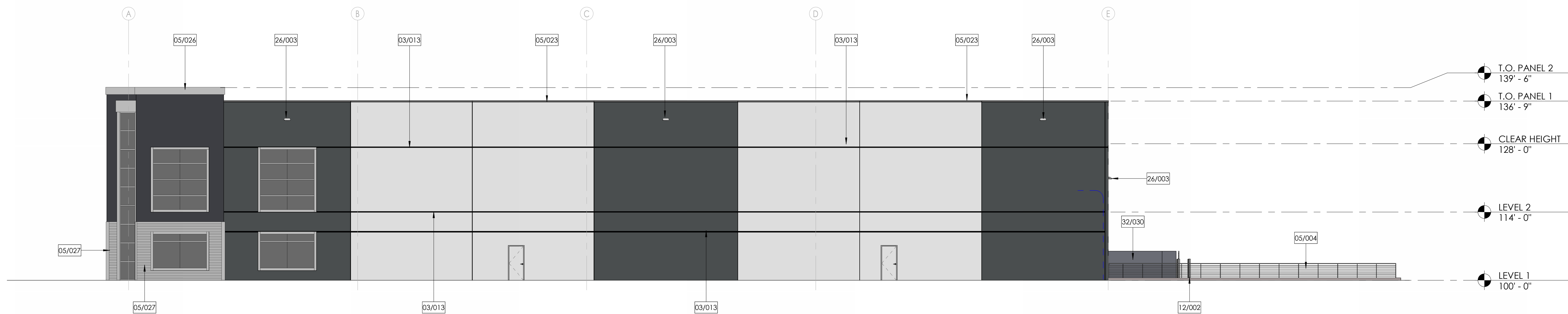
PROVIDE MOUNTING DETAILS FOR WALL-MOUNTED EXTERIOR SIGNS. ALL POLE-MOUNTED SIGNS AND MONUMENT SIGNS EXCEEDING 6 FT. TALL MUST BE ENGINEERED. AWNINGS THAT PROJECT 2FT OR MORE REQUIRE ENGINEERING CALCULATIONS.

KEYNOTE LEGEND	
03/013	CONCRETE WALL REVEAL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
05/023	METAL PARAPET WALL CAP
05/026	ACM PANEL BY MANUFACTURE
05/027	HORIZONTAL SILVER METAL PANELS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL
26/003	PAINTABLE EXTERIOR WALL LIGHT FIXTURE. TO BE PAINTED TO MATCH WALL BEHIND. SEE ELECTRICAL
32/030	DUMPSTER ENCLOSURE, SEE SHEET 8/A001



1 EAST ELEVATION - OVERALL

A202 3/32" = 1'-0"



2 WEST ELEVATION - OVERALL

A202 3/32" = 1'-0"

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	
MARK	DESCRIPTION

AE2022.290

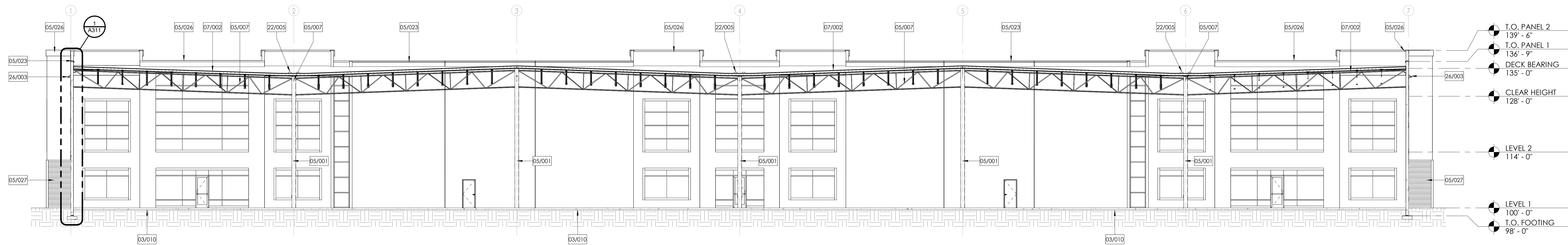
EAST & WEST ELEVATION

DATE: 04/23/2025

SHEET #:

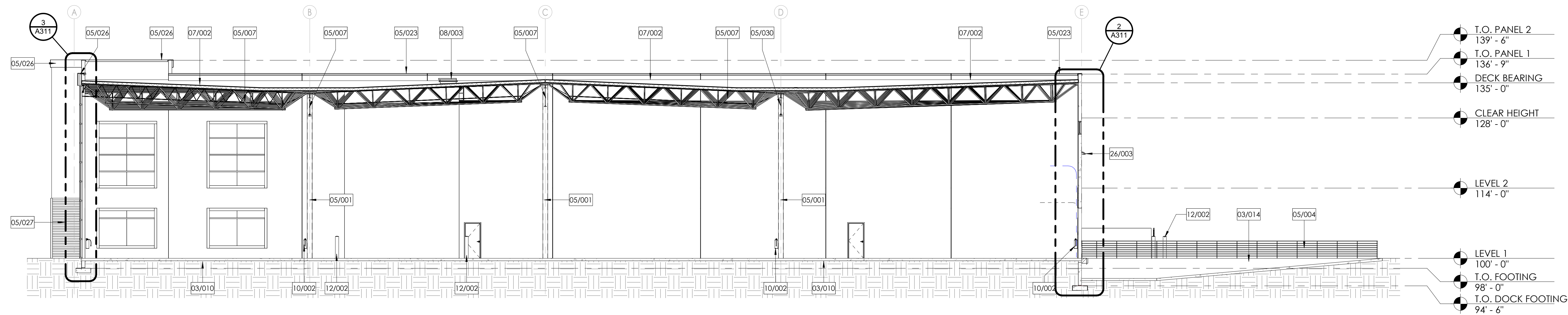
A202

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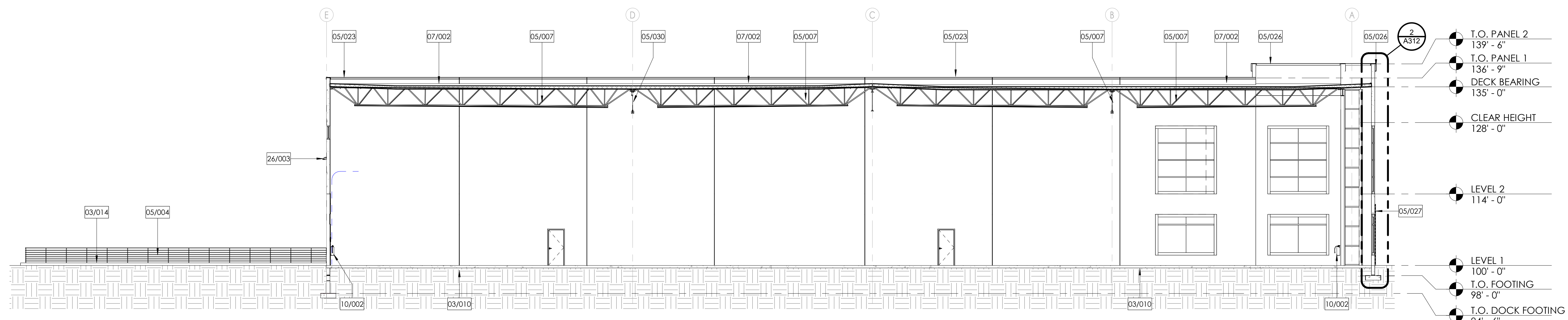
1
A301 **BUILDING SECTION 1**
3/32" = 1'-0"

0 8' 16' 24'
GRAPHIC SCALE



2
A301 **BUILDING SECTION 2**
3/32" = 1'-0"

0 8' 16' 24'
GRAPHIC SCALE



3
A301 **BUILDING SECTION 3**
3/32" = 1'-0"

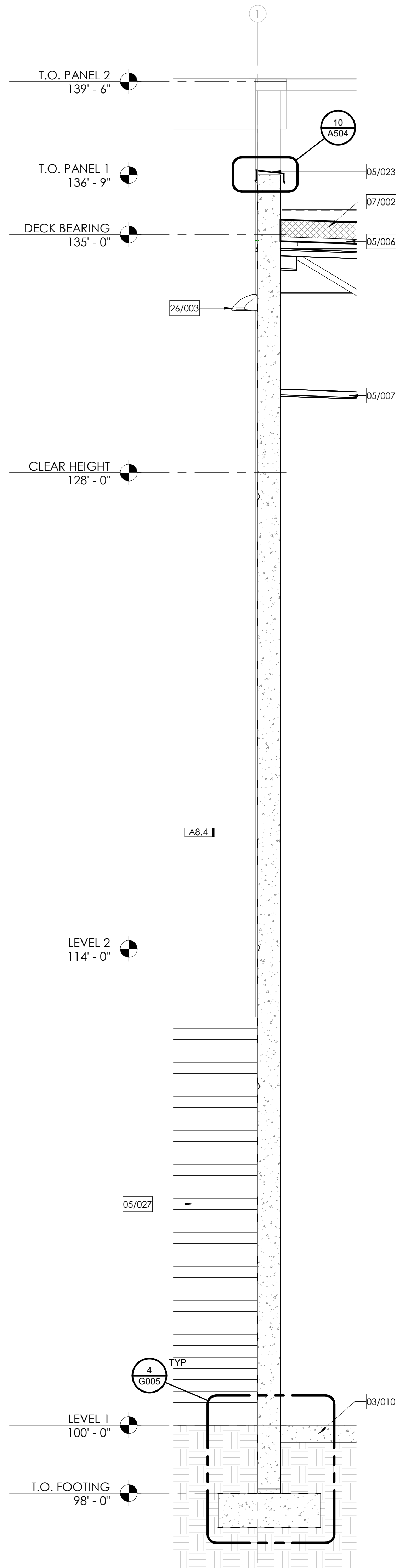
0 8' 16' 24'
GRAPHIC SCALE

KEYNOTE LEGEND	
03/010	CONCRETE SLAB ON GRADE - SEE STRUCTURAL FOR THICKNESS AND REINFORCING
03/014	DOCK CONCRETE RETAINING WALL
05/001	STRUCTURAL STEEL COLUMN - SEE STRUCTURAL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
05/007	METAL JOISTS - PER STRUCTURAL FOR SIZE AND SPACING
05/023	METAL PARAPET WALL CAP
05/026	ACM PANEL BY MANUFACTURE
05/027	HORIZONTAL SILVER METAL PANELS
05/030	METAL GIRDER - PER STRUCTURAL FOR SIZE AND SPACING

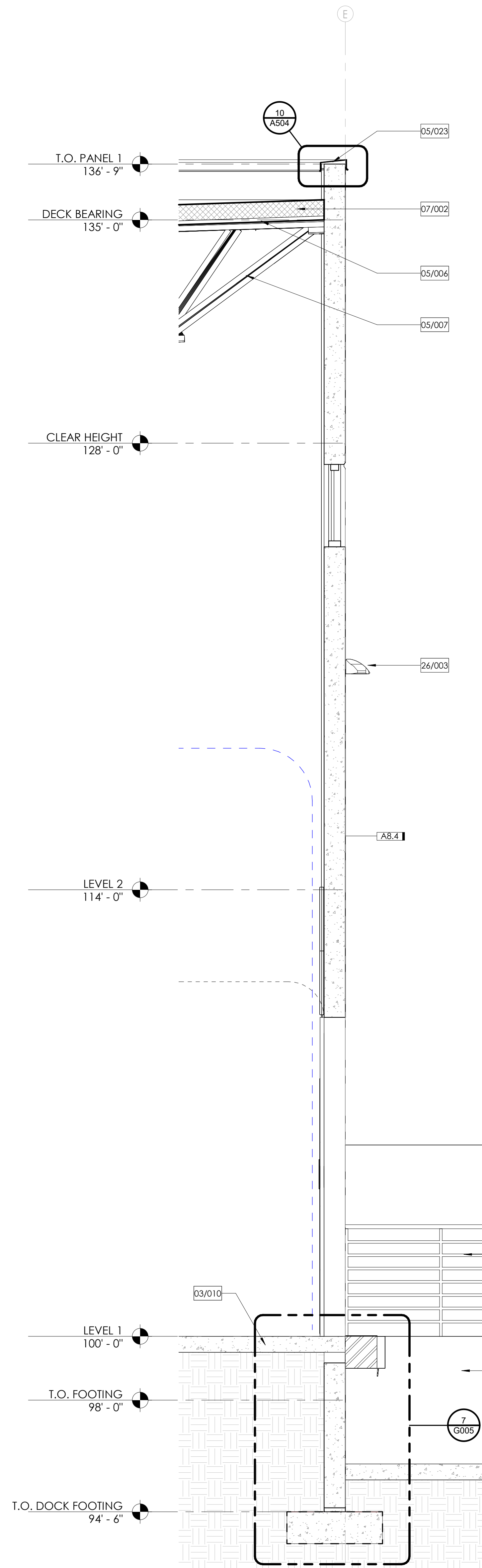
KEYNOTE LEGEND	
07/002	45 MIL TPO ROOF OVER RIGID INSULATION ON METAL DECK - PROVIDE SUBMITTAL FOR APPROVAL (PROVIDE ALTERNATE BID FOR 60 MIL OPTION)
08/003	ROOF HATCH ACCESS, PROVIDE SUBMITTAL FOR APPROVAL
10/002	FIRE EXTINGUISHER, STANDARD. FIRE MARSHAL TO APPROVE ALL FINAL LOCATIONS
12/002	8" PIPE BOLLARD PAINTED - PROVIDE SUBMITTAL FOR APPROVAL
22/005	ROOF DRAINS, SEE MECHANICAL FOR TYPE AND SIZE
26/003	PAINTABLE EXTERIOR WALL LIGHT FIXTURE. TO BE PAINTED TO MATCH WALL BEHIND. SEE ELECTRICAL

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

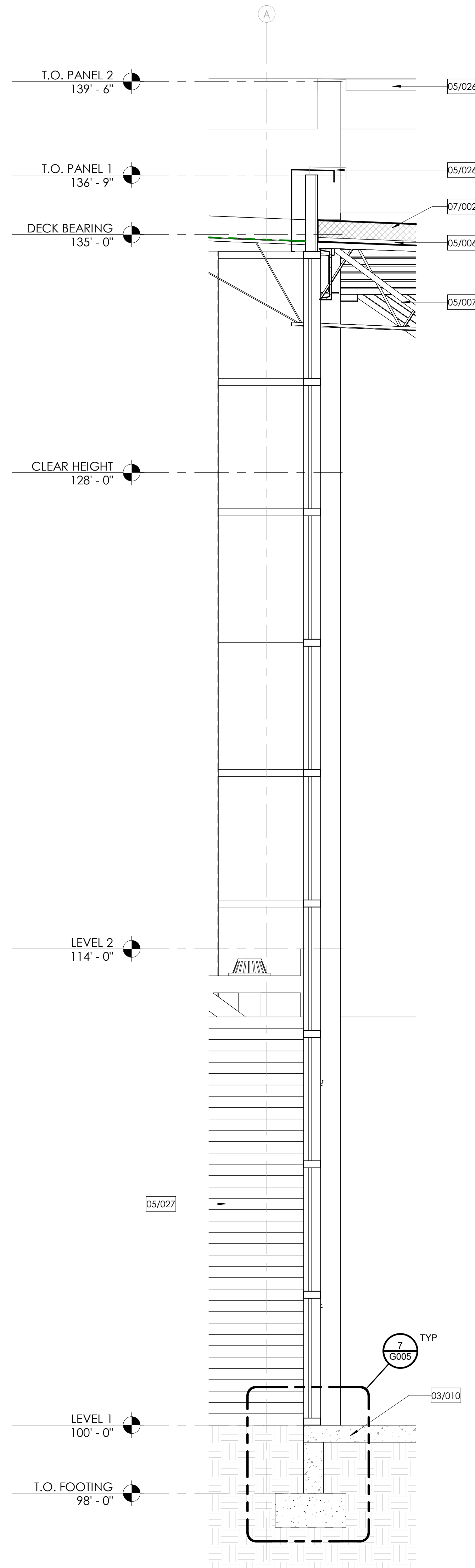
Revision	Schedule	Description	Revision Date
MARK			



1 WALL SECTION - 1
A311 1/2" = 1'-0"

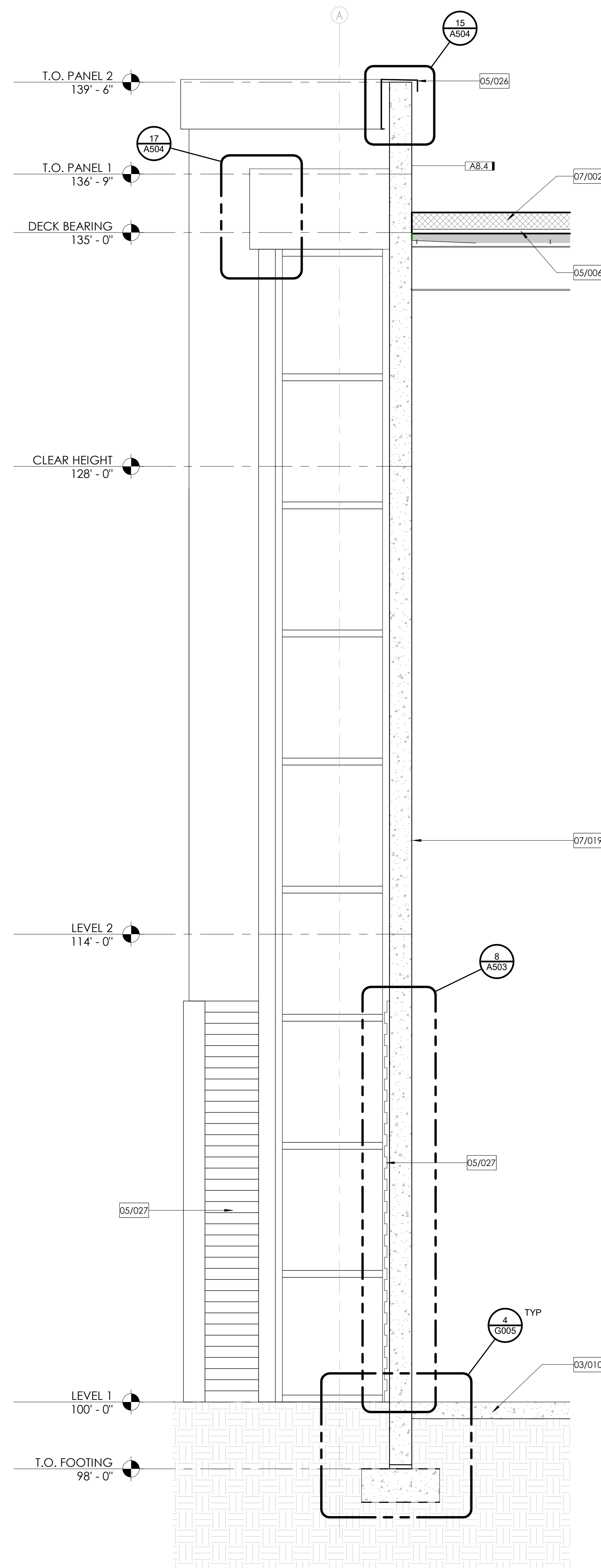


2 WALL SECTION - 2
A311 1/2" = 1'-0"

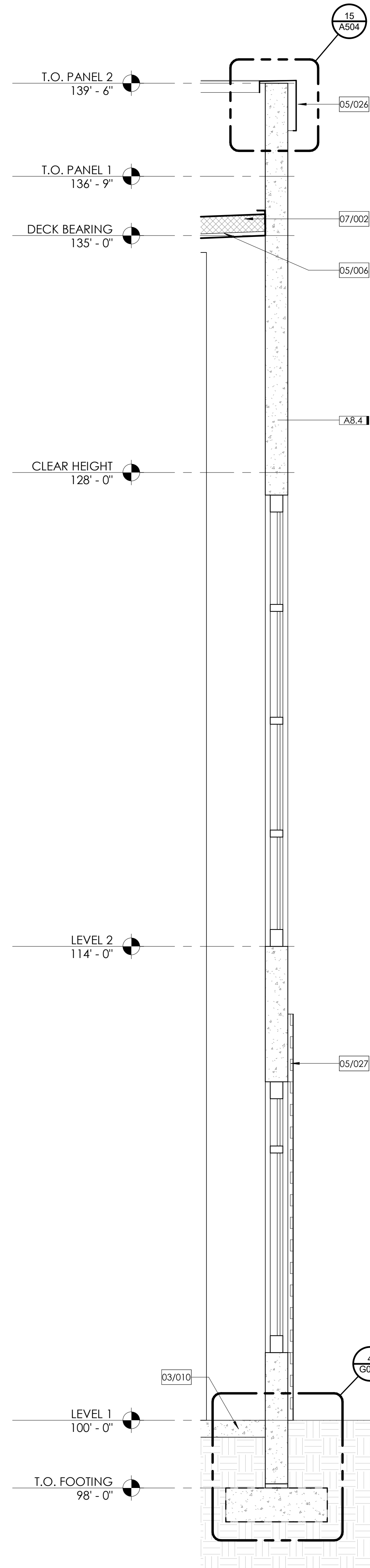


3 WALL SECTION - 3
A311 1/2" = 1'-0"

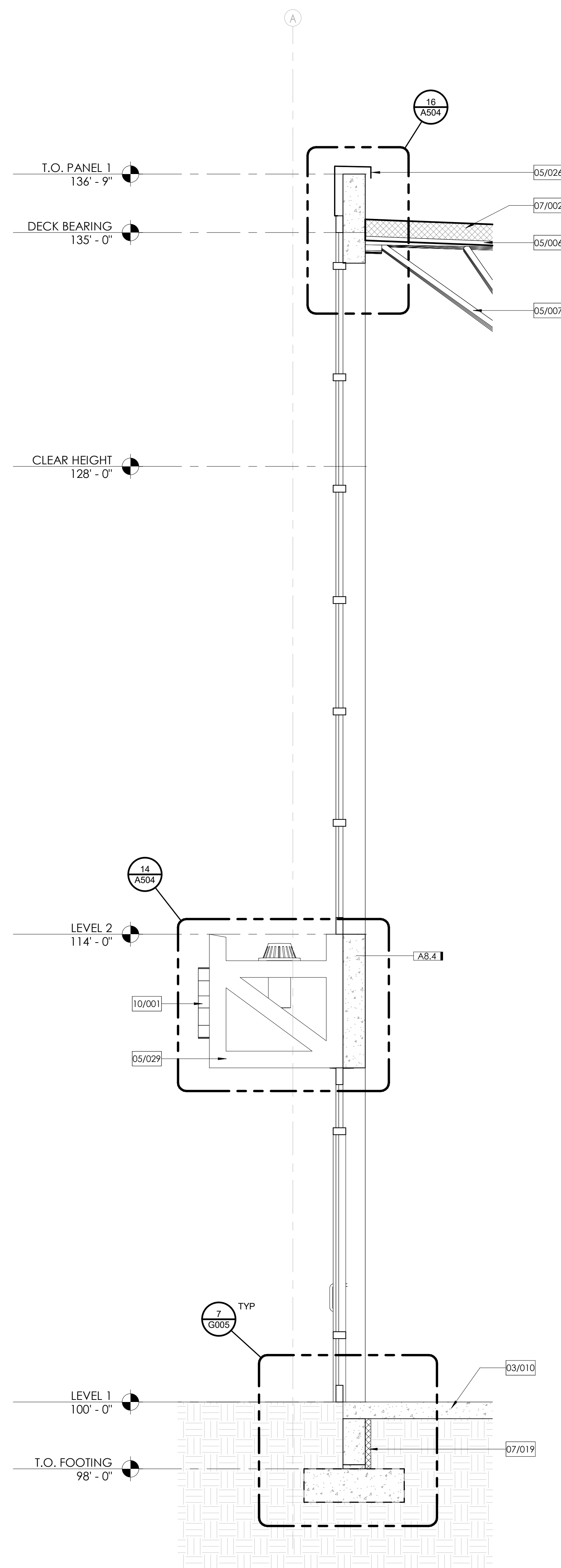
KEYNOTE LEGEND	
03/010	CONCRETE SLAB ON GRADE - SEE STRUCTURAL FOR THICKNESS AND REINFORCING
03/014	DOCK CONCRETE RETAINING WALL
05/004	42" GUARD RAILING GALVANIZED - PROVIDE SUBMITTAL FOR APPROVAL PRIOR TO FABRICATION
05/006	METAL DECK PER STRUCTURAL
05/007	METAL JOISTS - PER STRUCTURAL FOR SIZE AND SPACING
05/023	METAL PARAPET WALL CAP
05/026	ACM PANEL BY MANUFACTURE
05/027	HORIZONTAL SILVER METAL PANELS
07/002	45 MIL TPO ROOF OVER RIGID INSULATION ON METAL DECK - PROVIDE SUBMITTAL FOR APPROVAL (PROVIDE ALTERNATE BID FOR 60 MIL OPTION)
26/003	PAINTABLE EXTERIOR WALL LIGHT FIXTURE. TO BE PAINTED TO MATCH WALL BEHIND. SEE ELECTRICAL



1 WALL SECTION - 4
A312 1/2" = 1'-0"



2 WALL SECTION - 5
A312 1/2" = 1'-0"



3 WALL SECTION - 6
A312 1/2" = 1'-0"

KEYNOTE LEGEND	
03/010	CONCRETE SLAB ON GRADE - SEE STRUCTURAL FOR THICKNESS AND REINFORCING
05/006	METAL DECK PER STRUCTURAL
05/007	METAL JOISTS - PER STRUCTURAL FOR SIZE AND SPACING
05/026	ACM PANEL BY MANUFACTURE
05/027	HORIZONTAL SILVER METAL PANELS
05/029	ENTRANCE CANOPY
07/002	45 MIL TPO ROOF OVER RIGID INSULATION ON METAL DECK - PROVIDE SUBMITTAL FOR APPROVAL (PROVIDE ALTERNATE BID FOR 60 MIL OPTION)
07/019	FOUNDATION INSULATION, SEE SHEET G002
10/001	BUILDING SIGNAGE, TO BE REVIEWED AND APPROVED WITH SEPARATE PERMIT

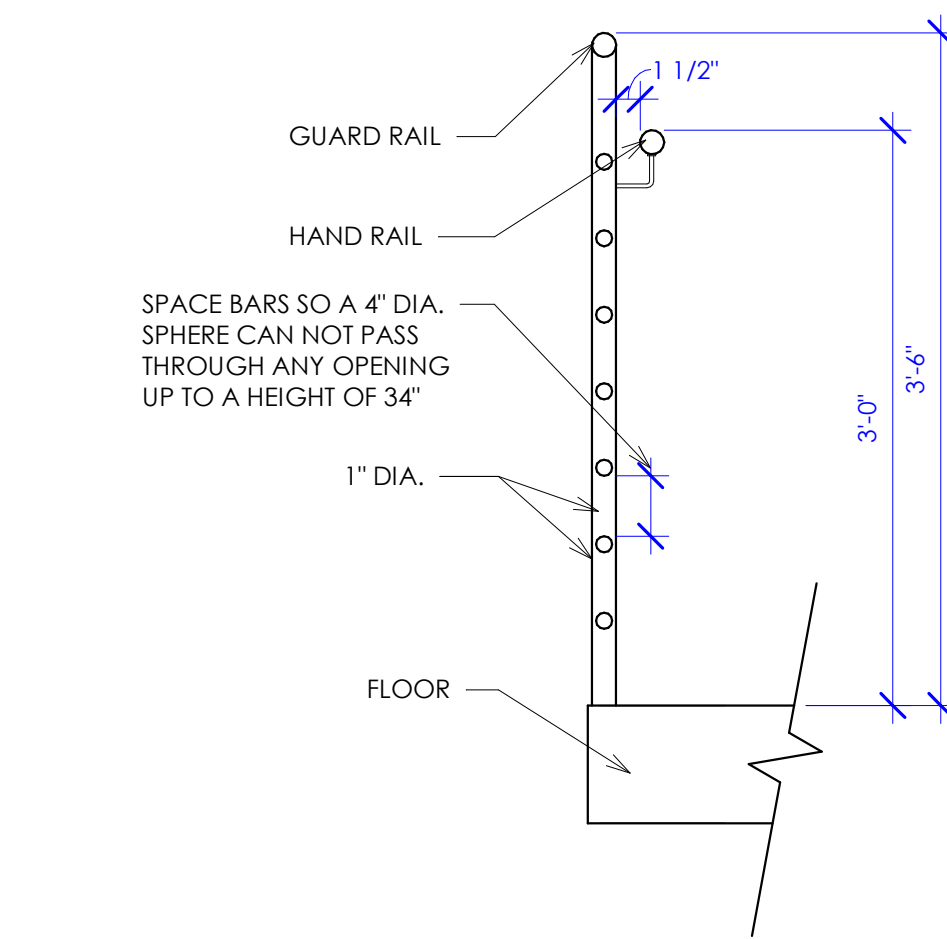
RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	DESCRIPTION

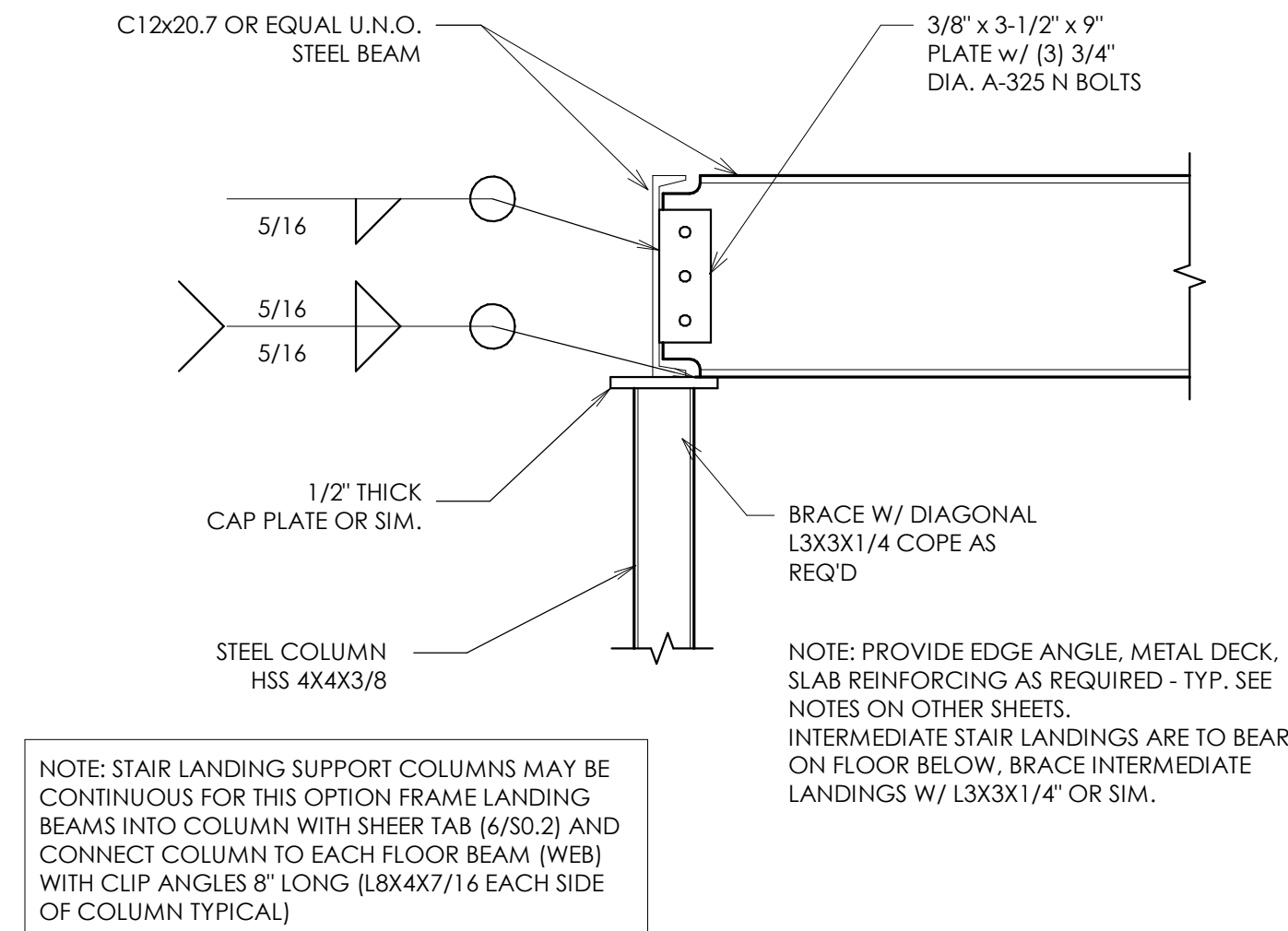
NOTE:

Each door providing access to an exterior area for assisted rescue shall be identified by a sign stating:
EXTERIOR AREA FOR ASSISTED RESCUE.

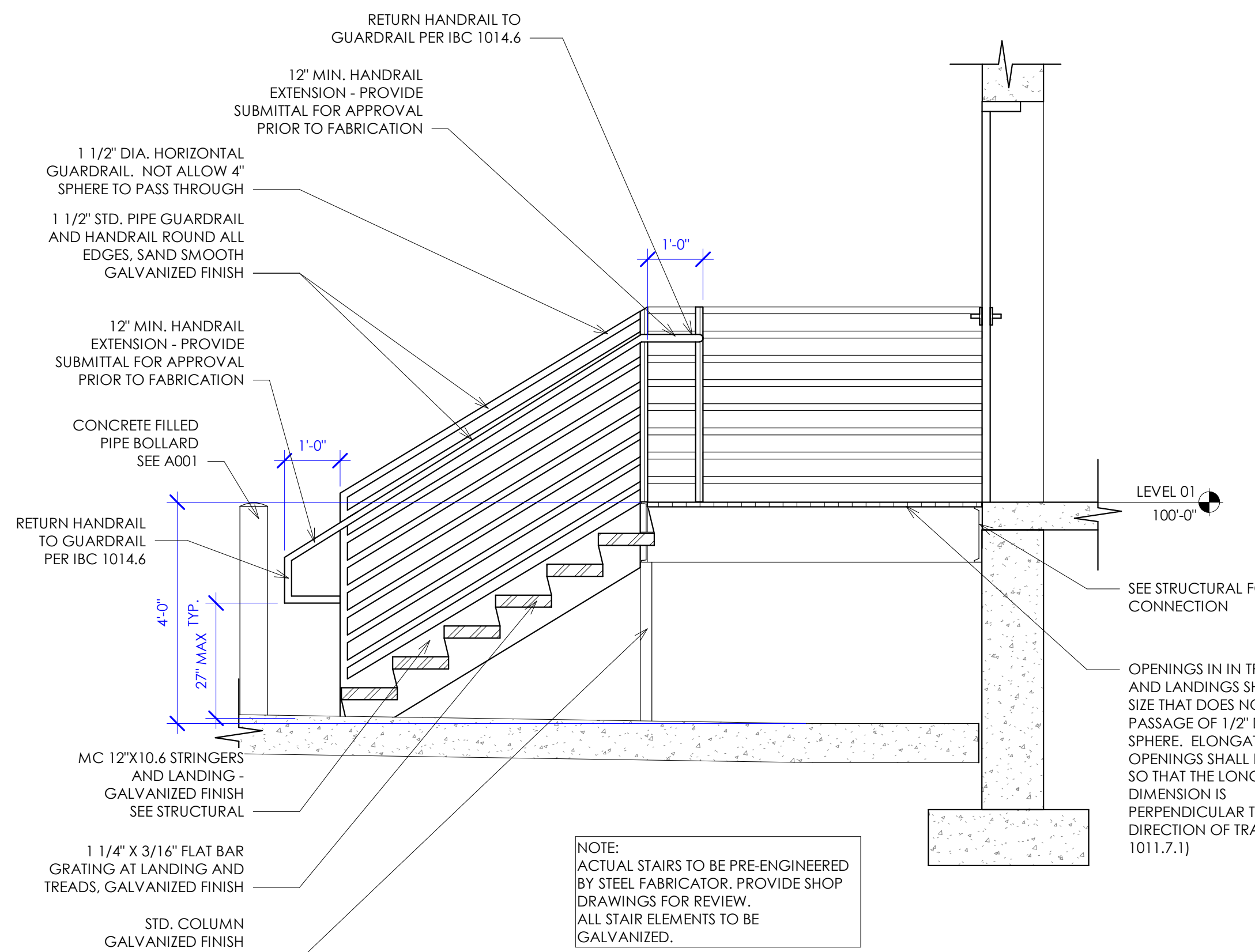
Signage shall comply with the ICC A 117.1 requirements for visual characters and include the International Symbol of Accessibility. Where exit sign illumination is required by Section 1013.3, the signs shall be illuminated. Additionally, visual characters, raised character and braille signage complying with ICC A 117.1 shall be located at each door to an Area of Refuge and exterior Area for Assisted Rescue in accordance with Section 1013.4.



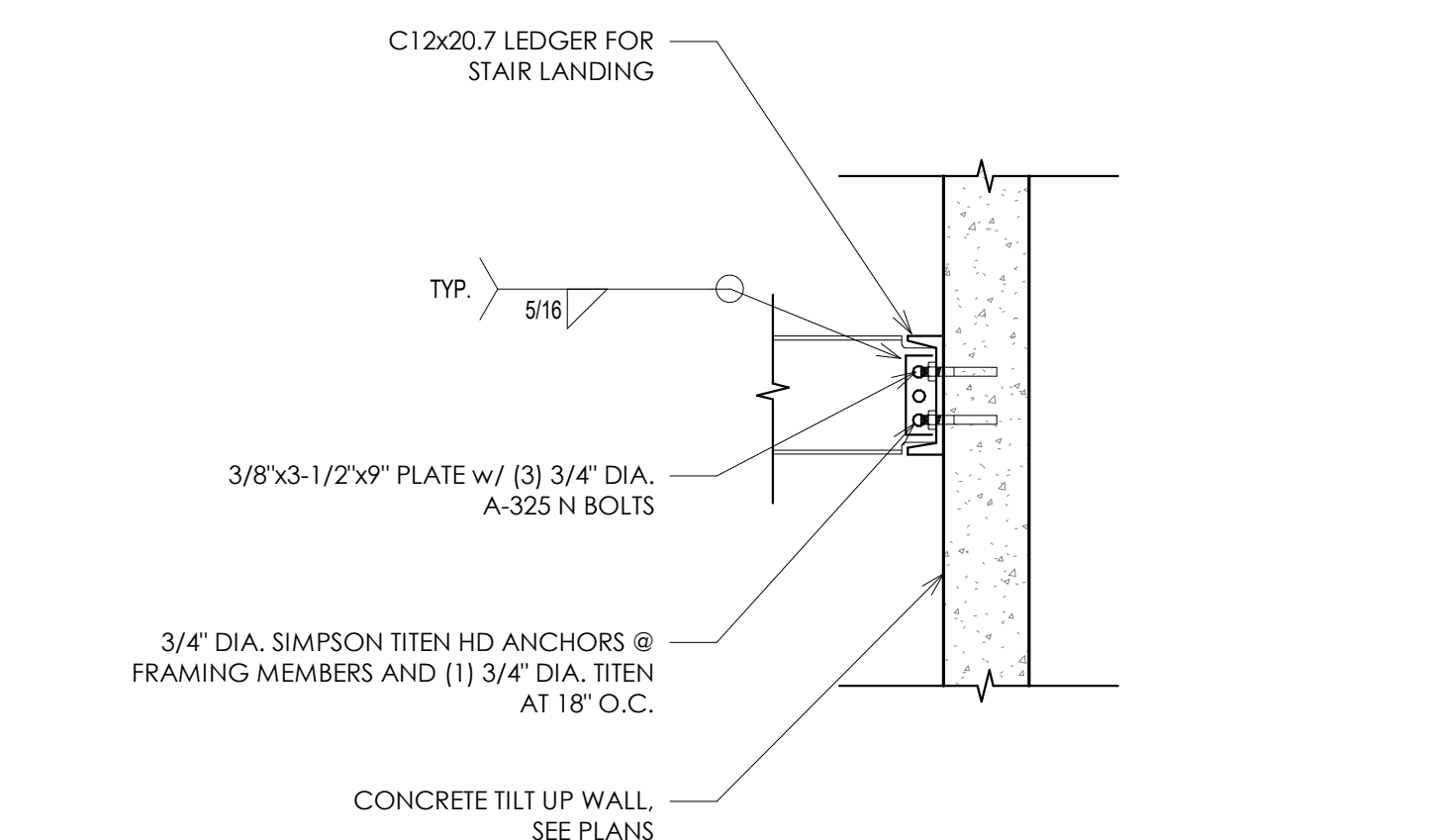
5 GUARDRAIL DETAIL1
1" = 1'-0"



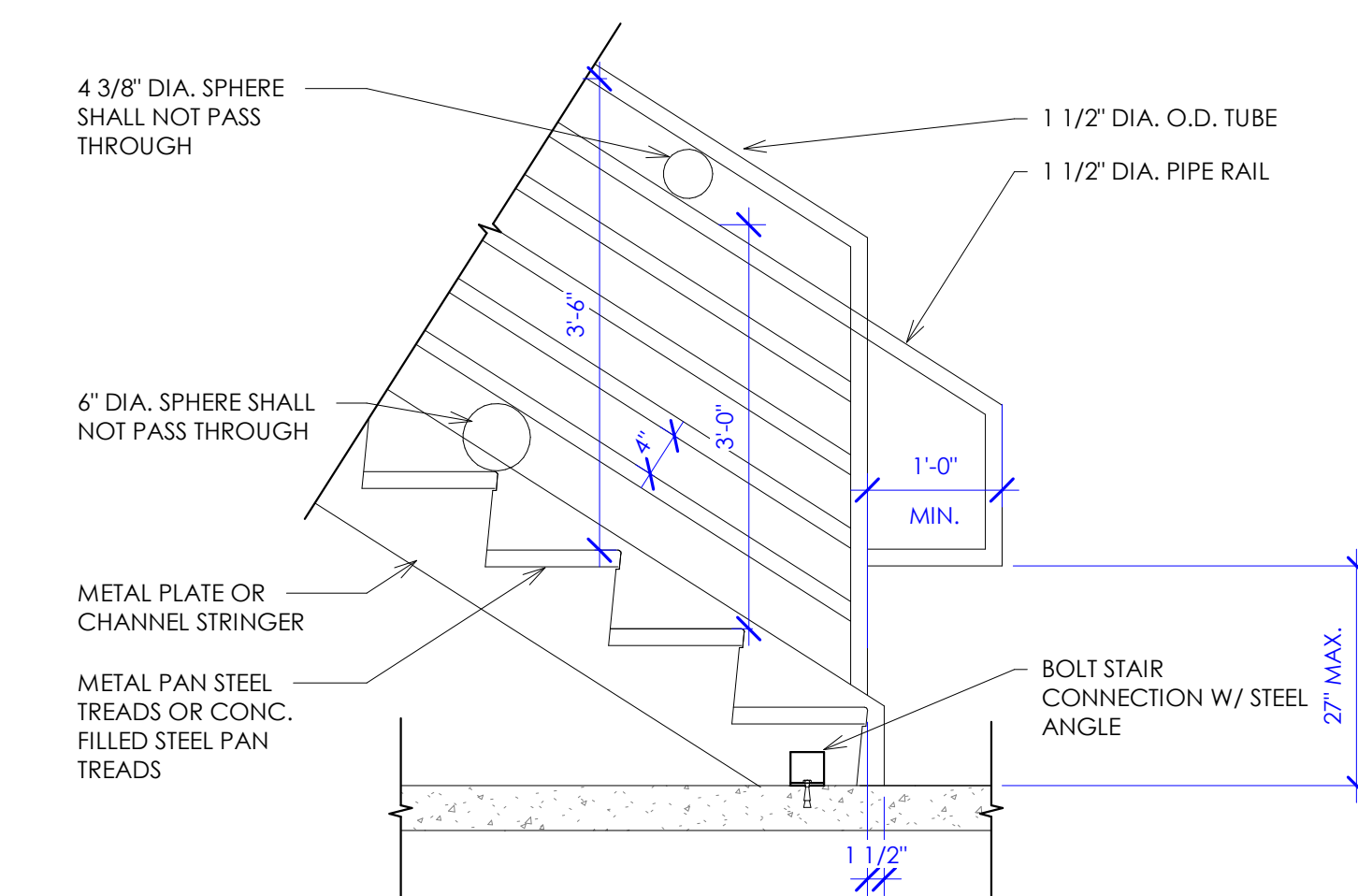
1 LANDING SUPPORT1
1" = 1'-0"



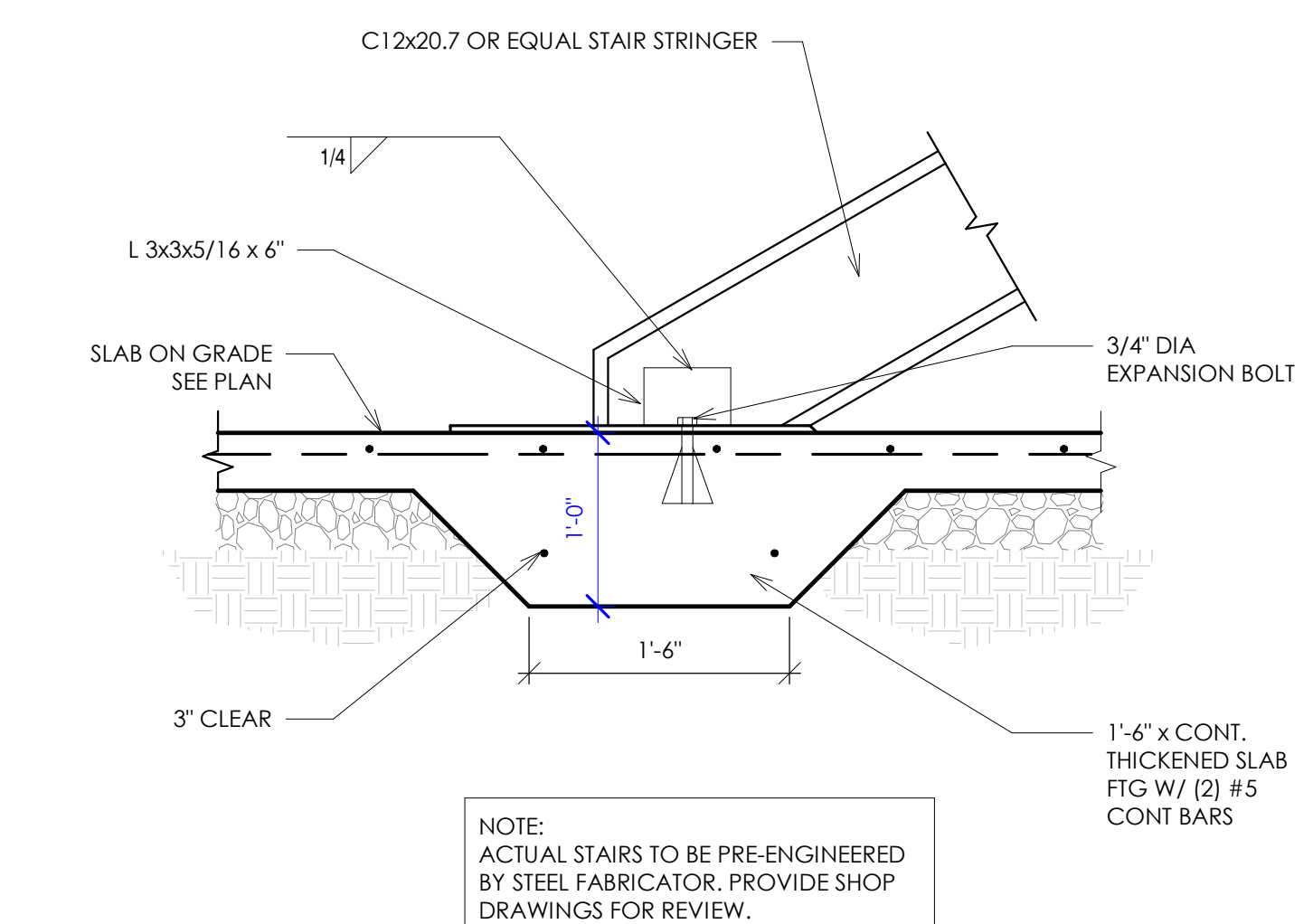
6 ENLARGED STAIR SECTION2
1/2" = 1'-0"



2 STAIR BEAM TO CONCRETE WALL CONNECTION - TYP.
1" = 1'-0"



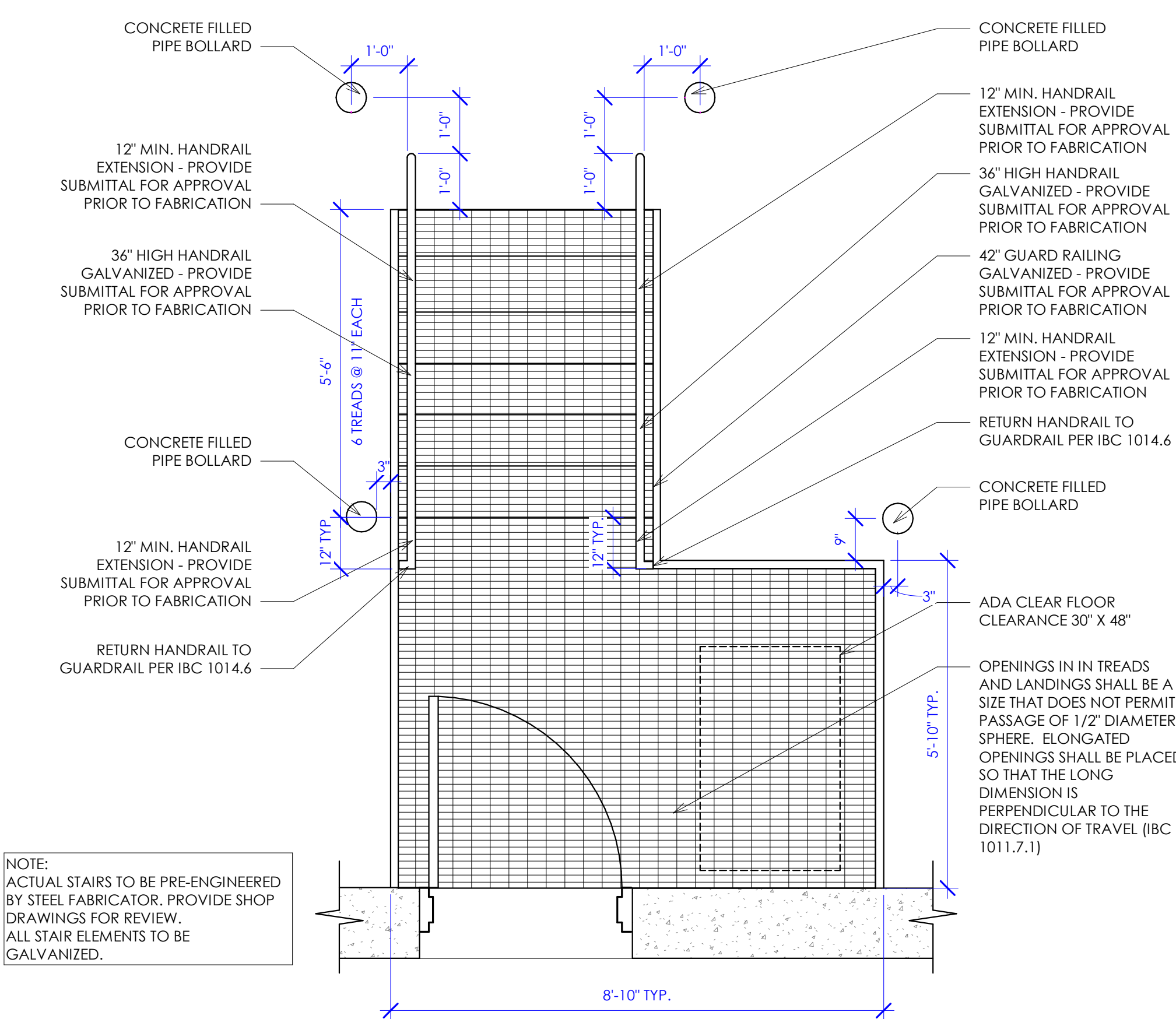
3 STAIR TO FLOOR ATTACHMENT - TYP.1
3/4" = 1'-0"



4 STRINGER ANCHORAGE DETAIL MID-TYPICAL
1" = 1'-0"

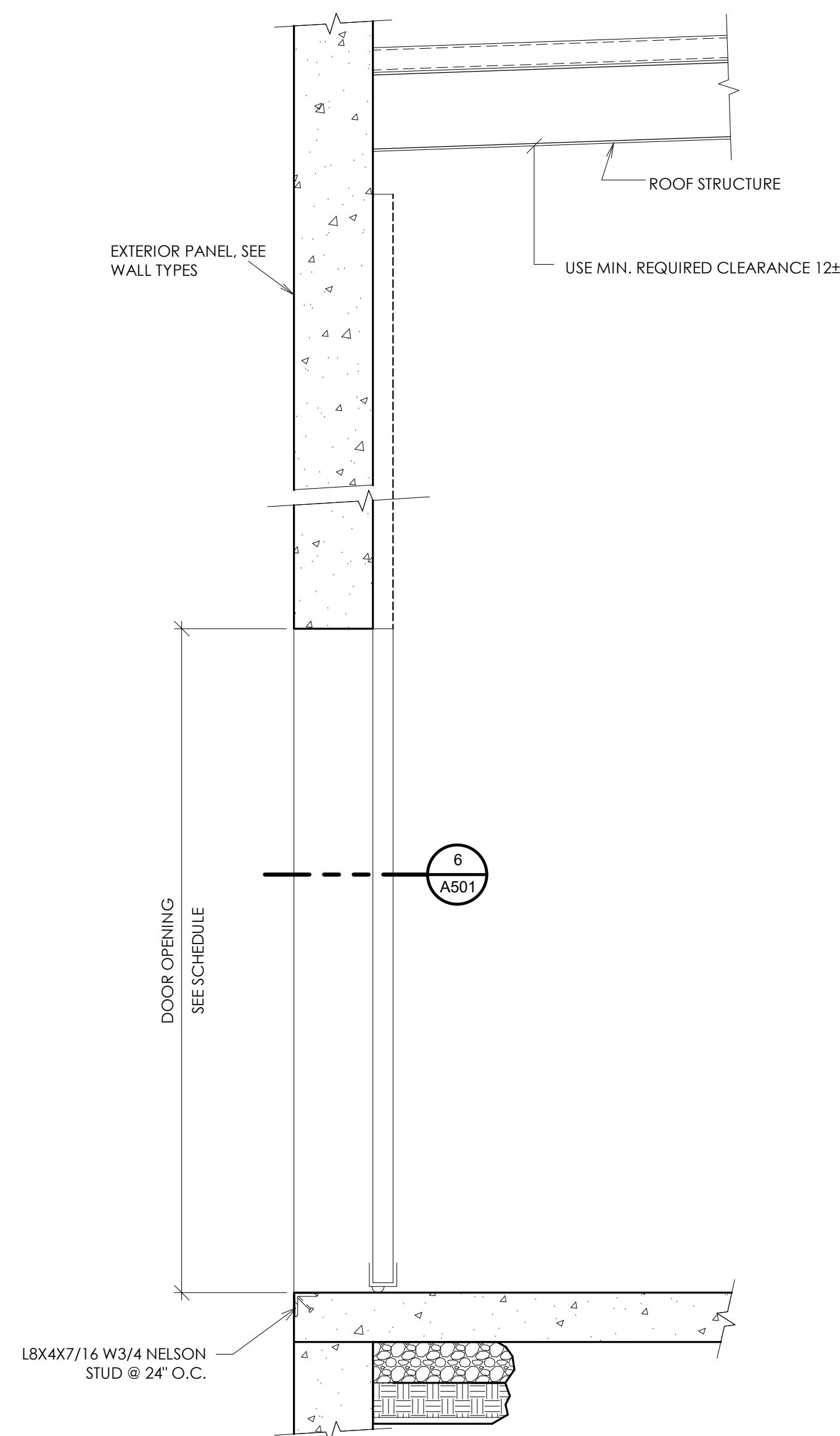


8 STAIR PERSPECTIVE
1/2" = 1'-0"



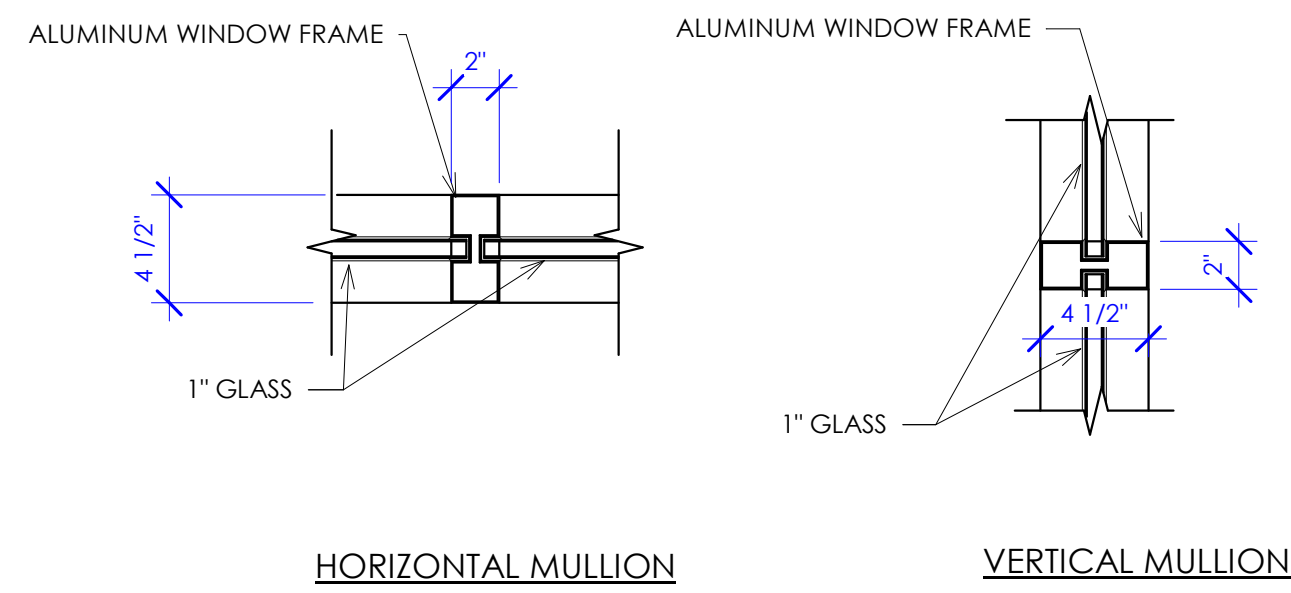
7 ENLARGED STAIR PLAN VIEW1
1/2" = 1'-0"

Revision	Schedule	Revision Date
MARK	DESCRIPTION	



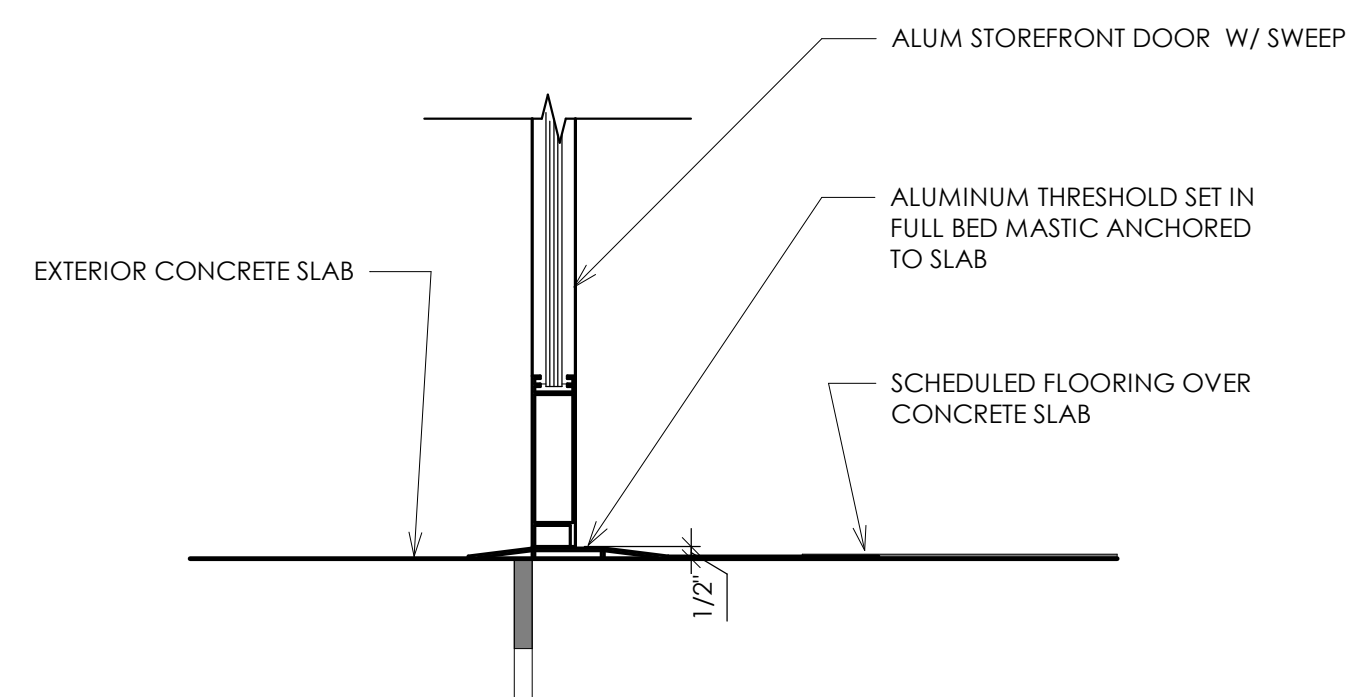
10
A501

HEAD AT SECTIONAL DOOR
1" = 1'-0"



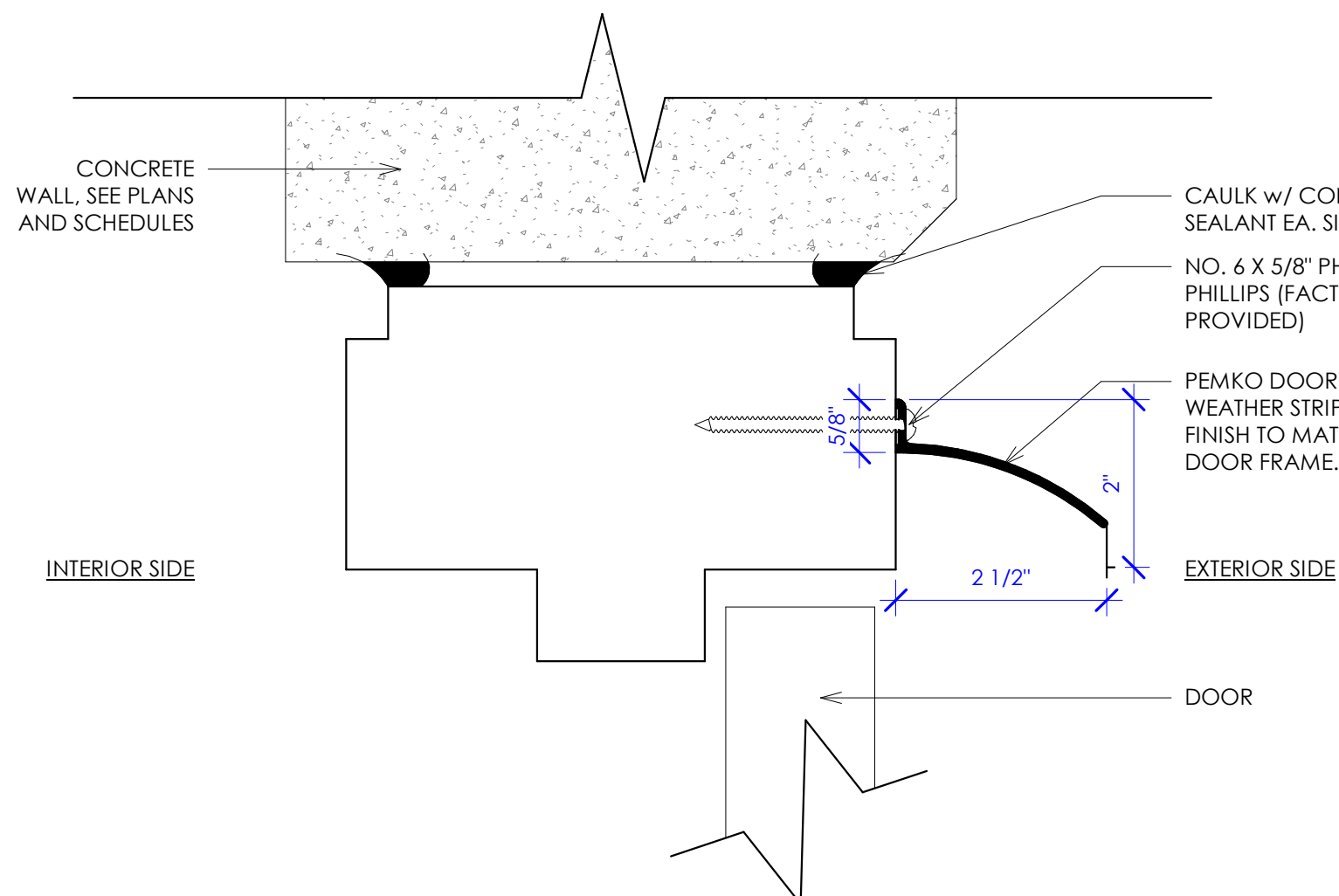
7
A501

WINDOW MULLION DETAIL (STOREFRONT)
1 1/2" = 1'-0"



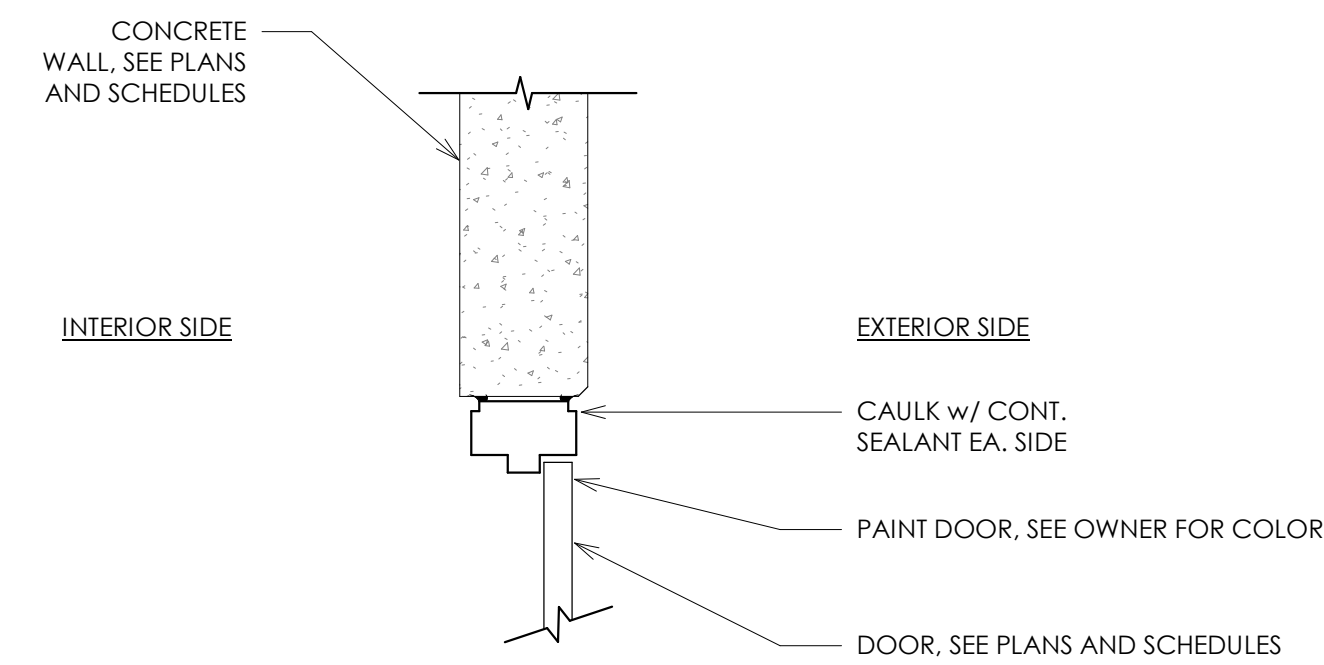
8
A501

ENTRY THRESHOLD DETAIL (STOREFRONT)
1 1/2" = 1'-0"



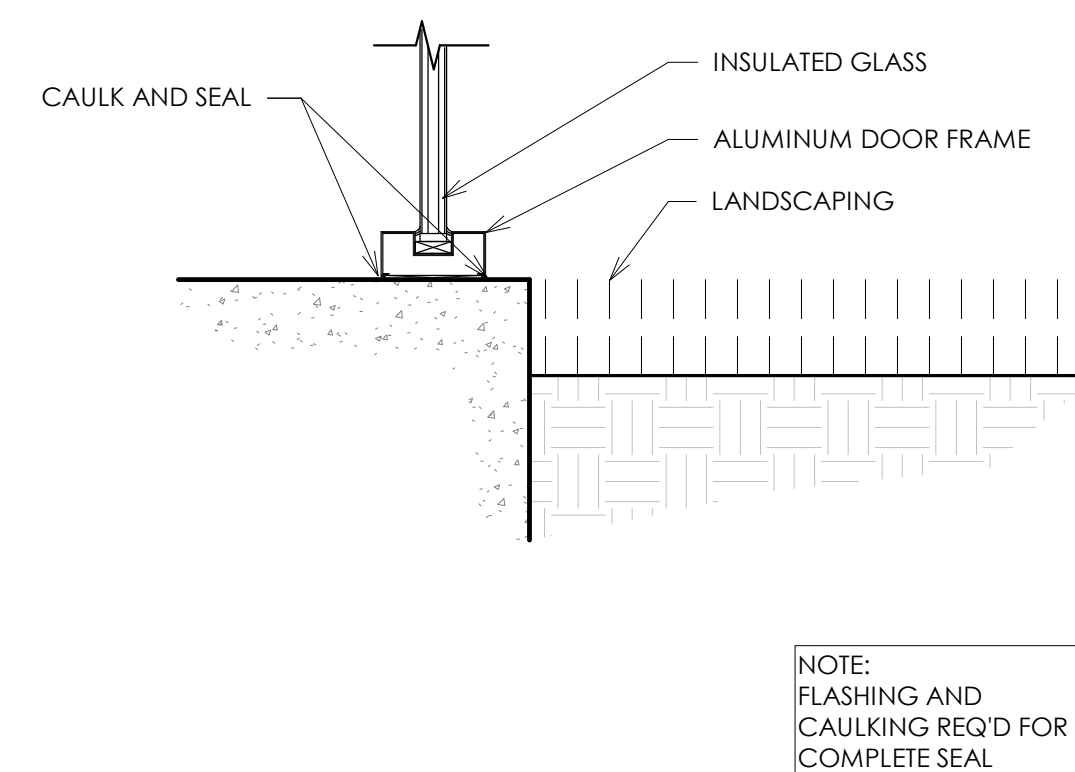
9
A501

DOOR TOP WEATHERSTRIP DETAIL
6" = 1'-0"



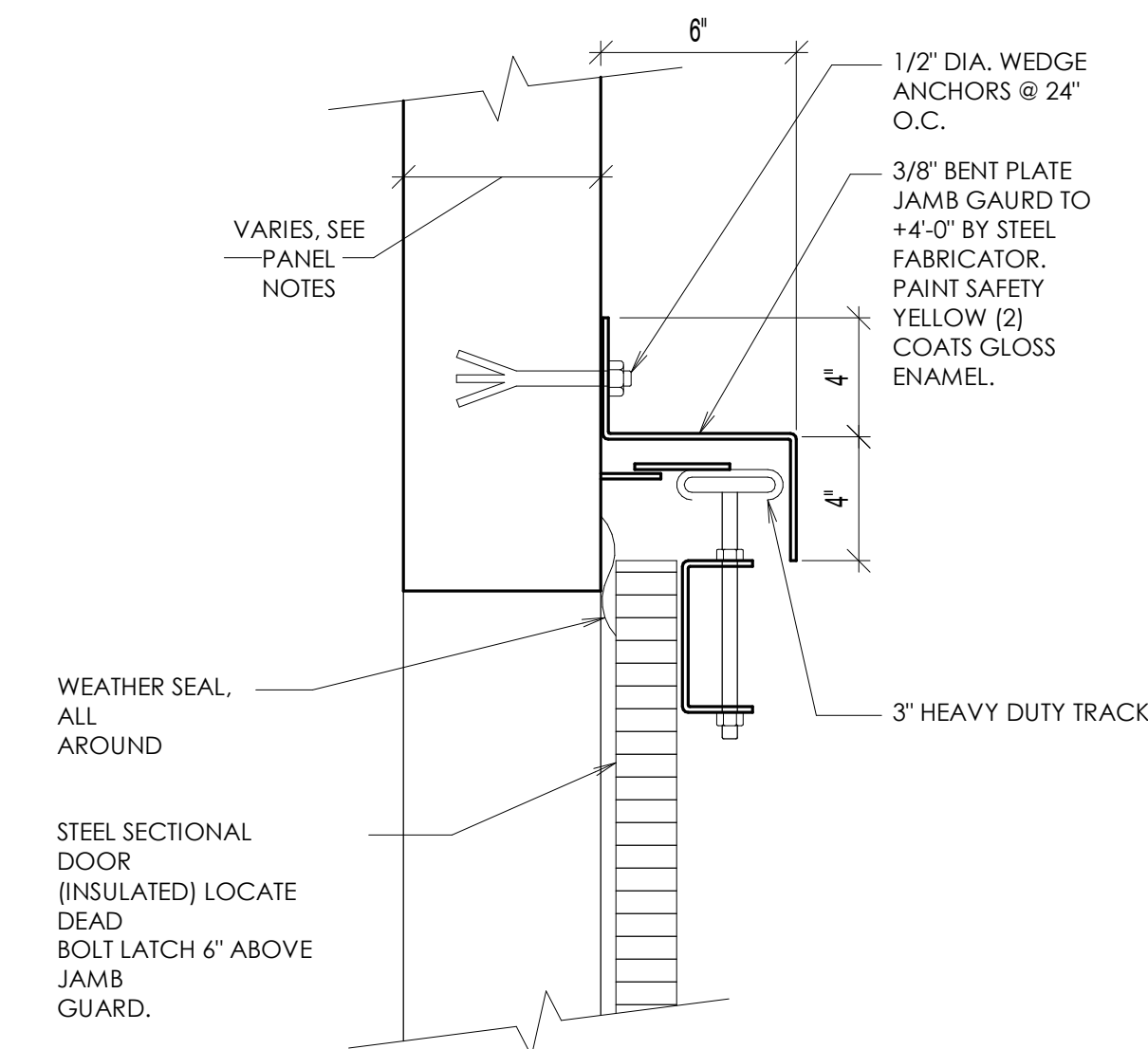
4
A501

DOOR HEADER DETAIL
1" = 1'-0"



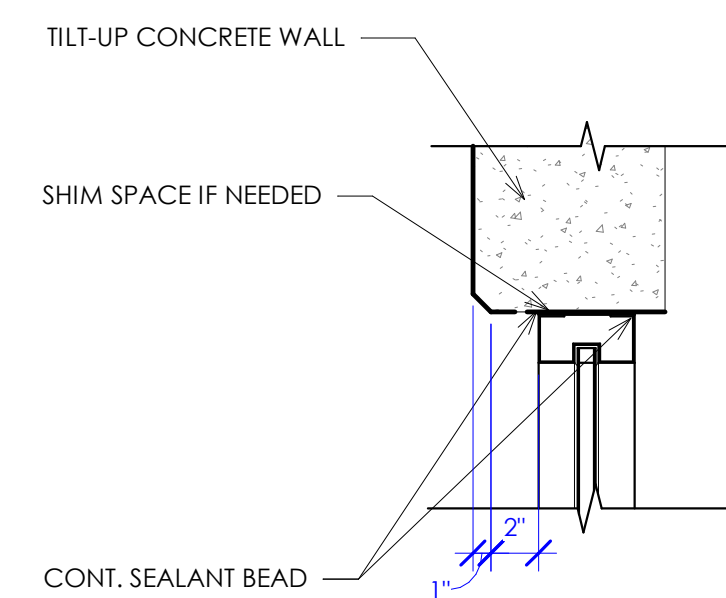
5
A501

WINDOW SILL (STOREFRONT)
1 1/2" = 1'-0"



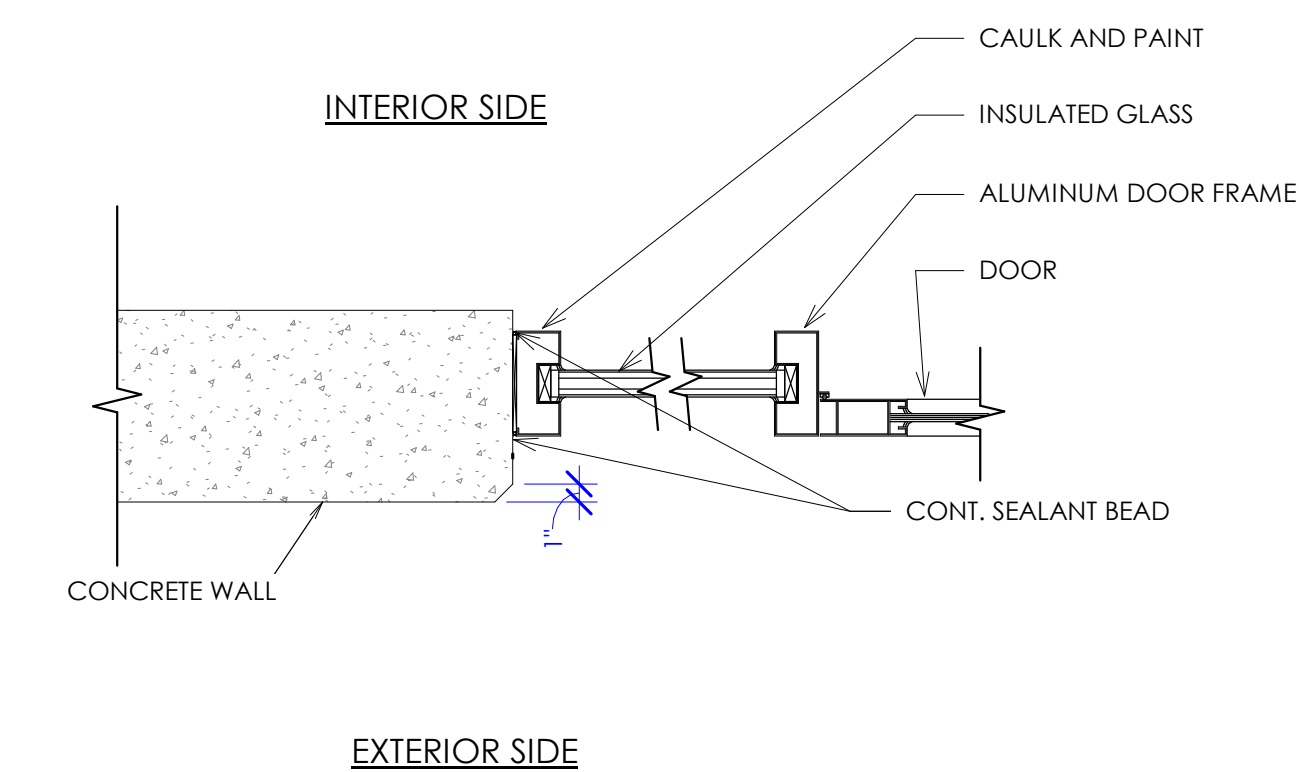
6
A501

JAMB AT SECTIONAL DOOR
1" = 1'-0"



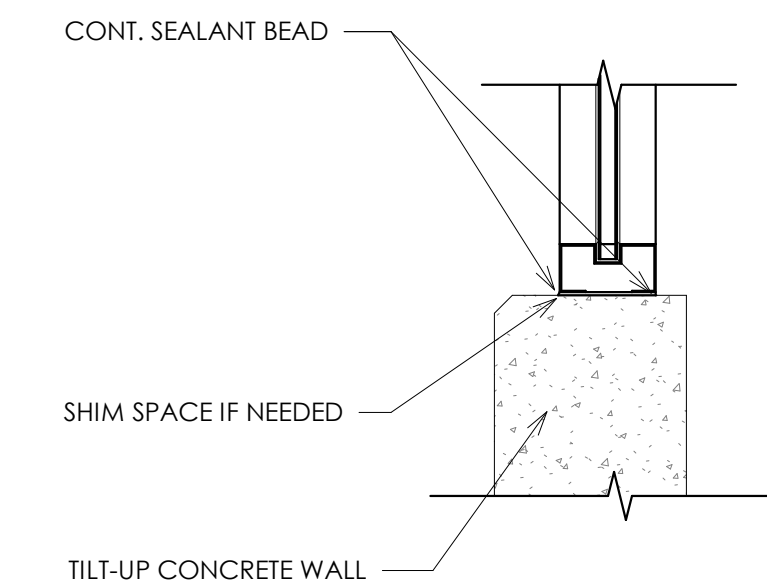
1
A501

WINDOW HEAD TILT PANEL (STOREFRONT)
1 1/2" = 1'-0"



2
A501

WINDOW/DOOR JAMB TILT PANEL (STOREFRONT)
1 1/2" = 1'-0"



3
A501

WINDOW SILL TILT PANEL (STOREFRONT)
1 1/2" = 1'-0"

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

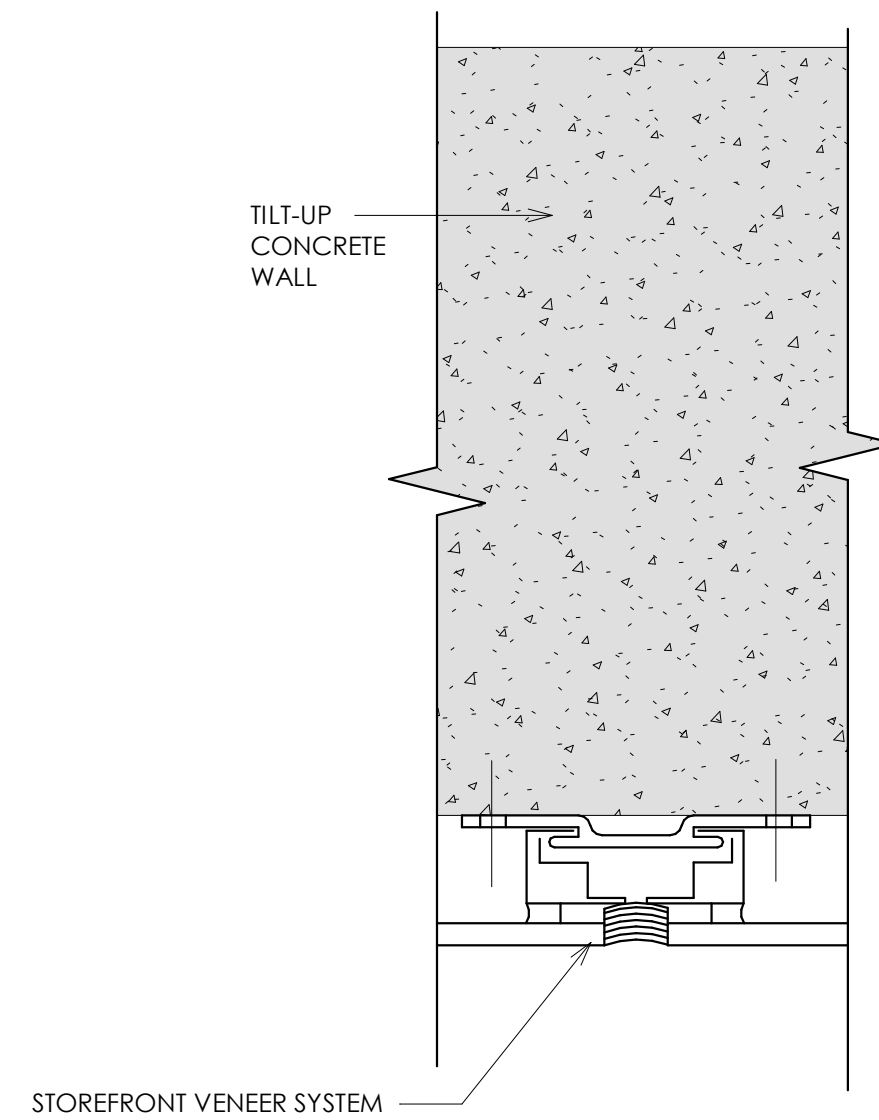
Revision	Revision Date
1	04/23/2025
2	04/23/2025
3	04/23/2025
4	04/23/2025
5	04/23/2025
6	04/23/2025
7	04/23/2025
8	04/23/2025
9	04/23/2025
10	04/23/2025

AE2022.290
WINDOW AND DOOR DETAILS

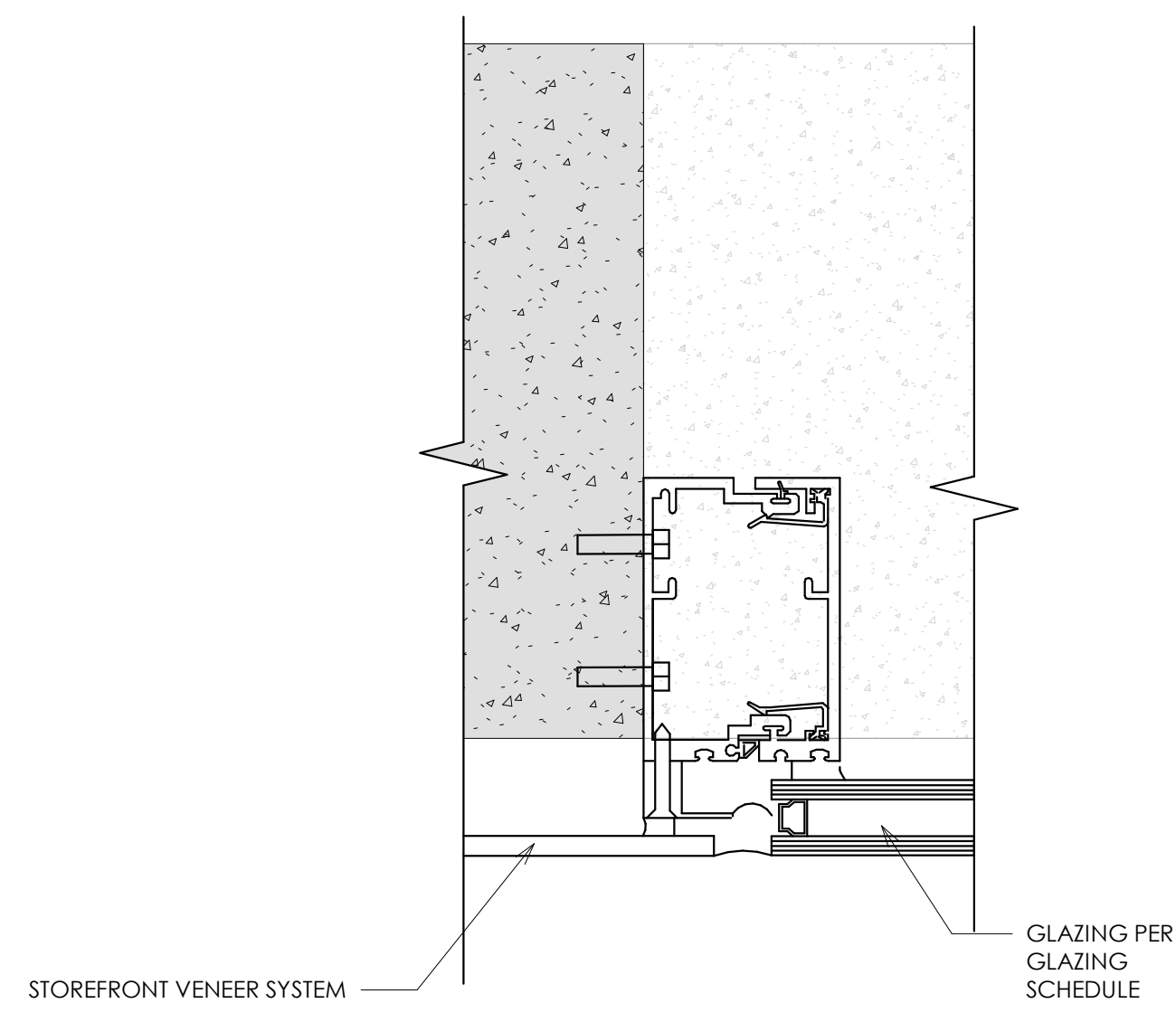
DATE: 04/23/2025

SHEET #:

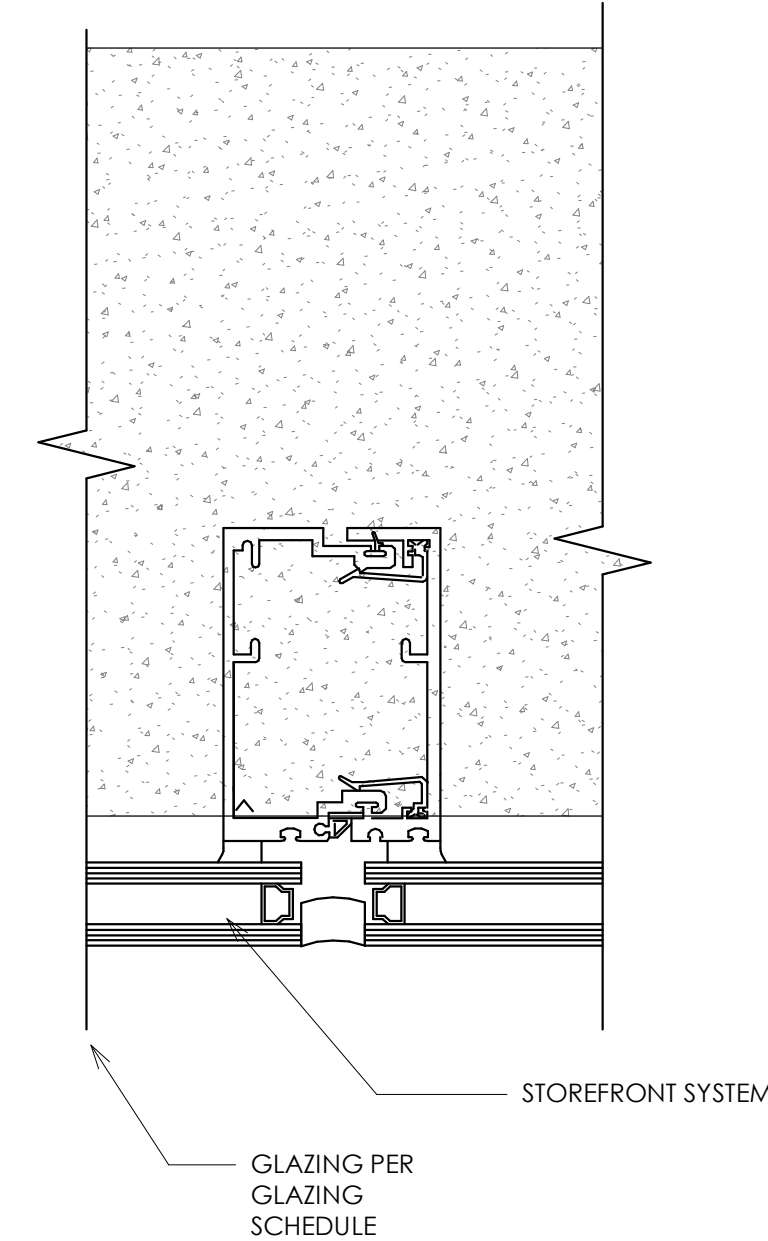
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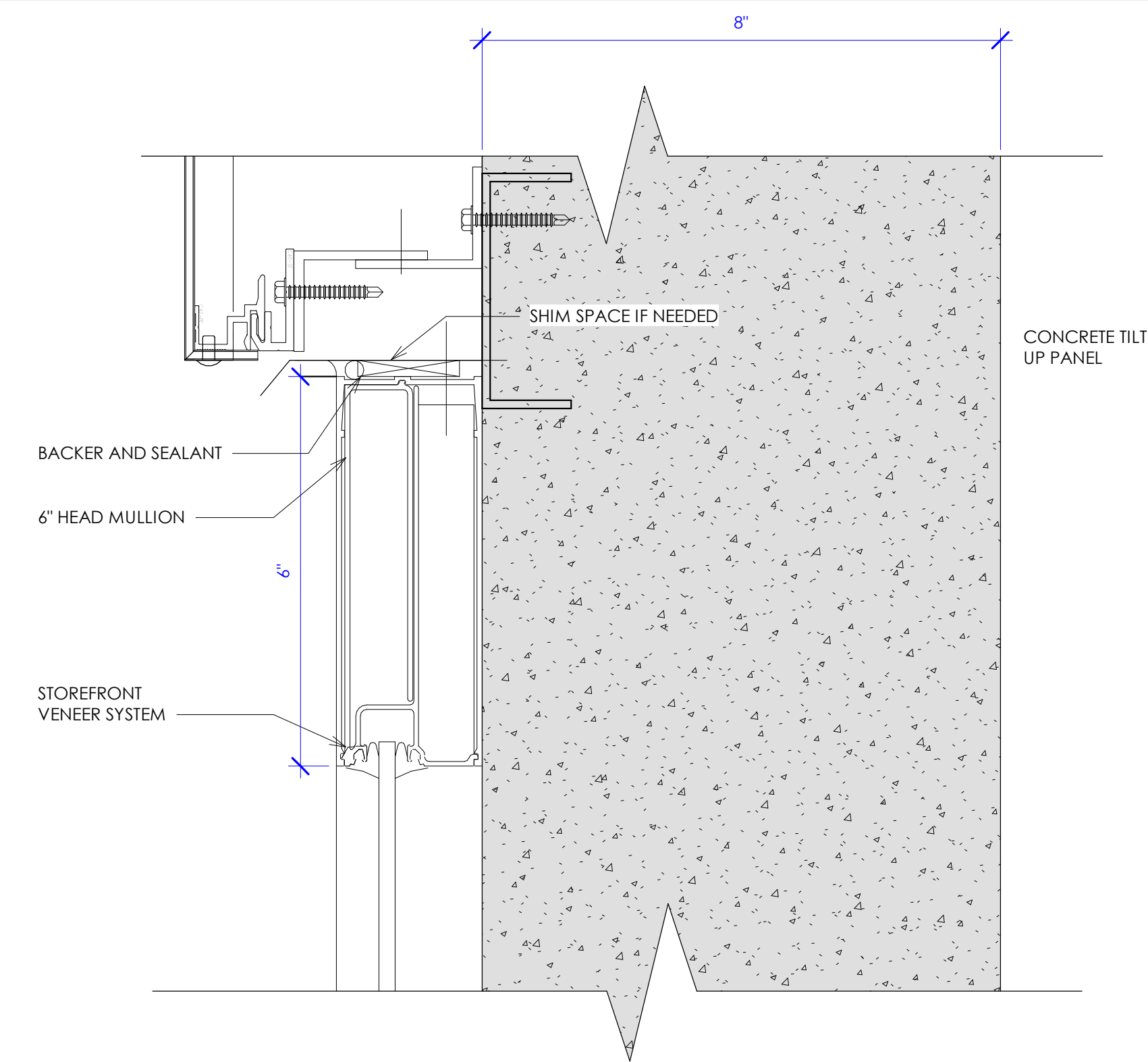
10
A502
STOREFRONT VENEER - PLAN - Thin1
6" = 1'-0"



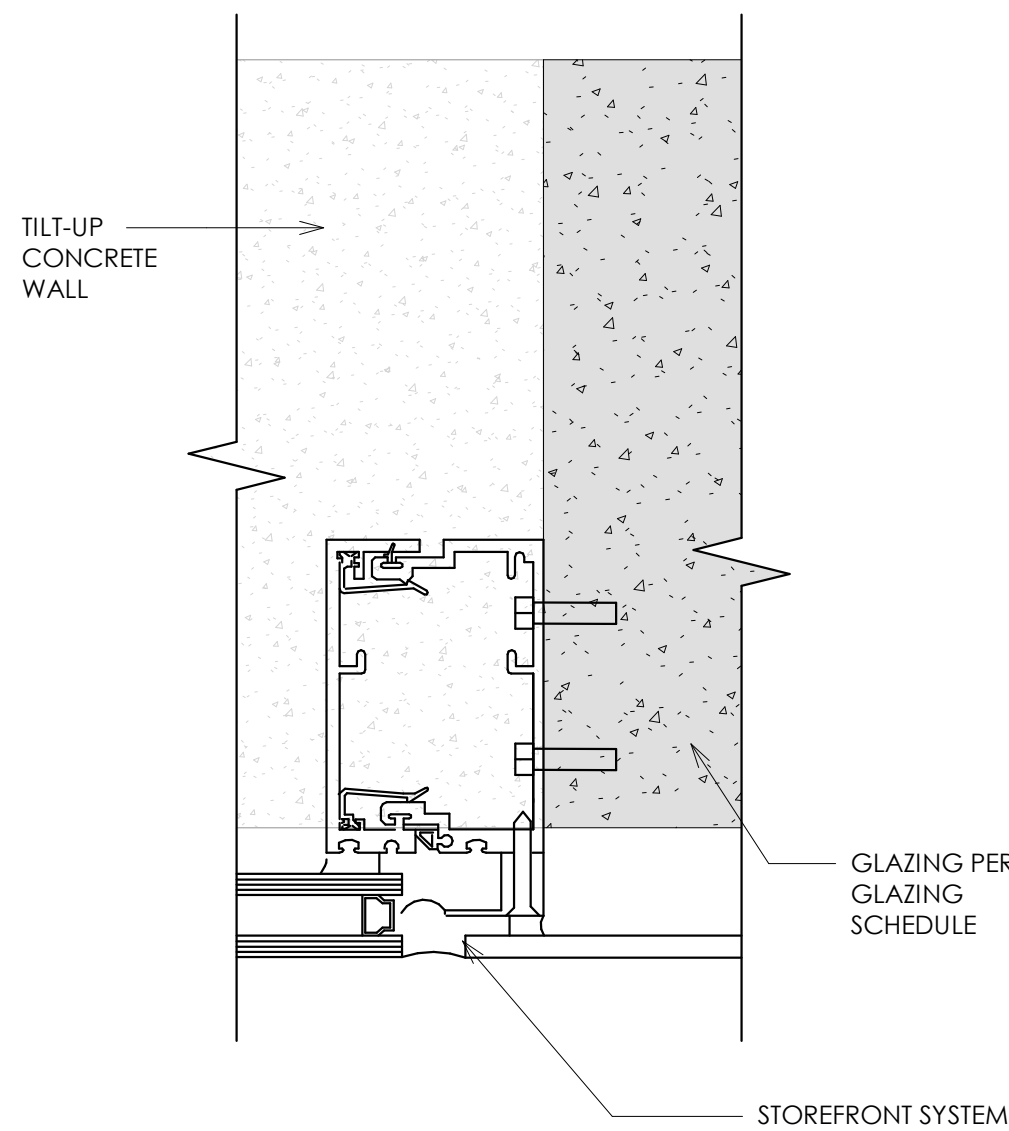
7
A502
STOREFRONT VENEER - PLAN - Transition1
6" = 1'-0"



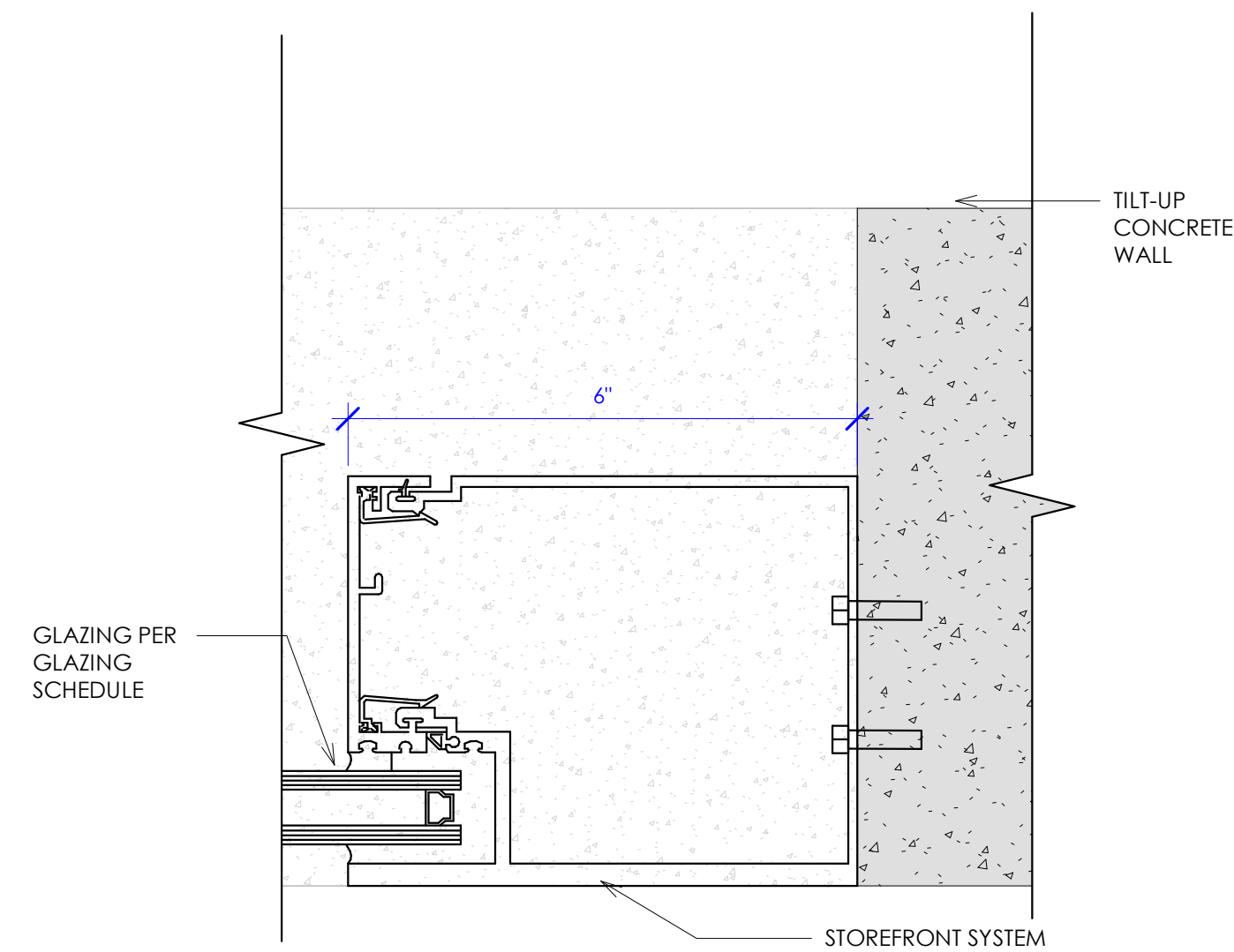
4
A502
STOREFRONT VENEER - PLAN - Middle1
6" = 1'-0"



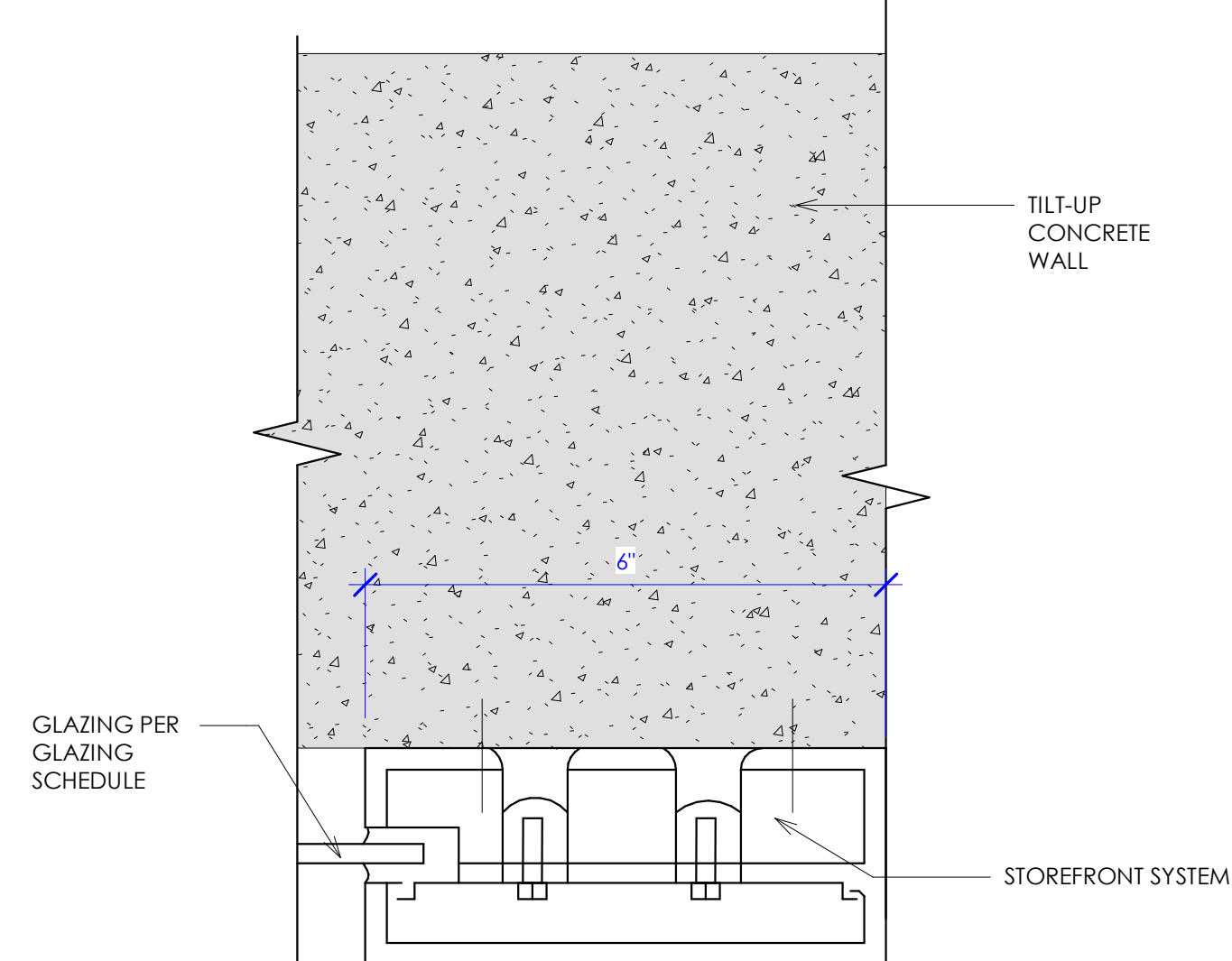
1
A502
STOREFRONT VENEER HEAD1
6" = 1'-0"



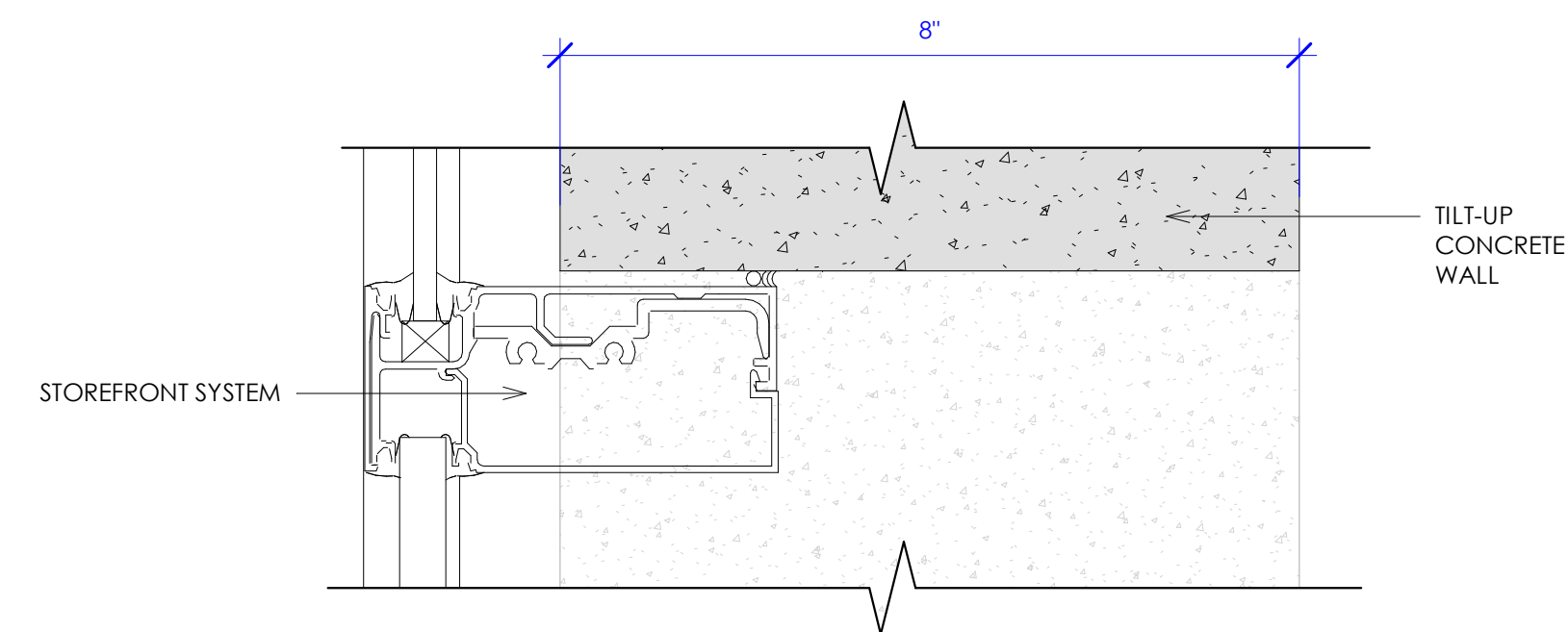
11
A502
STOREFRONT VENEER - PLAN - Transition Right1
6" = 1'-0"



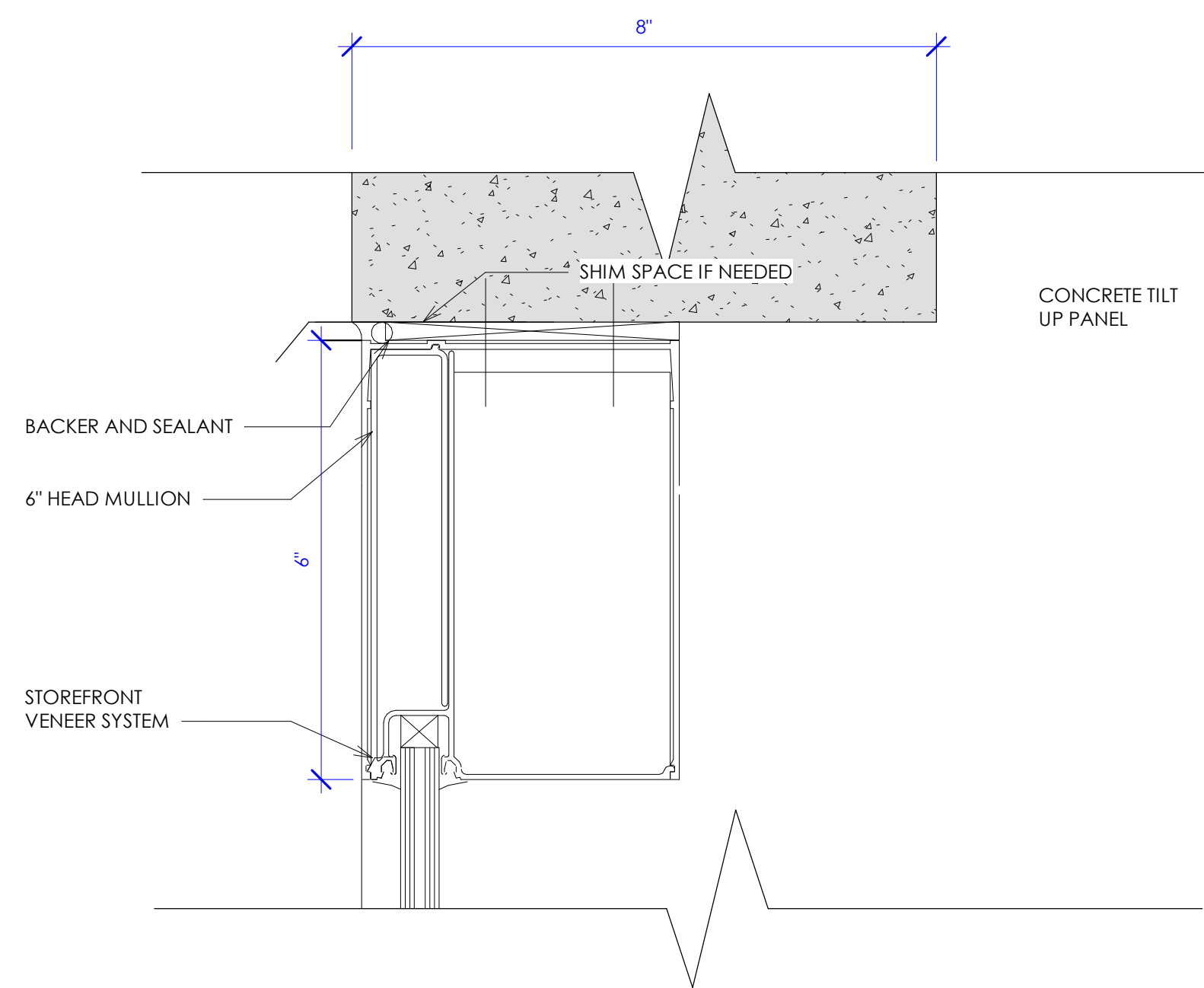
8
A502
STOREFRONT VENEER - PLAN - End1
6" = 1'-0"



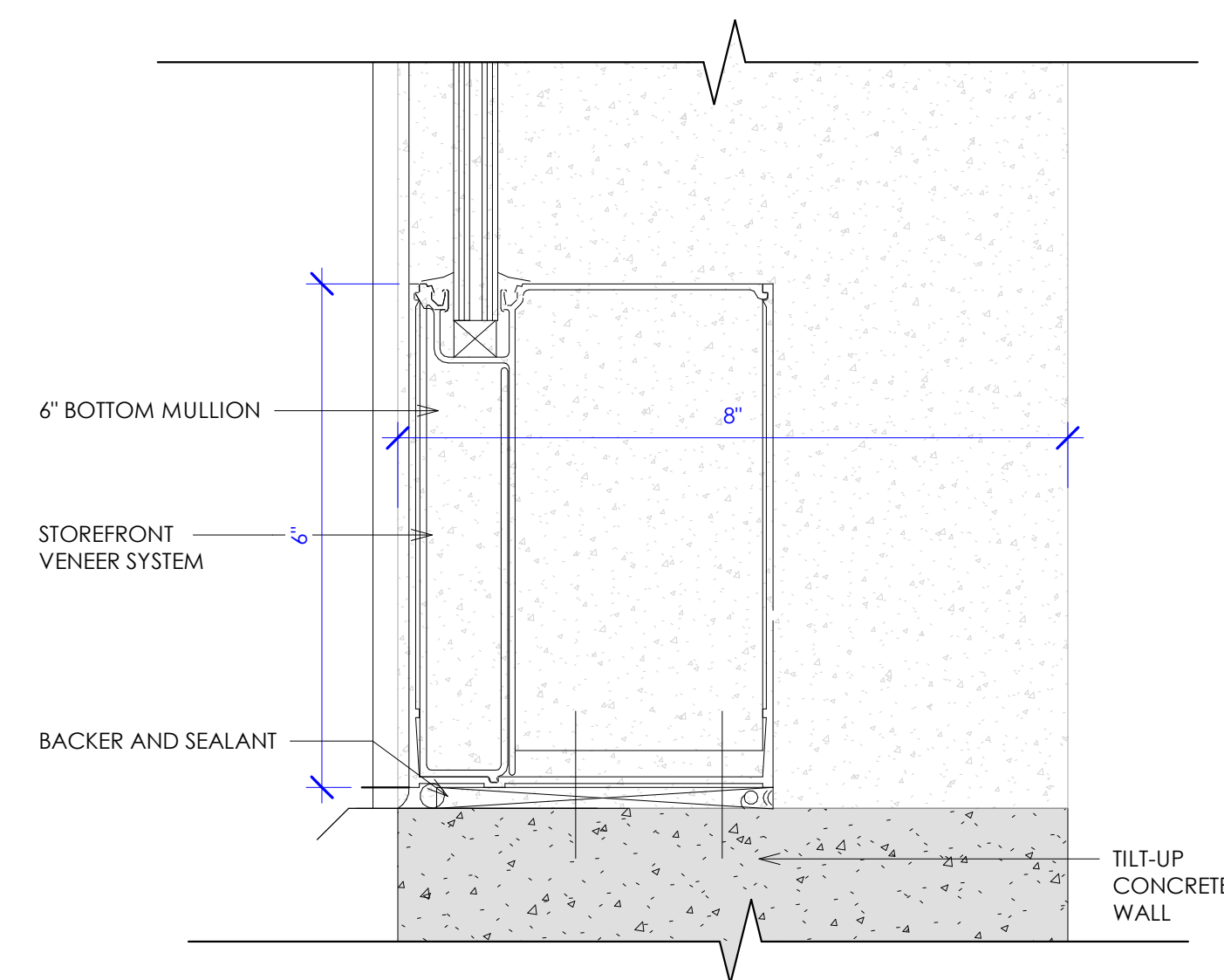
5
A502
STOREFRONT VENEER - PLAN - End - Thin1
6" = 1'-0"



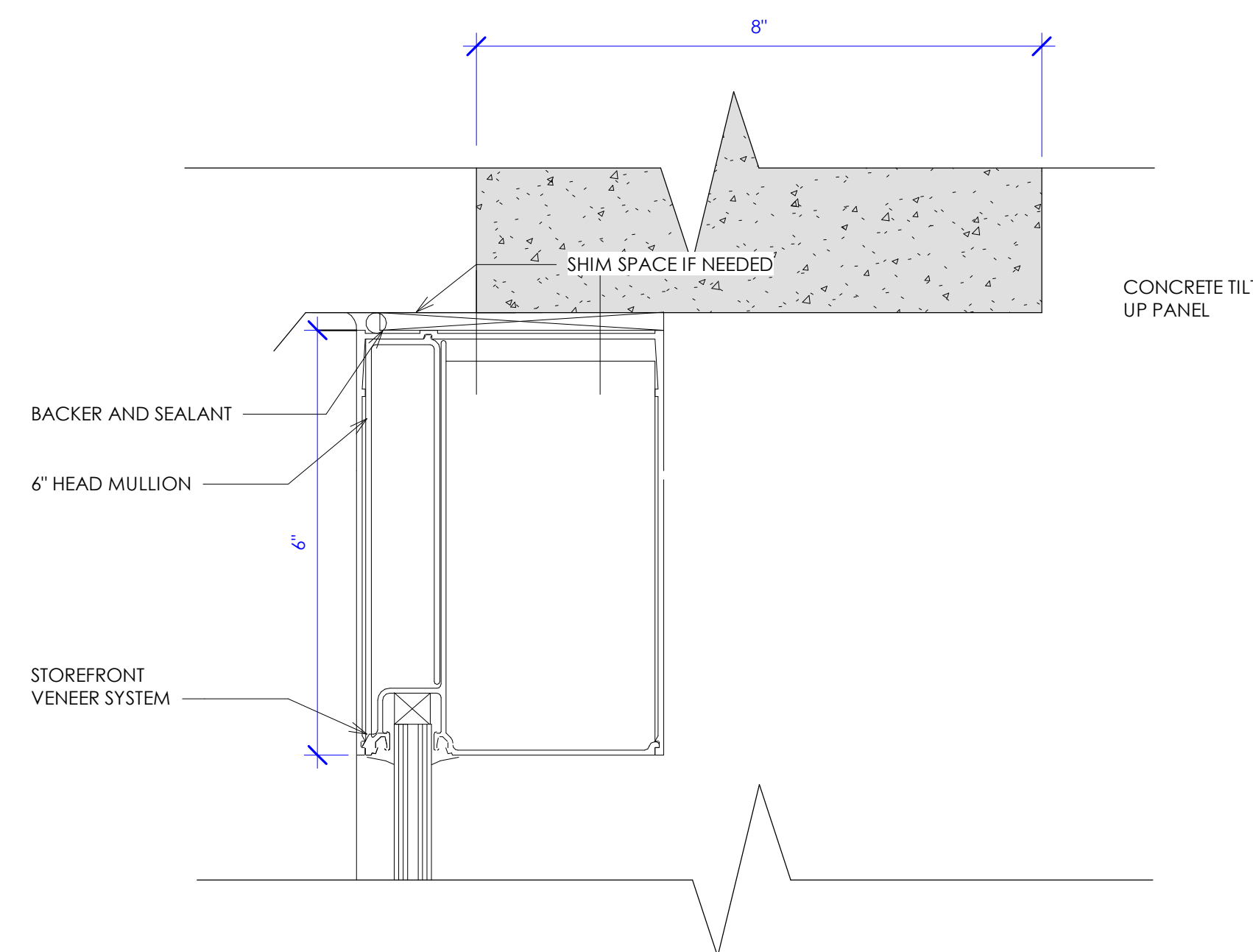
2
A502
STOREFRONT VENEER AT LINTEL - BOTTOM1
6" = 1'-0"



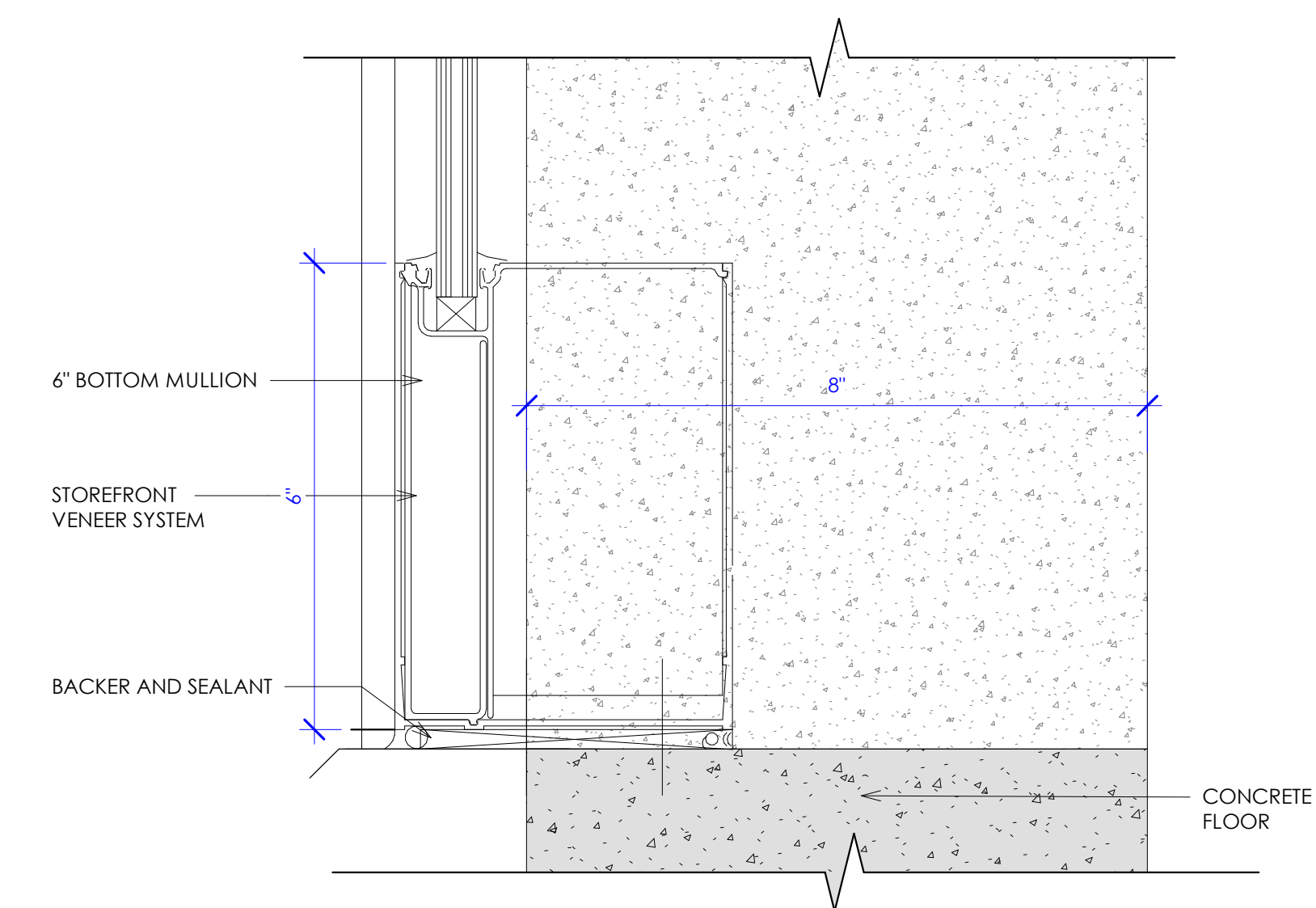
12
A502
STOREFRONT VENEER HEAD 3
6" = 1'-0"



9
A502
STOREFRONT VENEER BOTTOM 3
6" = 1'-0"



6
A502
STOREFRONT VENEER HEAD 1
6" = 1'-0"



3
A502
STOREFRONT VENEER AT BOTTOM
6" = 1'-0"

MARK	REVISION	DATE

RODERICK CATALYST BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

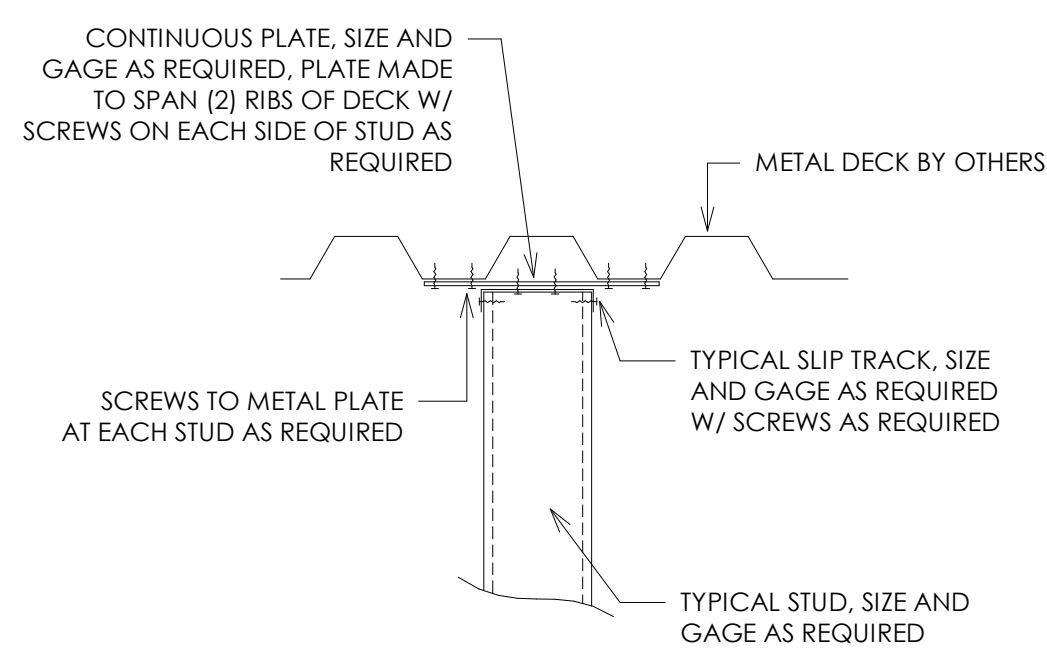
CONSTRUCTION DOCUMENTS / BID SET

4/28/2025 11:19:01 AM

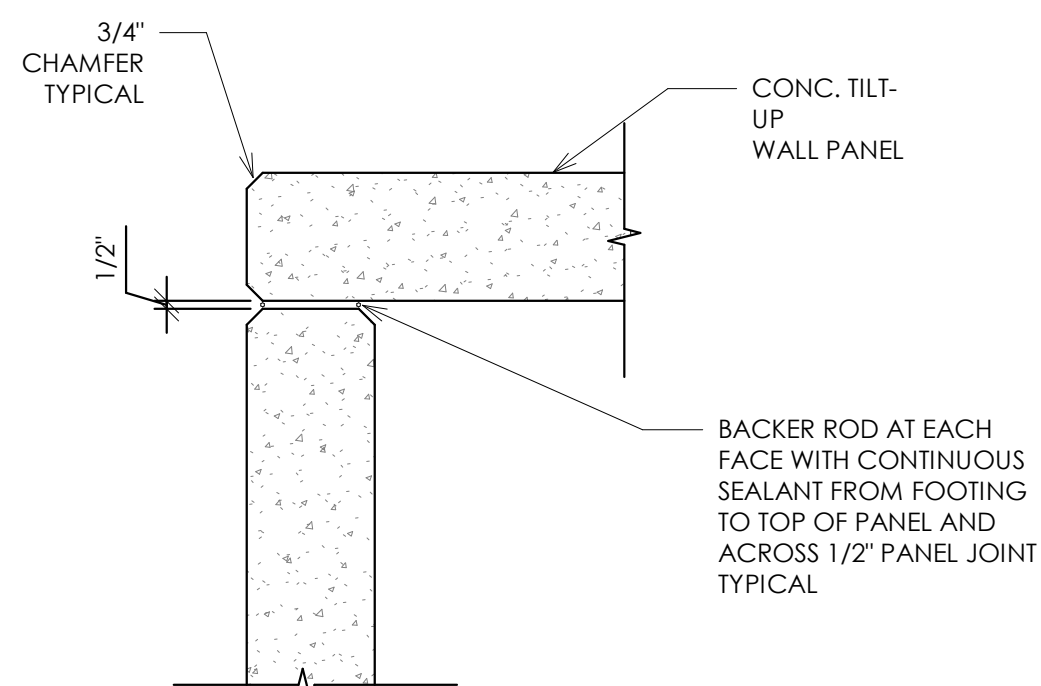
AE2022.290
**FRAMING
DETAILS**

DATE: 04/23/2025

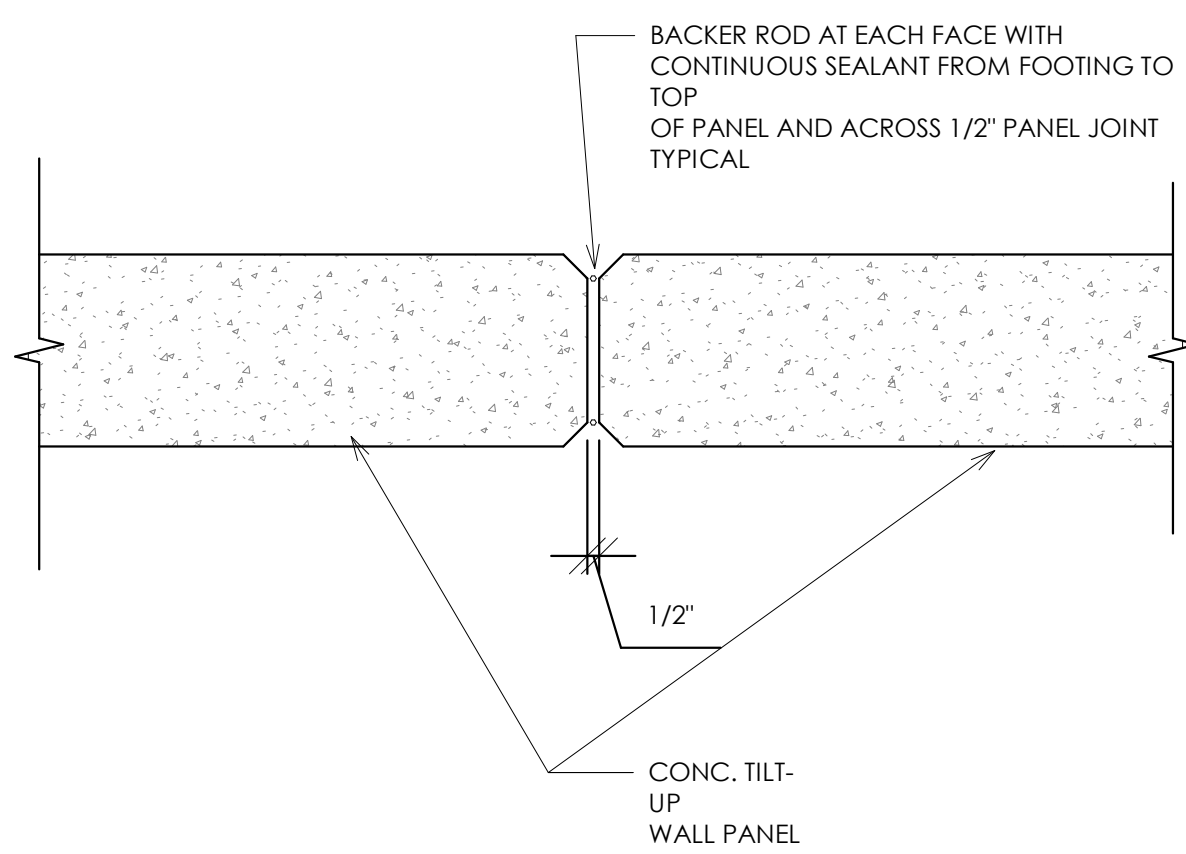
SHEET #:

A503COPYRIGHT ©
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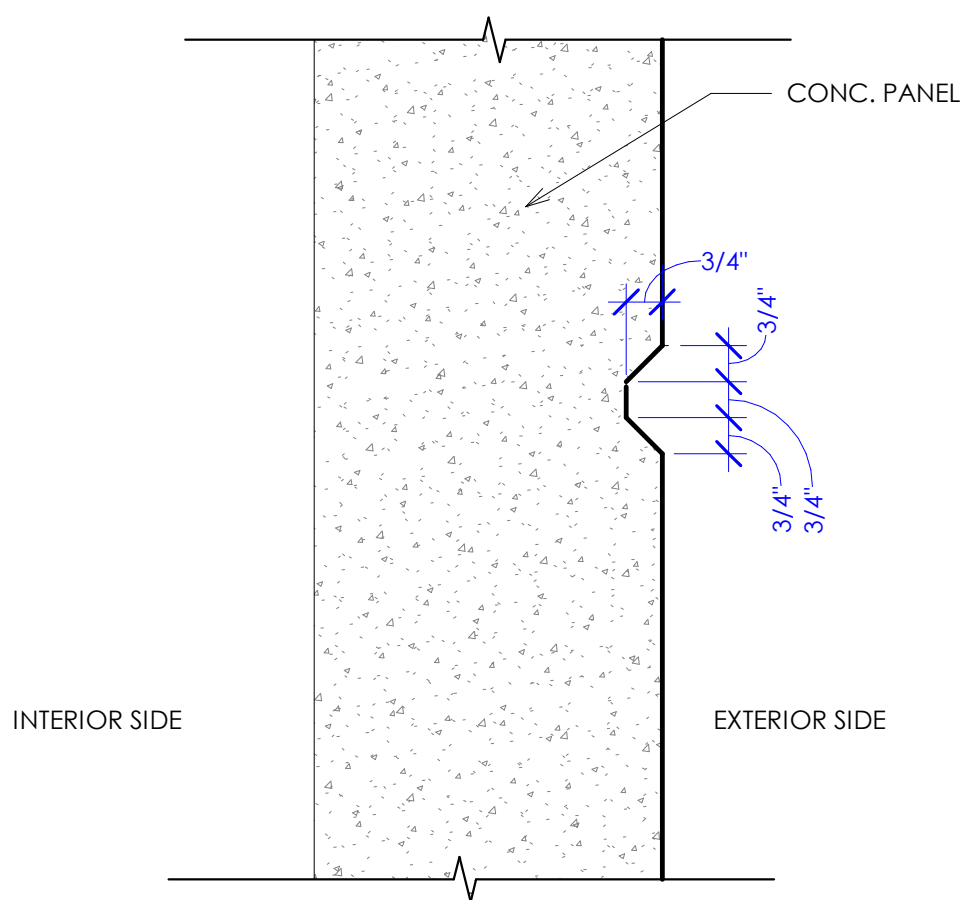
5 CONNECTION TO METAL DECK1
3/4" = 1'-0"



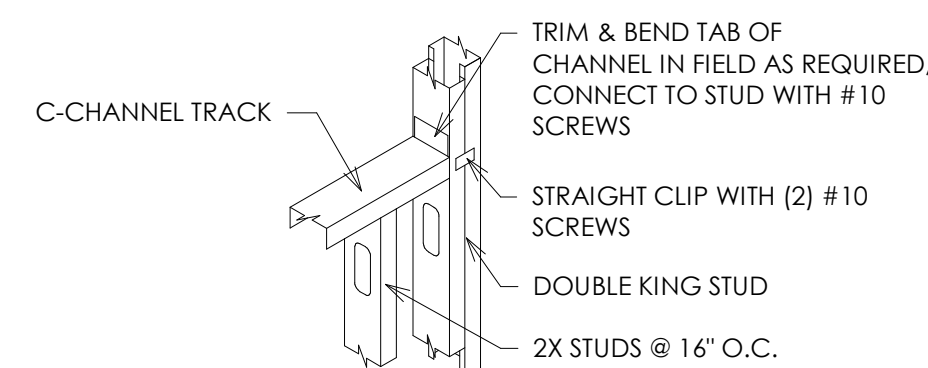
6 CONCRETE TILT-UP DETAIL - CORNER
1" = 1'-0"



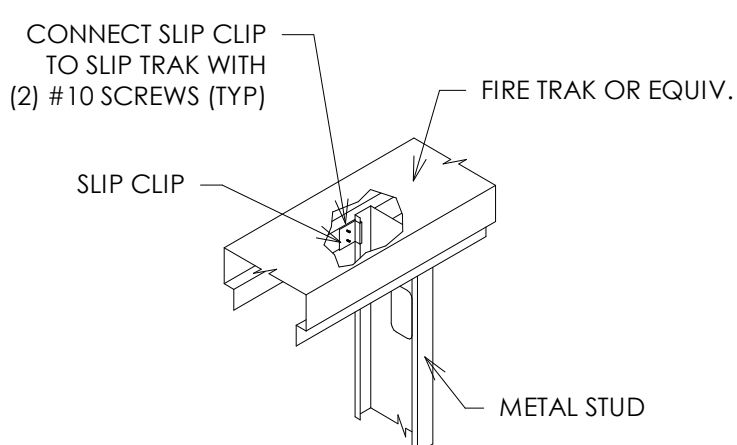
9 CONCRETE TILT-UP DETAIL - PANEL JOINT
1 1/2" = 1'-0"



7 TYPICAL REVEAL DETAIL
2" = 1'-0"

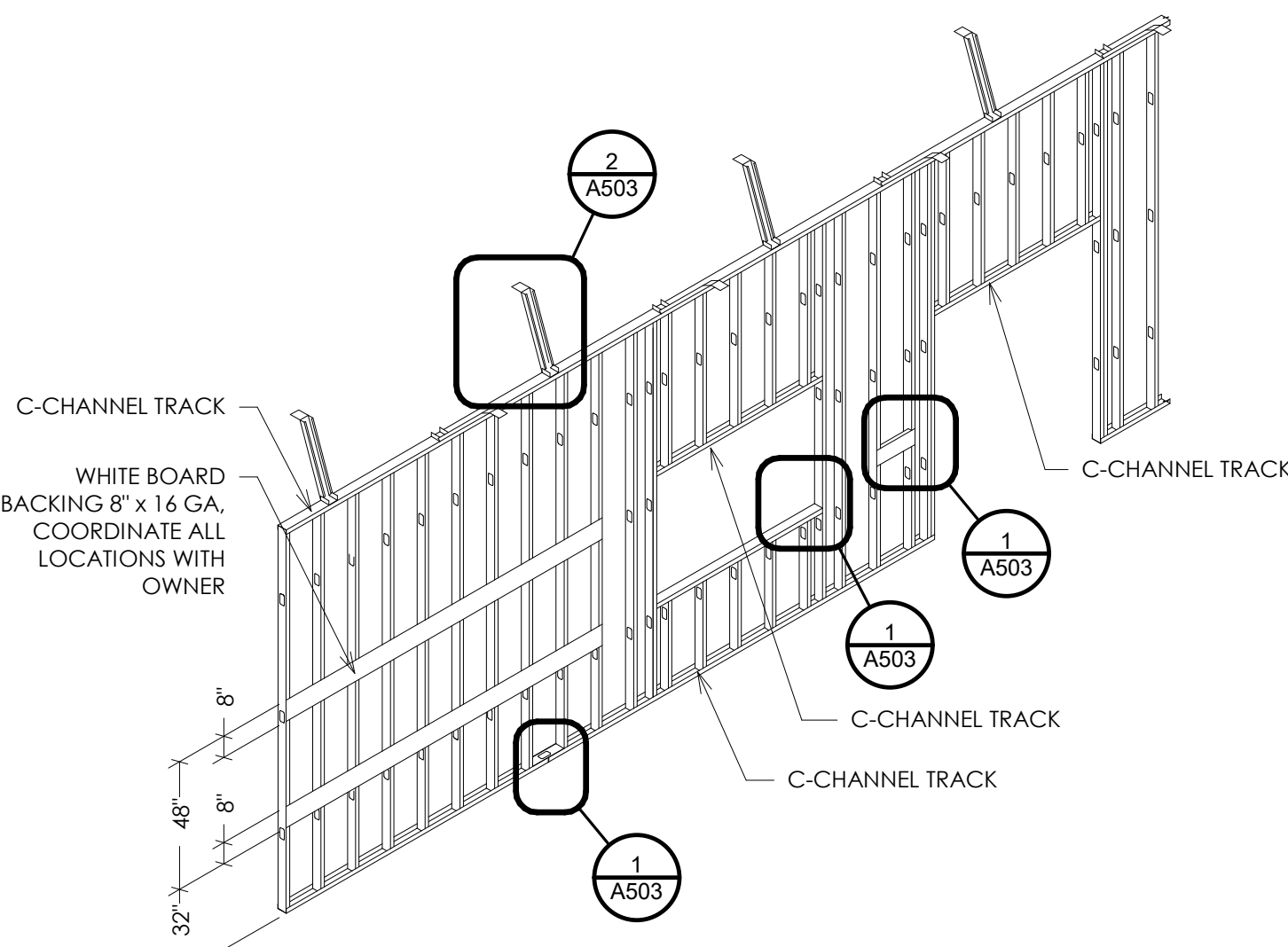


SILL DETAIL

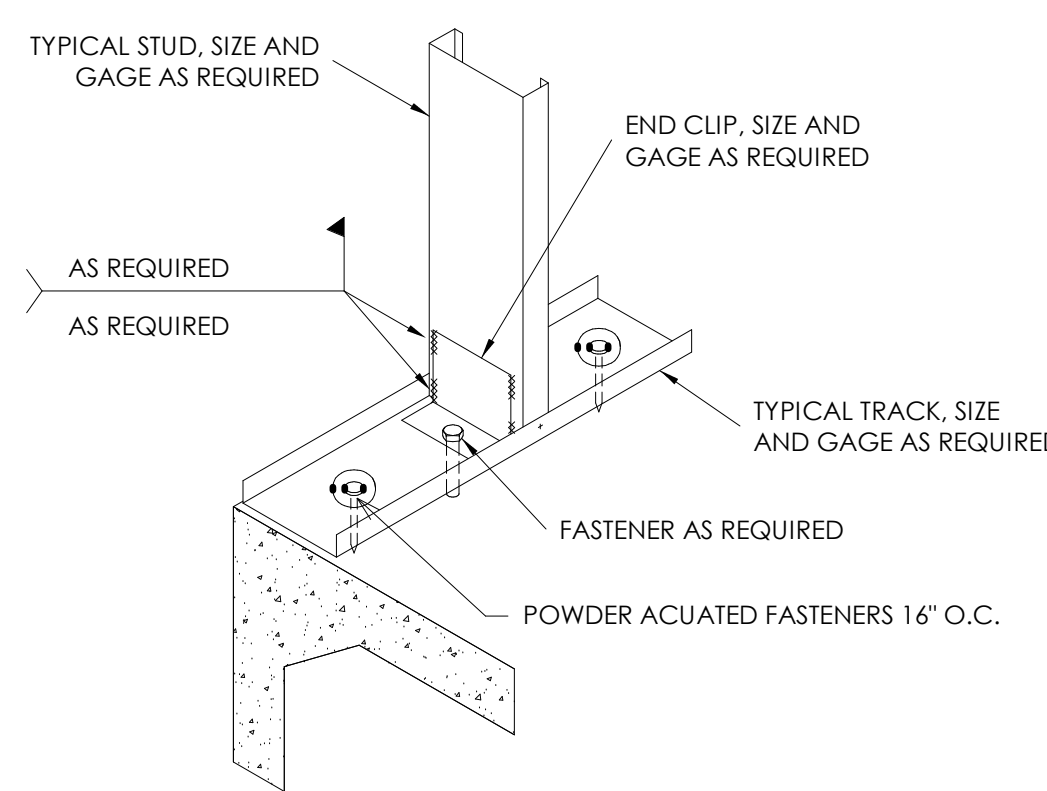


SLIP TRACK @ WALL HEAD

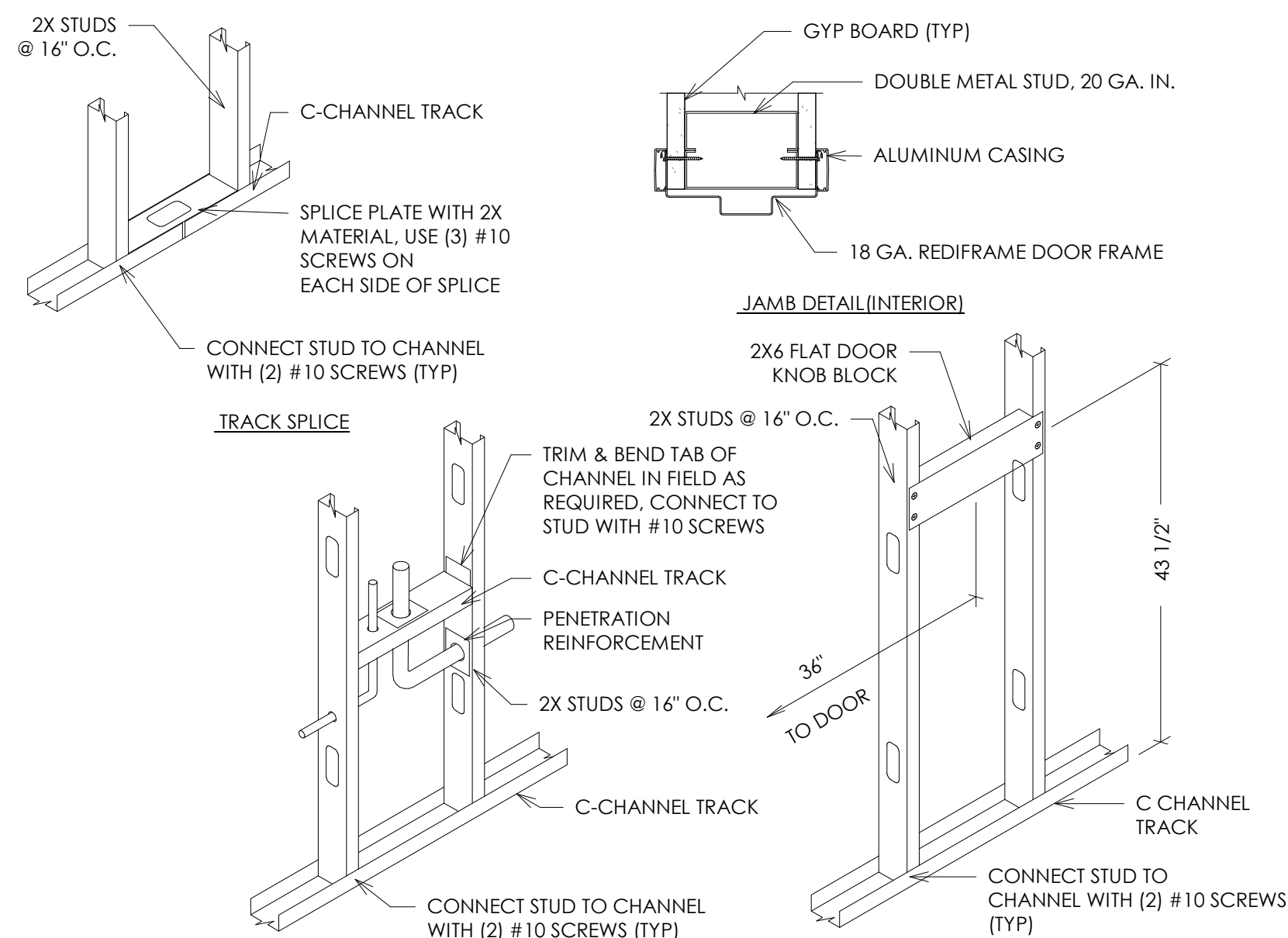
1 TYPICAL METAL FRAMING DETAILS
1" = 1'-0"



3 INTERIOR WALL SECTION
1" = 1'-0"

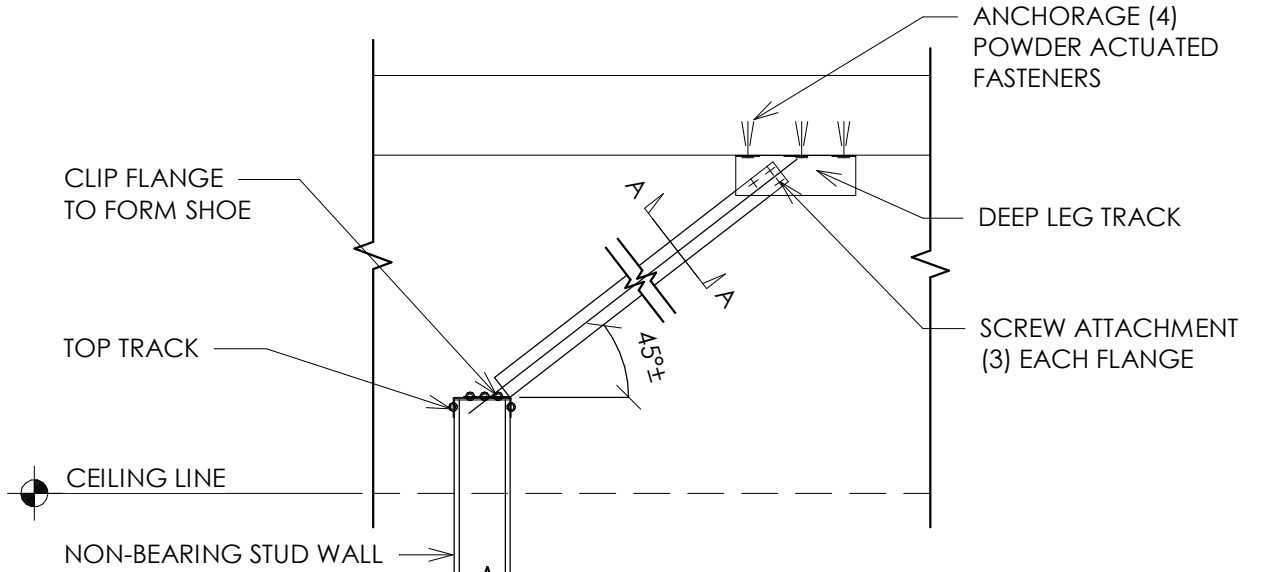


4 TYPICAL BASE CONNECTION1
3/4" = 1'-0"

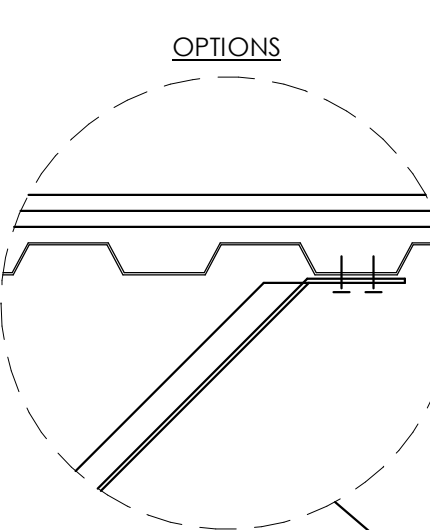


TYPICAL FRAMING PENETRATION

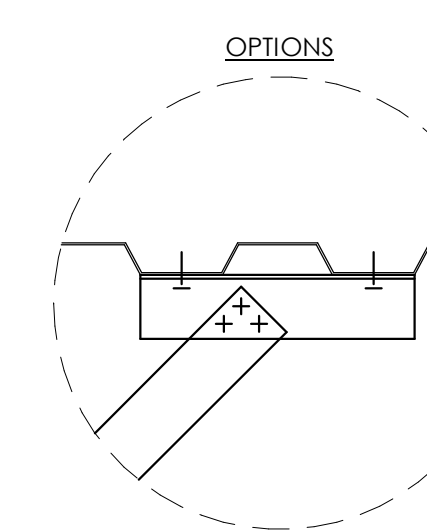
DOOR KNOB BLOCKING DETAIL



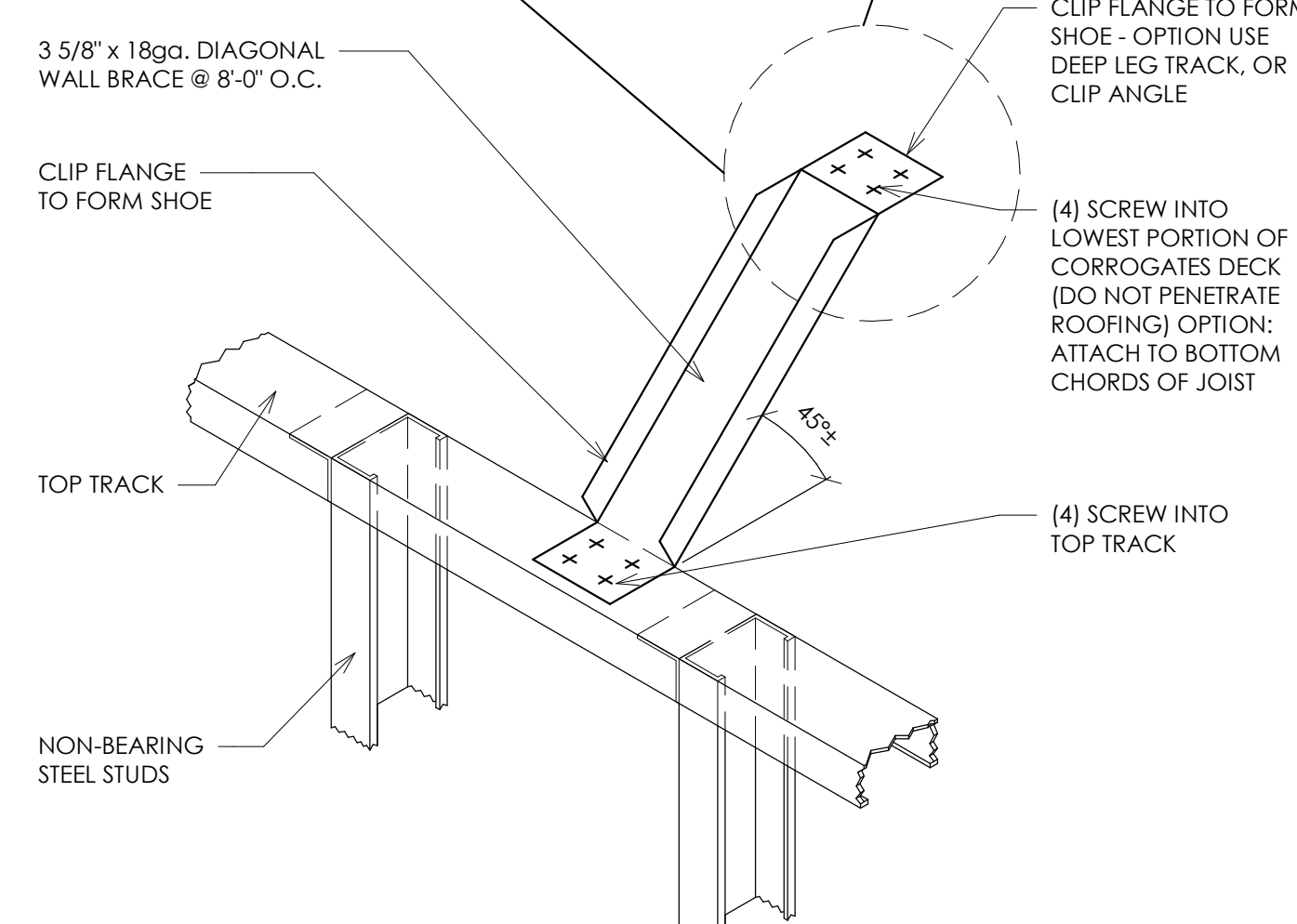
SIDE VIEW



OPTIONS

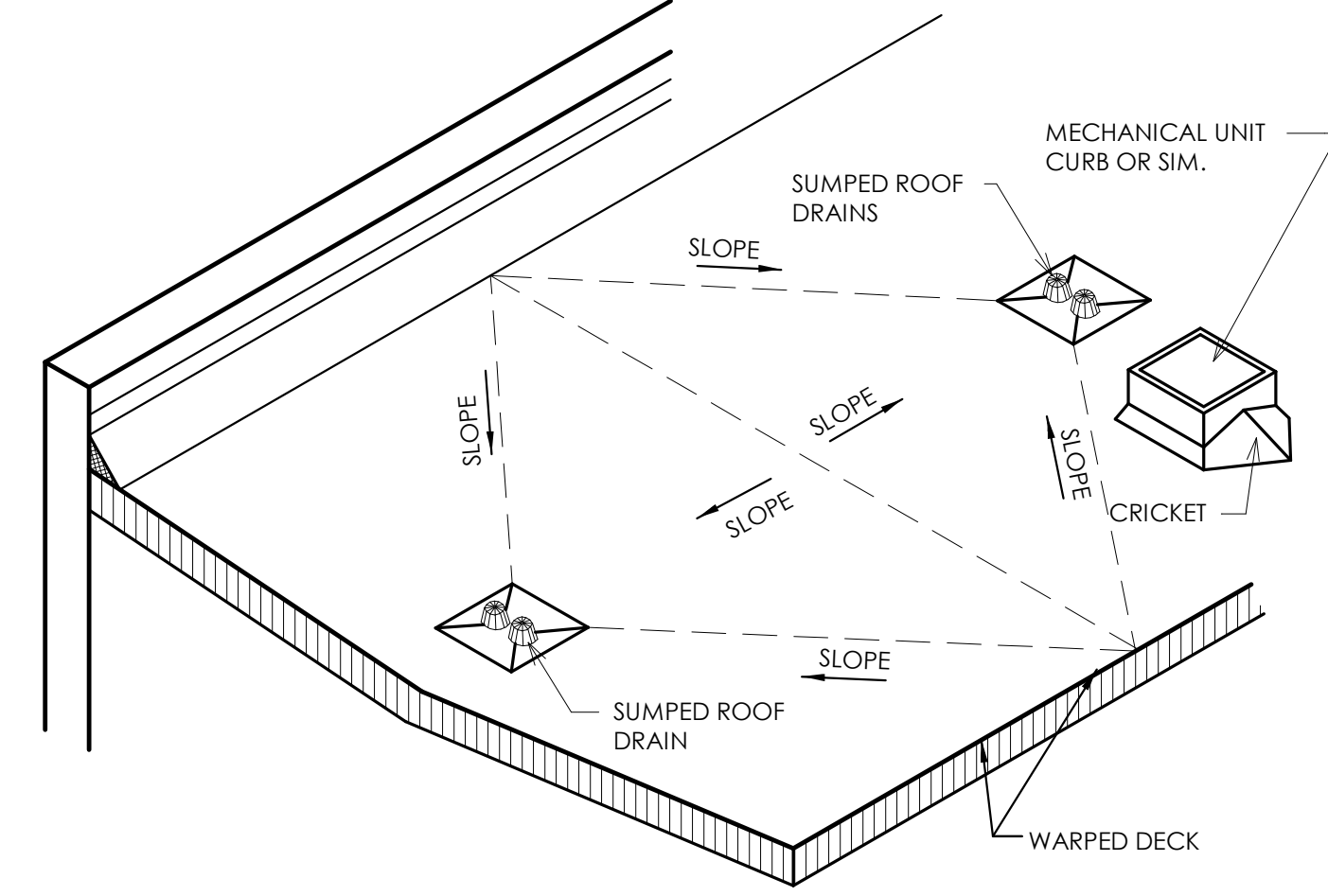
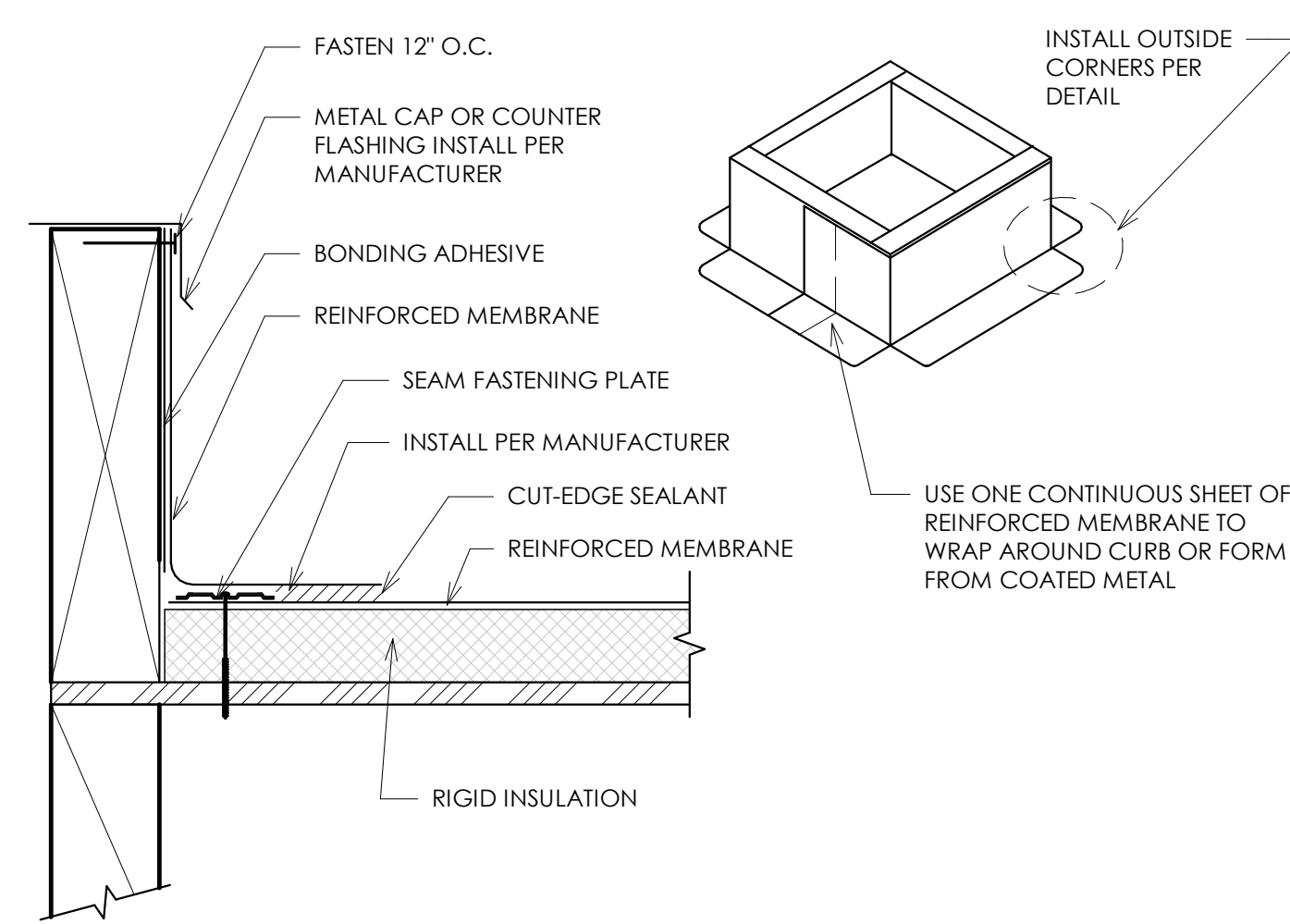
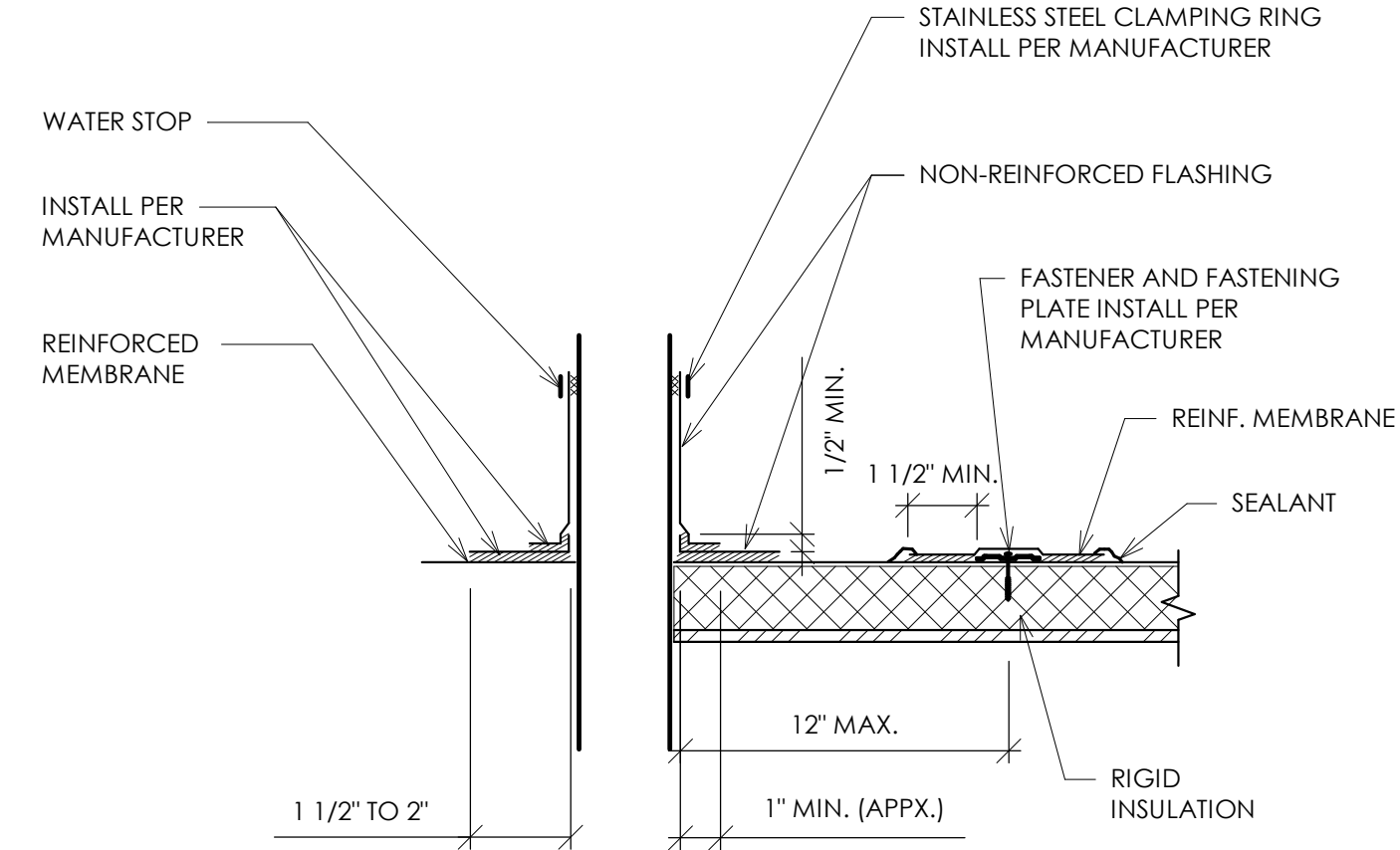
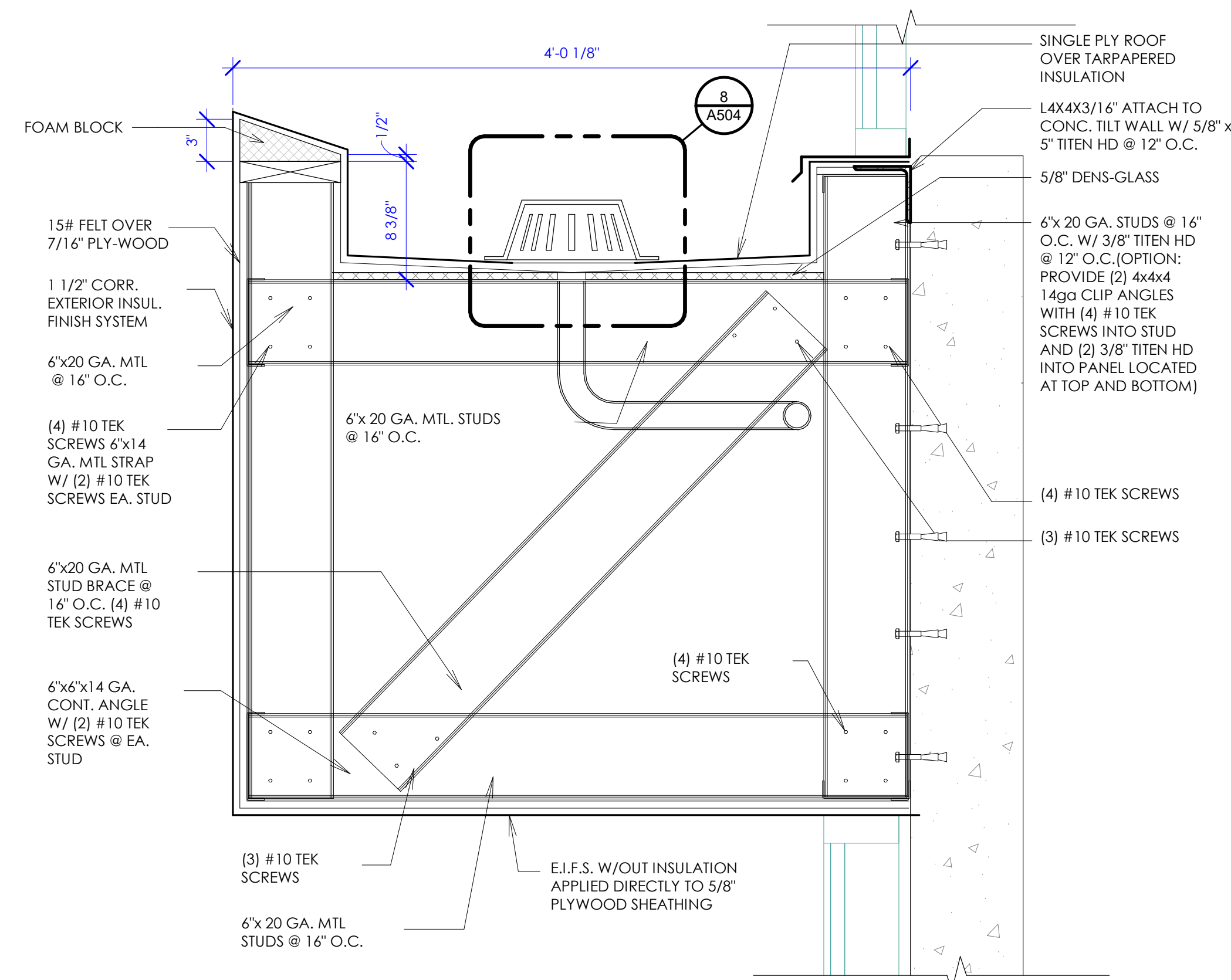


OPTIONS

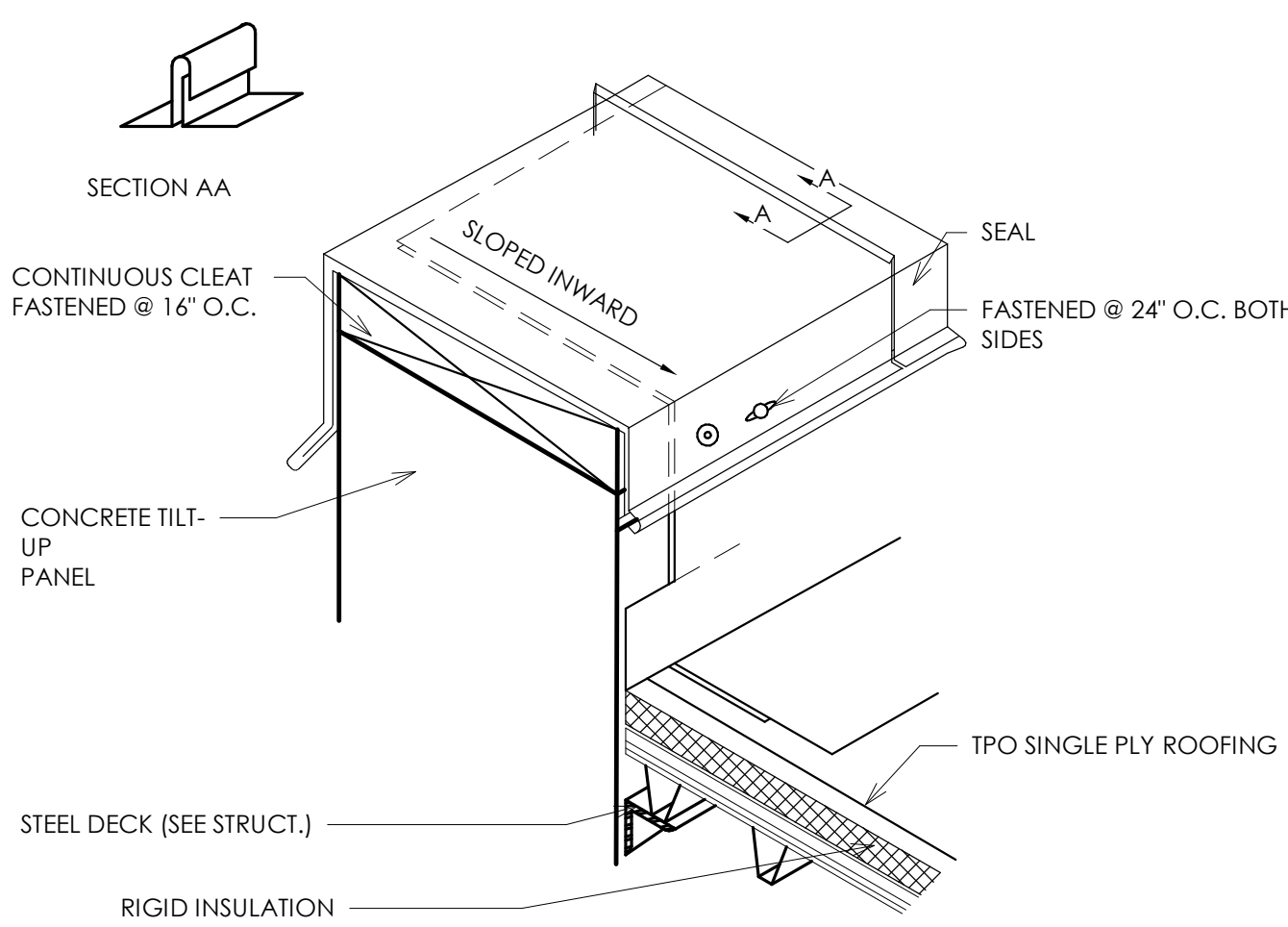


ISOMETRIC VIEW

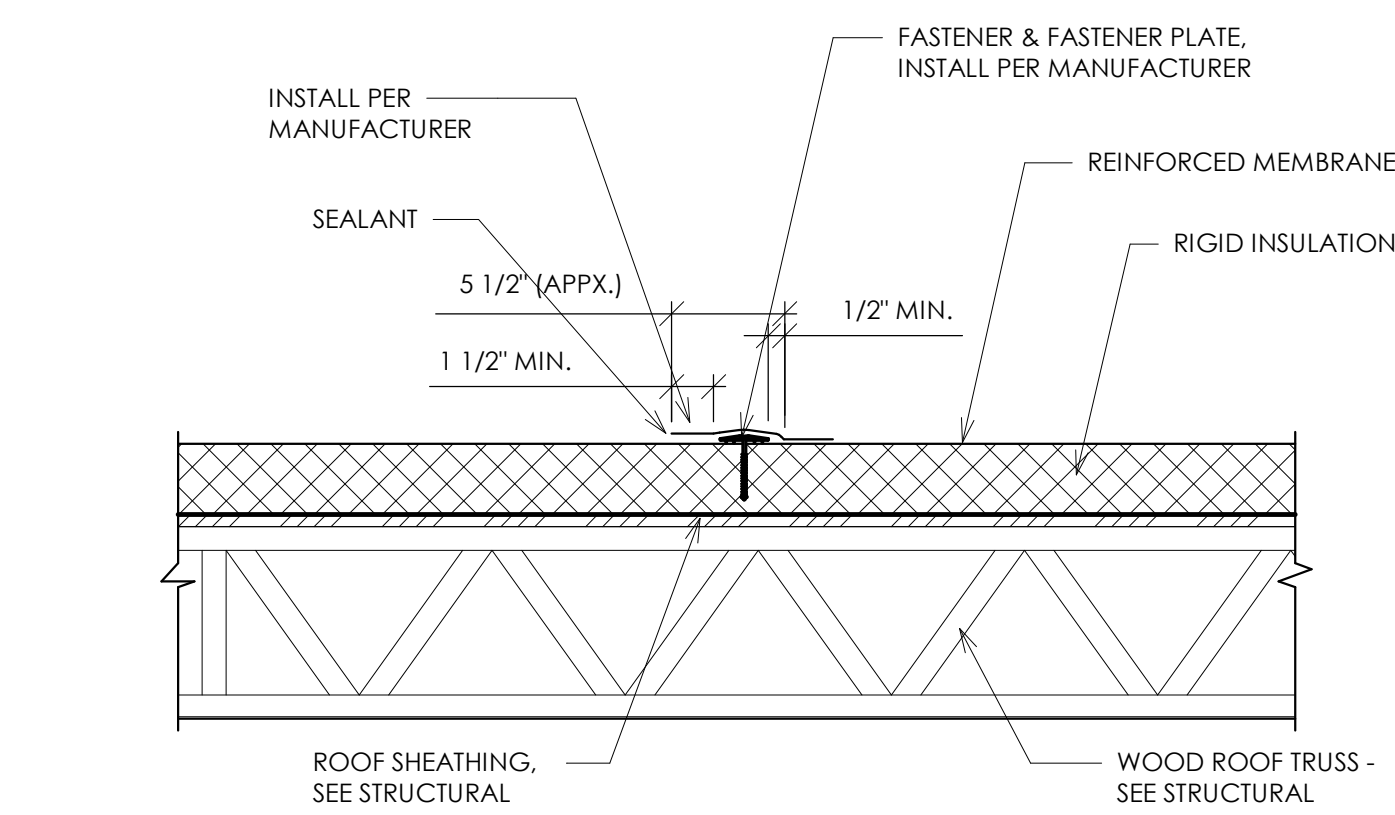
2 NON-BEARING INTERIOR WALL W/ BRACE1
1" = 1'-0"



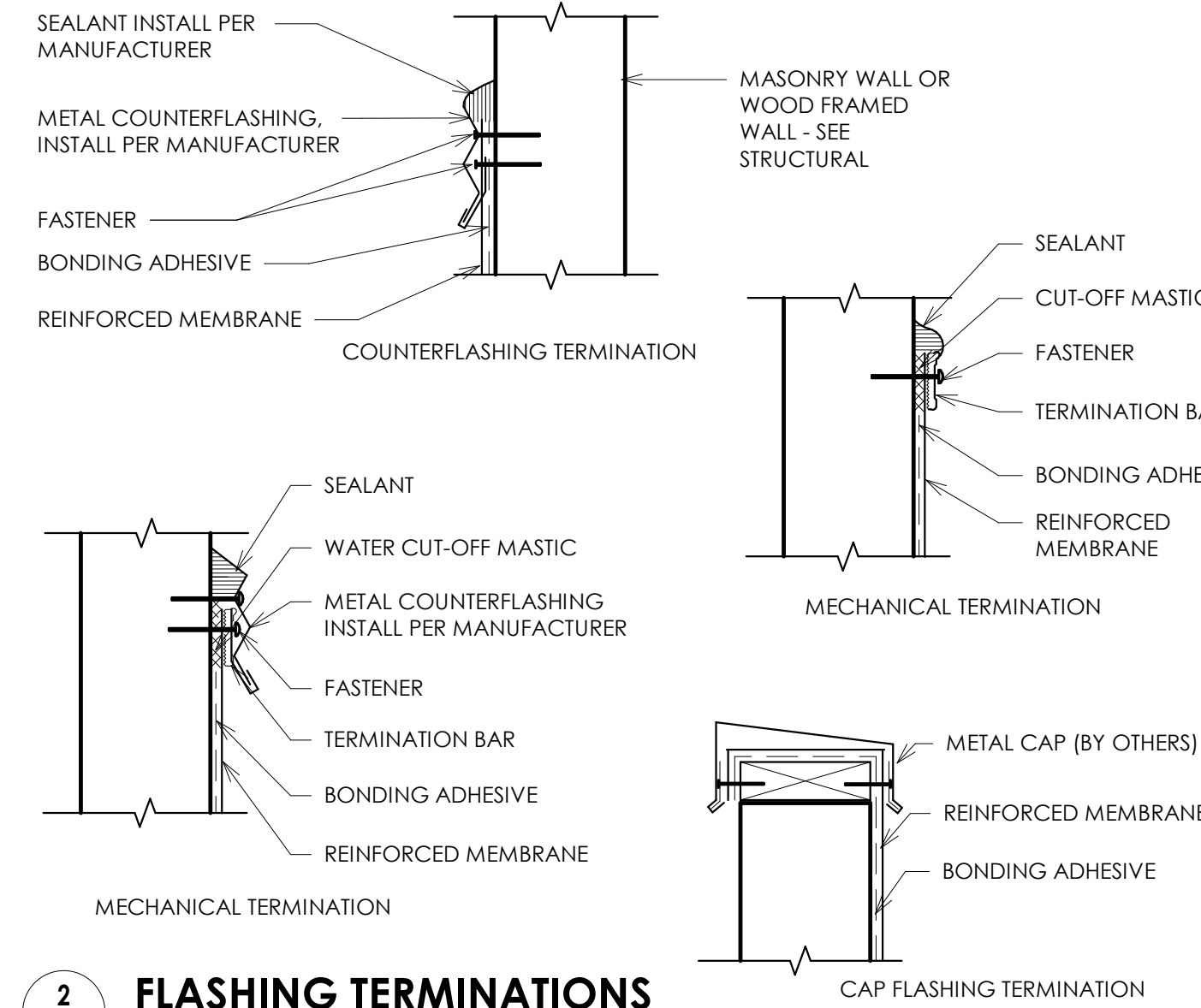
9 FIELD FABRICATED PIPE FLASHING



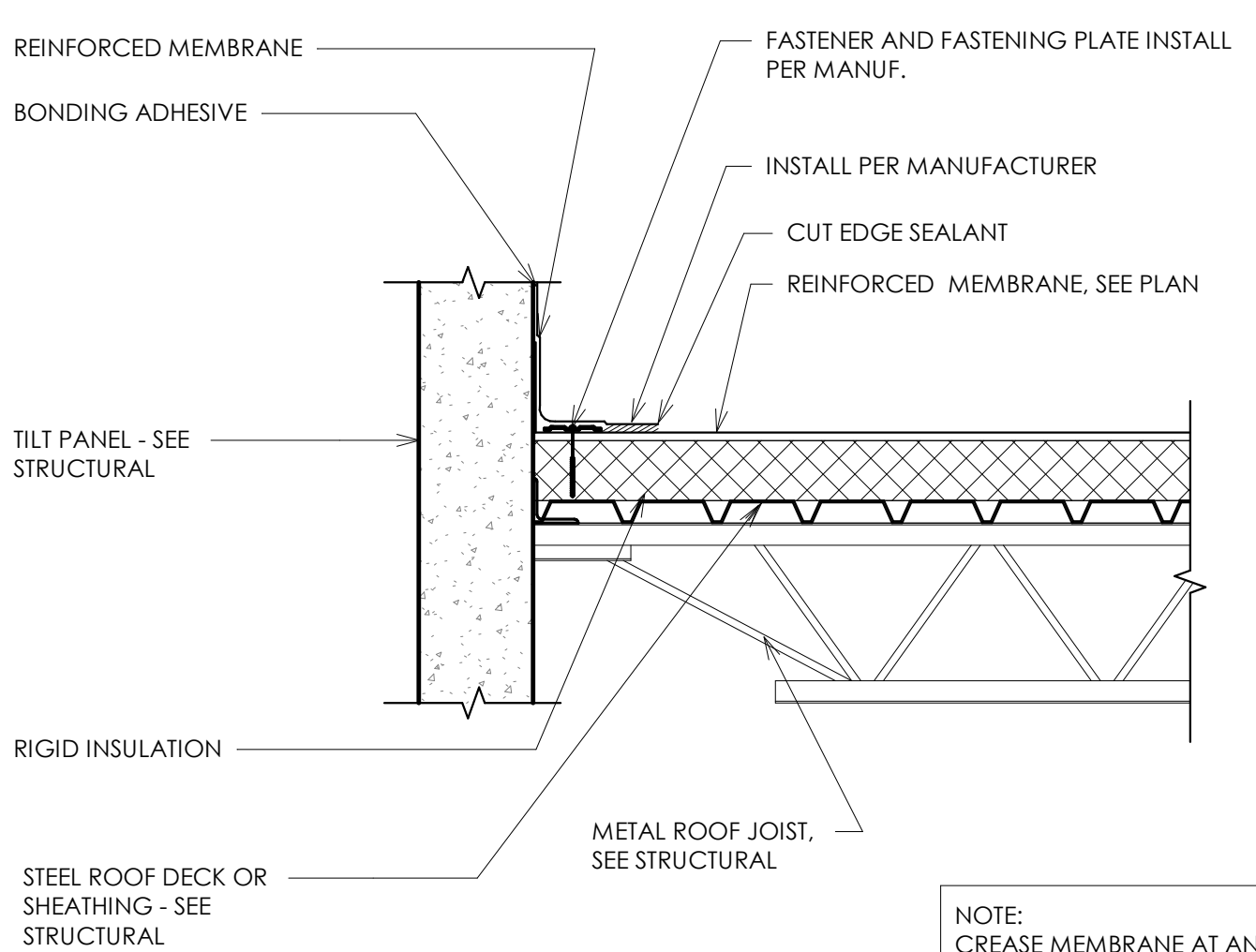
5 CURB FLASHING



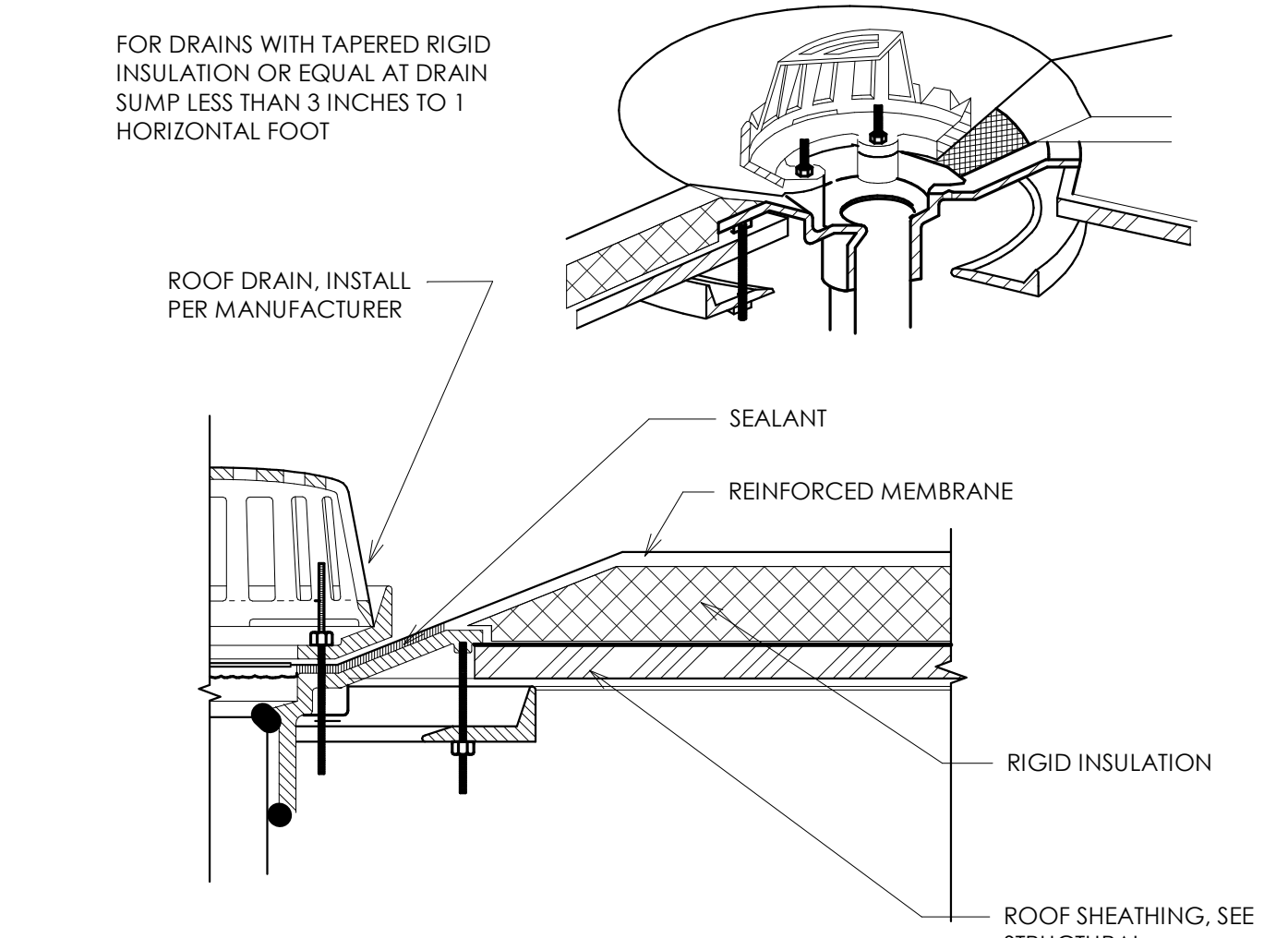
1 CRICKET DETAIL



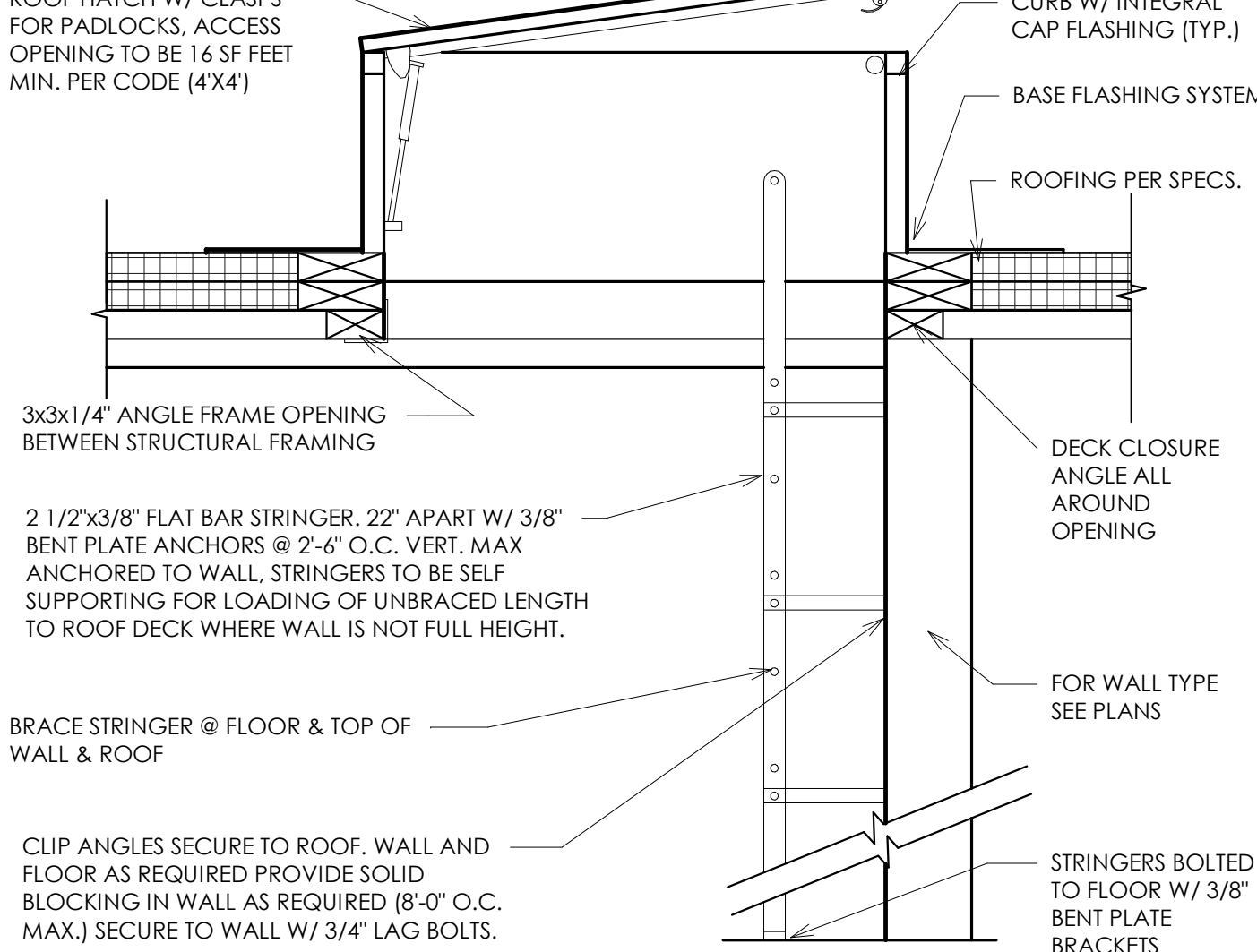
10 COPING DETAIL



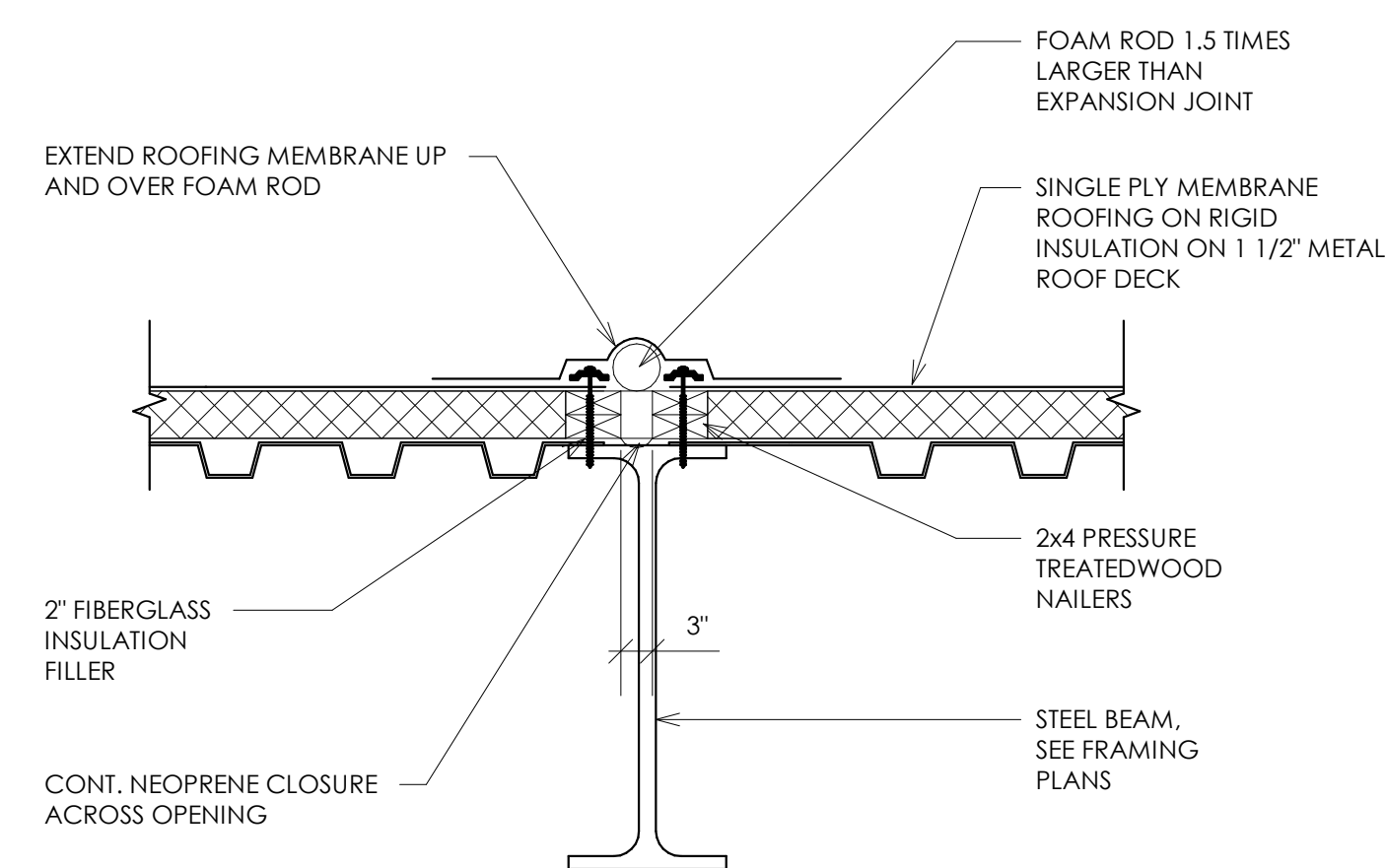
6 LAP CROSS SECTION



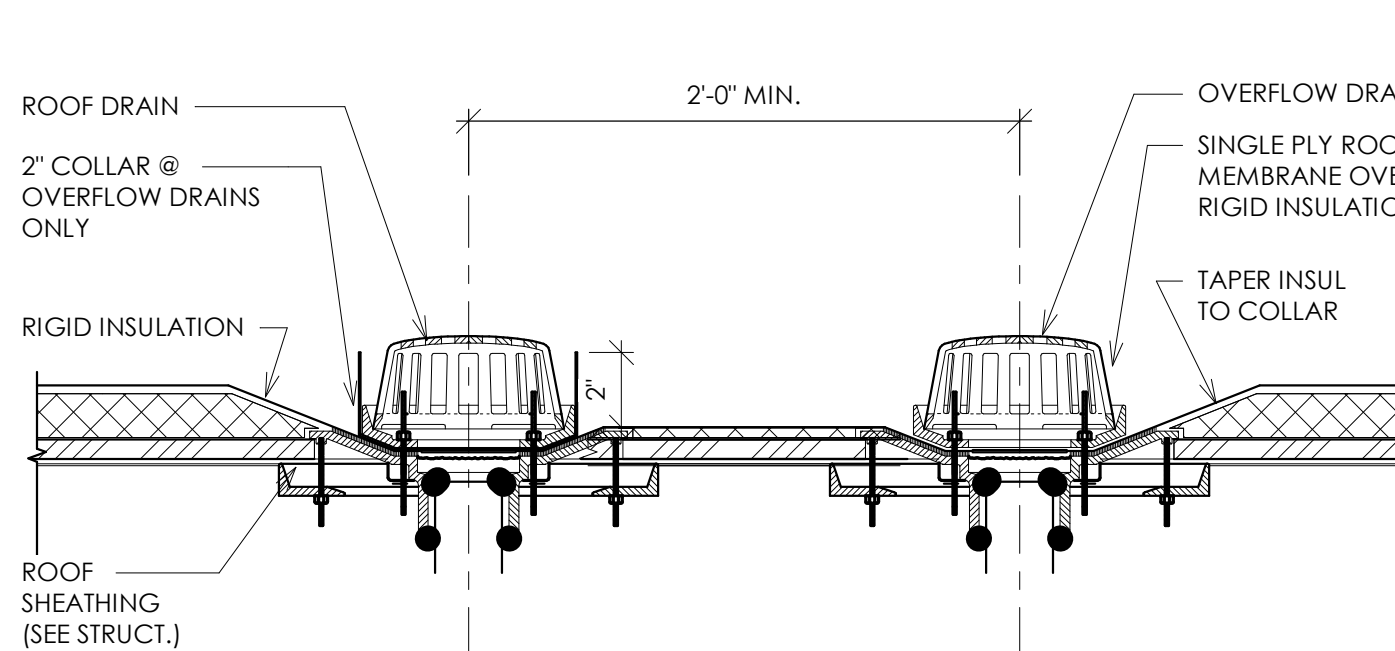
2 FLASHING TERMINATIONS



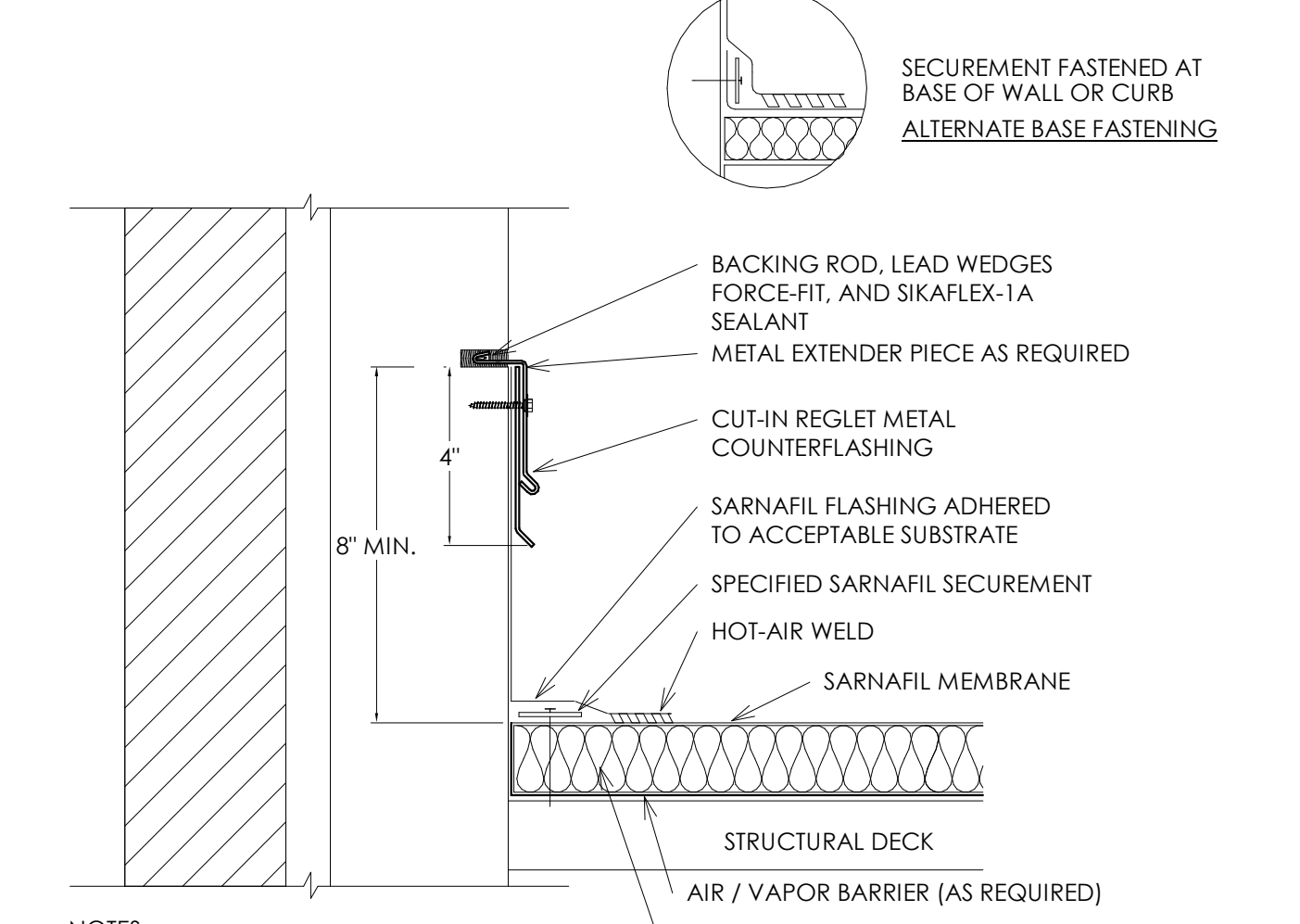
11 FLASHING @ TILT PANEL



7 ROOF DRAIN



3 ROOF ACCESS HATCH & LADDER



12 EXPANSION JOINT DECK TO DECK

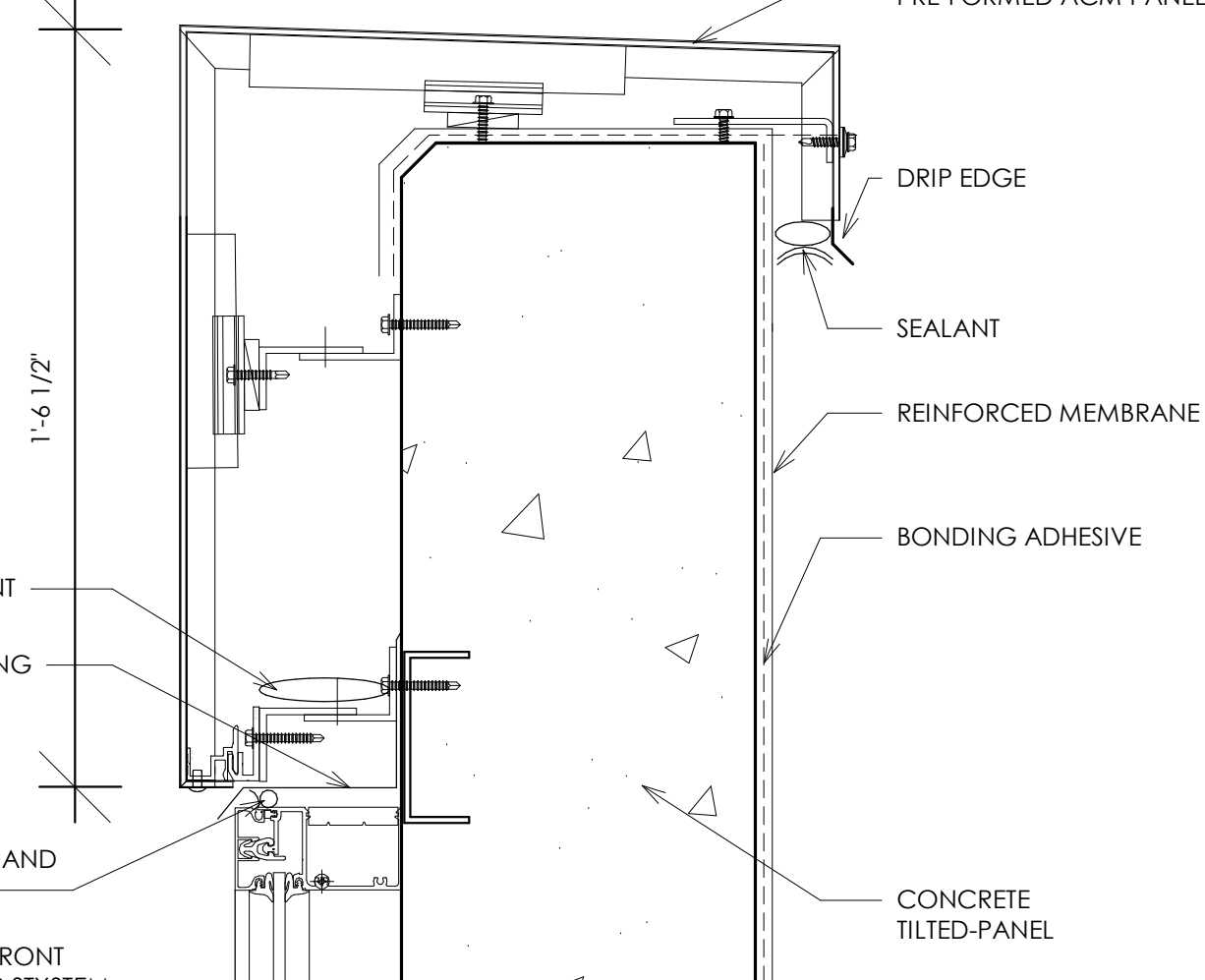
8 ROOF DRAIN SECTION DETAIL

4 CUT IN REGLET - BID ALT.

17 CORNICE DETAIL @ CORNER GLASS CONDITION



15 CORNICE DETAIL



16 CORNICE DETAIL @ STOREFRONT

GENERAL NOTES:

- ALL DOOR HARDWARE TO BE LEVER TYPE MECHANISMS
- EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- MASTER KEY ALL LOCKSETS.
- MANUAL FLUSH BOLTS FOR THE DOUBLE DOORS ARE ONLY ALLOWED IN THE INACTIVE DOOR ACCESSING MECHANICAL AND STORAGE ROOMS.
- PROVIDE DOOR STOPS OR BUMPERS @ ALL DOOR LOCATIONS WHERE DOOR COMES IN CONTACT WITH ADJACENT WALL. COORDINATE TYPE AND PLACEMENT WITH OWNERS.
- ALL ALUMINUM FRAMES TO BE MODULEX METAL FRAMES OR EQUAL.
- ALL KNOCK-DOWN & WELDED FRAMES TO BE PAINT GRADE.
- THE ROLL UP DOORS WILL NEED TO BE DESIGNED FOR THE LOCAL WIND LOADS AND 3 SECOND GUSTS FOR UTAH VALLEY

FOOT NOTES:

- ENTRY DEADBOLT TO HAVE INDICATOR OF LOCKED OR UNLOCKED. DOOR TO HAVE SIGN "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."
- THE LOCK MUST BE KEY-OPERATED LOCKING FROM THE EGRESS SIDE AND THE LOCKING DEVICE IS READILY DISTINGUISHABLE AS LOCKED.
- PROVIDE A SIGN INDICATING "FIRE RISER" 4" LETTERS MIN. w/ CONTRASTING BACKGROUND
- PROVIDE A SIGN INDICATING "FIRE ALARM PANEL" 4" LETTERS MIN. w/ CONTRASTING BACKGROUND
- DUMPSTER GATE DOOR; SEE SITE DETAILS - FOR ALL 3 ENCLOSURE DUMPSTER

LEGEND

- PVCY = PRIVACY LOCKS
KEY = KEYED LOCK
RH = RIGHT HAND
LH = LEFT HAND
DBL = DOUBLE ASSEMBLY
LCH = INTERIOR LATCH

HARDWARE SCHEDULE

- 1

HINGES:
PASSAGE:
CLOSER:
FRAME:

(3) 4-1/2" HAGAR HINGES
CRASH BAR - CORBIN 8200 SERIES W/
OUTSIDE TRIM LEVER (KEYED)
LCN 4041
WEATHERSTRIPPING, DOOR SWEEP, AND THRESHOLD.
- 2

SPRING:
FRAME:
PANELS:

25,000 CYCLE MIN
WEATHER STRIPPING
INSULATED FLUSH PANELS
- 3

SPRING:
FRAME:
PANELS:

25,000 CYCLE MIN
WEATHER STRIPPING, DOCK BUMPERS,
EDGE OF DOCK LEVELER
INSULATED FLUSH PANELS
- 4

HINGES:
PASSAGE:
CLOSER:
FRAME:

(4) 4-1/4" X 4-1/4" SATIN CHROME FINISH
ROCKWOOD PUSH BAR (BF15647) WITH
12" PULL WITH 8814-2 DEADLOCK (F16)
NORTON 7500
SILENCERS, DOOR SWEEP, WEATHERSTRIPPING, AND
THRESHOLD.
- 5

HINGES:
PASSAGE:
FRAME:

(3) 4-1/4" X 4-1/4" SATIN CHROME FINISH
ACTIVE LEAF LEVER W/KEY PER SCHEDULE,
INACTIVE LEAF MANUAL FLUSH BOLTS
SILENCER, DOOR SWEEP, WEATHER STRIPPING
AND THRESHOLD
- 6

SPRING:
FRAME:
PANELS:

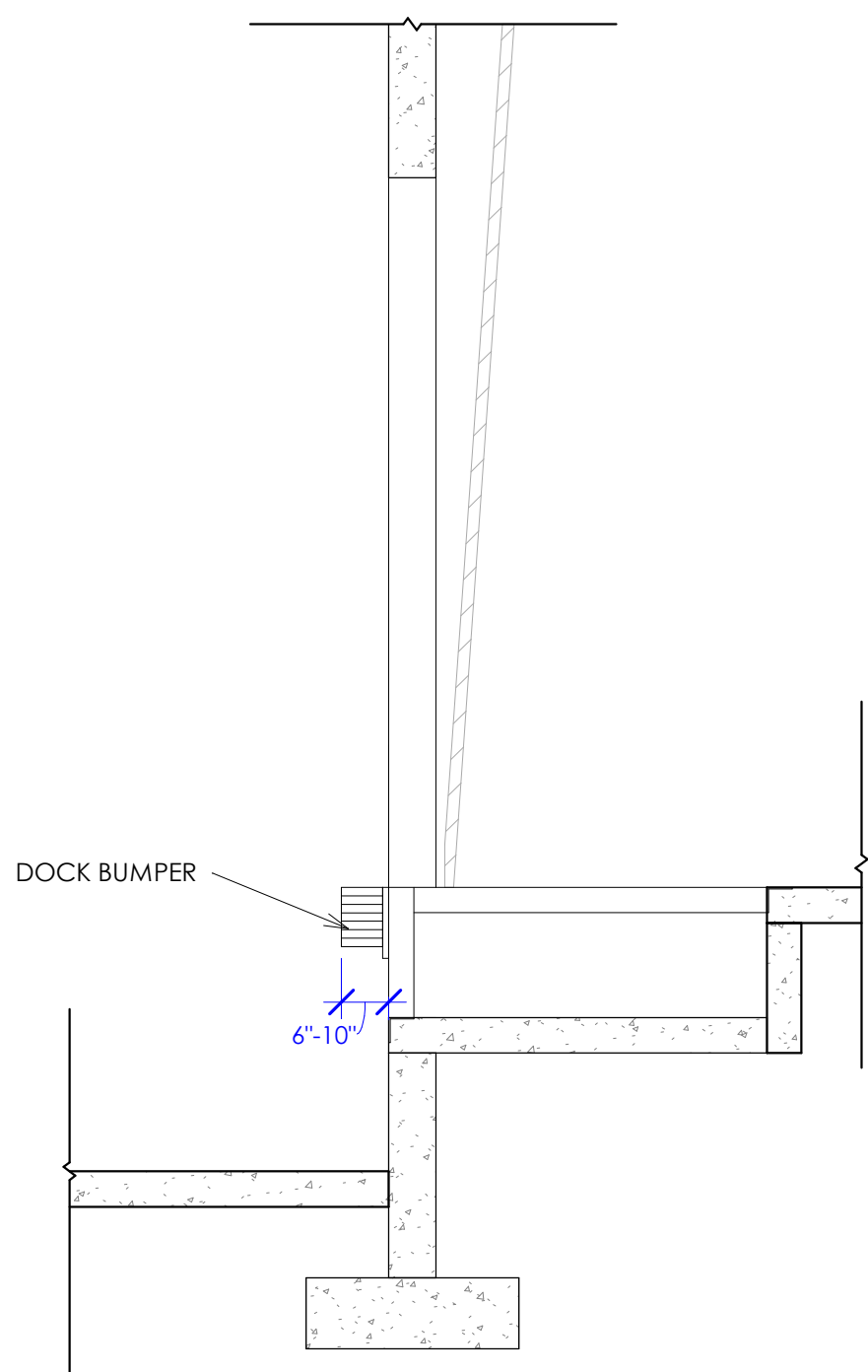
25,000 CYCLE MIN
WEATHER STRIPPING, 8410-14F HEAVY-DUTY DOCK BUMPERS,
8x6 SERCO MECHANICAL PIT LEVELER
INSULATED FLUSH PANELS
- 7

HINGES:
PASSAGE:
CLOSER:
FRAME:

(3) 4-1/2" HAGAR HINGES
CRASH BAR - ED8200
OUTSIDE TRIM LEVER - TRILOGY; DL2700 WP IC / 26D - Y
LCN 4041
WEATHERSTRIPPING, DOOR SWEEP, AND THRESHOLD.

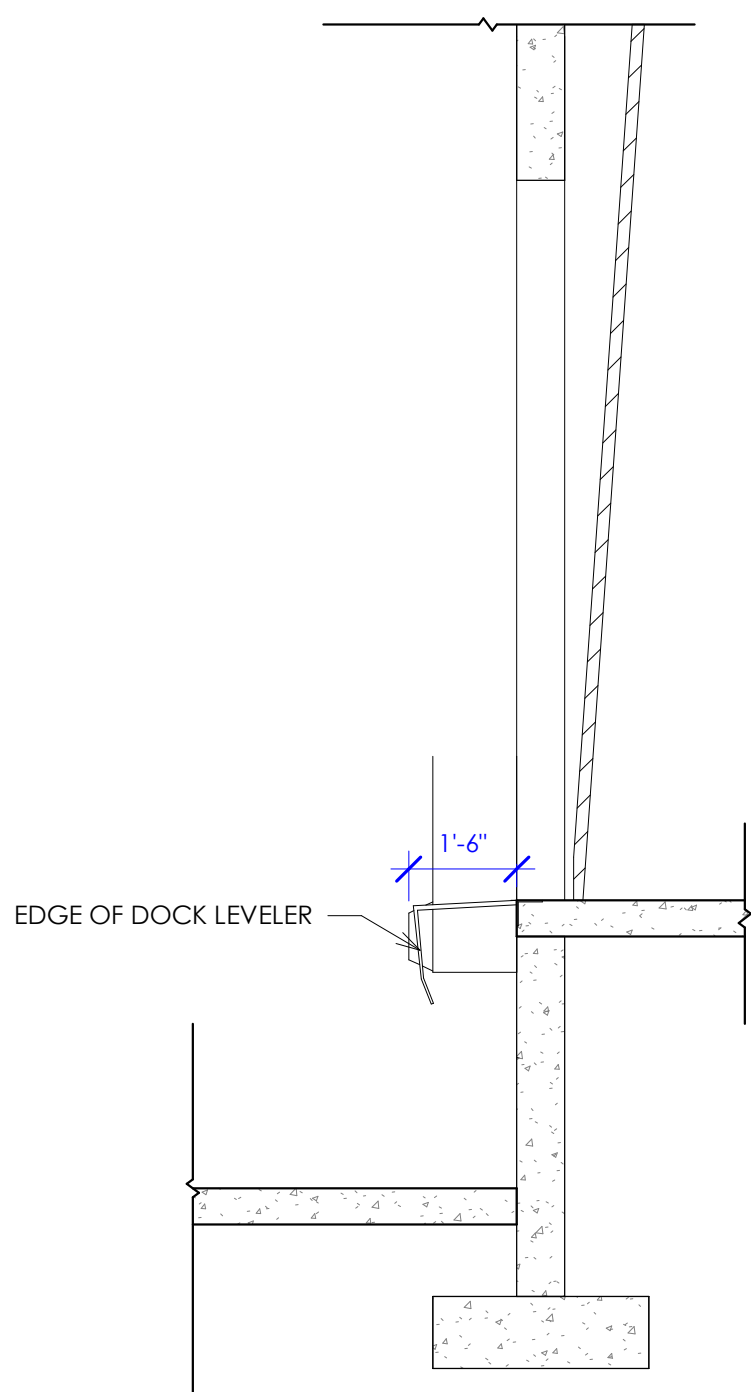
DOOR NOTES
1/4" = 1'-0"

PIT LEVELER: SERCO MECHANICAL DOCK LEVELER: MUST MEET ANSI
MH1.4.1-1987 TEST LOAD SPECS; MUST WITHSTAND 10,000 LB MOVING
LOAD - OR EQUAL

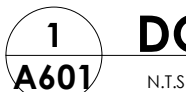


PIT LEVELER REQUIREMENTS

EDGE OF DOCK LEVELER: BLUE GIANT MD-CM
72"x27" 30,000 LBS CAPACITY - OR EQUAL



EDGE OF DOCK LEVELER REQUIREMENTS



DOCK SEAL REQUIREMENTS

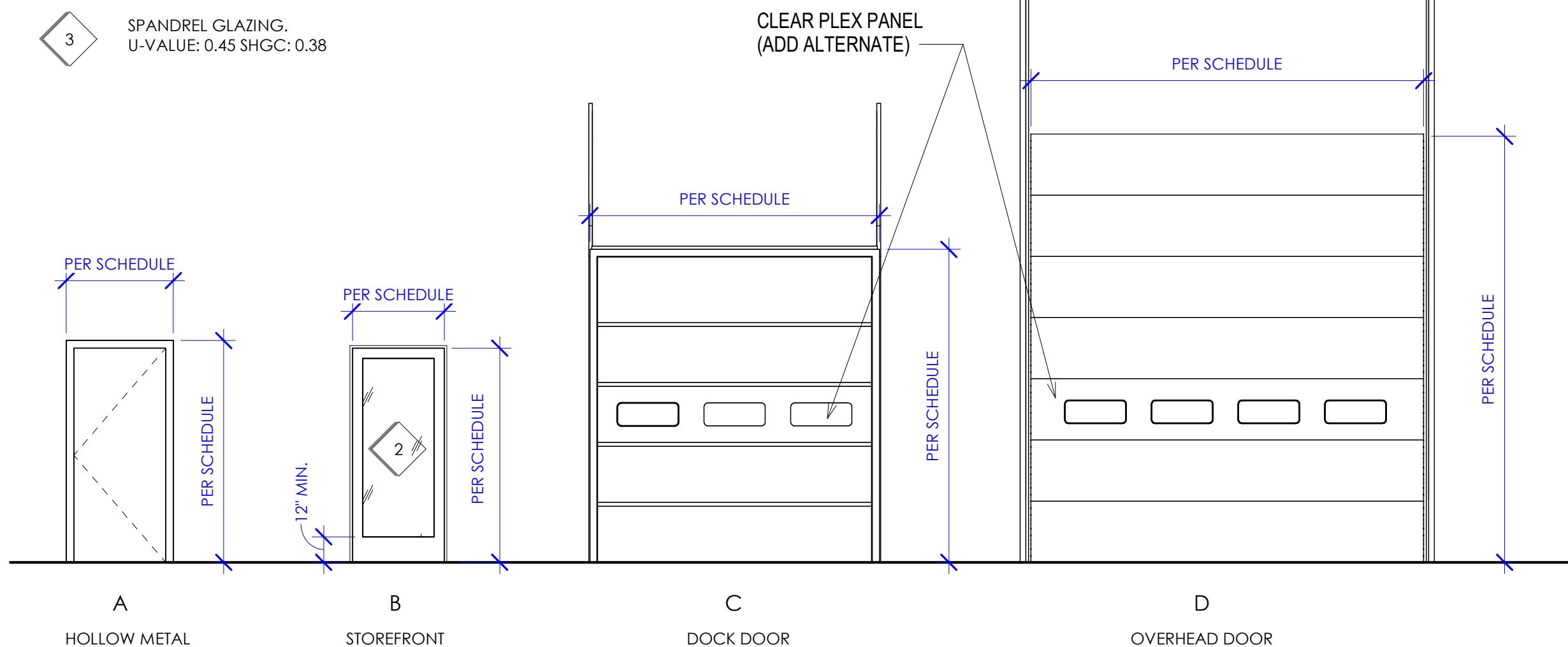
GLAZING LEGEND:

- 1

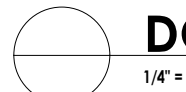
GRAY TINTED 1" THICK LOW-E GLAZING, U-VALUE:
0.45 SHGC: 0.38
- 2

GRAY TINTED 1" THICK LOW-E SAFETY GLAZING, U-VALUE:
0.45 SHGC: 0.38
- 3

SPANDREL GLAZING,
U-VALUE: 0.45 SHGC: 0.38



* PROVIDE 1 3/4" MAX. STOREFRONT FRAME AS SCHEDULED AND TRANSOM IF CEILING HEIGHT PERMITS



DOOR TYPES

DOOR SCHEDULE								
MARK	DOOR						SELF CLOSER	HARD WARE
	Type	WIDTH	HEIGHT	THICKNESS	MATERIAL	FRAMES		
100-1	B	3' - 0"	8' - 0"	1 3/4"	GLASS	HM	YES	4
100-2	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
100-3	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
100-4	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
100-5	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
100-6	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
100-7	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
100-8	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
100-9	D	12' - 0"	14' - 0"	1 1/2"	STEEL	HM		2
100-10	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
100-11	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
200-1	B	3' - 0"	8' - 0"	1 3/4"	GLASS	HM	YES	4
200-2	D	12' - 0"	14' - 0"	1 1/2"	STEEL	HM		2
200-3	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
200-4	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
200-5	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3

DOOR SCHEDULE								
MARK	DOOR						SELF CLOSER	HARD WARE
	Type	WIDTH	HEIGHT	THICKNESS	MATERIAL	FRAMES		
200-6	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
200-7	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
200-9	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-1	B	3' - 0"	8' - 0"	1 3/4"	GLASS	HM	YES	4
300-2	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
300-3	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-4	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-5	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-6	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-7	C	9' - 0"	10' - 0"	1 1/2"	STEEL	HM		3
300-8	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
300-9	D	12' - 0"	14' - 0"	1 1/2"	STEEL	HM		2
300-10	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
300-11	A	3' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1
400-1	A	4' - 0"	7' - 0"	1 3/4"	HOLLOW METAL	HM	YES	1

Revision Schedule	
MARK	DESCRIPTION
	Revision Date

AE2022.290

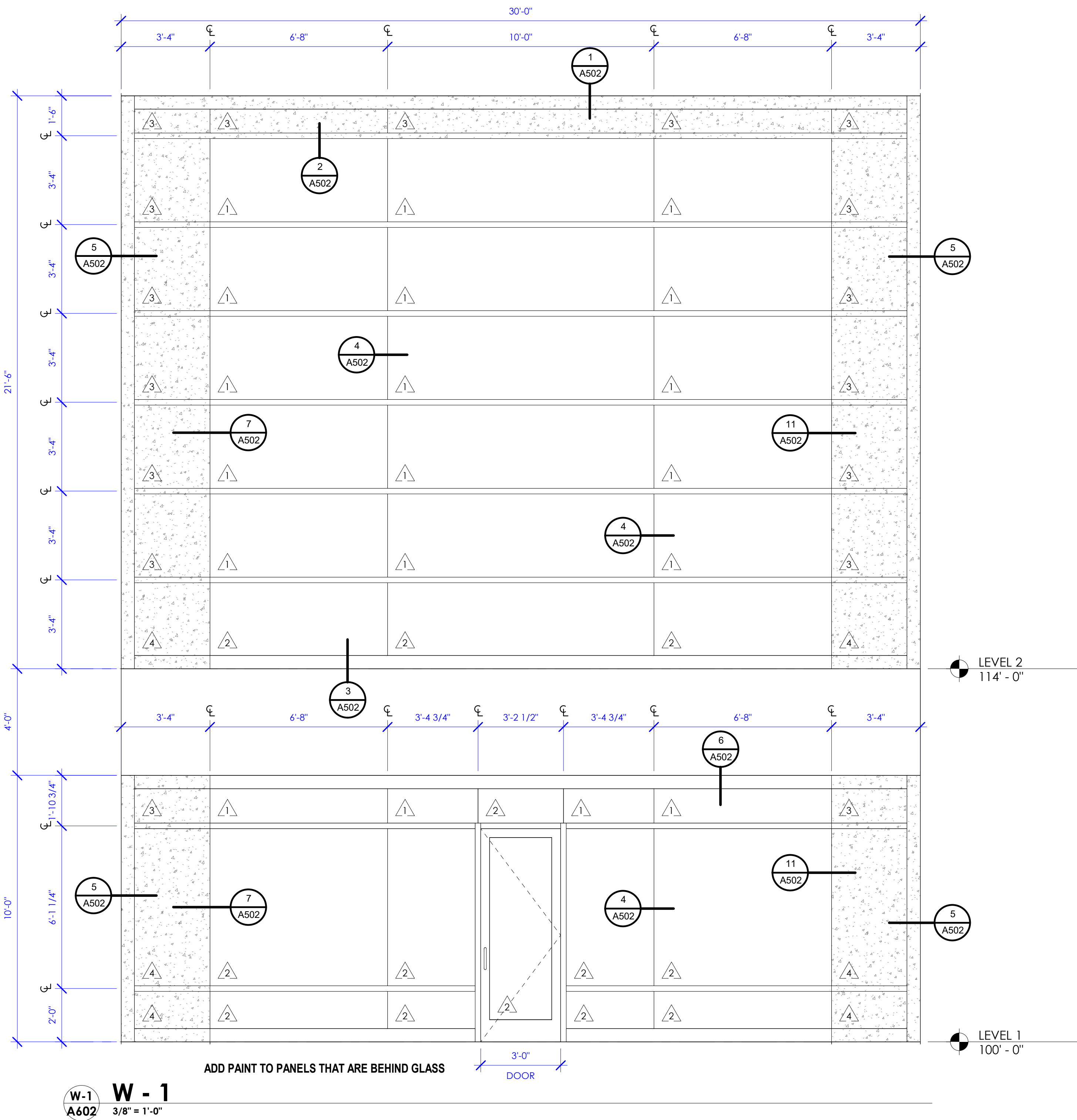
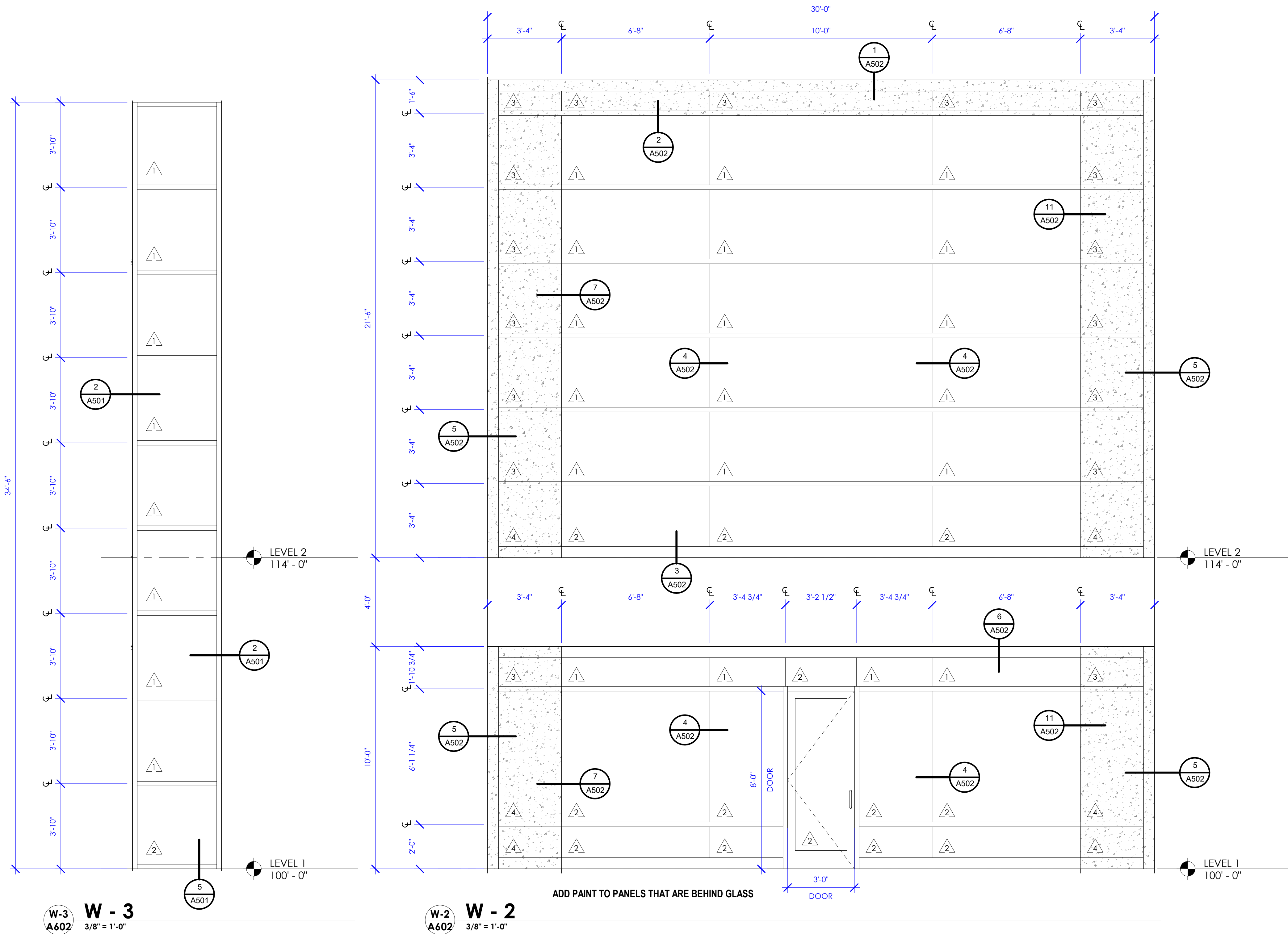
DOOR SCHEDULES

DATE: 04/23/2025

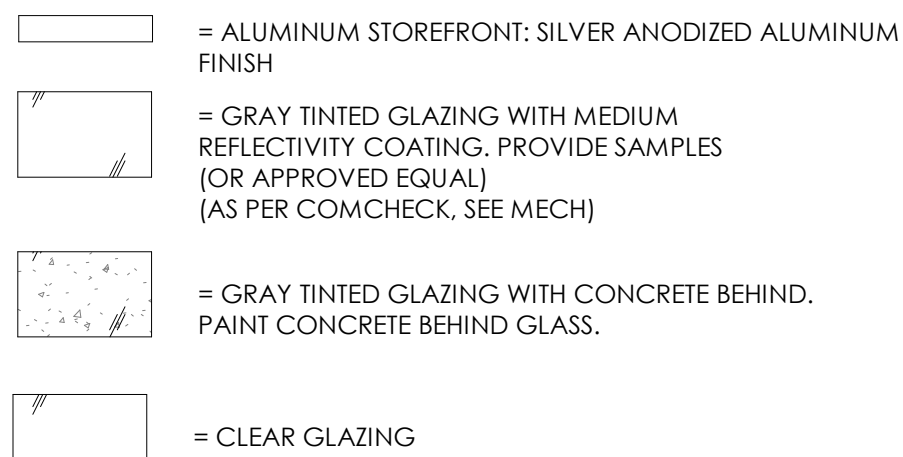
SHEET #:

A601

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WINDOW FRAMES:



GLASS: TRULITE 1" OA (1/4 - 1/2 AS-1/4) GREYLITE II / SOLARBAN 60 (3)
SPANDREL: TRULITE II WITH #3-820 HARMONY GRAY SPANDREL (MONOLITHIC)
-- OR APPROVED EQUAL --

NOTES

1. CONTRACTOR TO PROVIDE SUBMITTALS FOR APPROVAL.
2. ALL GLAZING WITHIN 24" INCH OF A DOOR/FLOOR SHALL BE TEMPERED.
3. SEE SHEET A501 FOR WINDOW HEADER, JAMB AND SILL DETAILS.
4. ALL EXTERIOR GLASS TO BE DOUBLE PANE TINTED AND TO BE LOW-E. VERIFY GLASS SPECIFICATIONS WITH COM- CHECK PROVIDED BY MECHANICAL ENGINEER.
5. REFER TO MECHANICAL COMCHECK FOR MINIMUM DESIGN STANDARDS FOR GLAZING.

GLAZING LEGEND:

1. GRAY TINTED 1" THICK LOW-E GLAZING, U-VALUE: 0.35 SHGC: 0.25
2. GRAY TINTED 1" THICK LOW-E SAFETY GLAZING, U-VALUE: 0.35 SHGC: 0.25
3. 1/4" GRAY TINTED GLASS
4. 1/4" GRAY TINTED SAFETY GLASS
5. 1" THICK CLEAR TINTED LOW E GLAZING

TEMPERED GLAZING NOTES:

HUMAN IMPACT LOADS. INDIVIDUAL GLAZED AREAS, INCLUDING GLASS MIRRORS, IN HAZARDOUS LOCATIONS AS DEFINED BELOW SHALL COMPLY WITH SECTIONS 2406.1.1 THROUGH 2406.1.5 OF THE IBC (INTERNATIONAL BUILDING CODE).

IDENTIFICATION OF SAFETY GLAZING. EACH PANE OF SAFETY GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE IDENTIFIED BY A LABEL SPECIFYING THE LABELER, WHETHER THE MANUFACTURER OR INSTALLER, AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, AS WELL AS THE INFORMATION SPECIFIED IN SECTION 2403.1 OF THE IBC (INTERNATIONAL BUILDING CODE). THE LABEL SHALL BE ACID ETCHED, SAND BLASTED, CERAMIC FIRED OR AN EMBOSSED MARK, OR SHALL BE OF A TYPE THAT ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED. EXCEPTIONS:

1. FOR OTHER THAN TEMPERED GLASS, LABELS ARE NOT REQUIRED, PROVIDED THE BUILDING OFFICIAL APPROVES THE USE OF A CERTIFICATE, AFFIDAVIT OR OTHER EVIDENCE CONFIRMING COMPLIANCE WITH THIS CODE.
2. TEMPERED SPANDREL GLASS IS PERMITTED TO BE IDENTIFIED BY THE MANUFACTURER WITH A REMOVABLE PAPER LABEL.

HAZARDOUS LOCATIONS. THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:

1. GLAZING IN SWINGING DOORS.
2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
3. GLAZING IN STORM DOORS.
4. GLAZING IN UNFRAMED SWINGING DOORS.
5. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE A STANDING SURFACE.
6. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24-INCH (610 MM) ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE THE WALKING SURFACE.

EXCEPTIONS:

1. PANELS WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND GLAZING, WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET (914 MM) OR LESS IN DEPTH. GLAZING IN THIS APPLICATION SHALL COMPLY WITH SECTION 2403.5, ITEM 7.
2. GLAZING IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION, OTHER THAN THE WALL TOWARDS WHICH THE DOOR SWINGS WHEN OPENED, IN ONE- AND TWO- FAMILY DWELLINGS OR WITHIN DWELLING UNITS IN GROUP R-2.
7. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN IN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEMS 5 AND 6, WHICH MEETS ALL OF THE FOLLOWING CONDITIONS:
 - 7.1. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET (0.84 M2);
 - 7.2. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR;
 - 7.3. EXPOSED TOP EDGE GREATER THAN 36 INCHES (914 MM) ABOVE THE FLOOR; AND
 - 7.4. ONE OR MORE WALKING SURFACE(S) WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING.

EXCEPTION: SAFETY GLAZING FOR ITEM 7 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS:

1. A PROTECTIVE RAIL 1 1/2 INCHES (38 MM) OR MORE IN HEIGHT, CAPABLE OF WITHSTANDING A HORIZONTAL LOAD OF 50 POUNDS PLF (730 N/M) WITHOUT CONTACTING THE GLASS, IS INSTALLED ON THE ACCESSIBLE SIDES OF THE GLAZING 34 INCHES TO 38 INCHES (864 MM TO 965 MM) ABOVE THE FLOOR.
2. THE OUTBOARD PANE IN INSULATING GLASS UNITS OR MULTIPLE GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLASS IS 25 FEET (7620 MM) OR MORE ABOVE ANY GRADE, ROOF, WALKING SURFACE OR OTHER HORIZONTAL OR SLOPED (WITHIN 45 DEGREES OF HORIZONTAL) (0.78 RAD) SURFACE ADJACENT TO THE GLASS EXTERIOR.
8. GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE.
9. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
 - 9.1. THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES (1524 MM) ABOVE A WALKING SURFACE ON THE POOL OR SPA SIDE OF THE GLAZING; AND
 - 9.2. THE GLAZING IS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA.
10. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES (914 MM) HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
11. GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE NOSE OF THE TREAD. EXCEPTION: SAFETY GLAZING FOR ITEM 10 OR 11 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS WHERE:
 1. THE SIDE OF A STAIRWAY, LANDING OR RAMP WHICH HAS A GUARDRAIL OR HANDRAIL, INCLUDING BALUSTERS OR IN-FILL PANELS, COMPLYING WITH THE PROVISIONS OF SECTIONS 1012 AND 1607.7; AND
 2. THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES (457 MM) FROM THE RAILING.

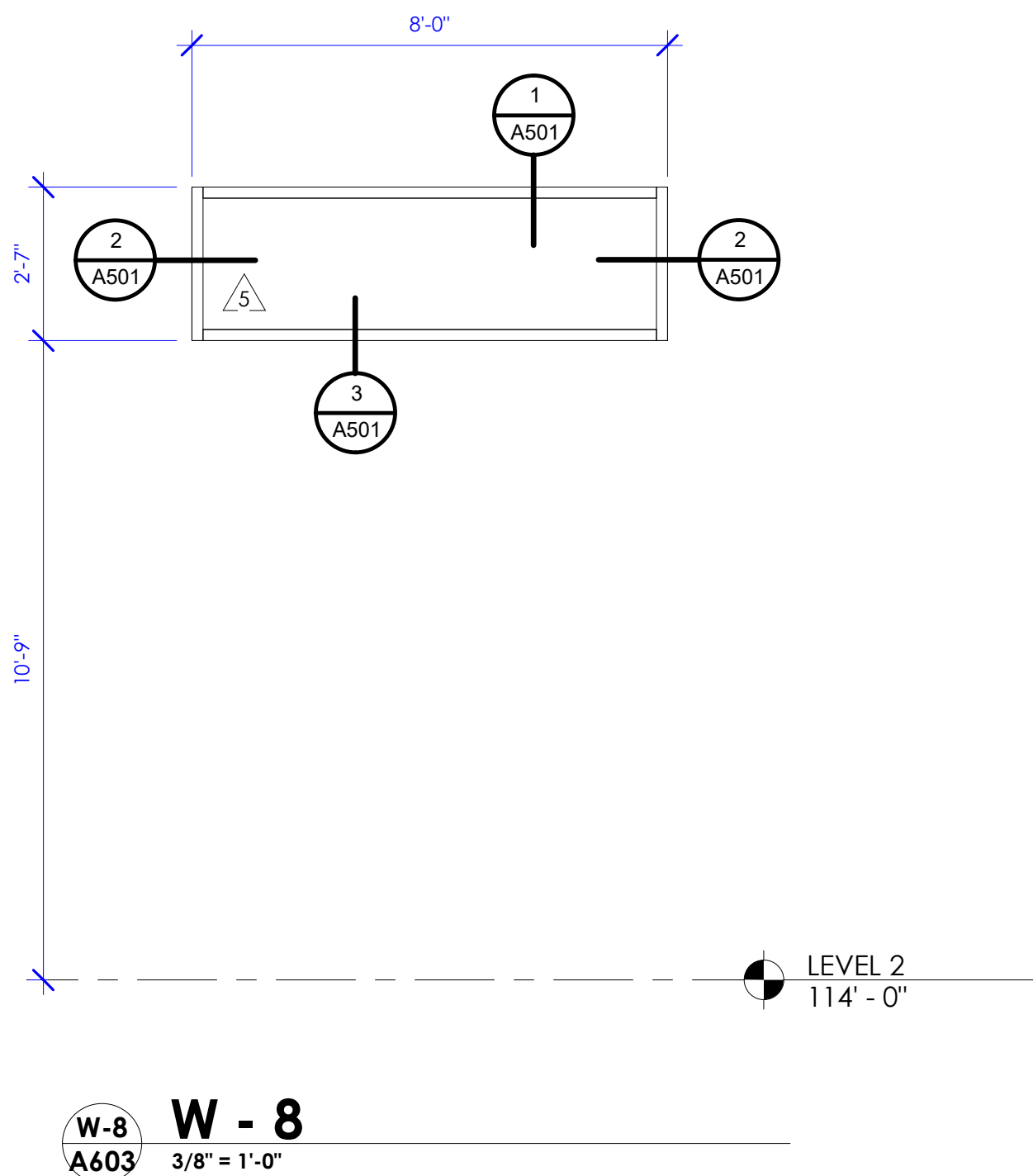
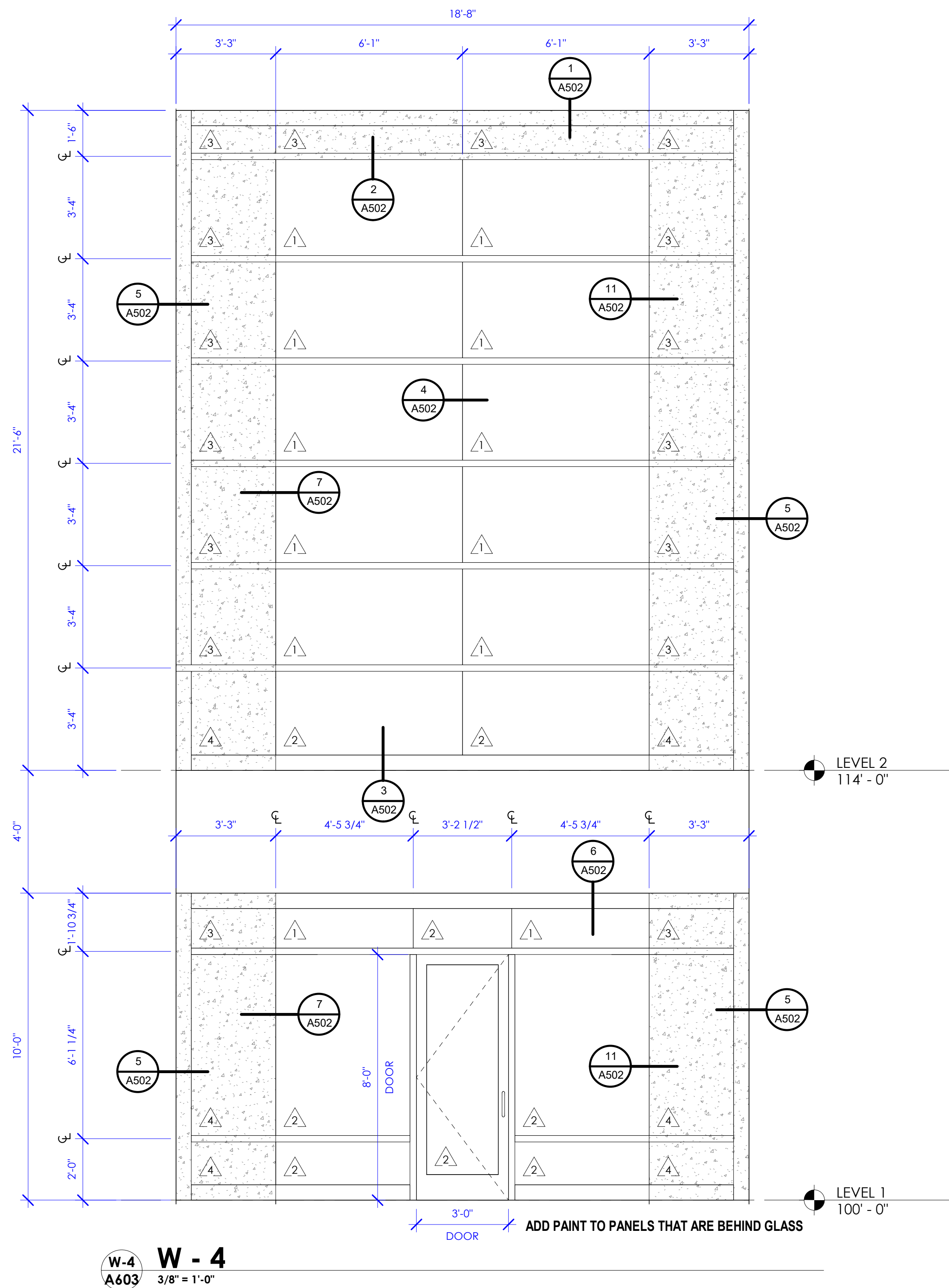
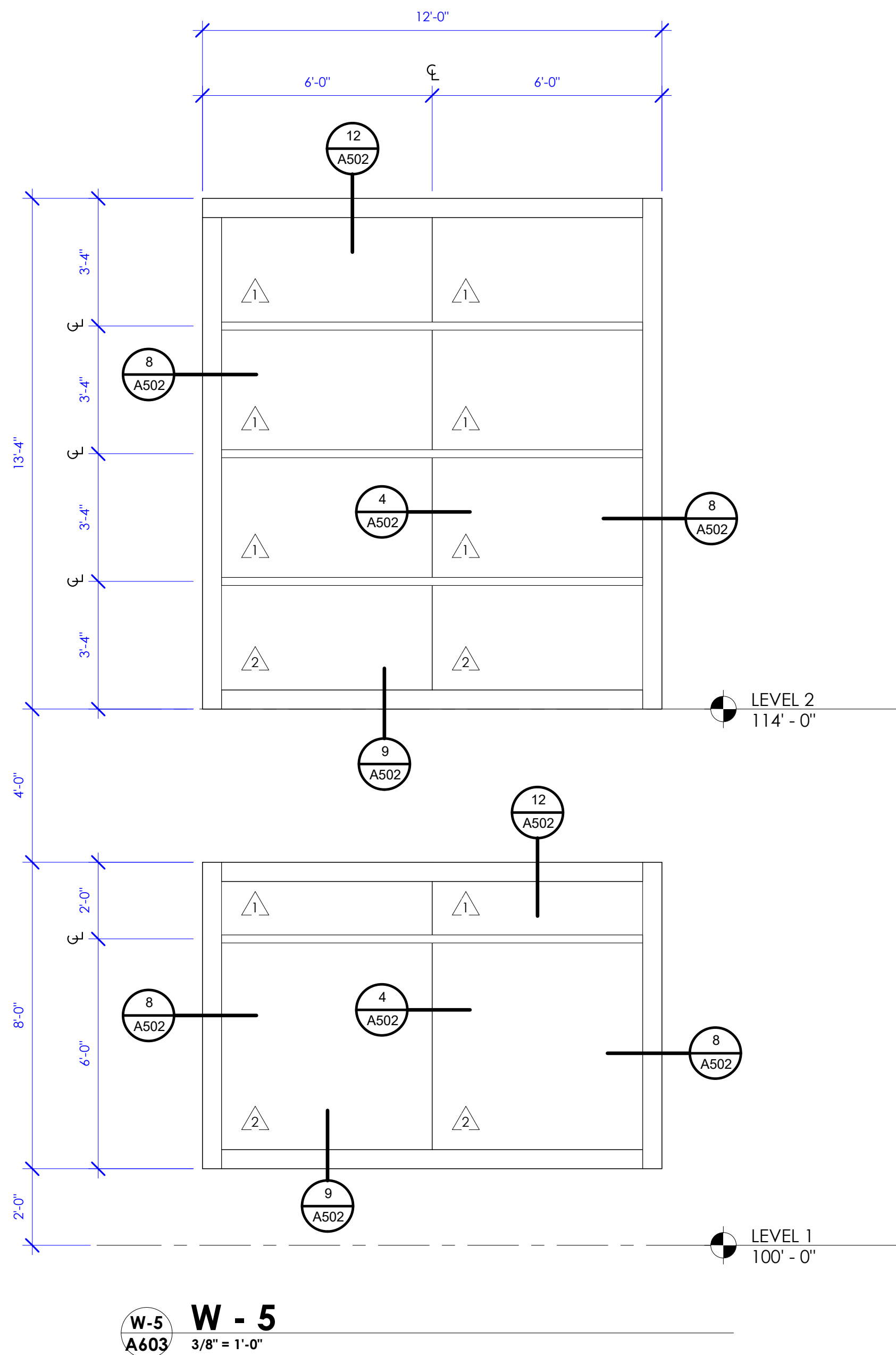
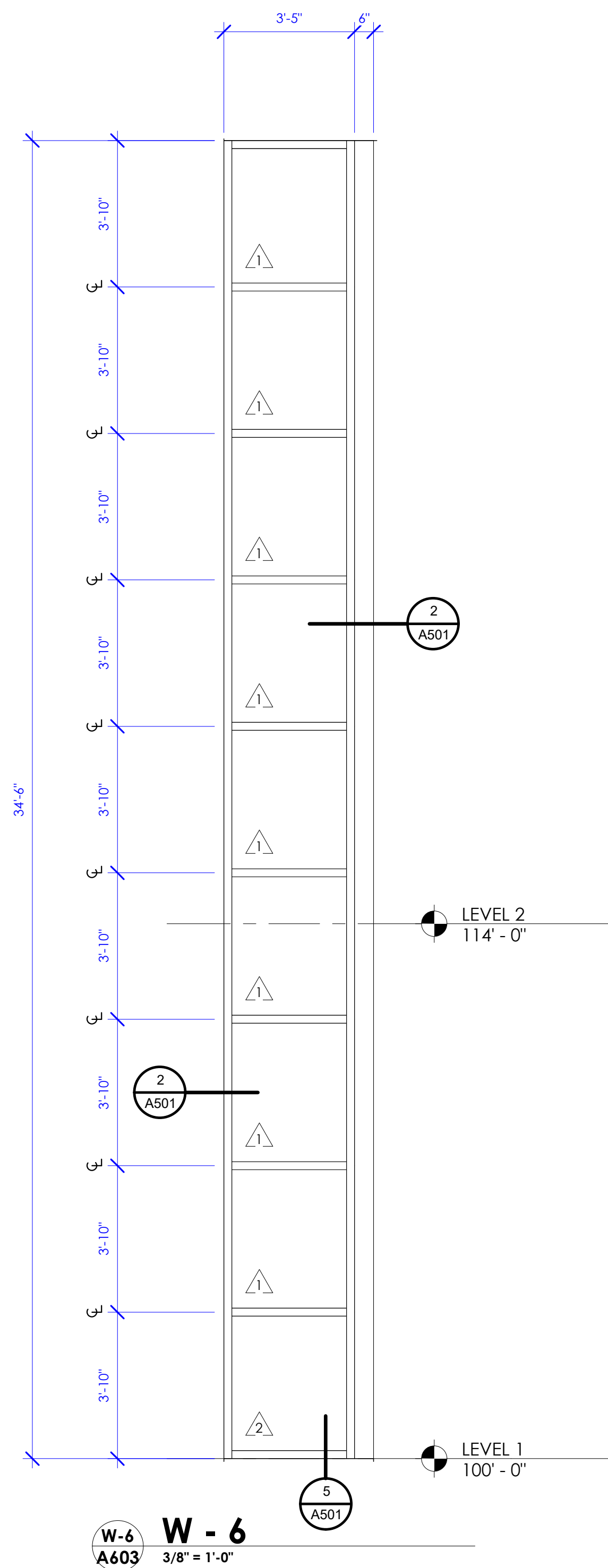
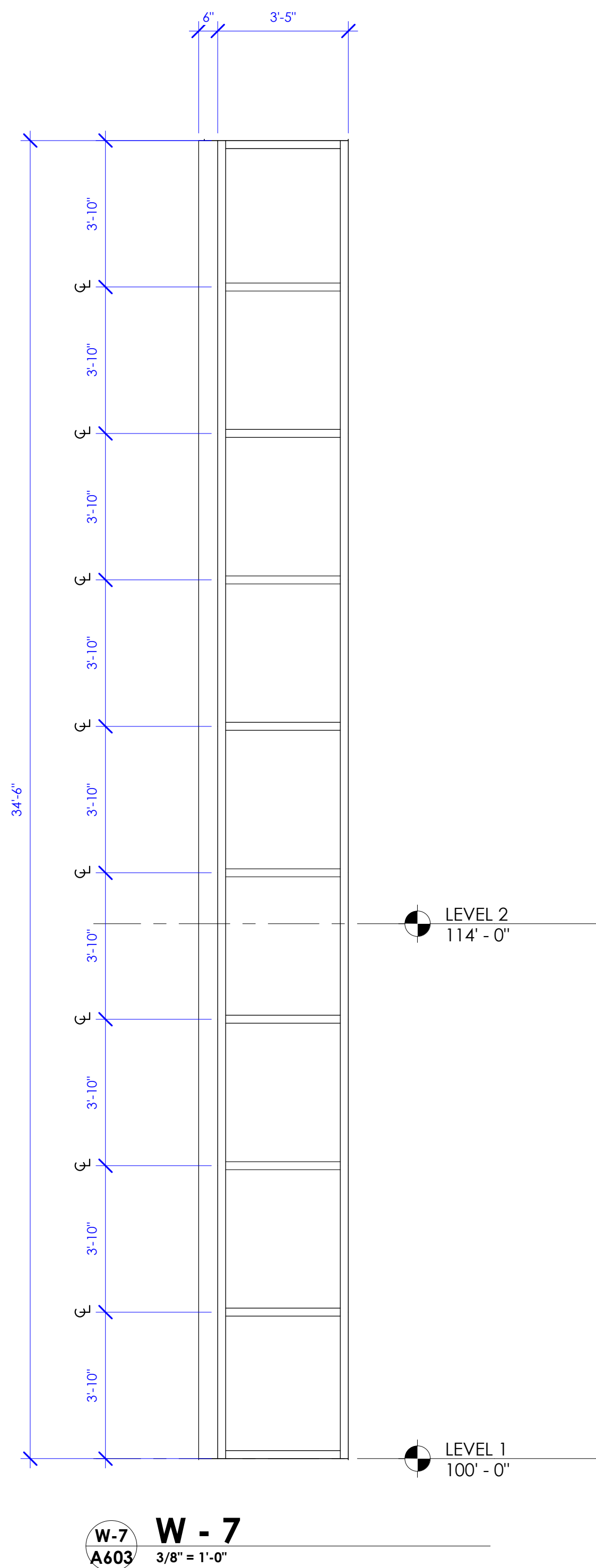
RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	DESCRIPTION

AE0222.290
WINDOW
ELEVATIONS

DATE: 04/23/2025

SHEET #:



WINDOW FRAMES:

- = ALUMINUM STOREFRONT: SILVER ANODIZED ALUMINUM FINISH
- = GRAY TINTED GLAZING WITH MEDIUM REFLECTIVITY COATING, PROVIDE SAMPLES (OR APPROVED EQUAL) (AS PER COMCHECK, SEE MECH)
- = GRAY TINTED GLAZING WITH CONCRETE BEHIND, PAINT CONCRETE BEHIND GLASS.
- = CLEAR GLAZING

GLASS: TRULITE 1" OA (1/4 - 1/2 AS-1/4) GREYLITE II / SOLARBAN 60 (3)

SPANDREL: TRULITE II WITH #3-820 HARMONY GRAY SPANDREL (MONOLITHIC)

-- OR APPROVED EQUAL --

NOTES

1. CONTRACTOR TO PROVIDE SUBMITTALS FOR APPROVAL.
2. ALL GLAZING WITHIN 24" INCH OF A DOOR/FLOOR SHALL BE TEMPERED.
3. SEE SHEET A501 FOR WINDOW HEADER, JAMB AND SILL DETAILS.
4. ALL EXTERIOR GLASS TO BE DOUBLE PANE TINTED AND TO BE LOW E. VERIFY GLASS SPECIFICATIONS WITH COMCHECK PROVIDED BY MECHANICAL ENGINEER.
5. REFER TO MECHANICAL COMCHECK FOR MINIMUM DESIGN STANDARDS FOR GLAZING.

GLAZING LEGEND:

- GRAY TINTED 1" THICK LOW-E GLAZING, U-VALUE: 0.35 SHGC: 0.25
- GRAY TINTED 1" THICK LOW-E SAFETY GLAZING, U-VALUE: 0.35 SHGC: 0.25
- 1/4" GRAY TINTED GLASS
- 1/4" GRAY TINTED SAFETY GLASS
- 1" THICK CLEAR TINTED LOW-E GLAZING

TEMPERED GLAZING NOTES:

HUMAN IMPACT LOADS. INDIVIDUAL GLAZED AREAS, INCLUDING GLASS MIRRORS, IN HAZARDOUS LOCATIONS AS DEFINED BELOW SHALL COMPLY WITH SECTIONS 2406.1.1 THROUGH 2406.1.5 OF THE IBC (INTERNATIONAL BUILDING CODE).

IDENTIFICATION OF SAFETY GLAZING. EACH PANE OF SAFETY GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE IDENTIFIED BY A LABEL SPECIFYING THE LABELER, WHETHER THE MANUFACTURER OR INSTALLER, AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, AS WELL AS THE INFORMATION SPECIFIED IN SECTION 2403.1 OF THE IBC (INTERNATIONAL BUILDING CODE). THE LABEL SHALL BE ACID ETCHED, SAND BLASTED, CERAMIC FIRED OR AN EMBOSSED MARK, OR SHALL BE OF A TYPE THAT ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED. EXCEPTIONS:

1. FOR OTHER THAN TEMPERED GLASS, LABELS ARE NOT REQUIRED, PROVIDED THE BUILDING OFFICIAL APPROVES THE USE OF A CERTIFICATE, AFFIDAVIT OR OTHER EVIDENCE CONFIRMING COMPLIANCE WITH THIS CODE.
2. TEMPERED SPANDREL GLASS IS PERMITTED TO BE IDENTIFIED BY THE MANUFACTURER WITH A REMOVABLE PAPER LABEL.

HAZARDOUS LOCATIONS. THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:

1. GLAZING IN SWINGING DOORS.
2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
3. GLAZING IN STORM DOORS.
4. GLAZING IN UNFRAMED SWINGING DOORS.
5. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPools, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE A STANDING SURFACE.
6. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24-INCH (610 MM) ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE THE WALKING SURFACE.

EXCEPTIONS:

1. PANELS WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND GLAZING.
2. WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET (914 MM) OR LESS IN DEPTH. GLAZING IN THIS APPLICATION SHALL COMPLY WITH SECTION 2406.3, ITEM 7.
3. GLAZING IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION, OTHER THAN THE WALL TOWARDS WHICH THE DOOR SWINGS WHEN OPENED, IN ONE- AND TWO- FAMILY DWELLINGS OR WITHIN DWELLING UNITS IN GROUP R-2.
4. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN IN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEMS 5 AND 6, WHICH MEETS ALL OF THE FOLLOWING CONDITIONS:

- 7.1. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET (0.84 M2);
- 7.2. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR;
- 7.3. EXPOSED TOP EDGE GREATER THAN 36 INCHES (914 MM) ABOVE THE FLOOR; AND
- 7.4. ONE OR MORE WALKING SURFACE(S) WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING.

- EXCEPTION:** SAFETY GLAZING FOR ITEM 7 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS:
1. A PROTECTIVE BAR 1 1/2 INCHES (38 MM) OR MORE IN HEIGHT, CAPABLE OF WITHSTANDING A HORIZONTAL LOAD OF 50 POUNDS PLF (730 N/M) WITHOUT CONTACTING THE GLASS, IS INSTALLED ON THE ACCESSIBLE SIDES OF THE GLAZING 34 INCHES TO 38 INCHES (864 MM TO 965 MM) ABOVE THE FLOOR.
2. THE OUTBOARD PANE IN INSULATING GLASS UNITS OR MULTIPLE GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLASS IS 25 FEET (7620 MM) OR MORE ABOVE ANY GRADE, ROOF, WALKING SURFACE OR OTHER HORIZONTAL OR SLOPED (WITHIN 45 DEGREES OF HORIZONTAL) (0.78 RAD) SURFACE ADJACENT TO THE GLASS EXTERIOR.
3. GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS. REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE.
4. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:

- 9.1. THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES (1524 MM) ABOVE A WALKING SURFACE ON THE POOL OR SPA SIDE OF THE GLAZING; AND
- 9.2. THE GLAZING IS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA.
10. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES (914 MM) HORIZONTALLY OF A WALKING SURFACE: WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
11. GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE NOSE OF THE TREAD.

EXCEPTION: SAFETY GLAZING FOR ITEM 10 OR 11 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS WHERE:

1. THE SIDE OF A STAIRWAY, LANDING OR RAMP WHICH HAS A GUARDRAIL OR HANDRAIL, INCLUDING BALUSTERS OR IN-FILL PANELS, COMPLYING WITH THE PROVISIONS OF SECTIONS 1012 AND 1607.7; AND
2. THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES (457 MM) FROM THE RAILING.

RODERICK CATALYST BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision	Schedule	Revision Date
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AE2022.290

WINDOW ELEVATIONS

DATE: 04/23/2025

SHEET #:

A603

DESIGN CODE:

2021 INTERNATIONAL BUILDING CODE (IBC)

DESIGN CRITERIA:

<u>SEISMIC DESIGN CRITERIA</u>	
RISK CATEGORY	= II
SEISMIC IMPORTANCE FACTOR, Ie	= 1.0
SOIL SITE CLASS	= D
SEISMIC DESIGN CATEGORY	= D
CALCULATED BUILDING PERIOD, T	= 0.31 SECONDS

MAPPED SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD ACCELERATION, SS	= 1.006G
1-SECOND ACCELERATION, S1	= 0.771G
SEISMIC RESPONSE COEFFICIENTS	
SHORT PERIOD SITE COEFFICIENT, Fa	= 1.0
LONG PERIOD SITE COEFFICIENT, Fv	= 1.7
DESIGN SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD ACCELERATION, SDS	= 0.471G
1-SECOND ACCELERATION, SD1	= 0.874G

<u>LATERAL FORCE RESISTING SYSTEM</u>	
SPECIAL REINFORCED CONCRETE SHEARWALLS:	
RESPONSE MODIFICATION FACTOR, R	= 5.0
SYSTEM OVERSTRENGTH FACTOR, O	= 2.5
DEFLECTION AMPLIFICATION FACTOR, CD	= 1.0
SEISMIC RESPONSE COEFFICIENT, Cs	= 0.134
SEISMIC ANALYSIS PROCEDURE	= ELF
CALCULATED SEISMIC BASE SHEAR, V5	= 542 KIPS

<u>WIND DESIGN CRITERIA</u>	
3-SECOND GUST WIND SPEED	= 115 MPH
WIND EXPOSURE	= C
INTERNAL PRESSURE COEFFICIENT	= +0.18
COMPONENT & CLADDING DESIGN PRESSURE	= 30 PSF (VARIES BY HT)
WIND ANALYSIS PROCEDURE	= DIRECTIONAL
CALCULATED WIND BASE SHEAR, VW	= 152 KIPS

DESIGN LOADS:

DESIGN LOADS ARE THOSE RECOMMENDED BY THE IBC, LOCAL BUILDING CODES, AND THOSE RECOMMENDED BY JMWAAE/URBIA. CHANGES TO THE DESIGN LOADS MUST BE SUBMITTED TO AND APPROVED IN WRITING BY THE OWNER AND JMWAAE/URBIA IN WRITING PRIOR TO FABRICATION OR CONSTRUCTION.

1. COLLATERAL LOAD(S) ARE DEFINED AS MECHANICAL AND/OR OTHER LOADS FOR USE IN THE FUTURE.

<u>ROOF LOADS</u>	
ROOF DEAD LOAD	= 25 PSF [20 PSF + 5 PSF (COLLATERAL)]
ROOF SNOW LOAD	
GROUND SNOW LOAD, PG	= 30 PSF
SNOW IMPORTANCE FACTOR, IS	= 1.0
SNOW EXPOSURE FACTOR, CE	= 1.0
THERMAL FACTOR, CT	= 1.0
FLAT ROOF SNOW LOAD, PF	= 21PSF + DRIFT

EARTHWORK:

<u>DESIGN CRITERIA:</u>	
SOILS REPORT BY:	GSH GEOTECHNICAL INC.
PROJECT NO.:	1111-020-20 & 1111-030-22
DATE:	OCTOBER 3, 2020 & OCTOBER 27, 2022

<u>DESIGN VALUES:</u>	
SOIL BEARING PRESSURE:	2000 PSF
FROST PROTECTION:	30 INCHES
ENGINEERED FILL:	AS REQD ON PLAN & SOILS REPORT
COEFFICIENT OF FRICTION	=0.3

REQUIREMENTS

- ALL EARTHWORK, MATERIALS, AND PLACEMENT MUST MEET THE APPROVAL OF THE GEOTECHNICAL / SOILS ENGINEER.
- THE CONTRACTOR AND OWNER SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL SITE SOIL CONDITIONS.
- ANY UNFORESEEN CONDITIONS ENCOUNTERED DURING SITE PREPARATION SHALL BE BROUGHT TO THE ATTENTION OF THE SOILS ENGINEER AND ARCHITECT.
- CONTRACTOR SHALL STRIP THE BUILDING AREA FROM ALL VEGETATION, DEBRIS, AND TOPSOIL. CONTRACTOR SHALL EXCAVATE ANY REMAINING LOOSE NATURAL OR FILL SOILS TO EXPOSE COMPETENT NATURAL SOILS. CONTRACTOR SHALL REMOVE EXISTING FOUNDINGS, FOUNDATIONS, SLABS, SITE PAVING, DEBRIS, AND STRUCTURES AS REQUIRED.
- CONTRACTOR SHALL CHECK FOR SOFT SPOTS OR OTHER UNSUITABLE SOILS BY PROFF ROLLING THE ENTIRE BUILDING PAD AREA WITH NORMAL COMACTION EQUIPMENT. REMOVE UNSUITABLE MATERIALS AND REPLACE WITH COMPACTED ENGINEERED STRUCTURAL FILL OR 2,000 PSI LEAN CONCRETE, FLOWABLE FILL.
- ENGINEERED OR STRUCTURAL FILL MATERIAL BENEATH FOOTINGS SHALL MEET THE REQUIREMENTS OF SOILS REPORT AND SPECIFICATIONS.
- SEE PLANS FOR THICKNESS OF ALL FLOOR SLABS. UNDERLAY ALL SLABS WITH AT LEAST A 4" THICK LAYER OF FREE-DRAINING GRANULAR MATERIAL. GRANULAR MATERIAL SHALL BE "PEA" GRAVEL OR 1" MINUS CLEAN GAP-GRADED GRAVEL.
- BACKFILL AROUND FOUNDATION WALLS SHALL BE PERFORMED USING GRANULAR MATERIAL. CARE SHALL BE TAKEN IN BACKFILLING MATERIALS SO AS NOT TO DAMAGE THE FOUNDATION. CONTRACTOR SHALL MONITOR BACKFILL OPERATIONS AS NEEDED.
- REFER TO THE PROJECT SPECIFICATIONS AND SOILS REPORT FOR FURTHER EARTHWORK REQUIREMENTS.

GENERAL STRUCTURAL NOTES:

- GENERAL STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT PROJECT STRUCTURAL PLANS AND PROJECT SPECIFICATIONS. SPECIFIC NOTES ON PLANS, DETAILS, AND SCHEDULES SHALL GOVERN OVER THE GENERAL NOTES.
- TYPICAL DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.
- DIMENSIONS SHOWN ON PLANS ARE FOR INFORMATION ONLY. CONSTRUCTION DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- CHANGES TO THE CONTRACT DOCUMENTS MAY BE MADE ONLY BY WRITTEN AUTHORIZATION FROM AN AUTHORIZED REPRESENTATIVE OF J.M. WILLIAMS AND ASSOCIATES JMWAAE/URBIA. JMWAAE/URBIA SHALL BE HELD HARMLESS FOR ANY CLAIMS ARISING DIRECTLY OR INDIRECTLY FROM CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM AN AUTHORIZED REPRESENTATIVE OF JMWAAE/URBIA.
- CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION/FABRICATION AND SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- THE STRUCTURAL DRAWINGS SHALL NOT BE CONSIDERED ALL INCLUSIVE AND DO NOT CONTAIN ALL DIMENSIONS, ELEVATIONS, AND OPENINGS. NEEDED FOR CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS, SITE CONDITIONS, AND OTHER TRADES INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, MECHANICAL, CIVIL, ELECTRICAL, AND PLUMBING.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND EXISTING CONDITIONS BEFORE THE CONSTRUCTION/FABRICATION OF ANY DISCREPANCY AFFECTED ELEMENTS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS AS DIRECTED BY THE ARCHITECT/ENGINEER SHALL GOVERN AND BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ANY CHANGES, SUBSTITUTIONS, OR MODIFICATIONS. ANY CONSTRUCTION, FABRICATION, OR INSTALLATION PERFORMED BEFORE RECEIVING THE ARCHITECT/ENGINEERS WRITTEN APPROVAL WILL BE AT THE CONTRACTOR'S RISK/RESPENSE.
- THE CONTRACTOR SHALL COORDINATE THE WORK PERFORMED BY ALL TRADES AND IS ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH CONTRACT DOCUMENTS AND CODE REQUIREMENTS. THE CONTRACTOR SHALL MEET ALL NOTED REQUIREMENTS AND SHALL INCLUDE THE ASSOCIATED COSTS IN THEIR RESPECTIVE BID.
- THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL TRADES AND SHALL NOTIFY ENGINEER OF SIZE AND LOCATION OF ANY EQUIPMENT OR OTHER ADDITIONAL LOADS NOT SHOWN ON STRUCTURAL PLANS OR TYPICAL DETAILS BEFORE CONSTRUCTION/FABRICATION.
- FAILURE TO FOLLOW PLANS AND CONSTRUCTION DOCUMENTS CONSTITUTES CHANGE IN PROJECT SCOPE. THE ENGINEER RESERVES THE RIGHT TO REQUEST REPLACEMENT OF ANY PORTION OF THE STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED. DEVIATION FROM CONSTRUCTION DOCUMENTS WITHOUT WRITTEN APPROVAL RELIEVES ENGINEER OF ALL LIABILITY, AND CONTRACTOR ASSUMES FULL LIABILITY. STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED.
- STRUCTURAL ELEMENTS SHALL NOT BE CUT FOR PIPES, DUCTS, SLEEVES, ETC. UNLESS NOTED OTHERWISE IN THE PLANS AND TYPICAL DETAILS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ARCHITECT/ENGINEER FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, OPENINGS, ETC NOT EXPLICITLY SHOWN ON CONTRACT DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING AS NECESSARY. SHORING AND SUPPORT BEAMS SHALL SUPPORT ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED (I.E. WIND, CONSTRUCTION LOADING, ETC.). SHORING SHALL REMAIN IN PLACE AS LONG AS SAFETY REQUIRED AND/OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE IN PLACE AND CONNECTED AS REQUIRED IN THE CONTRACT DOCUMENTS.
- DURING AND AFTER CONSTRUCTION, THE LOADS IMPOSED ON THE STRUCTURE BY THE CONTRACTOR AND OWNER SHALL BE WITHIN THE LIMITS OF THE OCCUPANCY DESIGN LOADS. SEE STRUCTURAL PLANS AND CALCULATIONS FOR THE OCCUPANCY DESIGN LOADINGS AND CRITERIA.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.
- VISITS TO THE JOB SITE BY REPRESENTATIVES OF JMWAAE/URBIA DO NOT CONSTITUTE APPROVAL OR SPECIAL INSPECTION OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS.
- JMWAAE/URBIA SHALL RECEIVE COPIES OF ALL SPECIAL INSPECTION REPORTS COMPLETED BY THE REVIEWING AUTHORITY OR THIRD PARTY REGARDING STRUCTURAL ITEMS LISTED FOR SPECIAL INSPECTION.
- ALL DEFERRED SUBMITTAL ITEMS, COMPONENTS, AND SYSTEMS NOT SPECIFICALLY ENGINEERED BY THE ENGINEER OF RECORD SHALL BE "DESIGN-BUILT" BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS OR AS-BUILT DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER IF REQUIRED BY THE REVIEWING AUTHORITY OR JURISDICTION. IF PRE-ENGINEERED SYSTEM IMPACTS THE ORIGINAL DESIGN FOR INTENT OF THE PROJECT IN ANY WAY, CONTRACTOR SHALL COORDINATE WITH ENGINEER OF RECORD PRIOR TO INSTALLATION.
- JMWAAE/URBIA IS NOT RESPONSIBLE FOR THE COST OF CONSTRUCTION NOR PROJECT BUDGETS. ANY STRUCTURAL CHANGES REQUIRED BY THE CONTRACTOR, OWNER OR ARCHITECT SHALL BE INVOICED BY JMWAAE/URBIA AND TREATED AS ADDITIONAL SERVICES.
- JMWAAE/URBIA IS NOT RESPONSIBLE FOR ADDITIONAL ENGINEERING REQUIRED AS A RESULT OF ANY THIRD PARTY OR CITY REVIEW. PROVIDED ORIGINAL DESIGN IS IN ACCORDANCE WITH THE CURRENT BUILDING CODE.
- OMISSIONS IDENTIFIED DURING PLAN REVIEW OR CONSTRUCTION SHALL BE ENGINEERED BY THE ENGINEER OF RECORD AT NO ADDITIONAL COST TO THE OWNER. THE OWNER SHALL BE RESPONSIBLE FOR PAYMENT OF OMISSIONS THROUGH AN APPROVED CHANGE ORDER.
- REVIEW OF SHOP DRAWING SUBMITTAL ITEMS BY JMWAAE/URBIA SHALL BE FOR GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS AND IS NOT INTENDED FOR APPROVAL. SHOP DRAWING REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF COMPLETING THE PROJECT ACCORDING TO CONTRACT DOCUMENTS.
- STRUCTURAL SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER AND ARCHITECT OF RECORD PRIOR TO FABRICATION AND ERECTION.
- THE FOLLOWING LIST INCLUDES, BUT IS NOT LIMITED TO, SPECIFIC ITEMS FOR WHICH SHOP DRAWING SUBMITTALS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION/INSTALLATION:
 - CONCRETE MIX DESIGN
 - CONCRETE REINFORCING
 - STEEL DECKING
 - STEEL DECKING
 - CONCRETE TILT-UP PANELS
 - ALL DEFERRED SUBMITTAL ITEMS

DEFERRED SUBMITTALS:

- FOR THE PURPOSES OF THIS SECTION, DEFERRED SUBMITTALS ARE DEFINED PER IBC SECTION 107.3.4.1 AS THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF THE APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE BUILDINGS OFFICIAL, WITHIN A SPECIFIED PERIOD.
- ANY USE OF SUBMITTAL ITEMS SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. THE ARCHITECT OR ENGINEER OF RECORD SHALL LIST THE DEFERRED SUBMITTALS ON THE PLANS AND SHALL SUBMIT THE DEFERRED SUBMITTAL DOCUMENTS FOR REVIEW BY THE BLDG OFFICIAL.
- SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION AND SHALL INCLUDE:
 - COMPLETE CALCULATIONS INDICATING MEMBER FORCES, STRESSES, DURATION FACTORS, DIMENSIONS, AND LOCATIONS.
 - MATERIAL GRAD, DIMENSIONS, SIZES AND LOCATIONS.
 - INDICATION OF TYPE AND SIZE OF CONNECTION (WHERE REQUIRED) AND DESIGN REACTIONS AT CONNECTION POINTS FOR REVIEW BY ENGINEER OF RECORD.
- DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

DEFERRED SUBMITTALS:

- OPEN-WEB STEEL JOIST & GIRDER

CONCRETE NOTES:

- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE IBC, LOCAL ORDINANCES, AND THE MOST CURRENTLY ADOPTED VERSION OF THE AMERICAN CONCRETE INSTITUTE (ACI) ACI 318.
- CONTRACTOR SHALL COORDINATE OPENINGS, BLOCK OUTS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS, AND ANY OTHER EMBEDDED ITEMS WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURAL PRIOR TO PLACING CONCRETE.
- NO OPENINGS, PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE INCLUDING BUT NOT LIMITED TO WALLS, BEAMS, COLUMNS, FOOTINGS, GRADE BEAMS AND SUSPENDED SLABS (INCLUDING CONCRETE OVER METAL DECK UNLESS SPECIFICALLY DETAILED OR WRITTEN APPROVAL IS GIVEN BY ENGINEER. FOOTINGS SHALL BE STEPPED TO AVOID PIPING UNLESS OTHERWISE DETAILED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF ALL ANCHOR BOLTS, SEISMIC ANCHORS OR STRAPS, ETC., INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, CARE, PLACEMENT AND REMOVAL OF ALL FORMWORK AND SHORES. DO NOT REMOVE FORMS AND SHORING UNTIL STRUCTURAL MEMBERS ACHIEVE SUFFICIENT STRENGTH TO SUPPORT THEIR OWN WEIGHT PLUS CONSTRUCTION LOADS.
- ONLY ONE GRADE OR TYPE OF CONCRETE SHALL BE POURED ON SITE AT ANY GIVEN TIME.
- CONTRACTOR SHALL SEE CIVIL DRAWINGS AND PROJECT SPECIFICATIONS FOR ADDITIONAL SITE CONCRETE REQUIREMENTS NOT GIVEN IN THIS SECTION.
- CONSTRUCTION ACTIVITY OR STORAGE OF MATERIALS SHALL NOT TAKE PLACE ON NEWLY PLACED CONCRETE UNTIL CONCRETE HAS ACHIEVED 75% OF SPECIFIED CONCRETE STRENGTH OR 7 DAYS, WHICHEVER IS SOONER. DAMAGED SLABS OR OTHER STRUCTURAL CONCRETE BECAUSE OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- CONTRACTOR SHALL FOLLOW RECOMMENDATIONS IN ACI 308R FOR HOT WEATHER CONCRETE PLACEMENT AND ACI 306R FOR COLD WEATHER CONCRETE PLACEMENT.

CONCRETE MATERIALS

- ALL CONCRETE ON SITE SHALL BE TYPE (II) CEMENT PER ASTM C150 FOR ALL CONCRETE.
- NO ALUMINUM CONDUIT, PRODUCT CONTAINING ALUMINUM, OR ANY OTHER MATERIAL THAT MAY BE INJURIOUS TO THE CONCRETE SHALL BE EMBEDDED IN CONCRETE.
- MAXIMUM SLUMP OF CONCRETE IS EQUAL TO 4 INCHES PLUS OR MINUS 1 INCH. CEMENTITIOUS MATERIALS AND AGGREGATES, UNO.
- CEMENTITIOUS MATERIALS AND AGGREGATES, UNO:
 - MIXING WATER: ASTM C1602
 - FLY ASH AND POZZOLAN: ASTM C618
 - 25% MAX CEMENTITIOUS CONTENT, (TYP): ASTM C 33
 - NORMAL WEIGHT AGGREGATES: ASTM C330
 - LIGHT WEIGHT AGGREGATES: ASTM C330
 - MAX AGGREGATE SIZE USED:
 - 1/2" NARROWEST DIMENSION BTWN FORMS
 - 1/3" DEPTH OF THE SLAB
 - 3/4" THE MIN CLEAR SPACING BTWN BARS
- AD MIXTURES WHEN USED, UNO:
 - WATER REDUCING AND RETARDING ADMIXTURE: ASTM C494
 - AIR ENTRAINING ADMIXTURES: ASTM C260
 - CHLORIDE ION CORROSION PREVENTION: ASTM C1582
 - CALCIUM CHLORIDE SHALL NOT BE ADDED TO CONCRETE MIX.
 - AD MIXTURES NOT MENTIONED AS PART OF THIS SECTION SHALL BE SUBMITTED TO ENGINEER FOR REVIEW BEFORE USE.

CONCRETE STRENGTH

CONCRETE SHALL BE SUPPLIED TO MEET THE FOLLOWING STRENGTH REQUIREMENTS AND REQUIREMENTS SPECIFIC TO THE EXPOSURE CLASSES INCLUDING LIMITS ON WATER/CEMENT RATIO AND AIR CONTENT FOR GIVEN IN ACCORDANCE WITH ACI 318:

CONCRETE ELEMENT:	STRENGTH:	EXPOSURE CLASS:
FOOTINGS & FOUNDATION WALLS:	4000 PSI	(F1, S0, W1, C1)
TILT-UP CONCRETE WALL PANELS	4500 PSI	(F2, S0, W1, C1)
INTERIOR SLAB ON GRADE:	3500 PSI	(F0, S0, W0, C0)
SITE CONCRETE:	4500 PSI	(F3, S0, W1, C2)

REINFORCEMENT & ANCHORAGE

- REINFORCING STEEL
 - TYPICAL REINFORCING BAR:
 - TILT WALLS: ASTM 705 GRADE 40
 - FIELD BENT DOWELS: ASTM 615 GRADE 40 (OPTIONAL)
 - DEFORMED BAR ANCHORS (DBA): ASTM A496
 - ANCHOR BOLTS (H&A): ASTM A108
- TYPICAL:
 - ANCHOR BOLTS: ASTM F1554 GRADE 36
 - NUTS: ASTM A563 NUTS AND
 - HARDENED WASHERS: ASTM F436 (5/16" THICK UNO)
- ALL SPLICES IN REINFORCING BARS SHALL MEET THE REQUIREMENTS OF "REINFORCING LAP SPLICE SPECIFICATION".
- DO NOT SPICE STRUTS AND TIES. DO NOT SPICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN IN DETAILS.
- MECHANICAL SPLICES SHALL BE POSITIVE CONNECTING COUPLERS AND SHALL MEET ALL APPLICABLE CODE REQUIREMENTS. ADJACENT MECHANICAL SPLICES SHALL BE STAGGERED A MINIMUM OF 24 INCHES ALONG THE REINFORCING BARS. TENSILE CAPACITY OF MECHANICAL SPLICES SHALL BE 125% OF THE SPLICED BAR.
- ALL REINFORCING STEEL SHALL BE DETAIL AND PLACED IN ACCORDANCE WITH THE ACI DETAILING MANUAL AND ACI STANDARDS.
- CONCRETE TO BE MECHANICALLY CONSOLIDATED DURING PLACEMENT PER ACI STANDARDS.
- CONSTRUCTION DOCUMENTS WITHOUT WRITTEN APPROVAL RELIEVES ENGINEER OF ALL LIABILITY, AND CONTRACTOR ASSUMES FULL LIABILITY. STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED.
- LIFTING OF RETAINS FOR REINFORCING OVER GRADE OR DECK DURING PLACEMENT OF CONCRETE IS NOT PERMITTED.
- REINFORCING STEEL AND EMBEDS SHALL BE PROPERLY TIED INTO PLACE PRIOR TO PLACING CONCRETE.
- HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION AND CONTROL JOINTS OR PROVIDE REINFORCING DOWELS TO MATCH MEMBER REINFORCING. UNO.
- PROVIDE CORNER BARS AT INTERSECTING WALL CORNERS USING THE SAME BAR SIZE AND SPACING AS THE HORIZONTAL WALL REINFORCING. SEE DETAIL FOR CORNER BARS.
- DO NOT WELD REINFORCING BARS. DO NOT SUBSTITUTE REINFORCING BARS FOR DEFORMED BAR ANCHORS OR HEADED STUD ANCHORS.
- SEE ACI 315 FOR ADDITIONAL DETAILING REQUIREMENTS FOR REINFORCING.

- CAST-IN-PLACE REINFORCEMENT SHALL HAVE THE FOLLOWING CLEAR COVER:
 - CAST AGAINST/PERMANENTLY EXPOSED TO EARTH: 3"
 - FORMED CONCRETE EXPOSED TO EARTH/WEATHER:
 - #6 THRU #18 BARS: 2"
 - #3 AND SMALLER BARS: 1-1/2"
- CONCRETE NOT EXPOSED EARTH/WEATHER:
 - SLABS, WALLS, JOISTS (#11 AND SMALLER): 3/4"
 - BEAMS, COLUMNS, TIES, STRUTS: 1-1/2"
- CONCRETE TILT-UP PANELS
 - #3 AND SMALLER BARS: 3/4"
 - #9 THRU #18 BARS: 1-1/2"

CONSTRUCTION AND CONTROL JOINTS:

- CONSTRUCTION OR CONTROL JOINTS IN ALL EXPOSED CONCRETE NOT SHOWN ON PLANS SHALL BE COORDINATED WITH THE ARCHITECT/ENGINEER BEFORE CONSTRUCTION IS PLACED.
- CONSTRUCTION JOINTS SHALL BE MADE IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
 - CONCRETE SLAB ON GRADE OR CONCRETE OVER METAL DECK:
 - 4" MIN. TYP. O.C. MAX
 - 5" THICK - 12" O.C. MAX
 - 6" THICK - 12" O.C. MAX
 - 8" THICK - 12" O.C. MAX
 - SAWCUT CONTROL JOINTS SHALL BE MADE 1-4 IN HOT WEATHER OR 4-8 IN COLD WEATHER AFTER COMPLETING THE FINISHING OF THE SLAB IN THAT JOINT LOCATION. CUTTING SHALL BE COMPLETED BEFORE SLAB CONCRETE COOLING OCCURS. SUBSEQUENT TO THE PEAK HEAT OF HYDRATION, USE EARLY ENTRY SAW.
 - CONSTRUCTION JOINTS SHALL NOT EXCEED A DISTANCE OF 125'-0" O.C. IN ANY DIRECTION, HOWEVER DISTANCE MAY BE INCREASED TO 150'-0' UNDER IDEAL CONDITIONS AT CONTRACTOR'S RISK.
 - FOOTINGS MAY BE MONOLITHIC WITH SLAB.
 - THE LENGTH TO WIDTH RATIO OF CONTROL JOINTS SHALL NOT EXCEED 1:5:1.
 - PROVIDE 2" #4 BARS X 48 INCHES AT ALL DISCONTINUOUS CONTROL OR CONSTRUCTION JOINTS IN SLAB-ON-GRADE.
 - PROVIDE 1" DIAGONAL #3 OR #4 BAR X 48" AT ALL INSIDE CORNERS.
 - CONTRACTOR MAY SUBMIT IN WRITING CHANGES OR MODIFICATIONS TO REQUIREMENTS FOR CONTROL AND CONSTRUCTION JOINTS FOR ARCHITECT, OWNER, AND ENGINEER REVIEW.

FOOTINGS

- SEE FOOTING SCHEDULE AND DETAILS FOR SIZE AND REINFORCING REQUIREMENTS, TYP. INTERIOR
- FOOTINGS MAY BE MONOLITHIC WITH SLAB.
- CONTRACTOR TO ENSURE THAT ALL EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH AS NOTED IN "EARTHWORK" SECTION. CONTRACTOR SHALL STEP FOOTINGS & FOUNDATION AS REQUIRED.
- NO FOOTING SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

FOUNDATION AND RETAINING WALLS

- BRACE WALLS AS REQUIRED UNTIL FLOOR SLABS AND/OR FLOOR FRAMING ARE IN PLACE, AND UNTIL WALLS HAVE BEEN PROPERLY CURED.
- FOUNDATION WALLS AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ACHIEVED THE DESIGN STRENGTH OR IS PROPERLY SHORED.
- BACKFILL ADJACENT TO FOUNDATION WALLS OR IN LANDSCAPED AREAS SHALL BE PLACED IN 8 INCH MAXIMUM LOOSE LIFTS. FILL SHALL HAVE MOISTURE CONTENT WITHIN 2% OF OPTIMUM AND SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (ASTM D 1557). HEAVY EQUIPMENT SHALL NOT BE USED TO BACKFILL WITHOUT PRIOR CONSENT OF THE ENGINEER.
- SEE ARCHITECTURAL DRAWINGS AND DETAILS FOR DRAINAGE METHOD BEHIND FOUNDATION AND RETAINING WALLS.
- CONSTRUCTION JOINTS (COLD JOINTS) IN WALLS SHALL BE WATERPROOFED TO PREVENT LEAKS.
- CONTRACTOR SHALL COORDINATE ALL STEPS IN WALLS WITH THE ARCHITECTURAL PRIOR TO PLACEMENT.

SLAB ON GRADE

- THE QUALITY OF THE SLAB-ON-GRADE, INCLUDING CONCRETE AND WORKMANSHIP ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE CONCRETE SUB-CONTRACTOR.
- THE CONSTRUCTION OF THE SLAB-ON-GRADE IS A MEANS AND METHODS OF CONSTRUCTION. VARIATIONS FROM THESE RECOMMENDATIONS SHALL BE SUBMITTED IN WRITING PRIOR TO DOING THE WORK. CONTRACTOR IS ENCOURAGED TO MAKE APPROVED MODIFICATIONS IN ORDER TO PROVIDE THE BEST SLAB POSSIBLE.
- THE SLAB-ON-GRADE IS USED TO BRACE TILT-UP WALLS AND IS THEREFORE A STRUCTURAL SLAB, DESIGNED AS AN ALTERNATE DESIGN METHOD AS ALLOWED BY THE IBC AND ACI 318, U.N.O.
- THE THICKNESS AND REINFORCING OF SLABS ON GRADE SHALL BE AS INDICATED ON THE FOOTING AND FOUNDATION PLAN. ALTERNATE THICKNESS AND REINFORCING MAY BE SUBMITTED TO ARCHITECT FOR OWNER'S CONSIDERATION, BASED ON CONTRACTORS EXPERIENCE.
- DEPRESSED SLABS, LOCAL AND DEPTH OF SLAB DEPRESSIONS SHALL BE AS REQUIRED IN AREAS OF CERAMIC TILE, SPECIAL ENTRY MATS, HARDWOOD FLOORS, ETC. SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- VAPOR RETARDER: PLACEMENT OF SLAB ON GRADE UNDERLAYMENT IS REQUIRED BENEATH FINISHED OFFICE AREAS OR AS OTHERWISE DIRECTED BY ARCHITECT. GEOTECHNICAL ENGINEER, OR OWNER. (OPTION: PROVIDE UNDER ALL SLABS ON-GRADE).
- VAPOR RETARDER SHOULD MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE BY SOILS REPORT:
 - MEET OR EXCEED REQUIREMENTS OF ASTM E1745, CLASS A MINIMUM
 - 10 MIL THICKNESS (MINIMUM)
 - TAPE ALL SEAMS AND PENETRATIONS WITH 6" WIDE TAPE AS RECOMMENDED BY MANUFACTURER
- PROVIDE ISOLATION JOINT OR BLOCKOUTS AROUND COLUMNS.
- SLAB-ON-GRADE SHALL NOT BE IN DIRECT CONTACT WITH INTERIOR FOOTINGS. PROVIDE HORIZONTAL ISOLATION USING FREE-DRAINING GRANULAR MATERIAL OR A VAPOR RETARDER, APPROVED A/E, U.N.O.
- THE SLAB REINFORCING STEEL SHALL BE PLACED IN THE TOP OF THE SLAB AND SHALL BE 2" CLEAR FROM 6" (OR THICKER) SLAB AND 1.5" CLEAR FOR 5" (OR THICKER) SLAB.
- ALL REINFORCING STEEL SHALL BE PROPERLY CHAINED TO ENSURE PROPER PLACEMENT. CHAIRS MUST HAVE A BASE FOR SLAB-ON-GRADE.
- REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS U.N.O. EVERY OTHER BAR MAY BE CUT AT JOINTS AT THE DISCRETION OF THE CONTRACTOR, OR #3 X 36" @ 18" O.C. MAY BE USED, U.N.O. SEE PLAN FOR ALTERNATES.
- SAWCUT CONTROL JOINTS 1" MIN DEEP (BUT NOT DEEPER THAN TOP BAR CLEARANCE). USE AN EARLY-ENTRY DRY-CUT SAW WITH "NEW" OR "LIKE NEW" 3/4" PLATE. CUT JOINTS 1-HOUR IN HOT WEATHER OR 4-HOURS IN COLD WEATHER AFTER COMPLETING THE FINISHING OF THE SLAB IN THAT JOINT LOCATION. SAW CUTTING SHOULD BE COMPLETED BEFORE SLAB CONCRETE COOLING OCCURS. SUBSEQUENT TO THE PEAK HEAT OF HYDRATION, SAW CUT 1.25" ± 0.25" ± 1" ± 1.5"
- HOT WEATHER CONCRETING IN COMPLIANCE WITH THE MOST RECENT ACI STANDARD, ACI 305R IS REQUIRED WHEN TEMPERATURES REACH 80 DEGREES FAHRENHEIT, OR WHEN THE TEMPERATURE OF FRESHLY MIXED CONCRETE RISES ABOVE 77 DEGREES FAHRENHEIT.
- COLD WEATHER CONCRETING IN COMPLIANCE WITH THE MOST RECENT ACI STANDARD, ACI 306R IS REQUIRED WHEN FOR MORE THAN THREE SUCCESSIVE DAYS THE AVERAGE DAILY AIR TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT AND STAYS BELOW 50 DEGREES FAHRENHEIT FOR MORE THAN ONE-HOUR OF ANY 24-HOUR PERIOD.
- OPTION: USE TYPE MS CEMENT OR EQUAL, WITH 1.5" MAXIMUM COARSE AGGREGATE TO HELP MINIMIZE SHRINKAGE.
- USE A LOW-SHINK MIX DESIGN, 28 DAY SHRINKAGE TO BE 0.04% OR LESS.
- PROPERLY WET BASE AND ENSURE REINFORCING BARS ARE COOL PRIOR TO PLACING CONCRETE, AND TO PREVENT SOILS FROM PULLING MOISTURE FROM SLAB.
- DO NOT PLACE CONCRETE DURING WET CONDITIONS, TO AVOID CANYON BREEZES.
- CONCRETE MAY NEED TO BE PLACED AT NIGHT.
- DO NOT PLACE CONCRETE IN THE HEAT OF THE DAY.
- DO NOT OVERWORK THE SURFACE OF THE CONCRETE AND DO NOT ADD WATER.
- SEE "CONCRETE MATERIALS" UNDER GENERAL CONCRETE NOTES FOR MAXIMUM SLUMP, ETC. U.N.O. PROPERLY CURE THE SLAB-ON-GRADE SURFACE IMMEDIATELY AFTER POWER TROWLING. ALLOW ANY BLEED WATER TO DISAPPEAR OR REMOVE EXCESS WATER PRIOR TO APPLYING THE CURING COMPOUND. ACCEPTABLE CURING INCLUDES WET CURING, OR THE USE OF A CURING COMPOUND. THE BOND BREAKER IS NOT A CURING COMPOUND. LACK OF MOISTURE AT THE SURFACE OF THE CONCRETE WHILE THE CONCRETE IS STILL HYDRATING IS TYPICALLY DUE TO IMPROPER CURING, INADEQUATE CURING, OR LACK OF CURING, AND MAY RESULT IN CRACKING. WET CURING IS FOR 7 DAYS OR UNTIL 70% OF THE SPECIFIED COMPRESSION STRENGTH IS ACHIEVED. THE APPLICATION OF THE CURING COMPOUND SHALL COMPLY WITH THE MANUFACTURERS SPECIFICATIONS OR RECOMMENDATIONS AND SHALL BE BASED ON THE RATE OF EVAPORATION AND OTHER ENVIRONMENTAL CONDITIONS AT THE SITE, AT THE TIME OF APPLICATION. CONTRACTOR TO COORDINATE WITH SUPPLIER, SUPPLIER TO ENSURE PROPER APPLICATION OF CURING COMPOUND.

MACROSYTHETIC FIBER REINFORCED CONCRETE

- MACROSYTHETIC FIBER REINFORCING IS APPROVED FOR USE IN CONSTRUCTION ONLY WHEN PRIOR WRITTEN CONSENT HAS BEEN OBTAINED BY AEURBIA/JMWAA AND OWNER.
- FIBERS SHALL MEET ALL REQUIREMENTS SET FORTH PER ASTM C1116 AND ASTM D7508.
- FIBER DESCRIPTION:
 - FIBER LENGTHS SHALL BE 2.0 INCHES OR GREATER.
 - BEFORE MIXING, FIBERS ARE COLLATED BY TWISTING WITH AN INITIAL BUNDLE ASPECT RATIO LESS THAN 25.
 - AFTER MIXING MACRO SYNTHETIC FIBERS ARE TO HAVE AN ASPECT RATIO OF 80 OR GREATER.
 - FIBER DOSAGE, SIZE, AND MATERIAL SHALL BE DETERMINED BY MANUFACTURER (EUCID, FORTA, OR OTHERS) MAY BE APPROVED WITH WRITTEN CONSENT FROM JMWAAE/URBIA/I.
 - DOSEAGE SHALL BE 4 LBS PER CUBIC YARD MINIMUM.

CONCRETE TILT-UP PANELS

- SEE ARCHITECTURAL PLANS FOR DIMENSIONS, OPENINGS, FINISH CONDITIONS (REVEALS, RECESSES, FORMLINES, ETC).
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PRIOR TO PLACING CONCRETE.
- PANEL THICKNESS IS THE TOTAL PANEL THICKNESS INCLUDING REVEALS, RECESSES, ETC. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, LOCATION, FURNISHING, AND PLACEMENT OF ALL PANEL LIFTING INSERTS AND ANY ADDITIONAL REINFORCING FOR INSERTS REQUIRED FOR THE LIFTING AND PLACING OF THE PANELS.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PLACING ALL CONNECTION ELEMENTS (ANGLES, BOLTS, EMBEDS, LEDGERS, PLATES, ETC).
- THE CONTRACTOR SHALL PROVIDE OPENINGS, SLEEVES, AND INSERTS FOR PLUMBING, MECHANICAL, ELECTRICAL, AND OTHER MISCELLANEOUS PIPES, DUCTS, AND CONDUITS. BREAKING OR DRILLING HOLES IN OR THROUGH PANELS WILL NOT BE PERMITTED.
- THE CONTRACTOR SHALL TEMPORARILY SUPPORT ALL WALL PANELS (VERTICALLY AND HORIZONTALLY) WITH THE NECESSARY SHORING, SHIMS, AND BRACING. DO NOT REMOVE SHORING UNTIL ALL STRUCTURAL MEMBERS, INCLUDING THE POUR STRIPS AND ROOF DECK, ARE SECURED.
- PROVIDE NON-SHRINK GROUT UNDER ALL PANELS - SHIMS ARE TO BE USED FOR TEMPORARY SUPPORT ONLY.
 - RECOMMENDED SPACING OF PANEL SUPPORT SHIMS SHALL BE 4'-0" O.C. MAX TO PREVENT EXCESSIVE POINT LOADING ON FOOTINGS. ACTUAL SHIM SPACING TO BE DETERMINED BY CONTRACTOR AS A MEANS AND METHODS OF CONSTRUCTION.
- SEE PLANS FOR THE REQUIRED CENTERLINE LOCATION OF THE VERTICAL REINFORCING, (FOR SINGLE OR DOUBLE CURTAIN REINFORCING).
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL PANELS. SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO:
 - DIMENSIONS TO ALL OPENING LOCATIONS
 - PANEL REINFORCING
 - LIFTING AND BRACING INFORMATION
 - ANGLES, BOLTS, EMBEDS, LEDGERS, PLATES, ETC.
 - ARCHITECTURAL REVEALS, FINISHES ETC.
 - WHERE APPLICABLE SHOP DRAWINGS SHALL BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
- SEE SCHEDULES, TABLES, AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

STRUCTURAL STEEL NOTES:

- ALL WORK TO BE IN STRICT ACCORDANCE WITH THE IBC, LOCAL ORDINANCES, AND THE MOST CURRENTLY ADOPTED VERSION OF THE FOLLOWING DESIGN SPECIFICATIONS:
 - AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
 - AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS"
 - AISC 303 "CODE OF STANDARD PRACTICE" EXCLUDING SECTIONS 3.2, 4.4, 4.4.1.
 - AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," AND "SEISMIC PROVISION FOR STRUCTURAL BUILDINGS,"
 - AISC "STRUCTURAL WELDING CODE," EXCEPT AS MODIFIED BY THE REQUIREMENTS GIVEN BY AISC.
- ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION AND ERECTION.
- SEE ARCHITECTURAL SHEETS FOR DIMENSIONS, ELEVATIONS, ACCESS HATCHES, DRAFT STOPS, ETC.
- ANCHOR BOLTS, LOCAL AND DEPTH OF SLAB DEPRESSIONS SHALL BE AS REQUIRED IN AREAS OF CERAMIC TILE, SPECIAL ENTRY MATS, HARDWOOD FLOORS, ETC. SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- ALL FAYING SURFACES MUST BE PROPERLY PREPARED FOR CONNECTION AND BE FREE OF RUST/CORROSION.
- ALL EXPOSED EXTERIOR STEEL ELEMENTS SHALL BE HOT-DIPPED GALVANIZED. CONTRACTOR TO COORDINATE WITH ARCHITECT BEFORE FABRICATION.
- STANDARD PENETRATIONS THROUGH STRUCTURAL MEMBERS FOR MECHANICAL, PLUMBING, ELECTRICAL SYSTEMS, ETC. SHALL BE PROVIDED ON THE CENTERLINE OF THE MEMBERS DEPTH AND WITHIN THE MIDDLE ONE-THIRD OF THE SPAN. ALL PENETRATIONS MUST BE SHOWN IN SHOP-DRAWINGS. NO FIELD-CUT PENETRATIONS ARE PERMITTED WITHOUT WRITTEN APPROVAL FROM JMWAAE/URBIA.
- REFER TO ARCHITECTURAL DRAWINGS FOR STEEL FIREPROOFING REQUIREMENTS.

MATERIALS

- WIDE FLANGE SECTIONS: ASTM A992 (50 KSI)
- SHAPES AND PLATES:
 - TYPICAL: ASTM A36
 - HSS (SQUARE, RECTANGULAR): ASTM A500 GRADE C (50 KSI)
 - PIPE: ASTM C107 GRADE B
- BOLTED CONNECTIONS (TYPICAL):
 - ANCHOR BOLTS (3/4" DIA UNO): ASTM F3125 A325
 - NUTS: ASTM A563 NUTS
 - HARDENED WASHERS: ASTM F436
- WELDS (TYPICAL):
 - E70 XX AT ALL JOISTS
 - E70 XX AT ALL LOCATIONS
 - E70 XX AT ALL OTHER LOCATIONS

WELDING

- ALL WELDS AND BOLTING TO MEET APPROVAL OF SPECIAL INSPECTOR AS REQUIRED BY BUILDING OFFICIAL.
- ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
- WELDS MAY BE PERFORMED IN THE SHOP OR IN THE FIELD. DESIGNATIONS IN THE CONTRACT DOCUMENTS ARE SHOWN ONLY FOR THE PURPOSE OF ASSISTING THE CONTRACTOR IN THE BIDDING PROCESS. AT THE DISCRETION OF THE CONTRACTOR FIELD WELDS MAY BE SUBSTITUTED FOR SHOP WELDS AND FIELD WELDS FOR SHOP WELDS. THE CONTRACTOR SHALL COORDINATE THE WELDING SEQUENCE BETWEEN SUB-CONTRACTORS AND FABRICATORS. CONTRACTOR IS TO VERIFY THAT SEQUENCE OF WELDING CONFORMS WITH APPLICABLE CODES AND REQUIREMENTS SET FORTH IN THE CONTRACT DOCUMENTS.
- ALL INTERSECTING STEEL SHAPES WHICH ARE NOT BOLTED SHALL BE CONNECTED BY A FILLET WELD ALL AROUND, UNLESS NOTED OTHERWISE.
- WHERE FILLET

SPECIAL INSPECTION NOTES	
1.	CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS NOT PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
2.	ANY CONSTRUCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.
3.	EXPANDED INSPECTION INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT AND /OR ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED (CSC) SEARCH REPORT NUMBERS
4.	SPECIAL INSPECTION OF SOILS SHALL REFERENCE THE APPROVED SOILS REPORT TO DETERMINE COMPLIANCE.
5.	ALL WELDS REQUIRED DURING CONSTRUCTION OF TALLNESS OF FEET LESS THAN 12 INCHES DEEP
6.	ALL WELDS SHALL BE VISUALLY INSPECTED [IRC 1704.3] AND SHALL BE IN COMPLIANCE WITH AWS D1.1.
7.	ALL COMPLETE PENETRATION WELDS SHALL BE TESTED ULTRASONICALLY OR BY USING ANOTHER APPROVED METHOD [ASC 368.1]
8.	SUPPLEMENTAL CONNECTIONS MAY HAVE PERIODIC SPECIAL INSPECTION PROVIDED THAT THE TURN-OF-THE-NUT METHOD WITH MATCH MARKING TECHNIQUES IS USED.

SOILS (IBC 1705.6)		
SPECIAL INSPECTIONS OF THE SOIL SHALL BE PERFORMED FOR COMPLIANCE WITH THE STATED REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS AND APPROVED GEOTECHNICAL REPORT.		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	●	
VERIFY EXCAVATIONS ARE EXTENDED TO THE PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	●	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	●	APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	●	APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	●	APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED

MISCELLANEOUS ITEMS REQUIRING SPECIAL INSPECTION (1705.12.4, 1705.12.5, 1705.12.6, 1705.12.7)		
ARCHITECTURAL COMPONENTS	●	ERECTION AND FASTENING OF INTERIOR & EXTERIOR NON-BEARING WALLS & INTERIOR & EXTERIOR CLADDING, SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE: (1) CLADDING AND WALLS ARE LESS THAN 30 FEET IN HEIGHT, (2) CLADDING AND/OR VENER WEIGH LESS THAN 5 PSF, (3) INTERIOR NON-BEARING WALLS WEIGHING LESS THAN 15 PSF OR LESS
ANCHORAGE OF ELECTRICAL EQUIPMENT DESIGNED FOR EMERGENCY AND STANDBY POWER SYSTEMS.	●	IN SDC C, D, E, OR F.
ANCHORAGE OF MECHANICAL AND PLUMBING SYSTEMS CARRYING HAZARDOUS MATERIALS.	●	IN SDC C, D, E, OR F.
INSTALLATION AND ANCHORAGE OF M/E/P FOR AUTOMATIC FIRE SUPPRESSION SYSTEMS.	●	IN SDC C, D, E, OR F. REQUIRED ONLY WHEN FLEXIBLE HOSE FITTING ARE NOT USED.
STORAGE RACK ANCHORAGE	●	IN SDC C, D, E, OR F. ANY STORAGE RACK GREATER THAN 8 FEET IN HEIGHT.
INSTALLATION AND ANCHORAGE OF M/E/P FOR AUTOMATIC FIRE SUPPRESSION SYSTEMS.	●	REQUIRED ONLY WHEN FLEXIBLE HOSE FITTING ARE NOT USED
DESIGNATED SEISMIC SYSTEMS	●	IN SDC C, D, E, OR F. VERIFY THAT THE LOCATION, LABEL, AND ANCHORAGE CONFORM TO THE MANUFACTURERS CERTIFICATE OF COMPLIANCE
ACCESS FLOORS	●	IN SDC D, E, OR F.
		SPECIAL INSPECTION SHALL BE BASED ON THE FIRE RESISTANCE DESIGN PER ARCHITECTURAL CONTRACT DOCUMENTS FOR WALL, FLOOR, AND ROOF ASSEMBLIES. SPECIAL INSPECTION SHALL BE PERFORMED AFTER THE ROUGH INSTALLATION OF ELECTRICAL, FIRE, SPRINKLER, MECHANICAL, PLUMBING SYSTEMS, AND SUSPENDED CEILINGS HAVE BEEN INSTALLED AS APPLICABLE. SPECIAL INSPECTION SHALL INCLUDE (1) CONDITION OF SUBSTRATES, (2) THICKNESS OF APPLICATION, (3) DENSITY OF FIRE RESISTANT MATERIAL, [p-c], (4) BOND STRENGTH ADHESION/COHESION, (5) CONDITION OF FINISHED APPLICATION.
SPRAYED FIRE-RESISTANT MATERIAL (1705.7.14)	●	

MASONRY CONSTRUCTION (IBC 1705.4 - LEVERL B		QUALITY ASSURANCE	
VERIFY PRIOR TO CONSTRUCTION			
COMPLIANCE WITH CONSTRUCTION DOCUMENTS AND SUBMITTALS		●	REVIEW MATERIAL CERTIFICATES, MIX DESIGNS, TEST RESULTS AND CONSTRUCTION PROCEDURES ARE IN COMPLIANCE WITH CONSTRUCTION DOCUMENTS
VERIFICATION OF Fm OF MASONRY UNITS		●	
PROPERTIES OF SITE PREPARED MORTAR		●	
CONSTRUCTION OF MORTAR JOINTS		●	
TYPE, SIZE, & GRADE OF REINFORCEMENT		●	
TYPE, SIE, & LOCATION OF EMBEDS & ANCHORS		●	
HOT OR COLD WEATHER PROTECTION		●	
GROUT SPACE		●	
VERIFY DURING CONSTRUCTION			
SIZE AND LOCATION OF STRUCTURAL ELEMENTS		●	
PLACEMENT AND SPING OF REINFORCING		●	
PLACEMENT OF EMBEDS & ANCHORS		●	
PROPORTIONS OF GROUT AND PLACEMENT OF GROUT		●	
PROPORTIONS OF MORTAR AND PLACEMENT OF MORTAR JOINTS		●	
PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD OR HOT WEATHER	●		COLD WEATHER IS DEFINED AS TEMPERATURES BELOW 40 DEGREES FAHRENHEIT; HOT WEATHER IS DEFINED AS TEMPERATURES ABOVE 90 DEGREES FAHRENHEIT.
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		●	
VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX UPON DELIVERY TO THE PROJECT SITE		●	
WELDING OF REINFORCEMENT		●	

STEEL BOLTING (AISC 360-16)			
INSPECTION TASKS PRIOR TO BOLTING			
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	●		
FASTENERS		●	MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS
CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL		●	INCLUDING GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE.
CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL		●	
CONNECTING ELEMENTS		●	MEET APPLICABLE REQUIREMENTS INCLUDING THE APPROPRIATE PLAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED.
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED		●	NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED
PROTECTED STORAGE		●	STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS
INSPECTION TASKS DURING BOLTING			
FASTENER PLACEMENT		●	STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS
JOINT		●	BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION
FASTENER COMPONENT		●	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING
PRETENSIONED FASTENERS		●	VERIFY THAT PRETENSIONED FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES
INSPECTION TASKS AFTER BOLTING			
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	●		

OPEN WEB STEEL JOISTS AND GIRDERS (1705.2.3)		
CERTIFICATE OF COMPLIANCE	●	CERTIFICATE OF COMPLIANCE MUST BE SUBMITTED TO THE BUILDING OFFICIAL PER 1704.2.5.
JOIST PLACEMENT	●	VERIFY JOIST SIZE AND PLACEMENT IS IN COMPLIANCE WITH APPROVED SUBMITTALS AND CONTRACT DOCUMENTS
END CONNECTIONS	●	WELDED AND/OR BOLTED
BRIDGING	●	HORIZONTAL AND DIAGONAL INSTALLED PER MANUFACTURERS REQUIREMENTS (INCLUDES BOTH STANDARD AND NON-STANDARD BRIDGING PER SJI)

ANCHOR BOLTS	JST	JOIST
ABOVE	JT	JOINT
AMERICAN CONCRETE INSTITUTE		
ADJ	K	KIPS
ADJ	KF	KIPS PER LINEAR FOOT
AMISC	KSF	KIPS PER SQUARE FOOT
CONSTRUCTION		
ALTERNATE	LBS (# #)	POUNDS
APPROXIMATE	LF	LINEAR FOOT
ARCH	LL	LIVE LOAD
ARCHIT	LLH	LONG LEG HORIZONTAL
ARCHIT	LLH	LONG LEG HORIZONTAL
AMERICAN SOCIETY OF TESTING	LLSV	LONG LEGS VERTICAL
AND MATERIALS	LSH	LONG SIDE HORIZONTAL
ASTM		
AMERICAN WELDING SOCIETY		
BFC	MFR	MANUFACTURER
BFF	MAX	MAXIMUM
BLW	MEH	MECHANICAL (DRAWINGS)
BOTTOM	MIN	MINIMUM
BOT	MISC	MISCELLANEOUS
BR	MP	MASONRY PIER
BEARING	ML	MASONRY RIEL
BTWN		
BETWEEN	MSJC	MASONRY STANDARDS JOINT
CJP	COM	COMMITTEE
CONTROL JOINT		
CL	MW	METAL STUD WALL
CL	MTL	METAL
CLR	MW	MASONRY WALL
CMU		
COL	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
COMP		
COMPOSITE	NIC	NOT IN CONTRACT
CONCRETE	NIS	NOT TO SCALE
CONNN	N.R.	NOT REQUIRED
CONSTR		
CONSTRUCTION		
CON	O.C.	ON CENTER
CON	OD	OUTSIDE DIAMETER
CON	OPP	OPPOSITE
CON		
CONCRETE	PWF	POWDER ACTUATED FASTENER
CONCRETE REINFORCING STEEL	PCF	POUNDS PER CUBIC FOOT
INSTITUTE	PFT	POWDER DRIVEN FASTENER
CONCRETE	PL	PREFABRICATED TRUSS
CONCRETE	PLF	POUNDS PER LINEAL FOOT
CONCRETE	PLUMB	PLUMBING (DRAWINGS)
CONCRETE	PSF	POUNDS PER SQUARE FOOT
CONCRETE	PSI	POUNDS PER SQUARE INCH
CONCRETE		
CONCRETE	POST	POST TENSIONED
CONCRETE		
CONCRETE	REINF	REINFORCING
CONCRETE	REQD	REQUIRED
CONCRETE	RTO	ROOF TOP UNIT
CONCRETE	SFRS	SEISMIC FORCE RESISTING SYSTEM
CONCRETE	SB	STEEL BASE PLATE
CONCRETE	SCP	STEEL COLUMN
CONCRETE	SCF	STEEL CAP
CONCRETE	SCHED	SCHEDULE
CONCRETE	SF	SQUARE FOOT
CONCRETE	SH	SIMILAR
CONCRETE	SJL	STEEL JOIST INSTITUTE
CONCRETE	SN	SNOW LOAD
CONCRETE	SL	
CONCRETE	SPTS	SPECIFICATIONS
CONCRETE	STRUC	STRUCTURAL
CONCRETE	STS	SELF TAPPING SCREWS
CONCRETE	SW	WOOD SHEAR
CONCRETE		
CONCRETE	T&B	TOP AND BOTTOM
CONCRETE	TO	TOP OF ...
CONCRETE	TOF	TOP OF FOOTING
CONCRETE	TOS	TOP OF SLAB
CONCRETE	TOW	TOP OF WALL
CONCRETE	TYP	TYPICAL
CONCRETE		
CONCRETE	U.N.O.	UNLESS NOTED OTHERWISE
CONCRETE		
CONCRETE	VERT	VERTICAL
CONCRETE		
CONCRETE	W/	WITH
CONCRETE	W/O	WITHOUT
CONCRETE	WO	WORK POINT
CONCRETE	WSW	WOOD STUD WALL
CONCRETE	WWF	WELDED WIRE FABRIC
CONCRETE	WWM	WELDED WIRE MESH

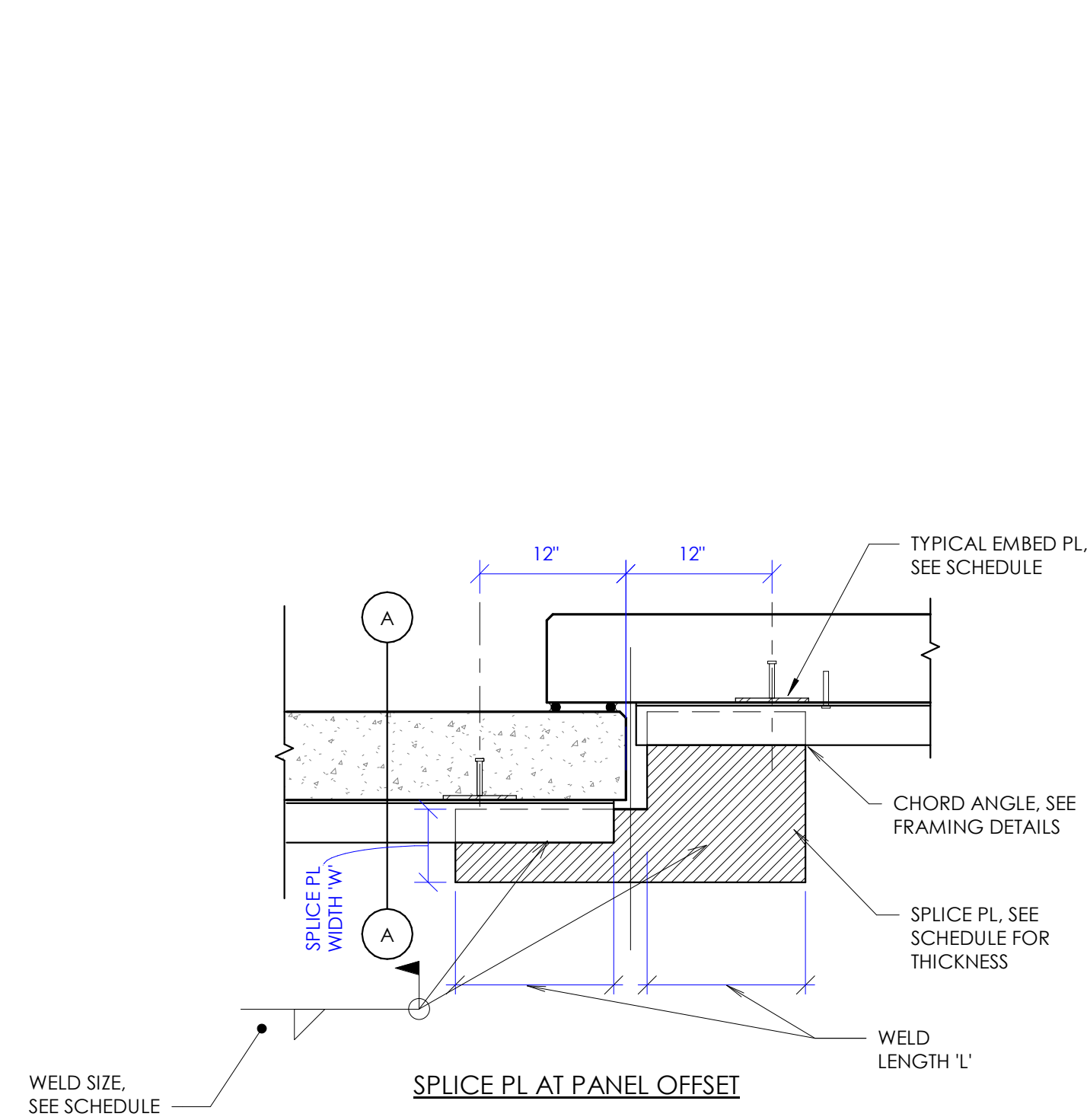
SPECIAL INSPECTIONS

S002

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LEDGER SCHEDULE 'L'						
MARK	SIZE	PANEL CONNECTION	SPICE PLATE			
			THICKNESS	WIDTH 'W'	WELD SIZE	WELD LENGTH 'L'
'L1'	L4x4x1/4	3/8"x4"x0'-8" EMBED PL W/ (2) 3/4" DIA x 0'-5" HSA @ 4'-0" O.C. (MAX)	3/8"	4 1/2"	3/16"	6"
'L2'	L4x4x5/16	3/8"x4"x0'-8" EMBED PL W/ (2) 3/4" DIA x 0'-5" HSA @ 4'-0" O.C. (MAX)	3/8"	4 1/2"	5/16"	7"
'L3'	L4x4x7/16	3/8"x4"x0'-8" EMBED PL W/ (2) 3/4" DIA x 0'-5" HSA @ 4'-0" O.C. (MAX)	3/8"	6 1/2"	5/16"	11"
'L4'	L6x4x7/16	3/8"x4"x0'-8" EMBED PL W/ (2) 3/4" DIA x 0'-5" HSA @ 4'-0" O.C. (MAX)	3/8"	7 1/2"	5/16"	13"

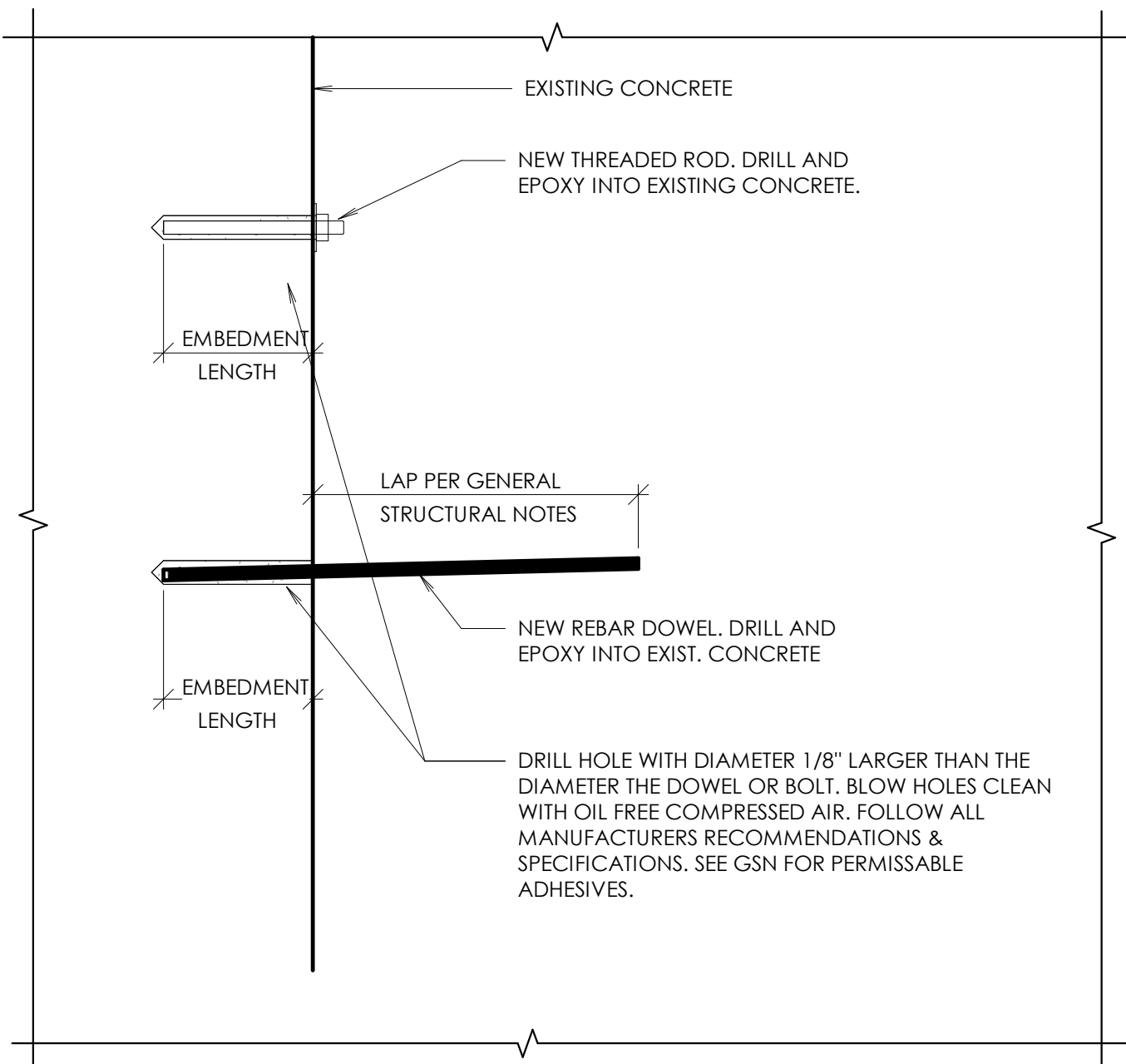
- NOTES:
- SCHEDULE APPLIES TO DECK LEDGERS AT ROOF AND FLOOR UNLESS NOTED OTHERWISE IN DETAILS.
 - CONTRACTOR OPTION: OMIT SPICE PL AND PROVIDE FULL PENETRATION WELD AT SPICE.
 - ALL LEDGERS SHALL HAVE A MINIMUM OF (2) WELD PLATES OR ANCHOR BOLTS AS NOTED.
 - WELD PLATES OR ANCHOR BOLTS SHALL BE LOCATED NOT LESS THAN 6" NOR MORE THAN 1'-4" FROM THE END OF THE LEDGER OR LEDGER SPICE.
 - SEE DETAIL 7/5701 FOR LEDGER ANGLE TO EMBED CONNECTION & THIS DETAIL FOR EMBED CONFIGURATION.



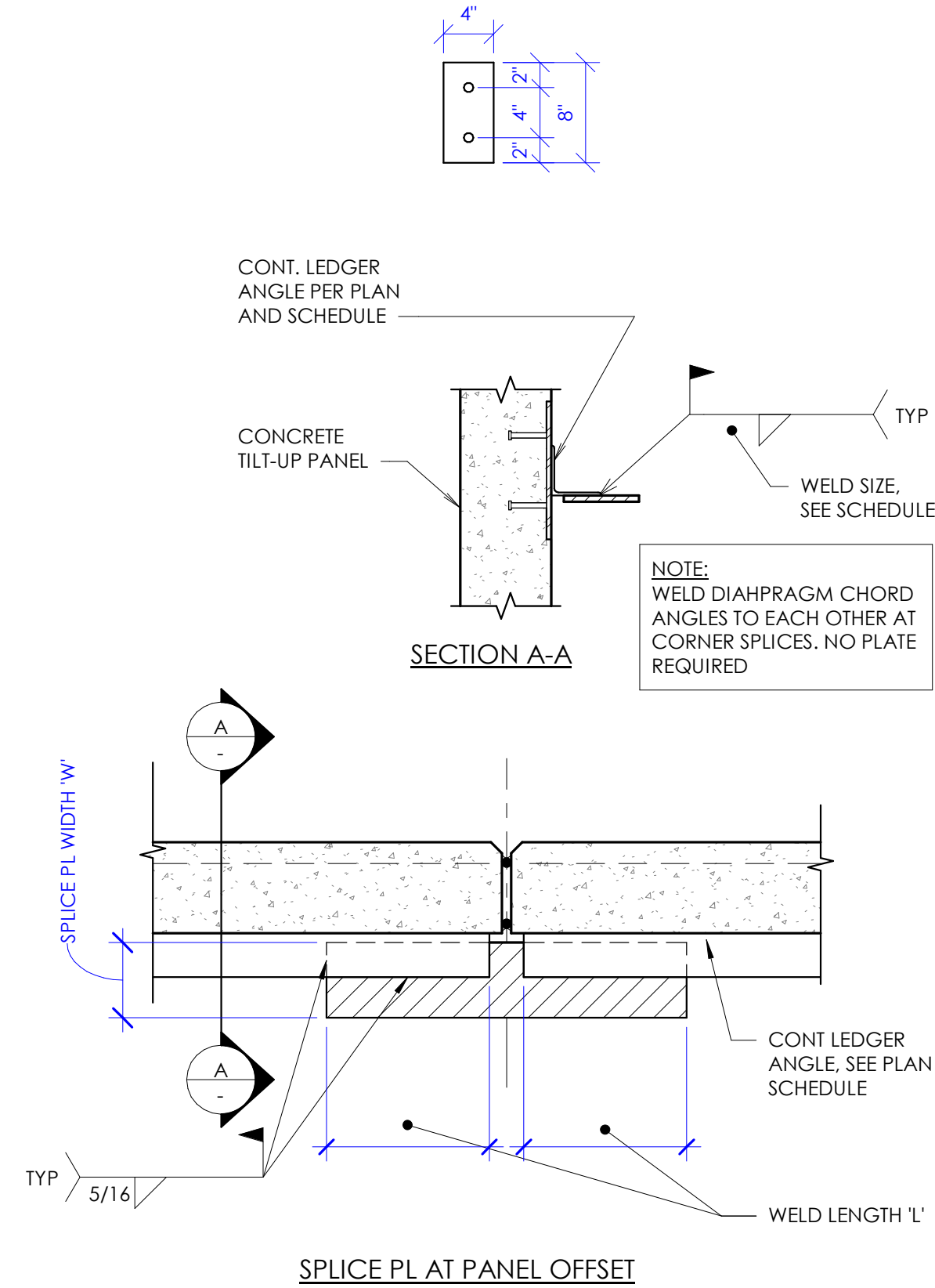
14 S003 TYPICAL LEDGER/DIAPHRAM CHORD SPICE

EMBEDMENT OF ADHESIVE ANCHORS		
REBAR DOWEL DIAMETER	ANCHOR BOLT DIAMETER	EMBEDMENT LENGTH
#4	1/2"	6"
#5	5/8"	7"
#6	3/4"	10"
#7	7/8"	13"
#8	1"	16"

- NOTES:
- EMBEDMENT LENGTHS SHALL BE ADJUSTED WHEN EXISTING WALL IS OF EQUAL OR OF LESS THICKNESS THAN SCHEDULE REQUIRES. IN THESE CASES THE EMBEDMENT LENGTH SHALL BE THE WALL THICKNESS MINUS 1 1/2".
 - INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
 - SEE GENERAL STRUCTURAL NOTES FOR APPROVED EPOXY/ADHESIVE AND ADDITIONAL REQUIREMENTS

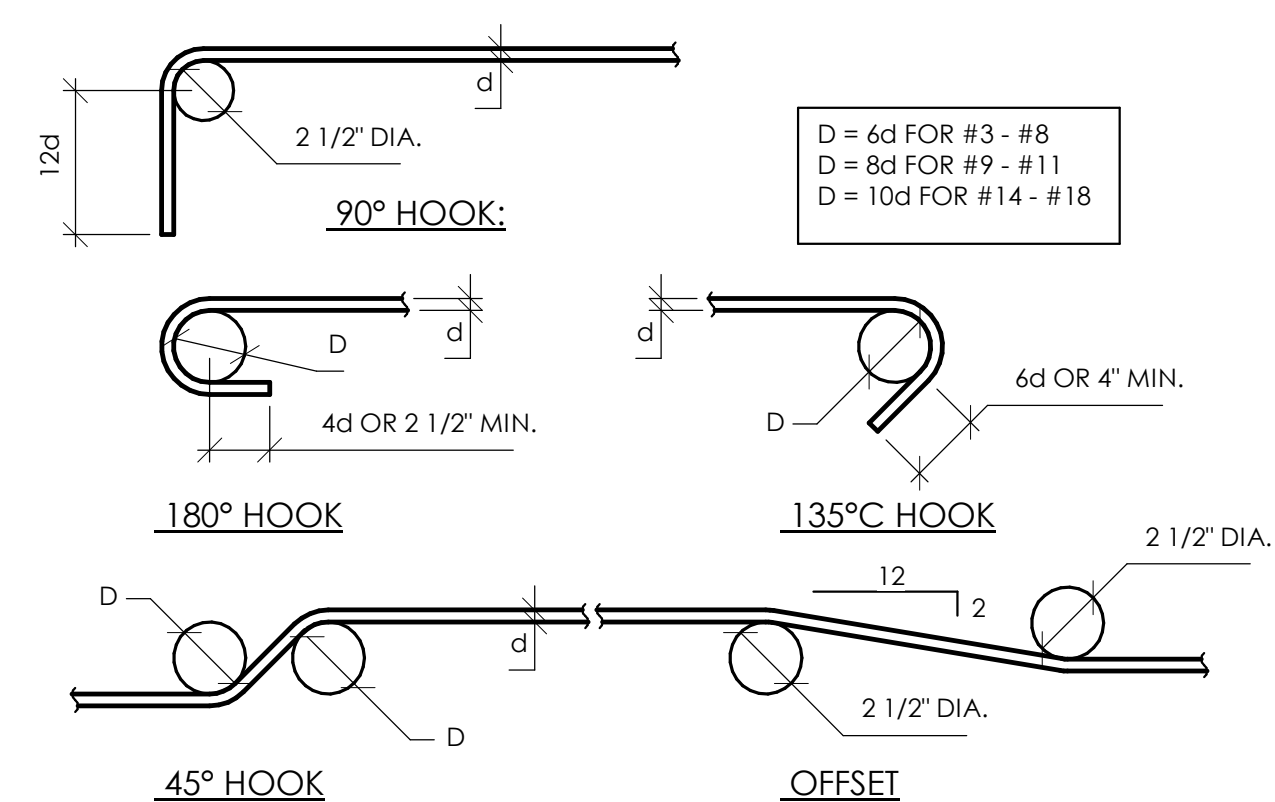


16 S003 POST-INSTALLED ANCHOR EMBEDMENT DETAIL



REINFORCING LAP SPICE SCHEDULE																
BAR SIZE	f'c = 3000 PSI				f'c = 4000 PSI				f'c = 5000 PSI				f'c = 6000 PSI			
	REGULAR		TOP		REGULAR		TOP		REGULAR		TOP		REGULAR		TOP	
	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	13"	17"	17"	21"	12"	16"	16"	21"	12"	16"	16"	21"	12"	16"	16"	21"
#4	17"	22"	22"	28"	15"	19"	19"	25"	13"	17"	17"	22"	12"	16"	16"	21"
#5	21"	27"	27"	35"	18"	24"	24"	31"	16"	21"	21"	27"	15"	19"	19"	25"
#6	27"	36"	36"	46"	24"	31"	31"	40"	21"	28"	28"	36"	20"	25"	25"	33"
#7	37"	48"	48"	63"	32"	42"	42"	54"	29"	38"	38"	49"	27"	34"	34"	44"
#8	49"	64"	64"	82"	42"	55"	55"	71"	38"	49"	49"	64"	35"	45"	45"	58"
#9	62"	80"	80"	104"	54"	70"	70"	90"	48"	62"	62"	81"	44"	57"	57"	74"
#10	78"	102"	102"	132"	68"	88"	88"	115"	61"	79"	79"	102"	56"	72"	72"	94"
#11	96"	125"	125"	162"	83"	108"	108"	141"	76"	97"	97"	126"	68"	88"	88"	115"

- NOTE:
- THESE NOTES SHALL BE USED FOR ALL SPLICES, UNLESS NOTED OTHERWISE.
 - CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPICE LENGTH.
 - CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE #2 ABOVE ARE MET.
 - TIES AND STIRRUPS SHALL NOT BE SPLICED.
 - FOR BUNDLED BARS OF THREE OR LESS, LAP SPICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
 - FOR BUNDLED BARS OF FOUR OR MORE, LAP SPICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
 - INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
 - ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
 - FOR ALL LIGHTWEIGHT CONCRETE, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3.
 - FOR ALL EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR TOP BARS AND 1.5 FOR REGULAR BARS.
 - TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12" OR MORE OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.



12 S003 REINFORCING LAP SPICE SCHEDULE @ BAR BENDING DIAGRAMS

METAL DECK SCHEDULE									
AREA	DECK TYPE			FASTENERS			SIDE SEAM CONNECTION		MIN. SHEAR CAPACITY [CAPACITY/MAX DECK SPAN]
	DEPTH	TYPE	GAUGE	FASTENER TYPE	AT SUPPORTS PREP. TO FLUTES	AT SUPPORTS PARALLEL TO FLUTES	TYPE	SPACING	
TYP. ROOF	1 1/2"	8"	22	3/4" DIA PUDDLE WELD 3/4" DIA PUDDLE WELD HILTI X-HSN 24	36/5 36/5 36/7	12" O.C. 12" O.C. 12" O.C.	1 1/2" TSW PUNCHLOK II PUNCHLOK II	12" O.C. 12" O.C. 12" O.C.	750 PLF/6'-3"



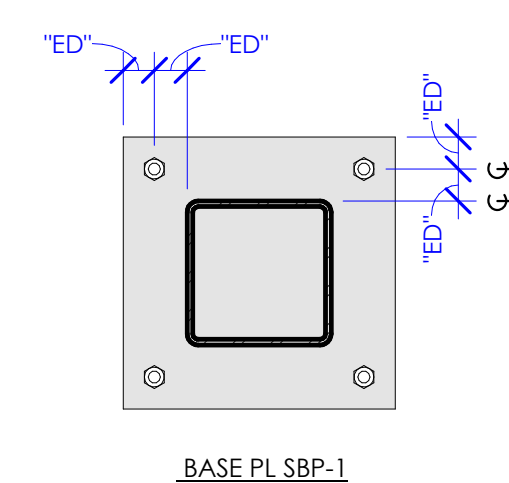
- NOTES:
- PROVIDE 2" MIN BEARING AT ALL SUPPORTS. ALL DECK WITH A PROFILES WITH A DEPTH OF 2" OR LESS SHALL HAVE NESTED OR TELESCOPED END LAPS.
 - USE INTERLACING SIDE SEAMS FOR ALL DECK TYPES.
 - TOP SEAM WELDS SHALL BE 1 1/2" LONG AND SHALL BE ACCORDING TO SDI STANDARDS.
 - MINIMUM SHEAR CAPACITY IS THE CAPACITY REQUIRED FOR ALTERNATE SYSTEMS. SEE GSN.
 - SUBMIT CURRENT ICC APPROVAL FOR ALL DECKS.
 - SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

5 S003 METAL DECK SCHEDULE

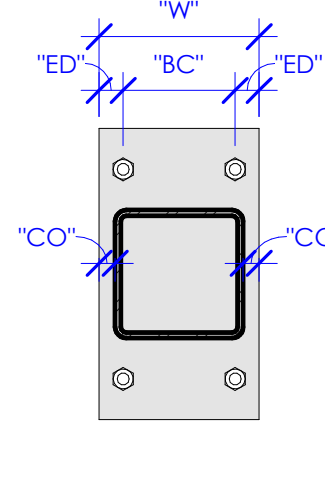
STRUCTURAL COLUMN SCHEDULE					
COLUMN MARK	COLUMN SIZE	BASE PLATE	CAP PLATE	ANCHOR BOLTS	COMMENTS
SC-6A	HSS 6x6x1/4	1" (SBP-1)	1/2" CL PLATE	(4) 3/4" A.B.	
SC-12A	HSS 12x12x3/8	3/4" (SBP-1)	3/4" (SCP-1)	(4) 3/4" A.B.	

STEEL COLUMN NOTES:

- TYPICAL ANCHOR RODS SHALL MEET THE FOLLOWING REQUIREMENTS, UNO
 - ANCHOR BOLTS SHALL PROJECT 3" MINIMUM ABOVE TOP OF THE BASE PLATE.
 - ANCHOR EMBEDMENT INTO FOOTINGS SHALL BE 12 x ANCHOR BOLT DIAMETER.
 - EMBEDDED ENDS SHALL HAVE 3" MINIMUM HOOKS.
 - PROVIDE (4) 3/4" DIA ANCHOR BOLTS AT EACH BASE PLATE, UNO.
- TYPICAL ANCHOR BOLTS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH NUT. ANY HOLES LARGER THAN THE BOLT DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH HARDENED WASHERS.
 - TYPICAL BASE PLATE ANCHOR HOLES SHALL BE PER AISC SPECIFICATION (5/16" MAX OVERSIZE).
- IF DESIRED SPICE LOCATIONS DIFFER FROM THOSE LEVELS SHOWN ON PLAN, NOTIFY STRUCTURAL ENGINEER PRIOR TO FABRICATION. WRITTEN APPROVAL REQUIRED. NON-SHRINK GROUT UNDER BASE PLATES SHALL BE 1 1/2" THICK UNO.
- FLOOR ELEVATIONS SHOWN ARE FOR INFORMATION ONLY. CONTRACTOR TO CONFIRM WITH ARCHITECTURAL.
- ALL CAP PLATES/BASE PLATES SHALL WELD TO COLUMN WITH 5/16" FILLET WELD, UNO.
- REFER TO DETAILS FOR ANCHOR BOLT LAYOUT. MODIFICATIONS TO ANCHOR BOLT LAYOUT MAY BE USED WITH WRITTEN APPROVAL OR SUBMITTAL FROM CONTRACTOR.
- ANCHOR BOLTS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
- SEE GENERAL STRUCTURAL NOTES FOR MATERIALS AND OTHER REQUIREMENTS.
- COLUMNS MARKED WITH W-COL ARE FOR TENANT PROVIDED STRUCTURES. BASE PLATE SIZES AND DIMENSIONS WILL BE PROVIDED BY TENANT.



BASE PLATE LAYOUT(S)



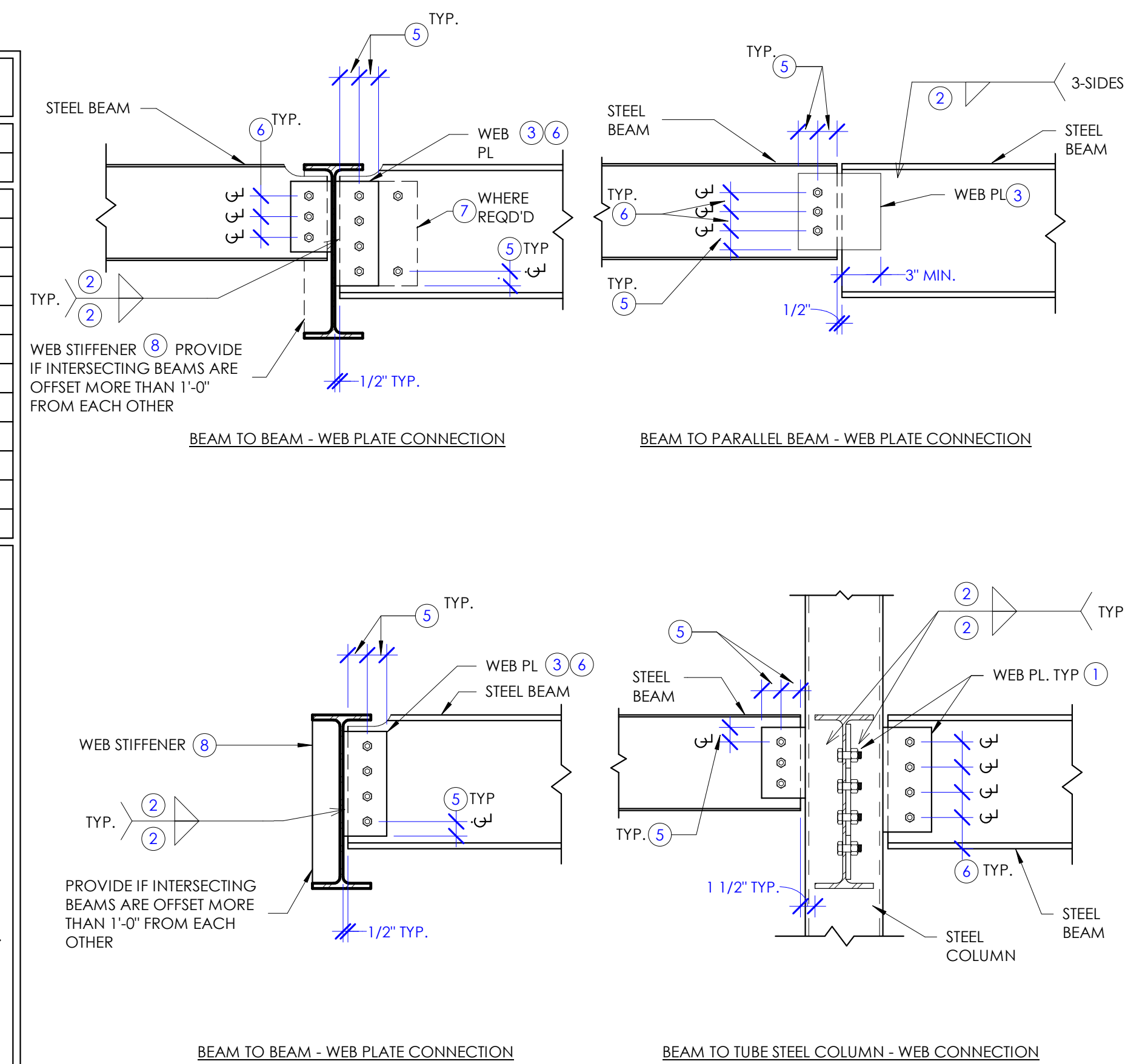
CAP PLATE LAYOUT(S)

6 S003 STEEL COLUMN BASE CONNECTION SCHEDULE1

A-325 BOLT SCHEDULE		
MAXIMUM BEAM SIZE IN EACH BEAM DEPTH GROUP	A-325N BOLTS	
	No. PER BEAM	SIZE
WB	2	3/4" DIA.
W10	2	3/4" DIA.
W12 & C12	3	7/8" DIA.
W14	3	7/8" DIA.
W16	4	7/8" DIA.
W18	5	7/8" DIA.
W21	6	7/8" DIA.
W24	6	7/8" DIA.
W27	7	7/8" DIA.
W30	8	7/8" DIA.
W33	9	1" DIA.
W36	10	1" DIA.

- HSS COLUMN SHALL HAVE A MINIMUM 1/4" THICKNESS FOR 3/8" SHEAR TABS AND MINIMUM 3/8" THICKNESS FOR 1/2" SHEAR TABS.
- FILLET WELDS SHALL BE AS FOLLOWS:
 - ONE SIDE: PLATE THICKNESS MINUS 1/16" (1/4" MIN.)
 - TWO SIDES: 1/2" PLATE THICKNESS PLUS 1/16" (1/4" MIN.) EACH SIDE
- BEAM WEB CONNECTION PLATE THICKNESS EQUALS BEAM WEB THICKNESS PLUS 1/8" (3/8" MIN).
- STIFFENER PL THICKNESS EQUALS BEAM FLANGE THICKNESS OF THE BEAM FRAMING INTO COLUMN (3/8" MIN).
- BOLT EDGE DISTANCE SHALL BE EQUAL TO 2X THE DIAMETER OF THE BOLT (1-1/2" MIN.) AT ALL EDGES.
- VERTICAL BOLT SPACING SHALL BE 3" O.C. TYP. FULL HT OF WEB. SPACING MAY BE REDUCED TO 3X THE DIAMETER OF THE BOLT IF REQ'D TO MAINTAIN A SINGLE ROW OF BOLTS (SINGLE ROW OF BOLTS IS PREFERRED).
- WHEN MORE THAN ONE COLUMN OF BOLTS IS REQUIRED, THE FIRST COLUMN OF BOLTS SHALL BE COMPLETE WITH THE REMAINDER OF THE BOLTS PLACED IN THE SECOND COLUMN.

STEEL BEAM STIFFENER PLATES		
FLANGE WIDTH	STIFFENER THICKNESS	WELD SIZE
LESS THAN 8 1/4"	1/4"	3/16"
8 1/4" TO 12 1/4"	3/8"	1/4"
12 1/4" TO 16 1/2"	1/2"	5/16"
16 1/2" TO 20 3/4"	5/8"	3/8"



8 S003 TYPICAL BOLTED SHEAR TAB CONNECTION SCHEDULE (SINGLE SHEAR)

REVISION	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	04/23/2025

STRUCTURAL COLUMN SCHEDULE					
COLUMN MARK	COLUMN SIZE	BASE PLATE	CAP PLATE	ANCHOR BOLTS	COMMENTS
SC-6A	HSS 64x11/4	1" (SBP-1)	1/2" CL PLATE	(4) 3/4" A.B.	
SC-12A	HSS 12x12x3/8	3/4" (SBP-1)	3/4" (SCP-1)	(4) 3/4" A.B.	

CONTINUOUS FOOTING SCHEDULE									
MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE			REINFORCING LENGTHWISE		
				NO.	SIZE	SPACING	NO.	SIZE	SPACING
FC2.5	2'-6"	CONT	1'-0"	-	#5	2'-0"	3	#5	CONT
FC3.0	3'-0"	CONT	1'-0"	-	#5	<varies>	3	#5	CONT
FC3.5	3'-6"	CONT	1'-0"	-	#6	3'-0"	3	#5	CONT
FS6.0	6'-0"	6'-0"	1'-0"	6	#5	5'-6"	6	#5	5'-6"
FS6.5	6'-6"	6'-6"	1'-0"	6	#5	6'-0"	6	#5	6'-0"
FS8.0	8'-0"	8'-0"	1'-4"	7	#6	7'-6"	7	#6	7'-6"
FS9.0	9'-0"	9'-0"	1'-4"	8	#6	8'-6"	8	#6	8'-6"

- SEE GENERAL STRUCTURAL NOTES FOR CONCRETE STRENGTH, REINFORCING, AND OTHER REQUIREMENTS
- ALL REINFORCING STEEL SHALL BE GRADE 60 AND BE PROPERLY TIED INTO PLACE PRIOR TO POUR
- ALL CONCRETE WORK MUST MEET THE REQUIREMENTS OF THE 2021 IBC, ACI 318 AND LOCAL ORDINANCES
- ALL BARS MUST BE 3" CLEAR FROM GRADE

SLAB-ON-GRADE CURING REQUIREMENTS & MISC.

- CONTRACTOR SHALL HOLD A PRE-POUR MEETING WITH REPRESENTATIVES FROM THE CONCRETE SUB CONTRACTOR, AND THE PROJECT ARCHITECT/ENGINEER PRIOR TO PLACING CONCRETE.
- THE CURING OF THE SLAB IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE CONCRETE SUB-CONTRACTOR AND IS REQUIRED. INSURE THE SLAB IS BEING CURED BASED ON COLD (ACI 308R-14) AND HOT (ACI 308R-20) WEATHER CONDITIONS WHEN APPLICABLE. CURE & DENSIFICATION SYSTEM TO BE GREENICE CURE SYSTEM OR APPROVED EQUAL. CONTRACTOR TO PROVIDE SUBMITTAL FOR ARCHITECTS, ENGINEERS AND OWNERS APPROVAL.
- CutspecIM for Greenice Cure System:**
Product: IceStart & IceStop
Basic Use: Surface Applied Supplementary Cementitious Material Admixture, the first treatment of a two-part Surface Applied Admixture Cure and Densification System.
For comprehensive manufacturer instructions, visit <https://greenumbrellasytems.com/greenice-cure/>

IceStartIM & IceStopIM is a concrete cure system designed for interior or exterior concrete with a polished concrete sheen—by Green Umbrella of Rochester, NY (844) 200-7336 R.T.U. (Ready to Use), S.O.L.O. (Spray-On, Leave-On), Green Umbrella IceStartIM is a Surface Applied Supplementary Cementitious Material Admixture, the first treatment of a two-part Surface Applied Admixture Cure and Densification System. Used only on EarlyAge concrete, IceStartIM is a chemical and mechanical process applied during concrete placement and power floating. 1) Apply IceStartIM during screeding or bull-floating, prior to breaking open the substrate using pans, @ 1200 SF per gallon. 2) Next, spray IceStartIM onto the slab in two equal applications of 1200 SF per gallon during initial panning and initial troweling for three total applications with a net coverage rate of 400 SF per gallon. Use a low-pressure, high-volume manual or battery-powered commercial sprayer. Alternatively, a screed mounted unit, and the retardant tanks of ride-on power trowels may be used. Always apply sufficient material for total net coverage of 400 SF per gallon. 3) Work into the surface following second and third applications during power troweling. 4) After the final application of IceStartIM, trowel burn as desired. When the concrete is hard enough for walking, apply Green Umbrella IceStopIM, a Hydro-phobic fixative for Surface Applied Admixture Cure, the second treatment of a two-part Surface Applied Admixture Cure 5) A single S.O.L.O. application of 400 SF per gallon. Keep wet for a dwell time of 30 minutes. Allow to air dry. No cure & seal, concrete hardener, or wet cure is needed. Apply IceStartIM and IceStopIM only when temperatures are 40°F and rising, not exceeding 90°F.

Contact Technical Sales: info@greenumbrellasytems.com
For full CSI specifications: <https://greenumbrellasytems.com/specifications/>

- ALTERNATE CURING COMPOUNDS (APPROVED EQUAL) SHALL COMPLY WITH ASTM C-309 AND ACI 308R-16. CURING COMPOUND MUST BE INSTALLED PER THE MANUFACTURER. CURING COMPOUNDS SHALL NOT BE COMBINED WITH BOND BREAKER. USE SEPARATE BOND BREAKER. PROVIDE SUBMITTAL FOR ARCHITECT, ENGINEER AND OWNER TO REVIEW.
- CONTROL JOINTS TO BE EPOXY FILLED (MM80 OR APPROVED EQUAL). COLD JOINTS TO BE FILLED WITH POLYUREA JOINT FILLER (ADHESIVES TECHNOLOGY CRACKBOND, F OR APPROVED, EQUAL). ALL JOINTS TO BE LEVELED FLUSH WITH FINISH FLOOR. FLOOR SLABS FLATNESS CLASSIFICATION TO MEET OR EXCEED 45 FF & 35FL. ELEVATION DIFFERENCES ARE MEASURED EVERY 10' FEET WITHIN 72 HOURS AFTER THE CONCRETE IS PLACED.
- SEE CONSTRUCTION NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALSO SEE CONCRETE NOTES / CONSTRUCTION AND CONTROL JOINTS, AND SLAB-ON-GRADE NOTES.
- CONTRACTOR SHALL PROVIDE ONSITE TEMPEST OR EQUAL WEATHER STATION AND RECORDED THE TEMPERATURE, RELATIVE HUMIDITY, WIND SPEED, AND OTHER WEATHER INFORMATION PRIOR TO, DURING, AND AFTER PLACING AND CURING THE CONCRETE. ALTERNATES MUST BE APPROVED BY THE OWNER.

FOOTING & FOUNDATION NOTES:

- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT USE CONCRETE CONTROL JOINTS AS DIMENSION LINES OR TO LOCATE BUILDING ELEMENTS.
- CONCRETE CONTROL JOINTS AS SHOWN ON PLAN INDICATES LOCATION OF EITHER KEYED OR SAWCUT CONTROL JOINTS IN SLAB ON GRADE AT CONTRACTORS OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL.
- SEE SHEET S501 FOR TYPICAL FOOTING & FOUNDATION DETAILS.
- COORDINATE LOCATIONS OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND PLUMBING.
- ALL FOOTINGS SHALL BE CENTERED UNDER COLUMNS AND WALLS, U.N.O.

VAPOR RETARDER AND ALTERNATE:

BASE BID: PROVIDE VAPOR RETARDER UNDER OFFICE AREAS AND WHERE REQUIRED BY GEOTECHNICAL ENGINEER. SEE GSN. SEE PLAN FOR OFFICE LOCATIONS.
ALTERNATE#1: PROVIDE VAPOR RETARDER UNDER ENTIRE SLAB-ON-GRADE.
ALTERNATE#2: PROVIDE (2) LAYERS OF VAPOR BARRIER UNDER THE ENTIRE SLAB-ON-GRADE.

CONTROL JOINTS AND ALTERNATIVES:

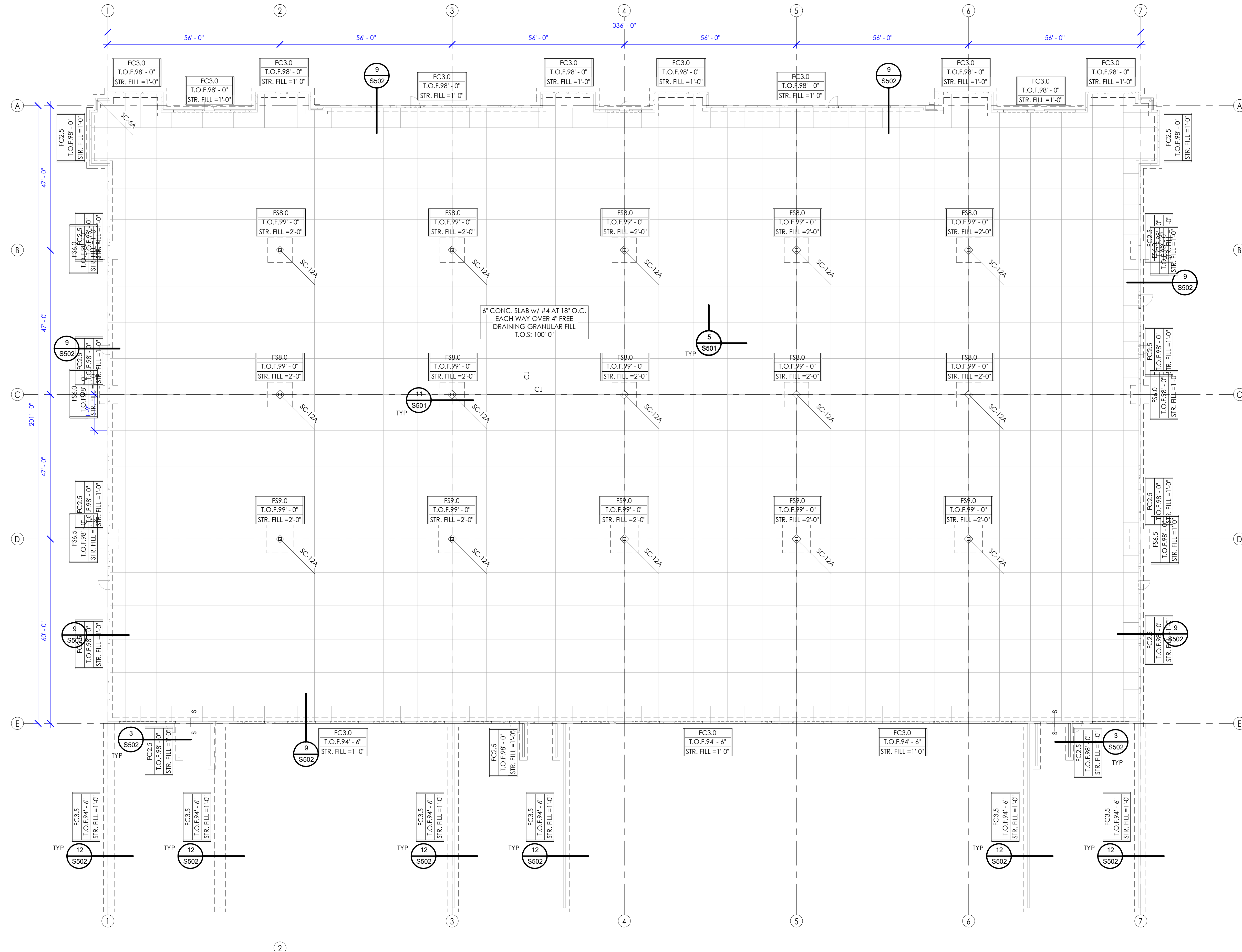
BASE BID: SLAB-ON-GRADE REINFORCING TO RUN CONTINUOUS THROUGH CONTROL JOINT (AT SAW CUT).
ALTERNATE#1: CUT EVERY OTHER BAR AT CONTROL JOINT.
ALTERNATE#2: STOP SLAB-ON-GRADE REINFORCING 4" FROM CONTROL JOINT AND PROVIDE #3 X36" DOWELS AT 18" O.C. MAX.
ALTERNATE#3: STOP SLAB-ON-GRADE REINFORCING 4" FROM CONTROL JOINT AND PROVIDE #3 X36" DOWELS AT 24" O.C. AND ALTERNATE WITH DIAMOND DOWELS AT 24" O.C. (DOWELS ARE 12" O.C. COMBINED).
ALTERNATE#4: CONTRACTOR MAY SUBMIT ADDITIONAL ALTERNATE DESIGN BASED ON PAST EXPERIENCE / PERFORMANCE.

CONSTRUCTION JOINTS AND ALTERNATIVES:

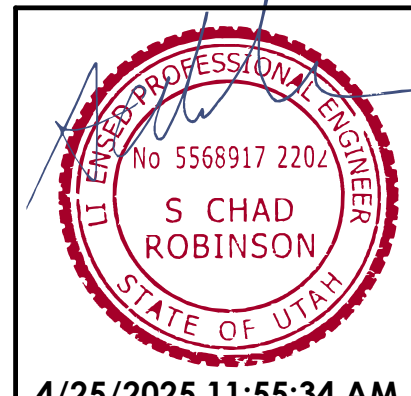
BASE BID: STOP SLAB-ON-GRADE REINFORCING 4" FROM CONSTRUCTION JOINT AND PROVIDE #3 X36" DOWELS AT 24" O.C. AND ALTERNATE WITH DIAMOND DOWELS AT 24" O.C. (DOWELS ARE 12" O.C. COMBINED).
ALTERNATE#1: SLAB-ON-GRADE REINFORCING TO RUN CONTINUOUS THROUGH CONSTRUCTION JOINT.
ALTERNATE#2: CUT EVERY OTHER BAR AT CONSTRUCTION JOINT.
ALTERNATE#3: STOP SLAB-ON-GRADE REINFORCING 4" FROM CONSTRUCTION JOINT AND PROVIDE #3 X36" DOWELS AT 18" O.C. MAX.
ALTERNATE#4: CONTRACTOR MAY SUBMIT ADDITIONAL ALTERNATE DESIGN BASED ON PAST EXPERIENCE / PERFORMANCE.

LEGEND

FSX X = INDICATES SPOT FOOTING, SEE SCHEDULE ON THIS SHEET
FCX X = INDICATES CONTINUOUS FOOTING, SEE SCHEDULE ON THIS SHEET
SC-X = INDICATES STEEL COLUMN, SEE S/5003
C.J. = INDICATES CONTROL JOINT LOCATION, SEE S/5501
S — S = INDICATES FOOTING STEP, SEE 12/S501
FC XX = INDICATES FOOTING DESIGNATION
TOP = XX'-X" = INDICATES TOP OF FOOTING ELEVATION
FILL X'-X" = INDICATES STRUCTURAL FILL DEPTH



1 **FOOTING AND FOUNDATION PLAN**
S101 1/16" = 1'-0"



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RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	DESCRIPTION

AE2022.290

FOOTING AND FOUNDATION PLAN

DATE: 04/23/2025

SHEET #:

S101

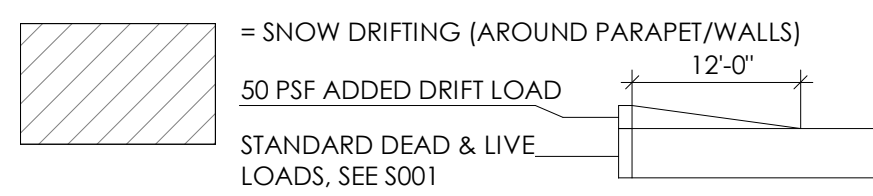
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STRUCTURAL COLUMN SCHEDULE					
COLUMN MARK	COLUMN SIZE	BASE PLATE	CAP PLATE	ANCHOR BOLTS	COMMENTS
SC-6A	HSS 6x6x1/4	1" (SBP-1)	1/2" CL PLATE	[4] 3/4" A.B.	
SC-12A	HSS 12x12x3/8	3/4" (SBP-1)	3/4" (SCP-1)	[4] 3/4" A.B.	

FRAMING NOTES

- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. ROOF AND FLOOR ELEVATIONS, WHERE SHOWN, ARE TO BE PROVIDED AND VERIFIED BY THE ARCHITECT.
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO STEEL COLUMNS AND TYPICAL DIMENSIONS.
- SEE SHEET S701 FOR ALL TYPICAL ROOF DETAILS.
- SCHEDULED MARK DESIGNATIONS ARE TYPICAL TO THE PROJECT AND MAY NOT NECESSARILY BE FOUND ON THIS PLAN.
- FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
- FOR CLARITY, ALL FLOOR AND ROOF OPENINGS MAY NOT BE SHOWN ON PLANS. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. VERIFY EXACT SIZE, WEIGHT AND LOCATIONS OF ALL EQUIPMENT ON AND HANGING FROM ROOF WITH MECHANICAL DRAWINGS. NOTIFY EOR WHERE ANY RTU PLACED ABOVE OR BELOW ROOF DECK THAT IS NOT SHOWN ON THIS SHEET WEIGHS MORE THAN 100 LBS.
- JOIST BRIDGING SHOWN IS FOR REPRESENTATION ONLY. JOIST MANUFACTURER IS RESPONSIBLE TO DESIGN THE LOCATION, QUANTITY, SIZE, AND TYPE OF JOIST BRIDGING TO BE USED AND SHALL CONFORM TO "SJI" REQUIREMENTS.
- WHERE MECHANICAL UNITS, DUCTS, OR SKYLIGHTS INTERRUPT JOIST BRIDGING CONTRACTOR SHALL PROVIDE STANDARD DIAGONAL BRIDGING EA SIDE OF CONFLICT.
- ALL OPEN-WEB ROOF JOISTS SHALL HAVE 5" DEEP JOIST BEARING ENDS. ALL OPEN-WEB GIRDERS SHALL HAVE 7 1/2" DEEP BEARING ENDS.
- JOIST DESIGN PER ALLOWABLE STRESS DESIGN (ASD).
- JOIST MANUFACTURER TO DESIGN TO TRANSFER 7.25K (SEISMIC, ASD) AXIAL LOAD THROUGH. ALL JOIST & GIRDER SHOES, UNO, (FORCES GIVEN INCLUDE OVERSTRENGTH FACTOR PER ASCE 12.11.2.2.2).
- JOIST MANUFACTURER TO DESIGN ROOF JOISTS FOR A TOTAL NET UPLIFT: .6 (WIND UPLIFT) - .6 (ROOF DL) = 8 PSF (NET UPLIFT, ASD)
- JOIST DESIGNER TO CONSIDER NET UPLIFT ON JOISTS / GIRDERS

SNOW DRIFT LEGEND



LEGEND

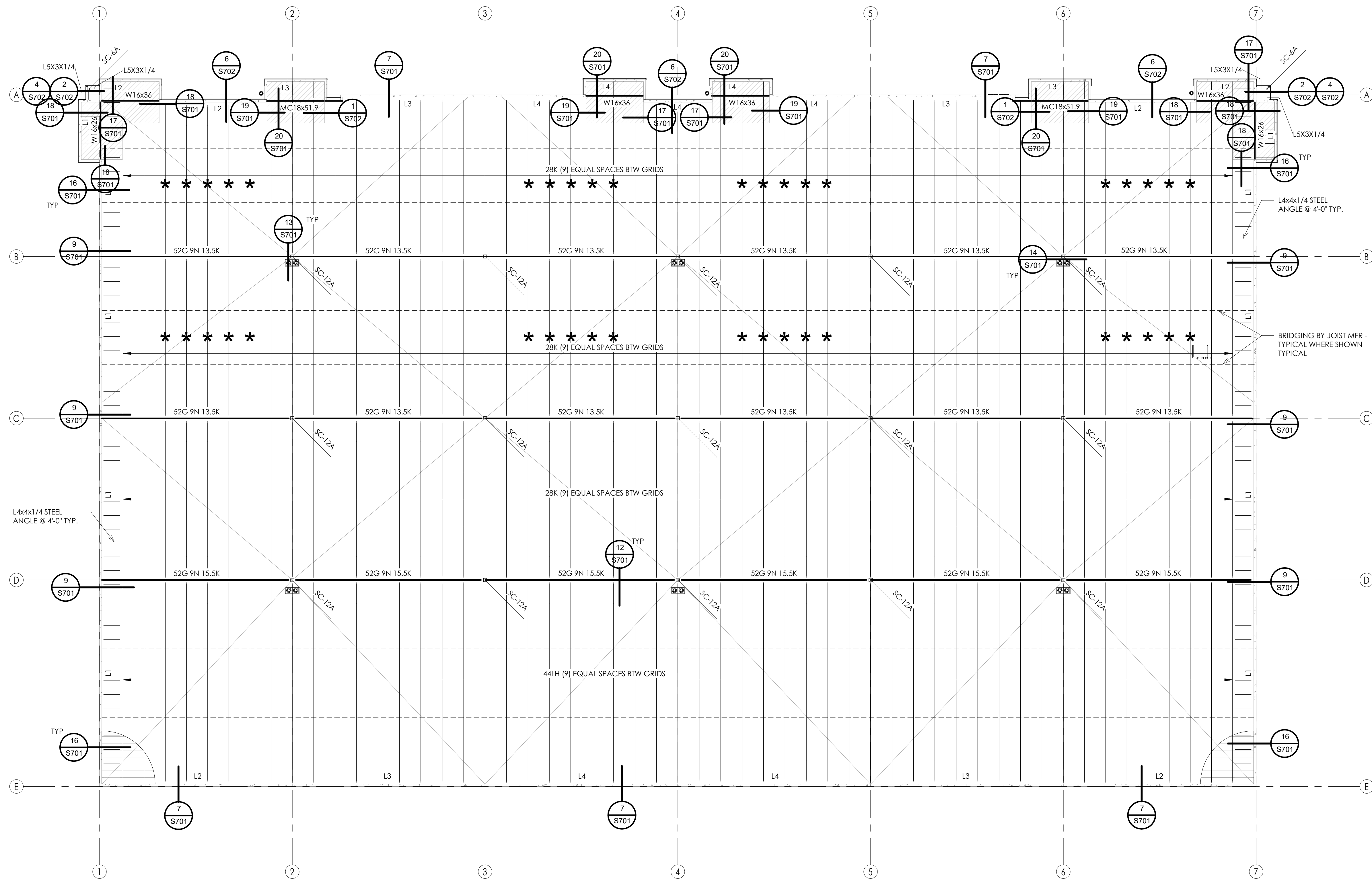
- * = INDICATES JOISTS TO BE DESIGNED FOR AN ADDITIONAL 750 LBS MIN. VERTICAL POINT AT ANY POINT ON JOIST
- = 1-1/2"X22GA TYPE 'B' STEEL DECK - ATTACH PER DECK SCHEDULE ON SHEET S003
- Lx = INDICATES LEDGER ANGLE TYPE. SEE 14/S003
- SC-x = INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S004
- = INDICATES JOIST BRIDGING, SEE NOTE 8.

DESIGN LOADS:

ROOF DEAD LOAD = 25 PSF
ROOF SNOW LOAD = 21 PSF

TOTAL LOAD = 46 PSF

- JOIST DESIGNER TO USE DESIGN LOADS AS NOTED AND SHOWN ON SHEET S001 FOR DISTRIBUTE LOADS ON ROOF JOISTS. EQUALLY DISTRIBUTE LOADS TO EA JOIST AND GIRDER PER THE SPACING INDICATED ON PLAN.
- CALCULATED JOIST LOADS SHALL BE SHOWN ON SUBMITTAL FOR ENGINEER APPROVAL PRIOR TO JOIST FABRICATION.
- JOIST SUPPLIER SHALL ALSO DESIGN FOR ADDITIONAL LOADS INCLUDING MECHANICAL UNITS, SNOW DRIFT, AND AXIAL LOADS AS INDICATED ON PLANS AND DETAILS



1 S102

ROOF FRAMING PLAN

1/16" = 1'-0"

Revision Schedule	
MARK	DESCRIPTION
	Revision Date

AE2022.290

**ROOF
FRAMING
PLAN**

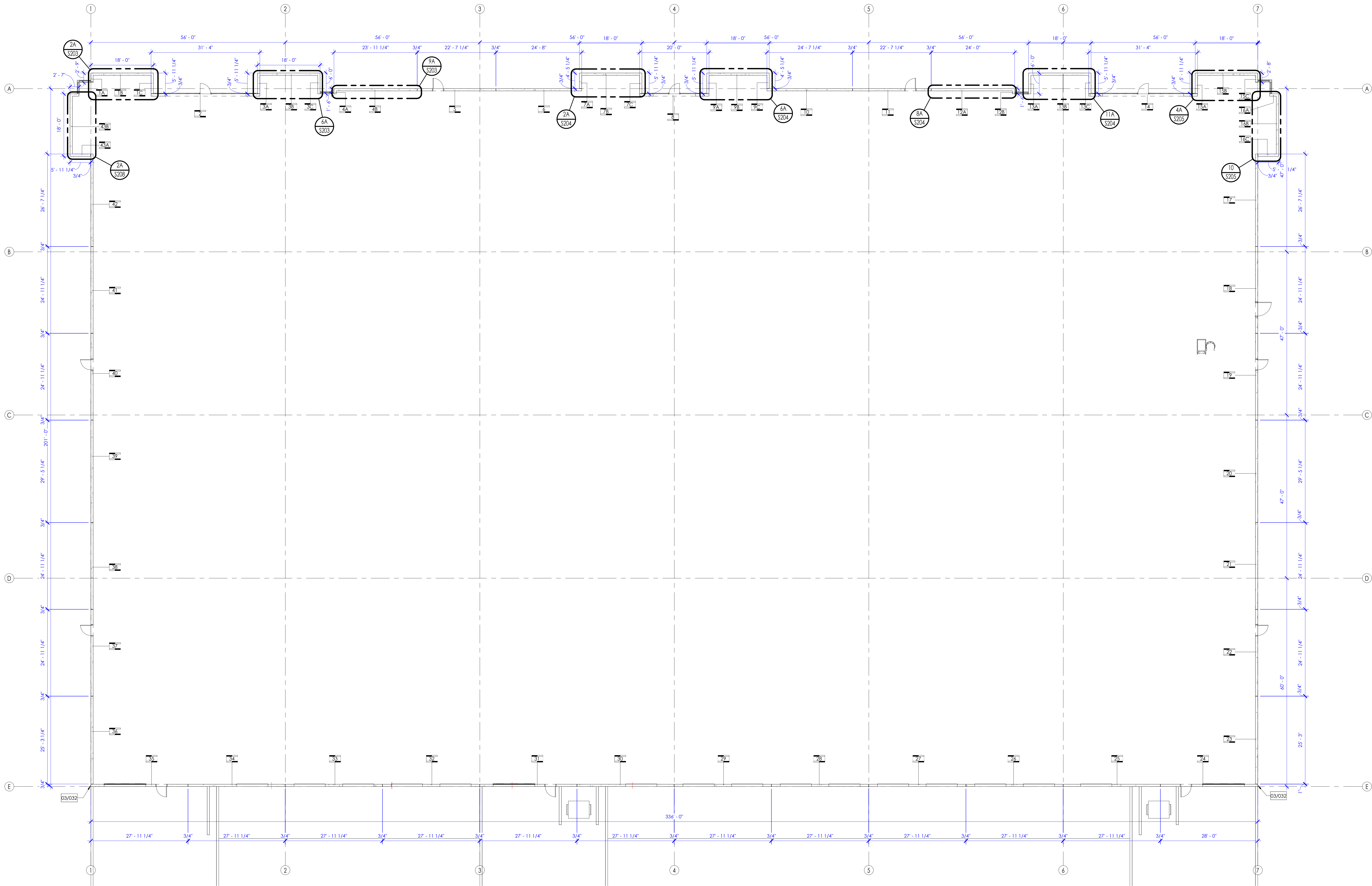
DATE: **04/23/2025**

SHEET #:

S102

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1
S201
3/32" = 1'-0"

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909 West South Jordan Parkway
South Jordan, Utah 84095
phone: 801.746.0456 - fax: 801.575.6456
webpage: aeurbia.com

PROFESSIONAL ENGINEER
No. 5558917-2204
S CHAD ROBINSON
STATE OF UTAH
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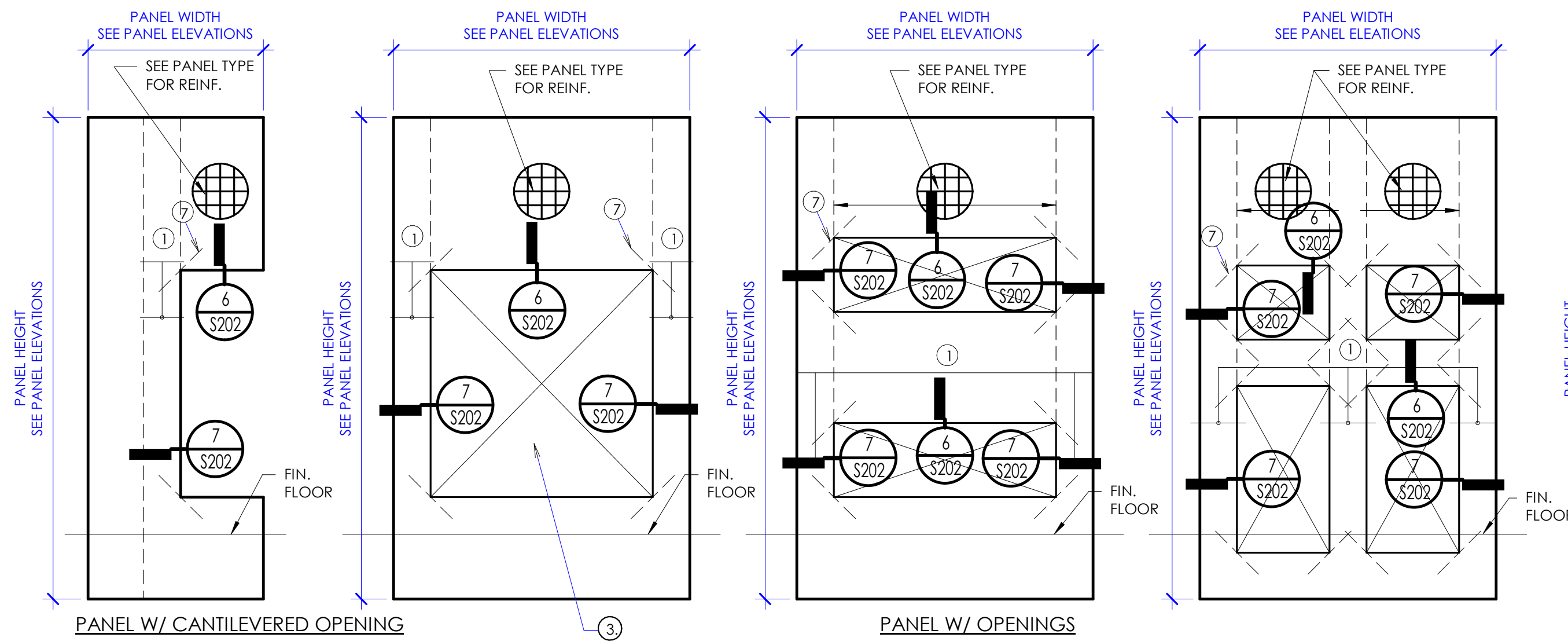
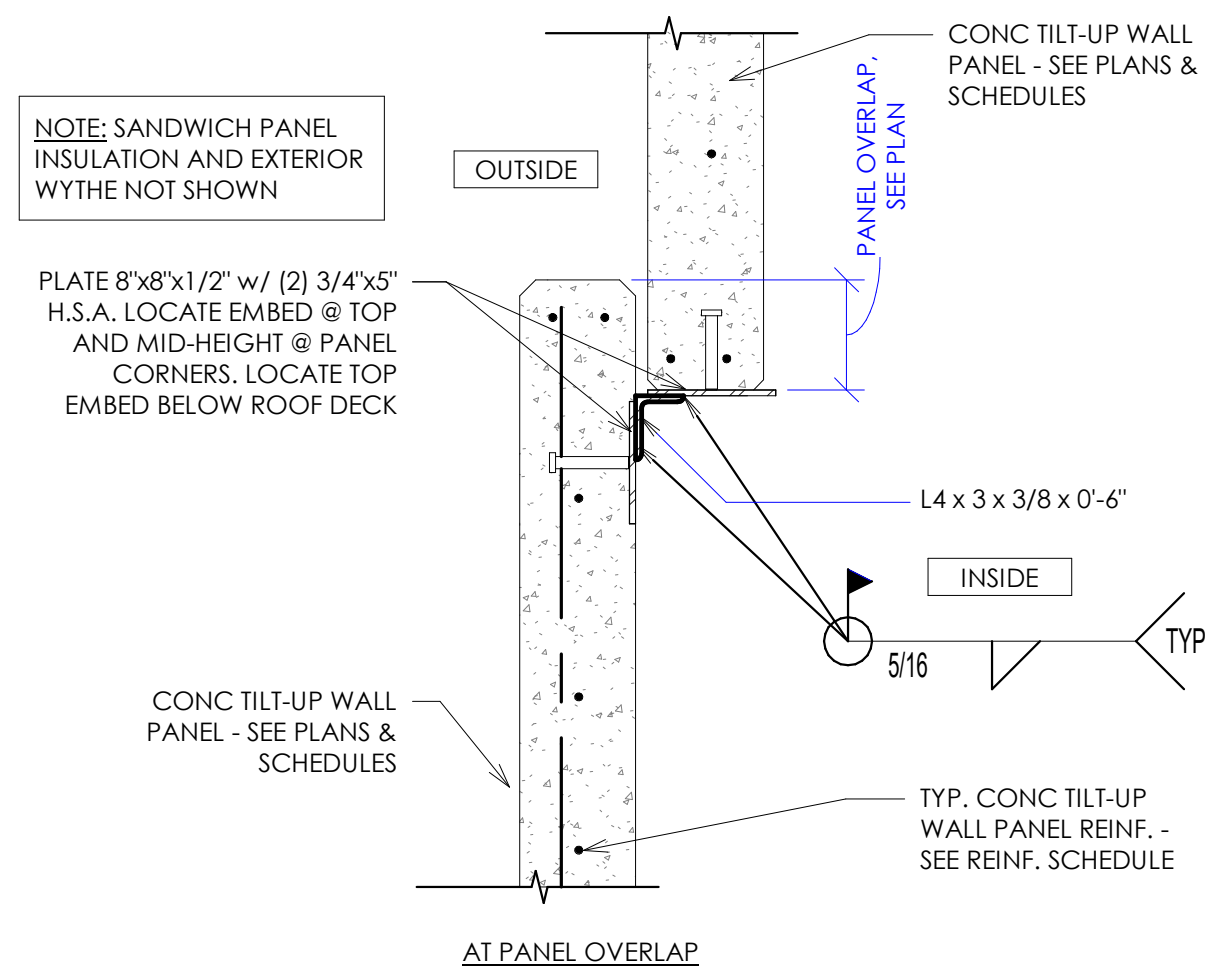
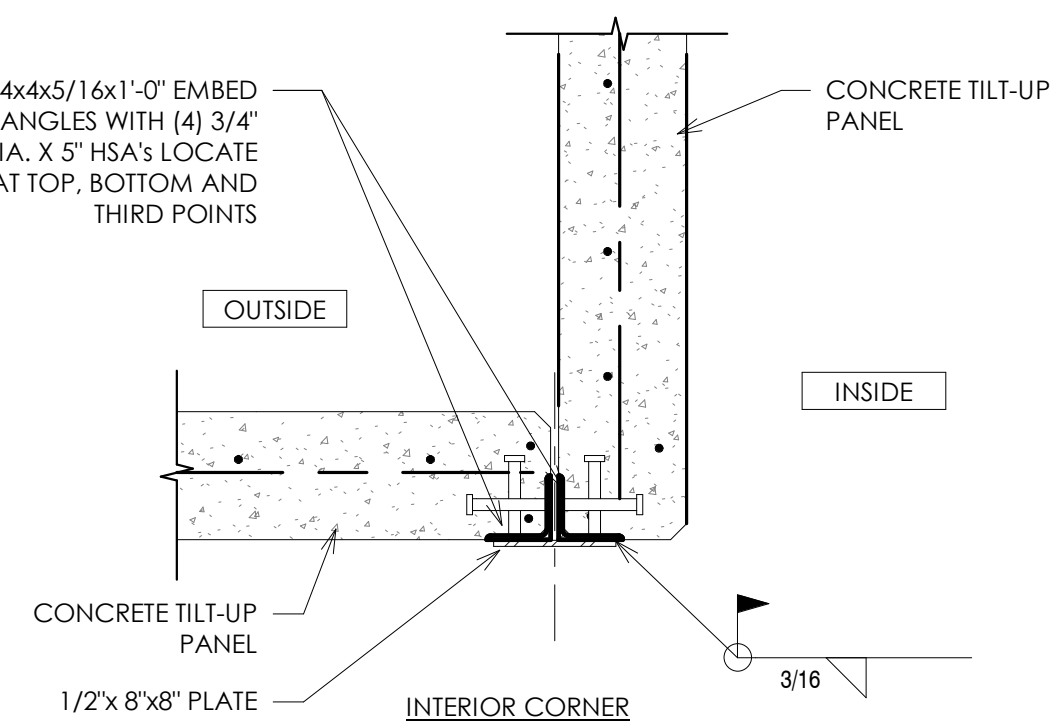
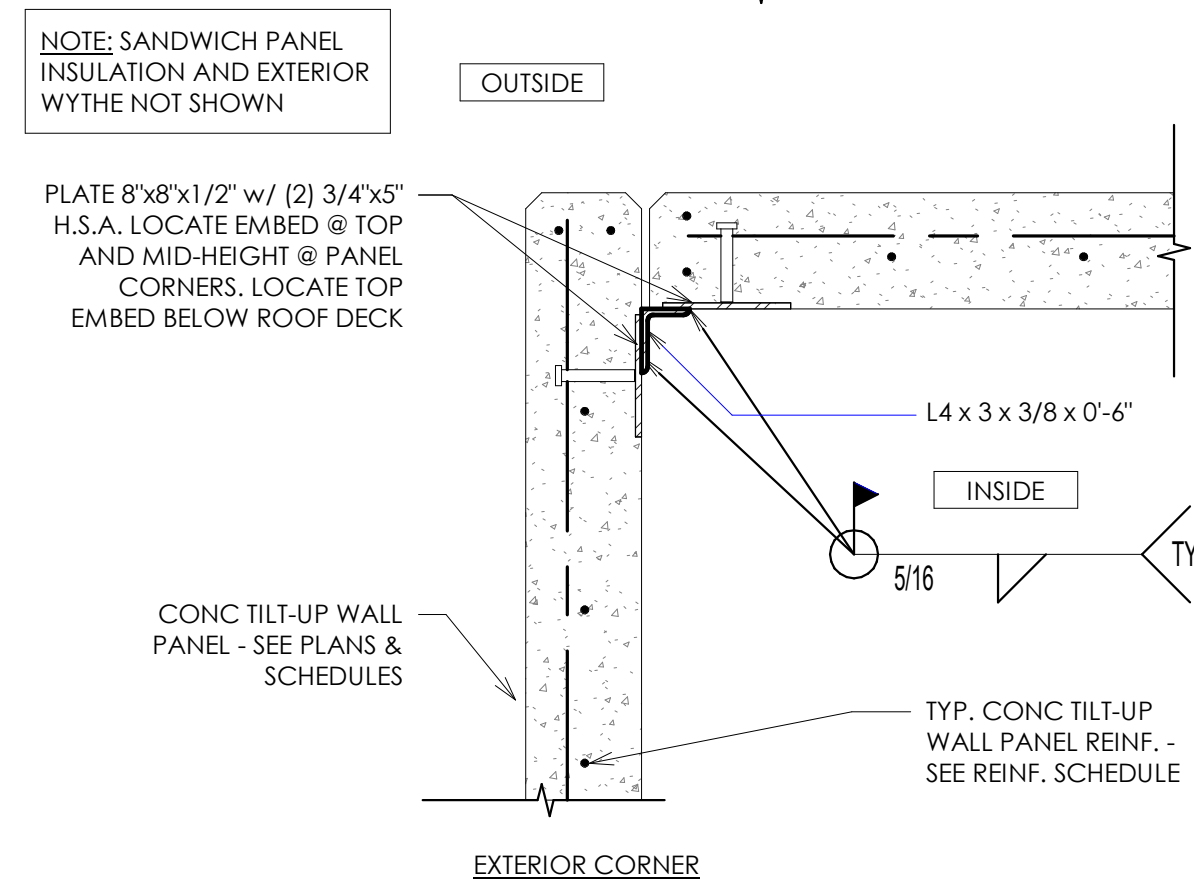
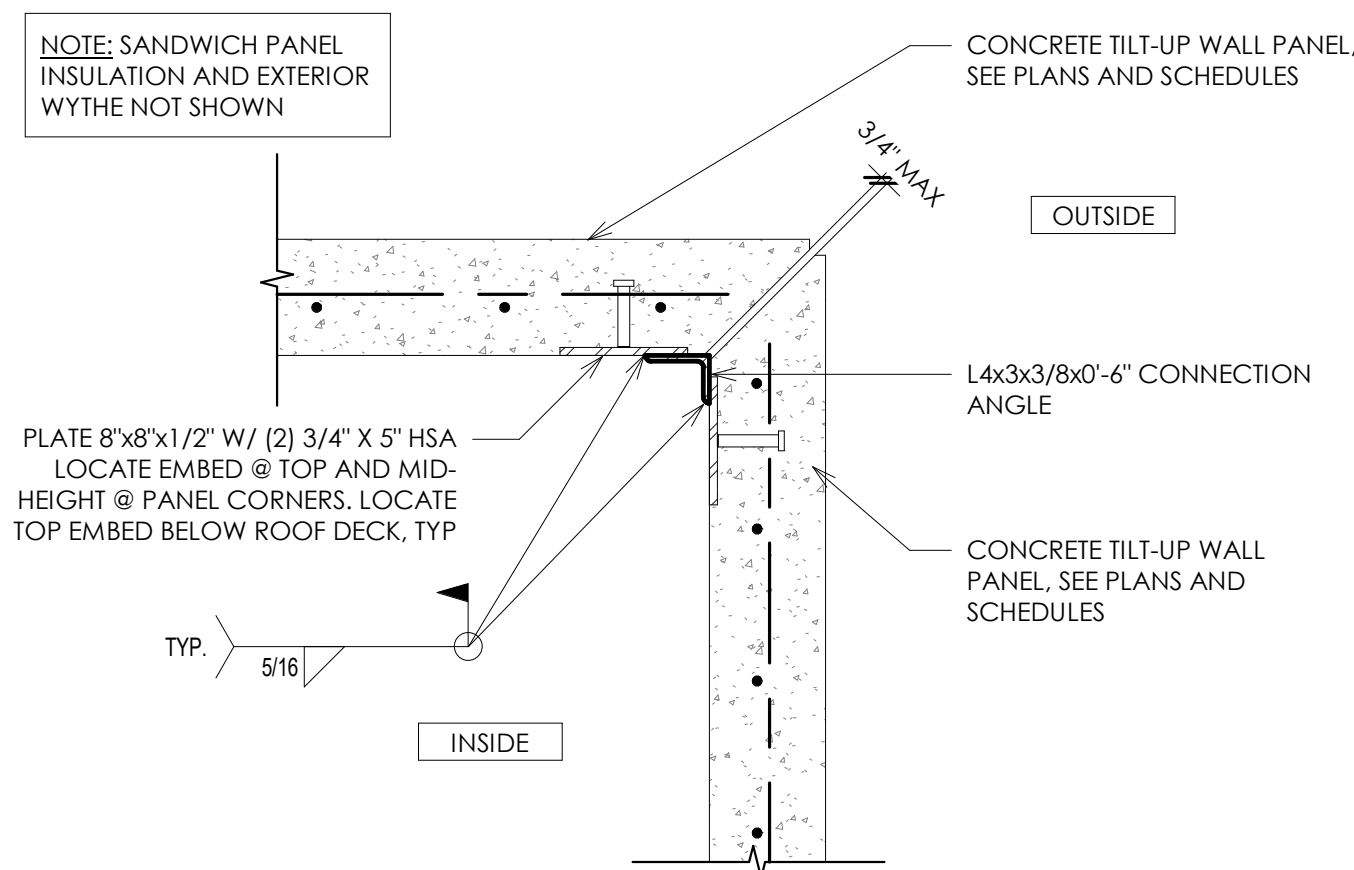
RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

MARK	REVISION	DESCRIPTION	REVISION DATE

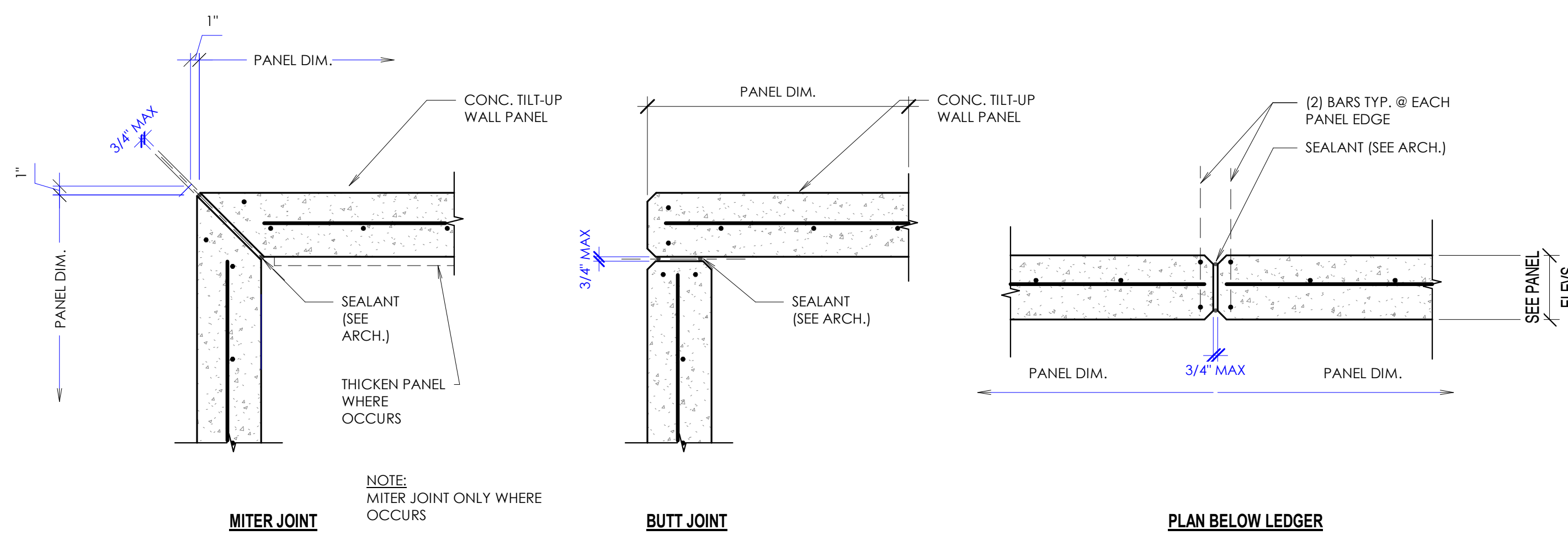
AE2022.290
PANEL ELEVATIONS FLOOR PLAN
DATE: 04/23/2025
SHEET #:
S201
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CONSTRUCTION DOCUMENTS / BID SET

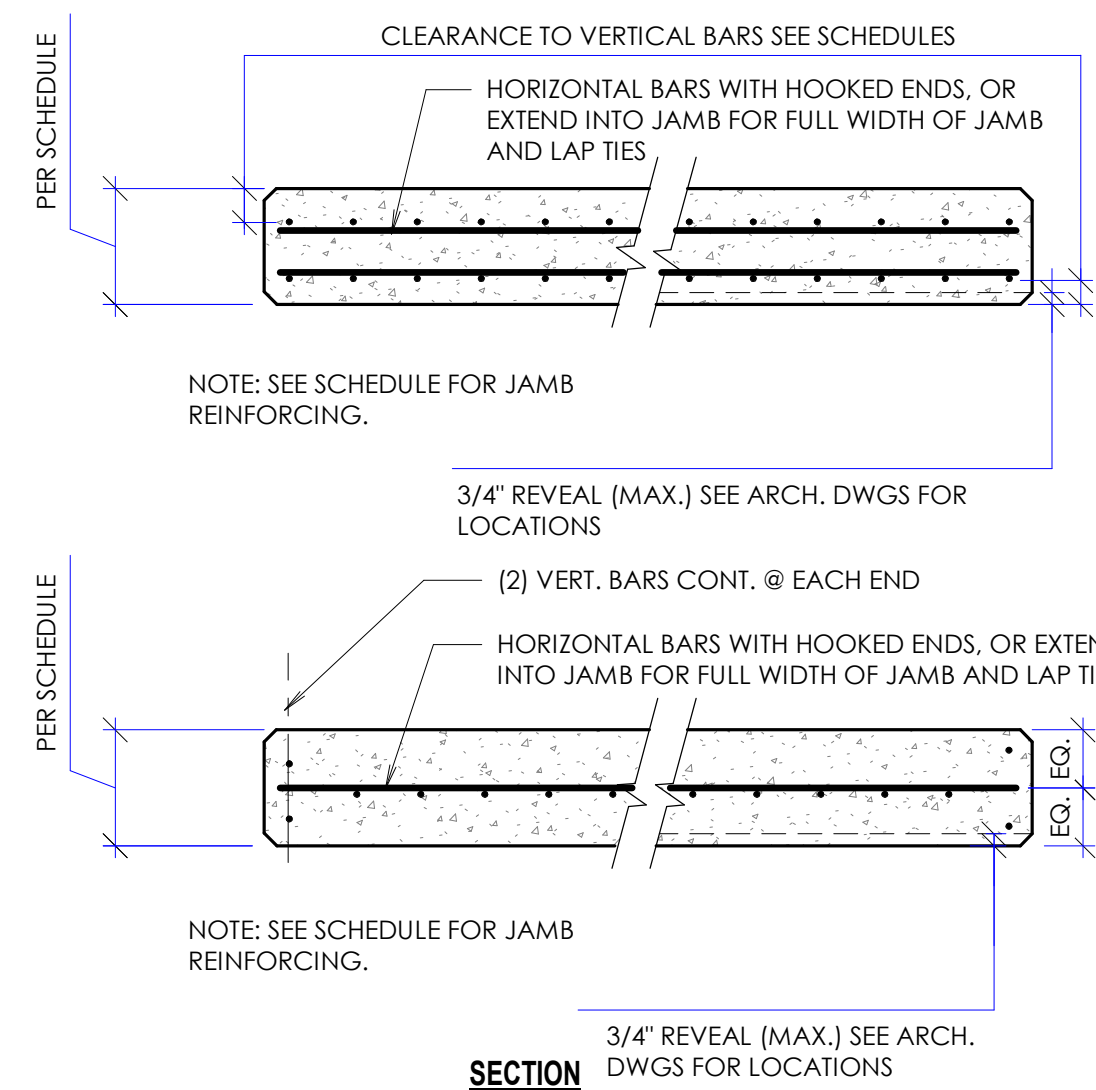
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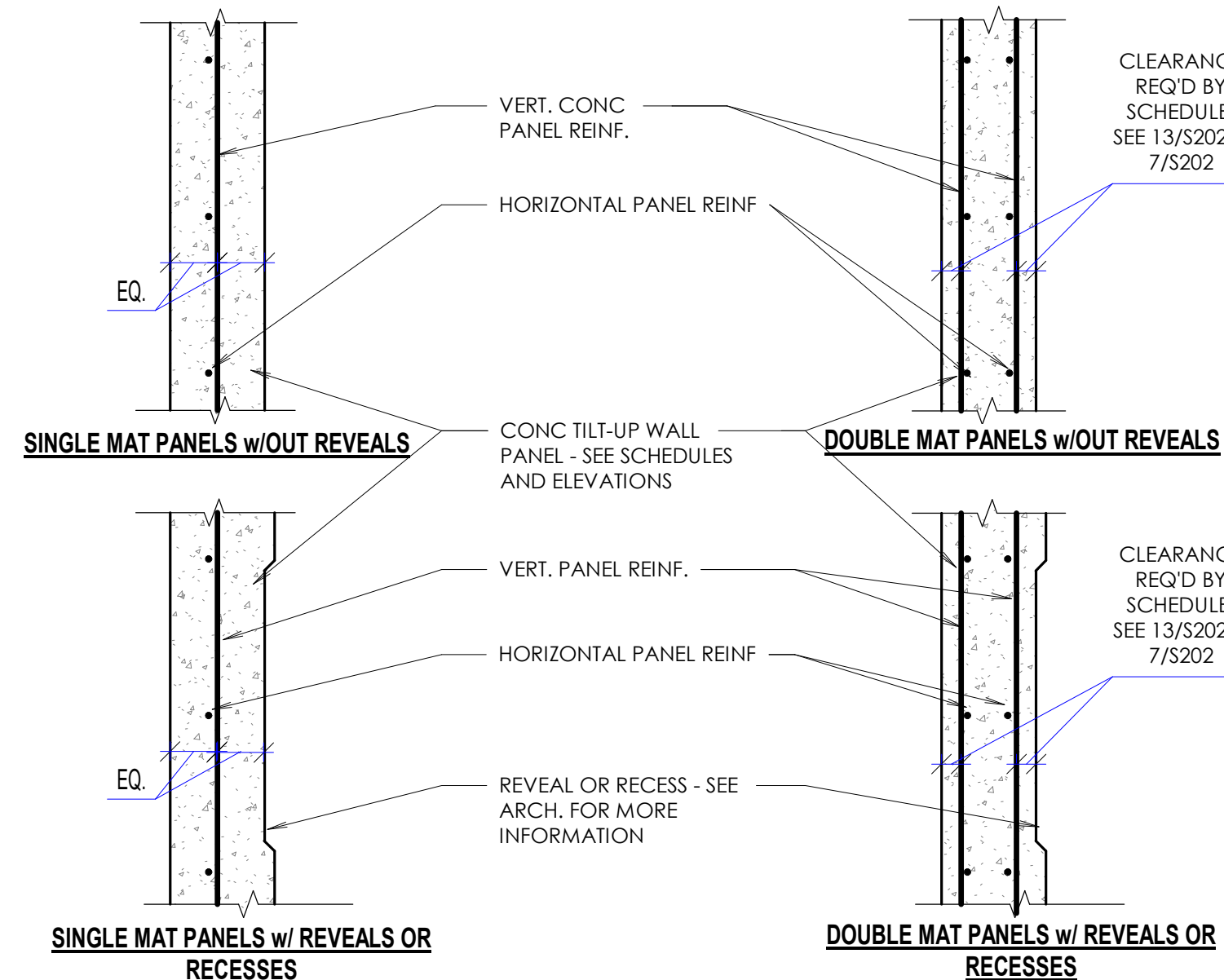
13 S202 **PANEL REINF & SCHEDULE - TYPICAL** (SEE SHEETS S200-202 FOR ACTUAL PANEL CONFIGURATIONS)
N.T.S.



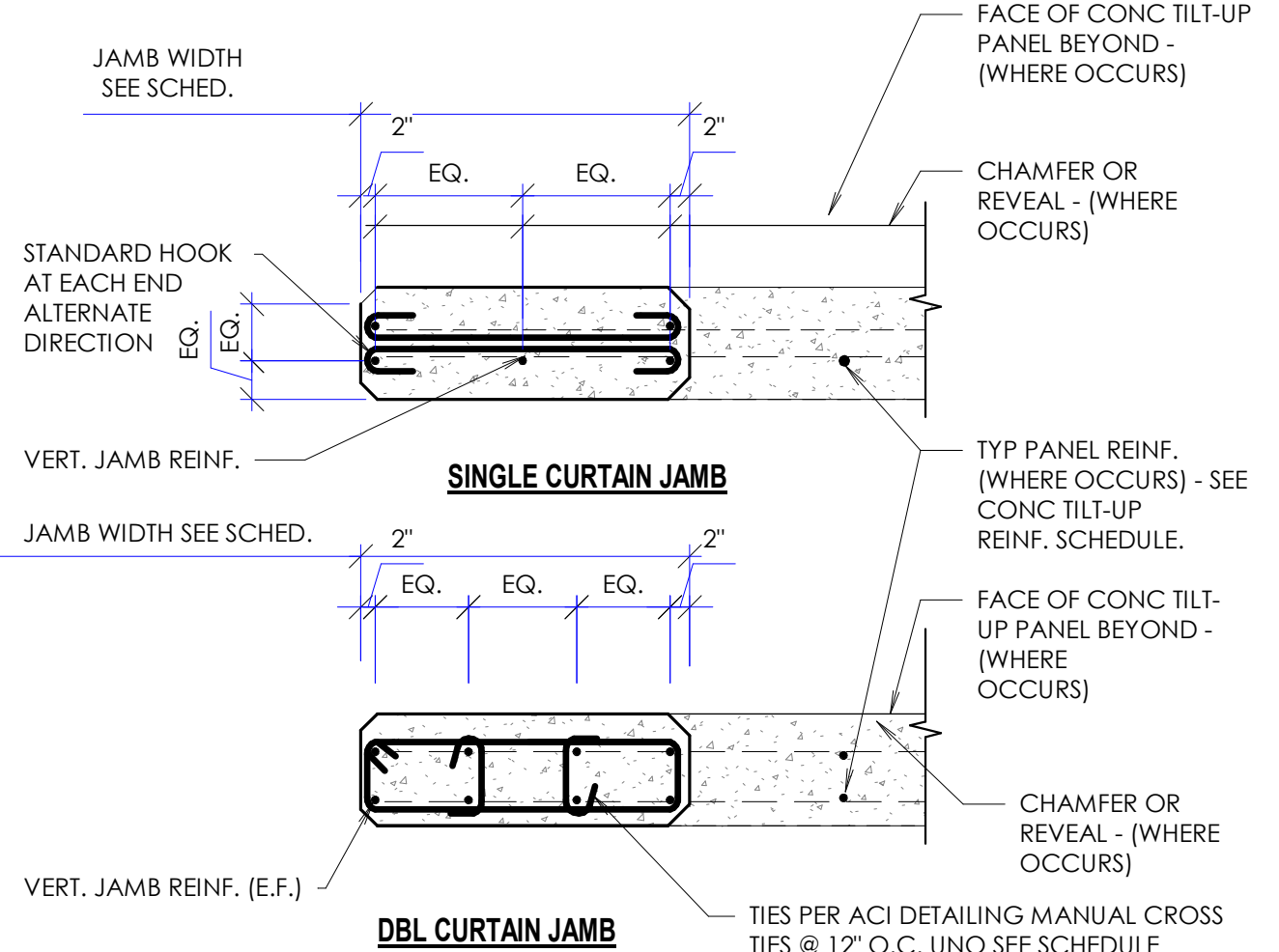
14 S202 **PANEL JOINT DETAILS**
N.T.S.



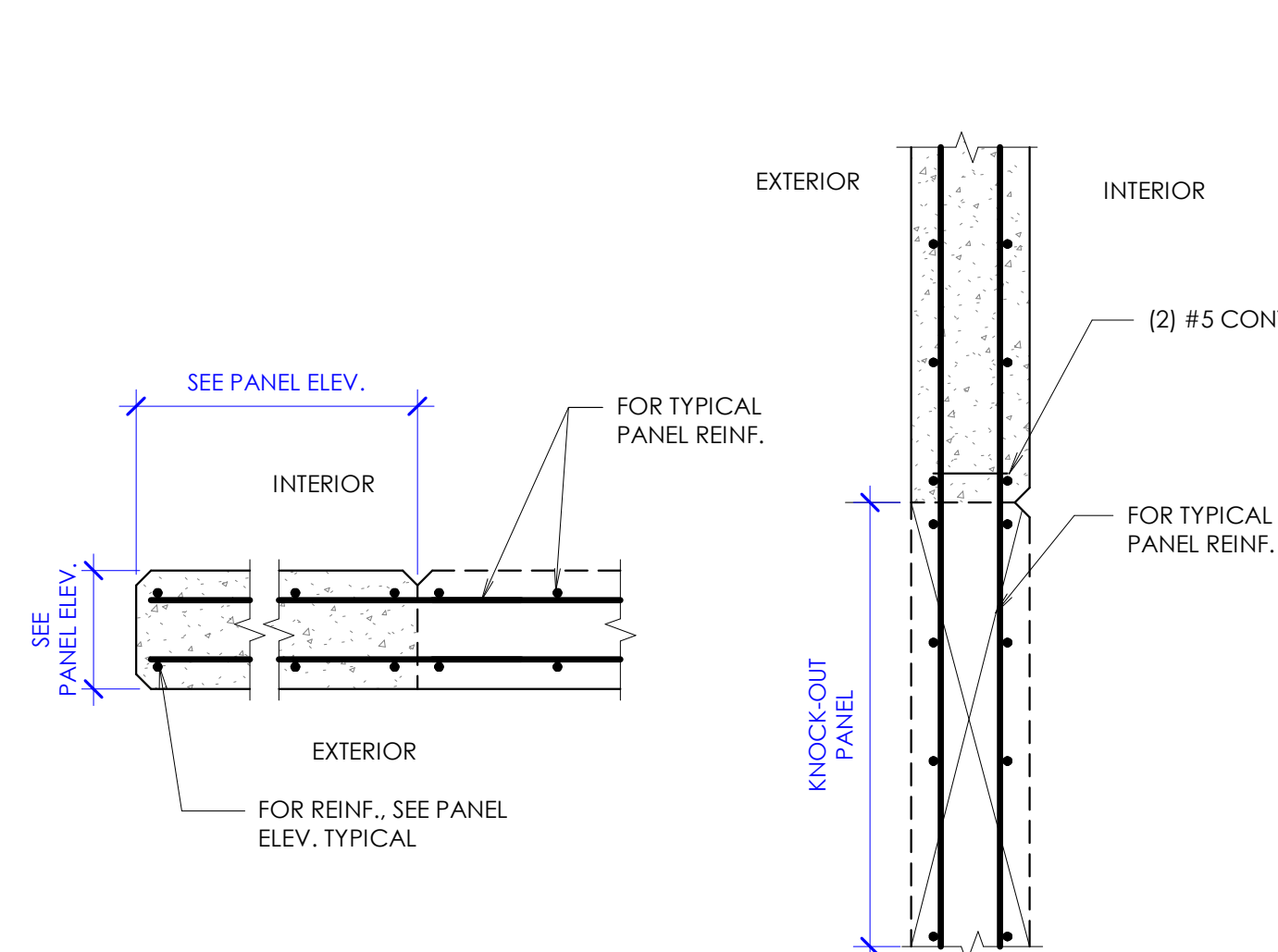
15 S202 **TYP PANEL REINFORCING**
N.T.S.



6 S202 **TYP LINTEL BEAM/HEADER REINF**
N.T.S.



7 S202 **TYPICAL JAMB REINF SCHEDULE**
N.T.S.



8 S202 **KNOCK-OUT PANEL DETAIL 2**
N.T.S.

- PANEL NOTES:**
- SEE PANEL ELEVATIONS AND DETAILS 7/S202 FOR JAMB REINFORCING & SCHEDULE.
 - FOR HEADER/LINTEL BEAM REINFORCING, SEE DETAIL 4/S202.
 - FOR PANEL REINFORCING, SEE SCHEDULE BELOW AND DETAIL 15/S202. ALL PANELS ARE REBAR PANEL TYPE 'A' U.N.O.
 - FOR TYPICAL PANEL JOINT DETAILS SEE 14/S202.
 - FOR REQUIRED CHORD ANGLE, SEE PLANS.
 - SEE ADDITIONAL DETAILS ON OTHER SHEETS AS APPLICABLE.
 - PROVIDE #4 x 48" DIAGONAL BAR @ CORNER OF ALL OPENINGS - TYPICAL.

PANEL REBAR SCHEDULE					
PANEL TYPE	PANEL THICKNESS	CONC. STRENGTH	VERTICAL REBAR	HORIZONTAL REBAR (HOOKED ENDS) OR EQUAL	COMMENTS
A	8"	4500 PSI	#5 @ 16" O.C. E.F.	#5 @ 18" O.C. E.F.	3/4" CLR
B	8"	4500 PSI	#5 @ 16" O.C. E.F.	#5 @ 16" O.C. E.F.	3/4" CLR

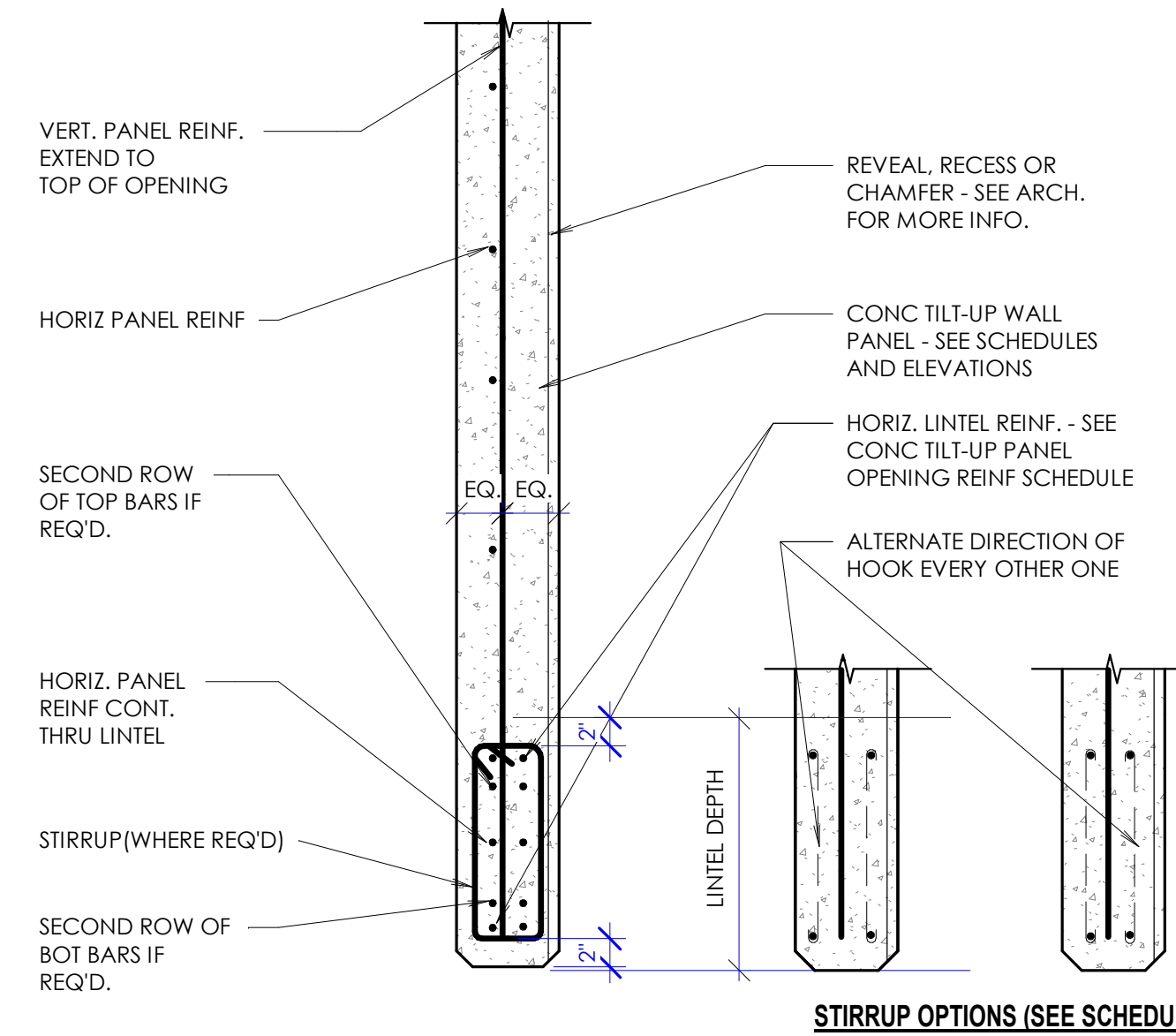
NOTE: PROVIDE ADDITIONAL REBAR FOR LIFTING AS REQUIRED. TYP.

EF=EACH FACE
HORIZONTAL STEEL TO CONTINUE THROUGH PIER/JAMB U.N.O.
HORIZONTAL BARS TO HAVE HOOKED ENDS OR EQUAL.

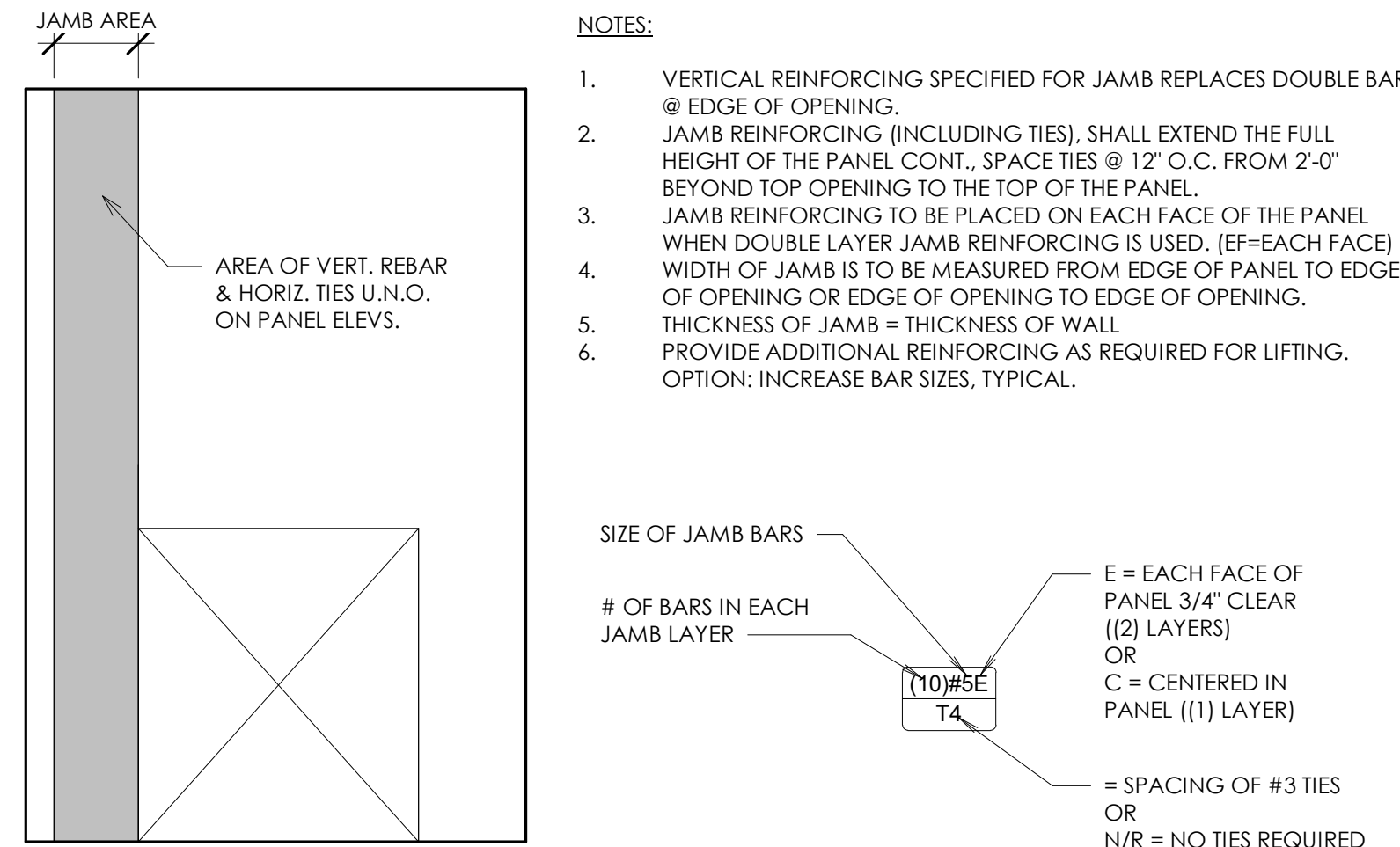
OPTION: CONTINUE STRAIGHT HORIZONTAL BARS SO THEY EXTEND INTO FULL WIDTH OF JAMBS @ EACH END AND OMIT HOOKED ENDS. PROVIDED JAMB WIDTH IS SUFFICIENT TO DEVELOP HORIZ. BARS.

CONCRETE TILT-UP PANEL OPENING REINFORCING SCHEDULE - U.N.O. LINTEL BEAMS/HEADERS				
BEAM TYPE	LINTEL REINFORCING			*NOTES
	DEPTH	HORIZ. REINF.	STIRRUPS	
CB-01	24"	(2) #5 BOT	N/R	
CB-02	24"	(3) #5 BOT & (2) #5 TOP	#3 @ 10" O.C.	
CB-03	30"	(3) #6 BOT & (2) #6 TOP	#3 @ 12" O.C.	
CB-04	30"	(3) #7 BOT & (2) #6 TOP	#3 @ 12" O.C.	

- NOTES:**
- EXTEND LINTEL REINFORCING BEYOND EDGE OF THE OPENING 4'-0" MINIMUM. WHERE NOT POSSIBLE, EXTEND TO THE EDGE OF PANEL AND TERMINATE WITH A STANDARD 90° HOOK. OR, HEADED BAR. FOR MULTIPLE OPENINGS, RUN LINTEL REINFORCING CONTINUOUS.
 - SEE ARCHITECTURAL FOR PANEL ELEVATIONS AND OPENING LOCATIONS.
 - SEE DETAILS ON THIS SHEET FOR REINFORCING PLACEMENT DIAGRAMS (WALL, LINTEL, AND JAMB COLUMN REINFORCING DIAGRAM).
 - AT PANEL WITH KNOCKOUT PANELS, REINFORCE AROUND KNOCKOUT AS PER THIS SCHEDULE.
 - WHEN (4) BARS ARE REQUIRED, PLACE (2) BARS PER ROW.
 - REINFORCING TO BE CONTINUOUS FROM EDGE OF PANEL TO EDGE OF PANEL, FOR LARGE OPENINGS.



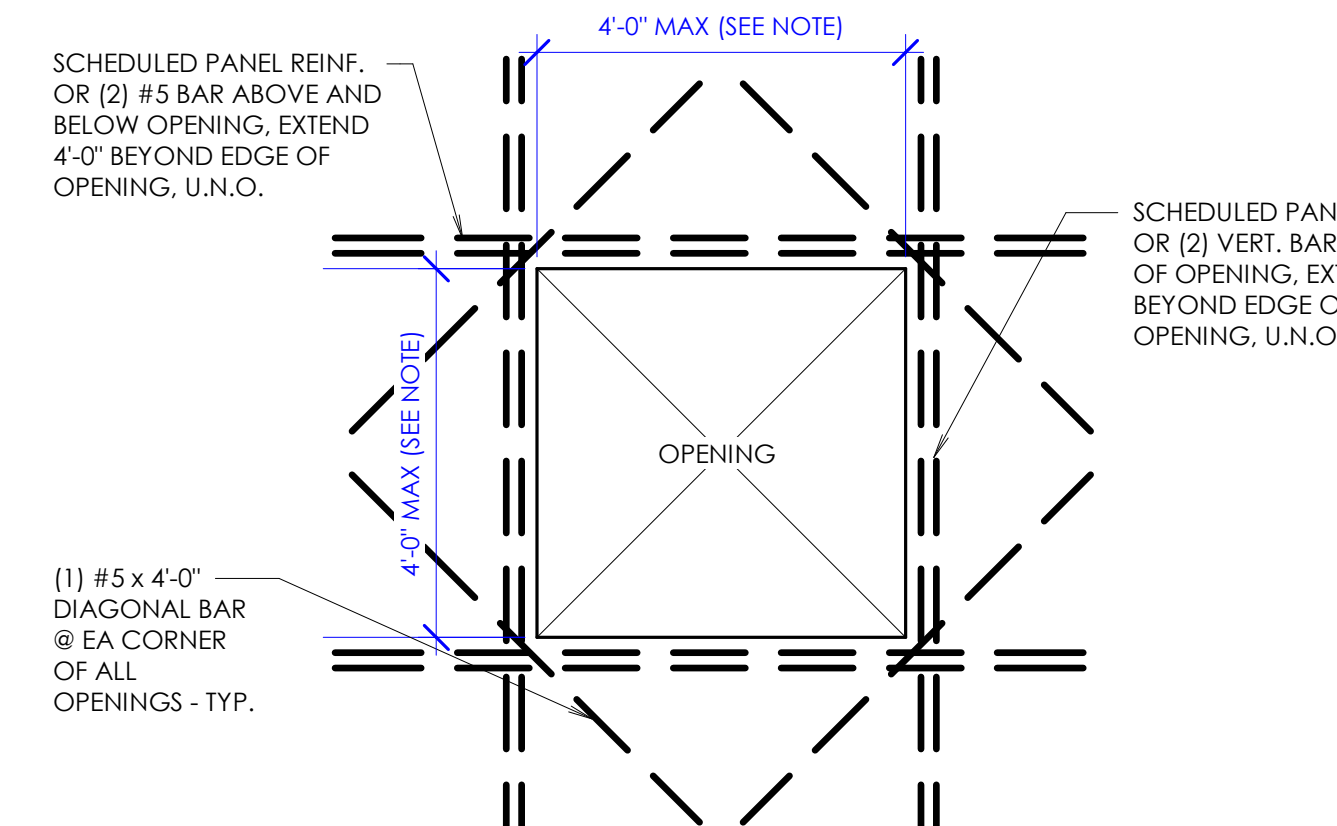
- NOTES:**
- VERTICAL REINFORCING SPECIFIED FOR JAMB REPLACES DOUBLE BAR @ EDGE OF OPENING.
 - JAMB REINFORCING (INCLUDING TIES), SHALL EXTEND THE FULL HEIGHT OF THE PANEL CONT. SPACE TIES @ 12" O.C. FROM 2'-0" BEYOND TOP OPENING TO THE TOP OF THE PANEL.
 - JAMB REINFORCING TO BE PLACED ON EACH FACE OF THE PANEL WHEN DOUBLE LAYER JAMB REINFORCING IS USED. (EF=EACH FACE)
 - WIDTH OF JAMB IS TO BE MEASURED FROM EDGE OF PANEL TO EDGE OF OPENING OR EDGE OF OPENING TO EDGE OF OPENING.
 - THICKNESS OF JAMB = THICKNESS OF WALL.
 - PROVIDE ADDITIONAL REINFORCING AS REQUIRED FOR LIFTING. OPTION: INCREASE BAR SIZES, TYPICAL.



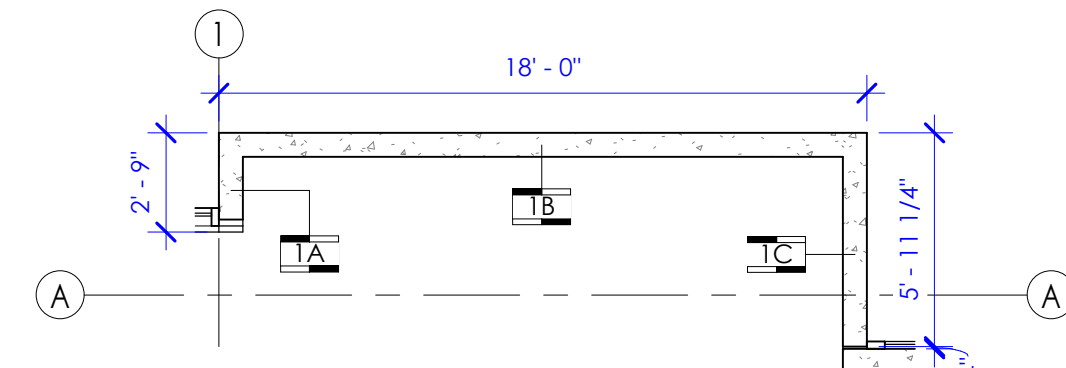
19 S202 **TYP CONC TILT UP INTERSECTION CONNECTION**
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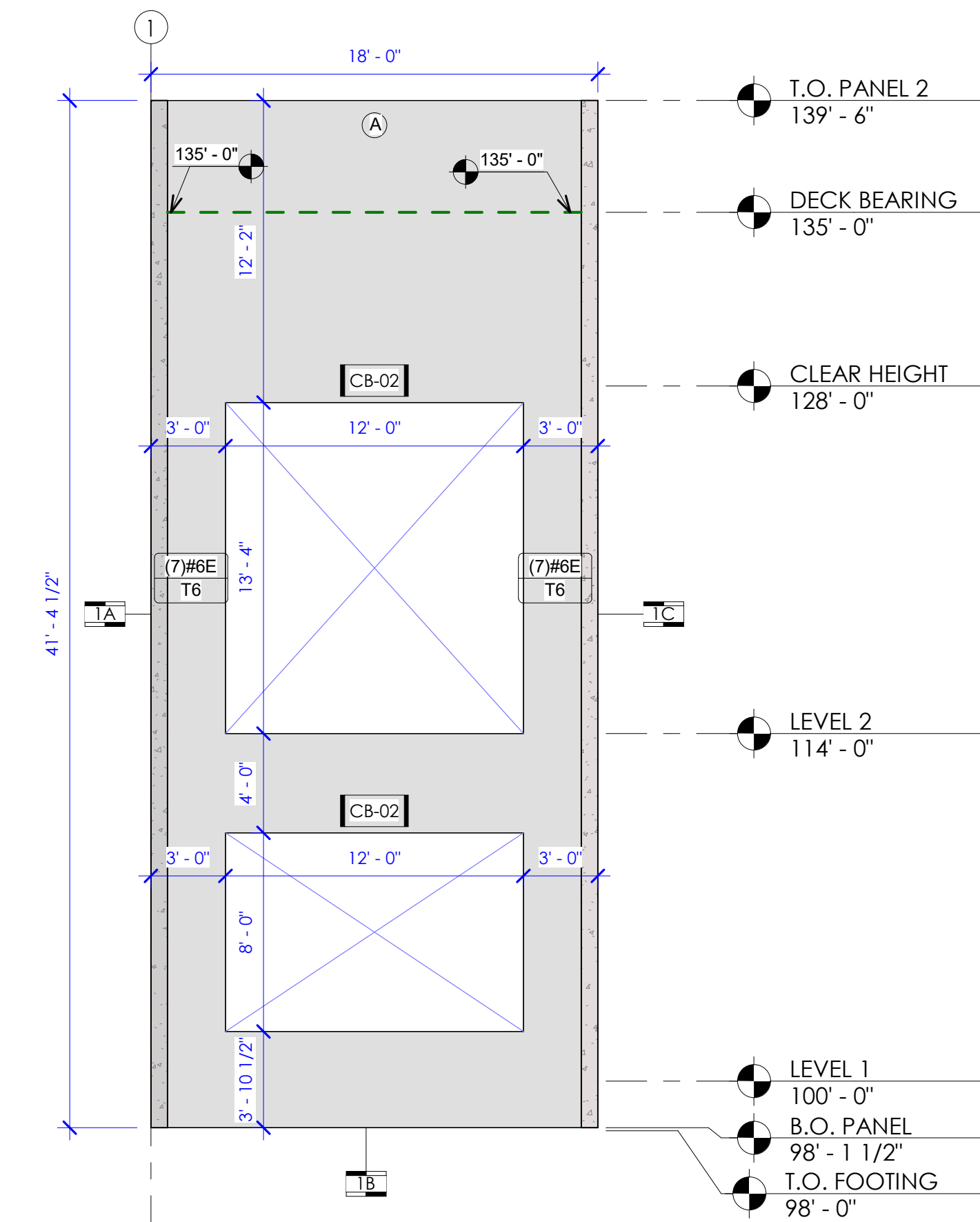
- NOTES:**
- MAINTAIN 2'-0" MIN EDGE DISTANCE FROM OPENING TO NEAREST PANEL EDGE.
 - UNSCHEDULED OPENINGS WHICH EXCEED DETAILED DIMENSIONS SHALL BE APPROVED IN WRITING BY EOR.
 - IF REBAR CANNOT BE EXTENDED 4'-0" BEYOND OPENING, EXTEND BAR MAXIMUM ALLOWABLE DISTANCE AND TERMINATE WITH STANDARD HOOK.



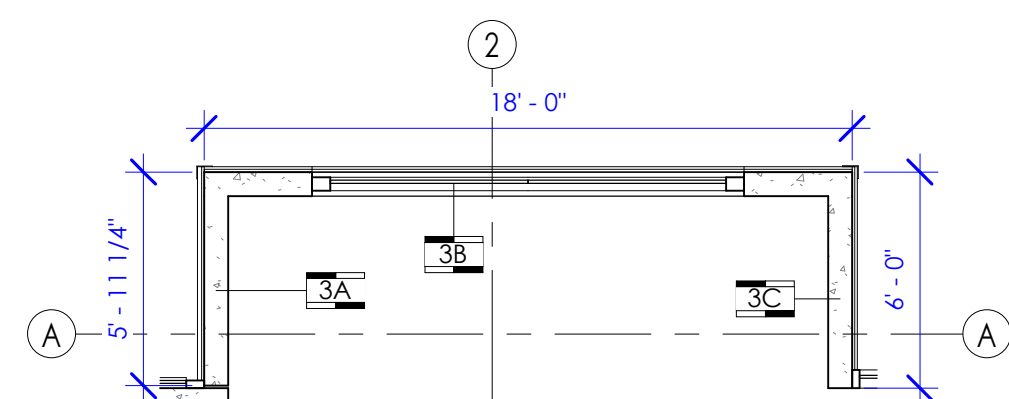
4 S202 **MISC. CONC TILT UP PANEL OPENING**
N.T.S.



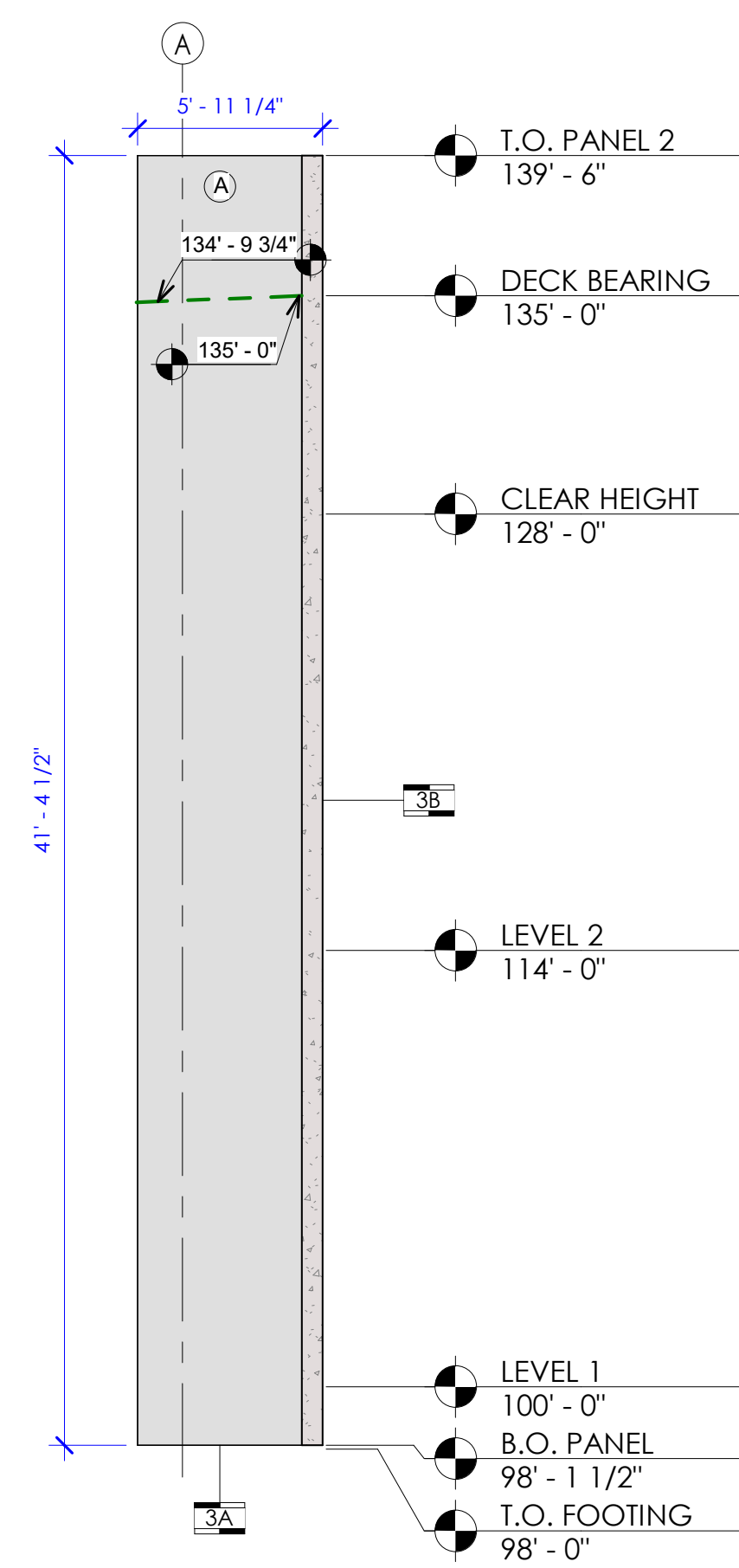
2A PANEL 1
S203 3/16" = 1'-0"



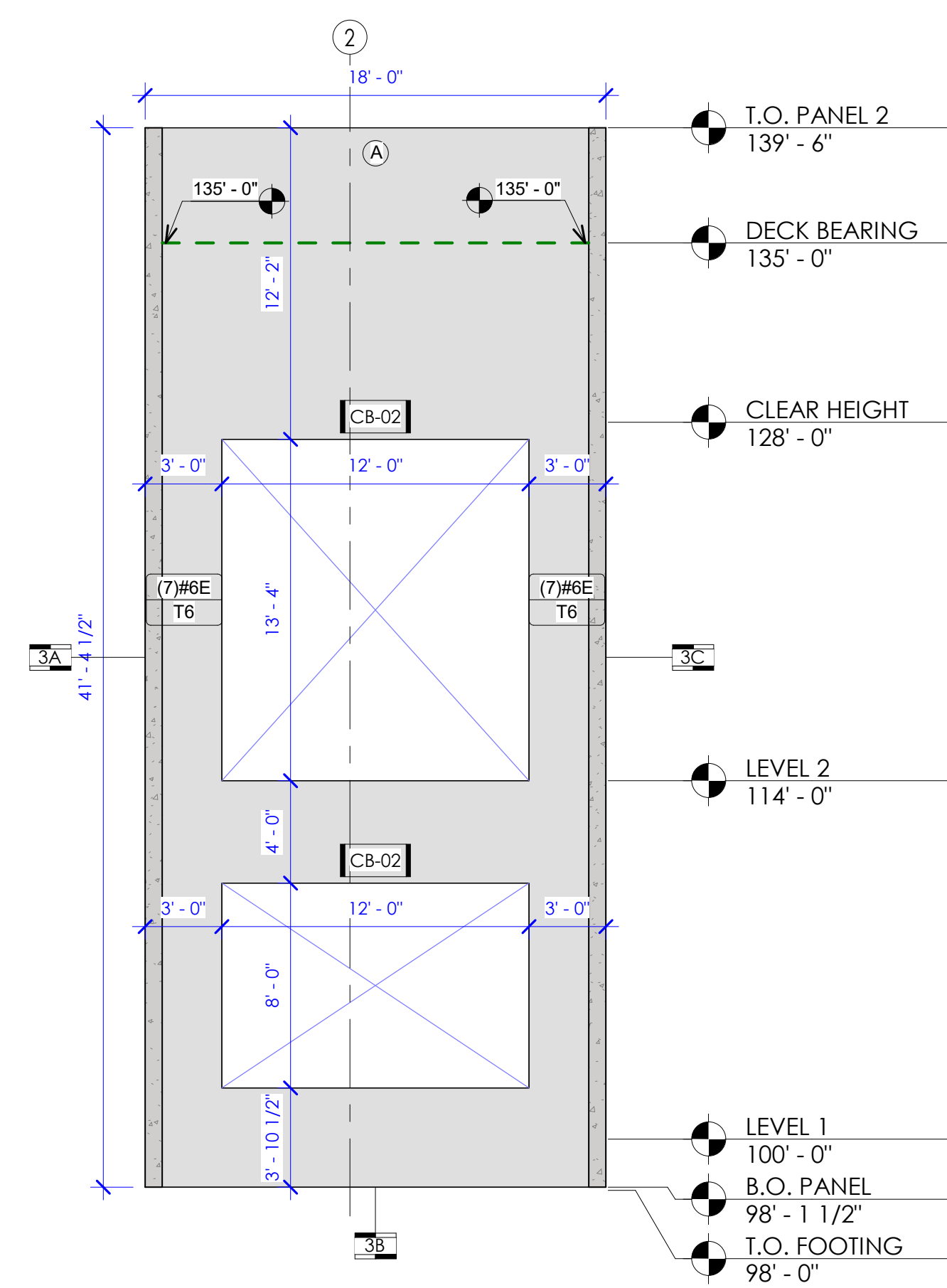
2 PANEL 1B
S203 3/16" = 1'-0"



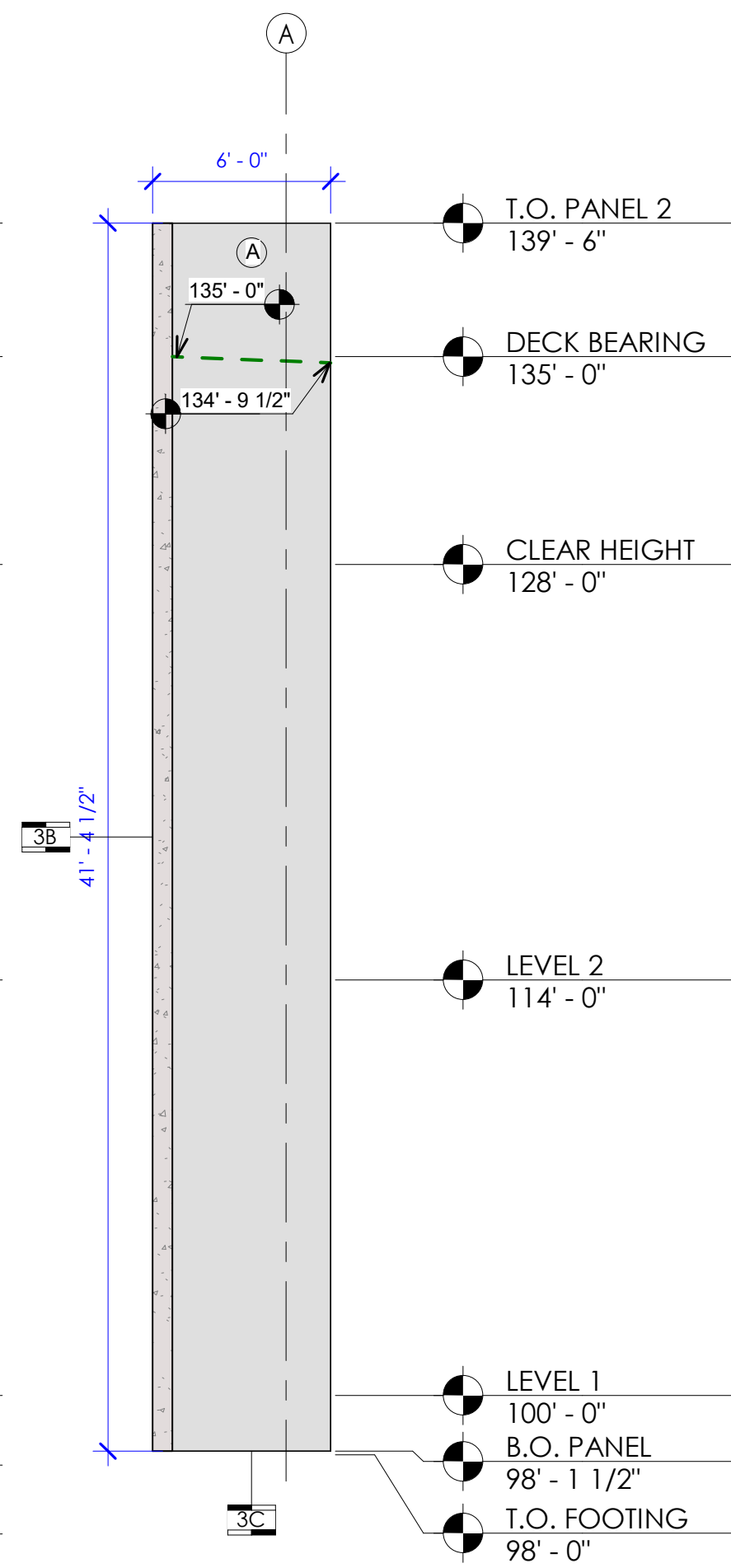
6A PANEL 3
S203 3/16" = 1'-0"



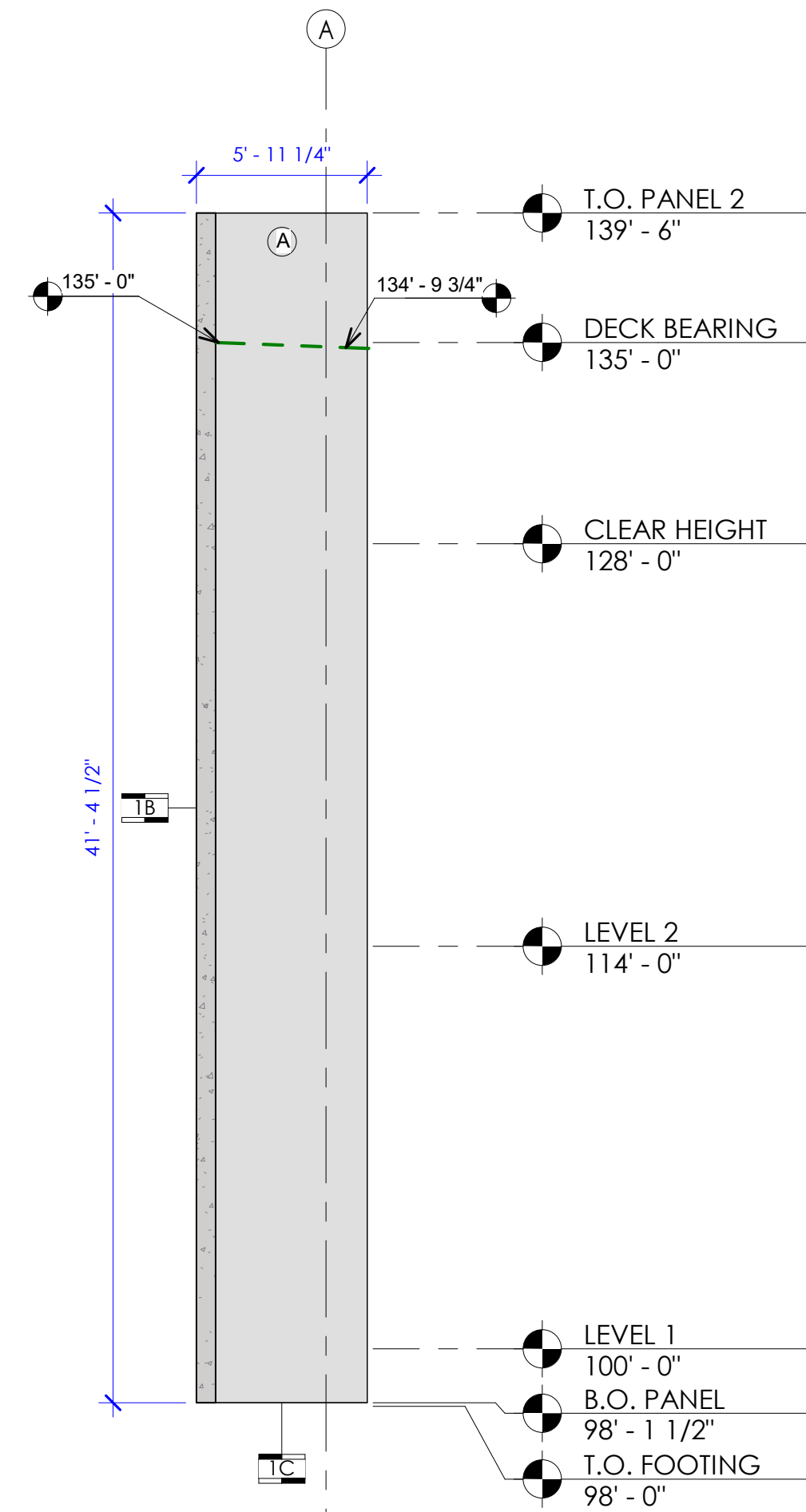
5 PANEL 3A
S203 3/16" = 1'-0"



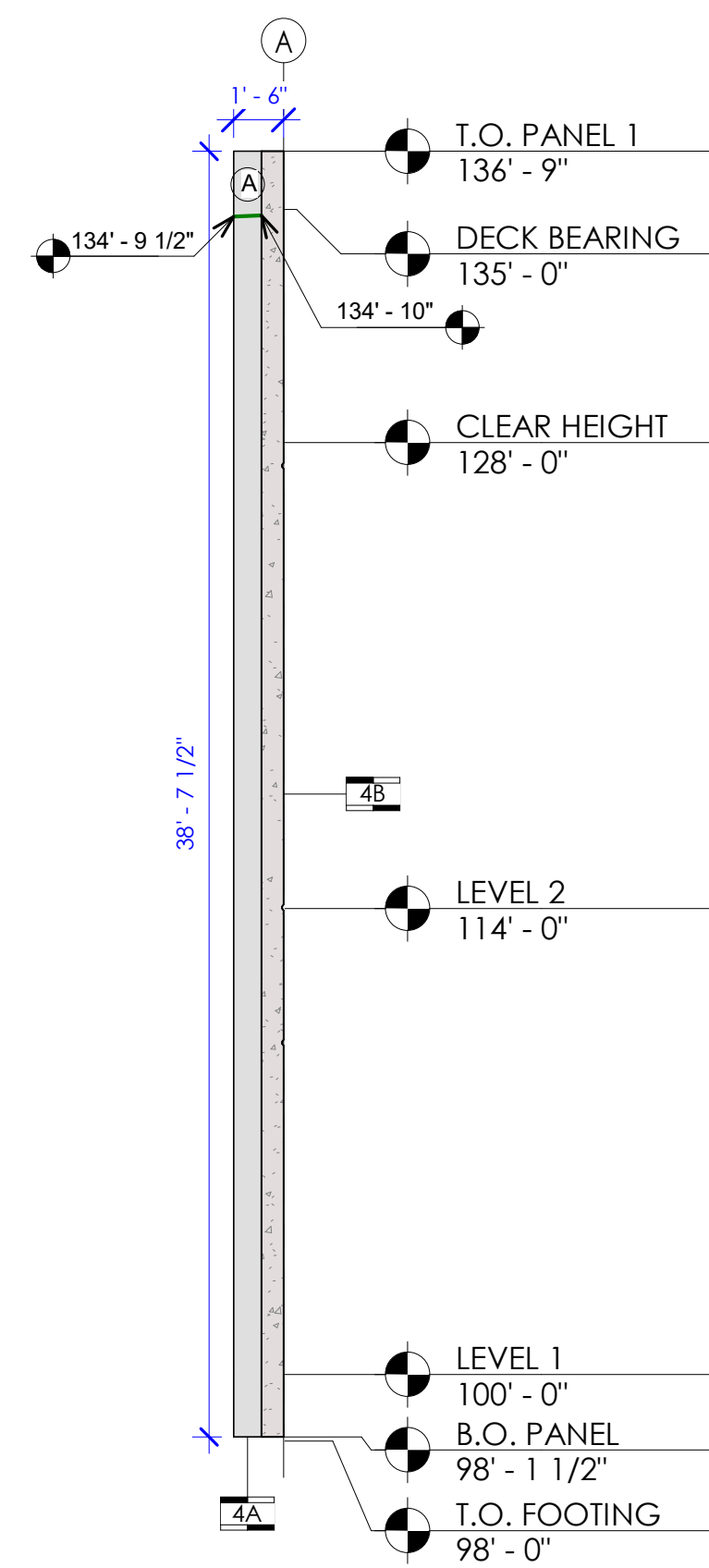
6 PANEL 3B
S203 3/16" = 1'-0"



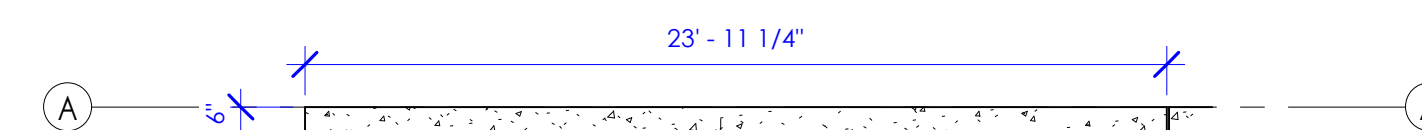
7 PANEL 3C
S203 3/16" = 1'-0"



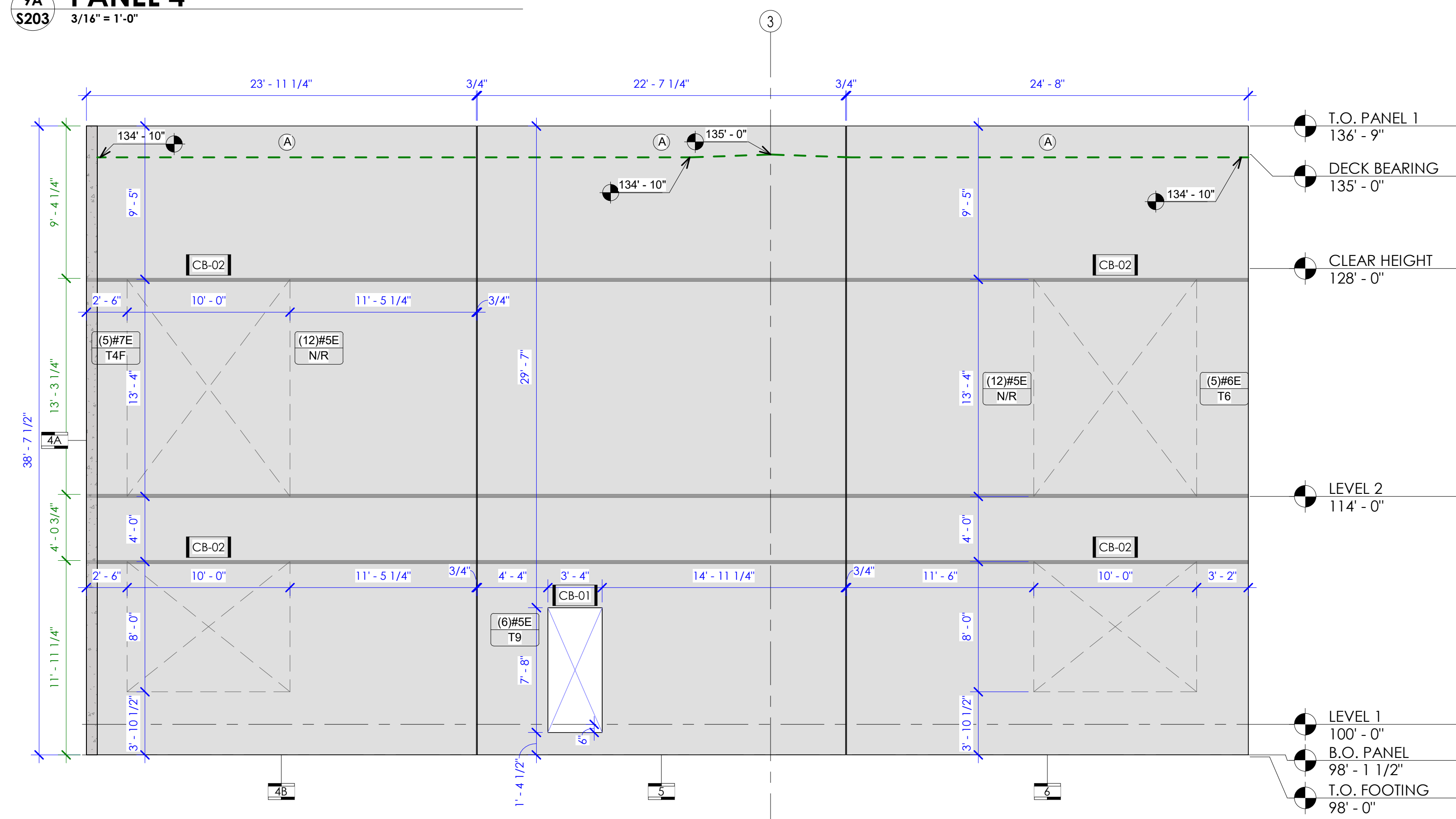
3 PANEL 1C
S203 3/16" = 1'-0"



8 PANEL 4A
S203 3/16" = 1'-0"



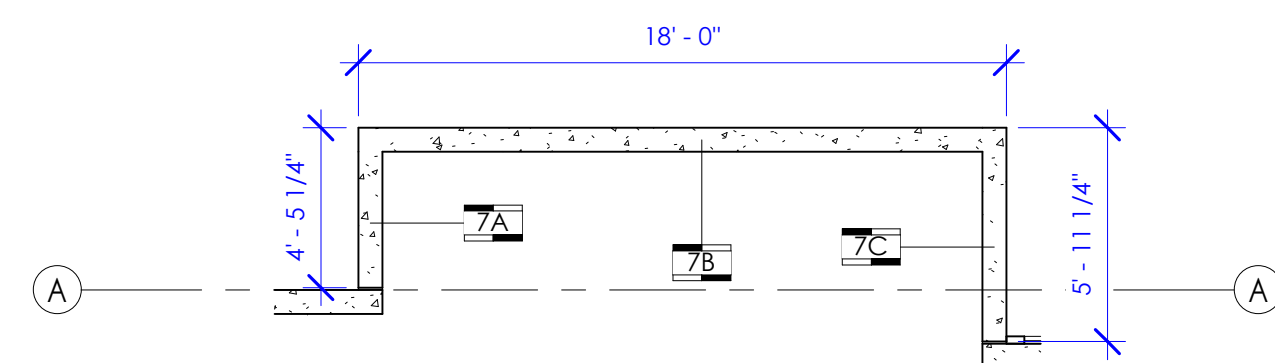
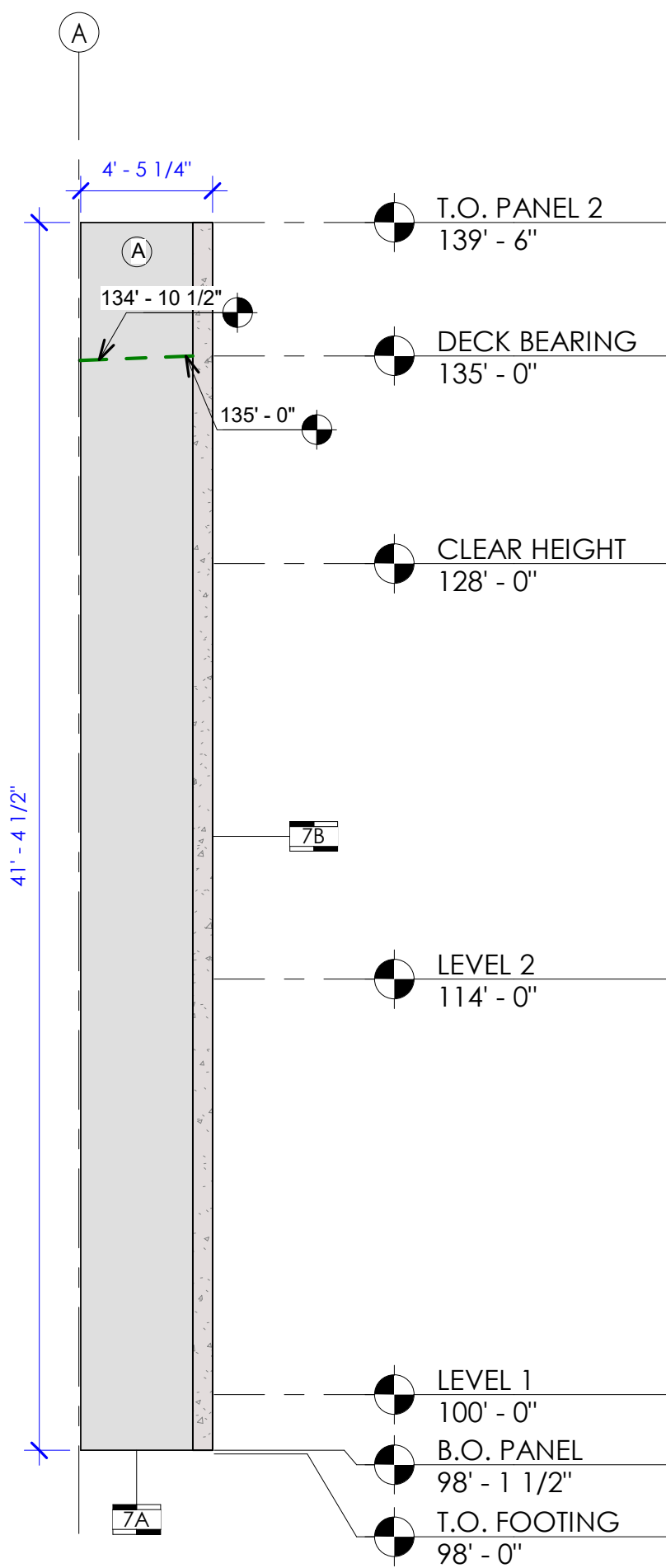
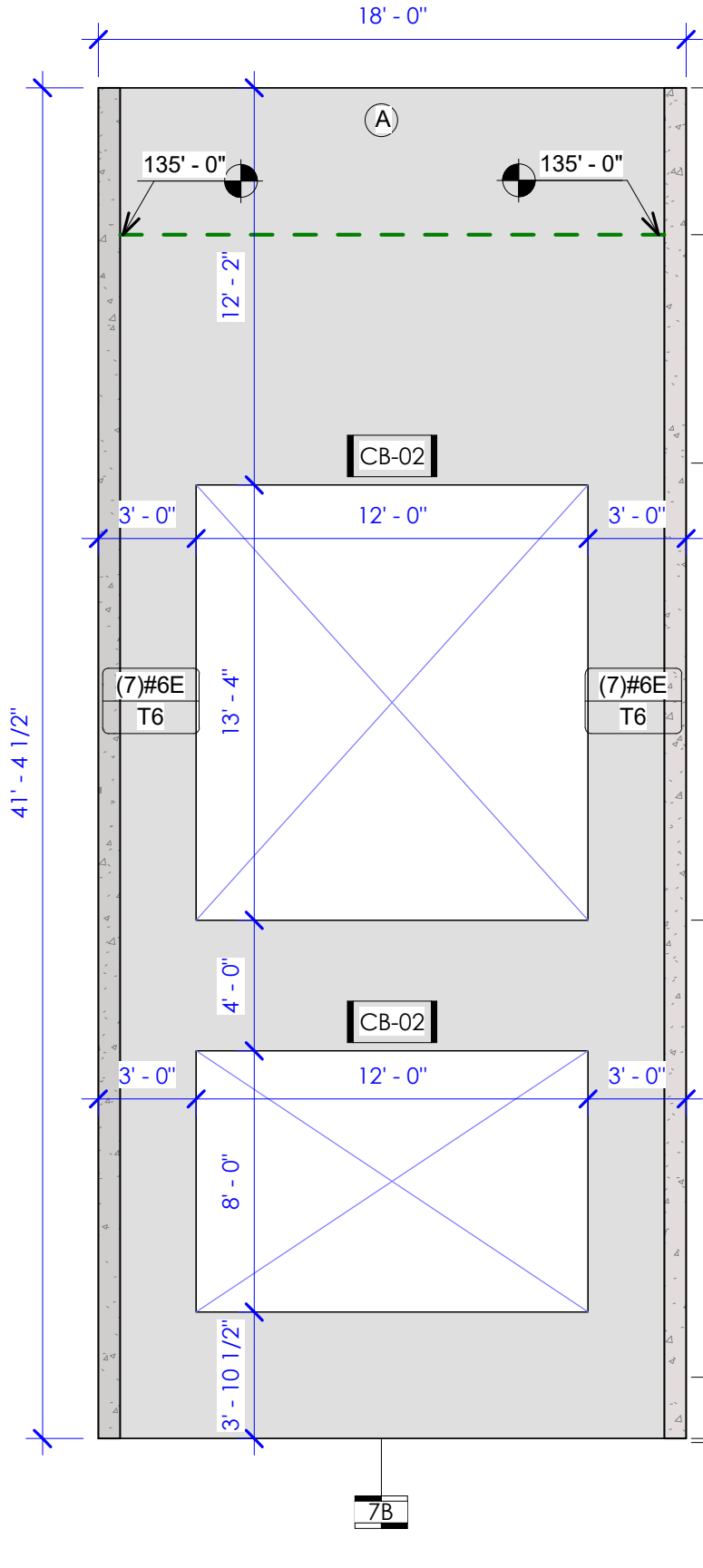
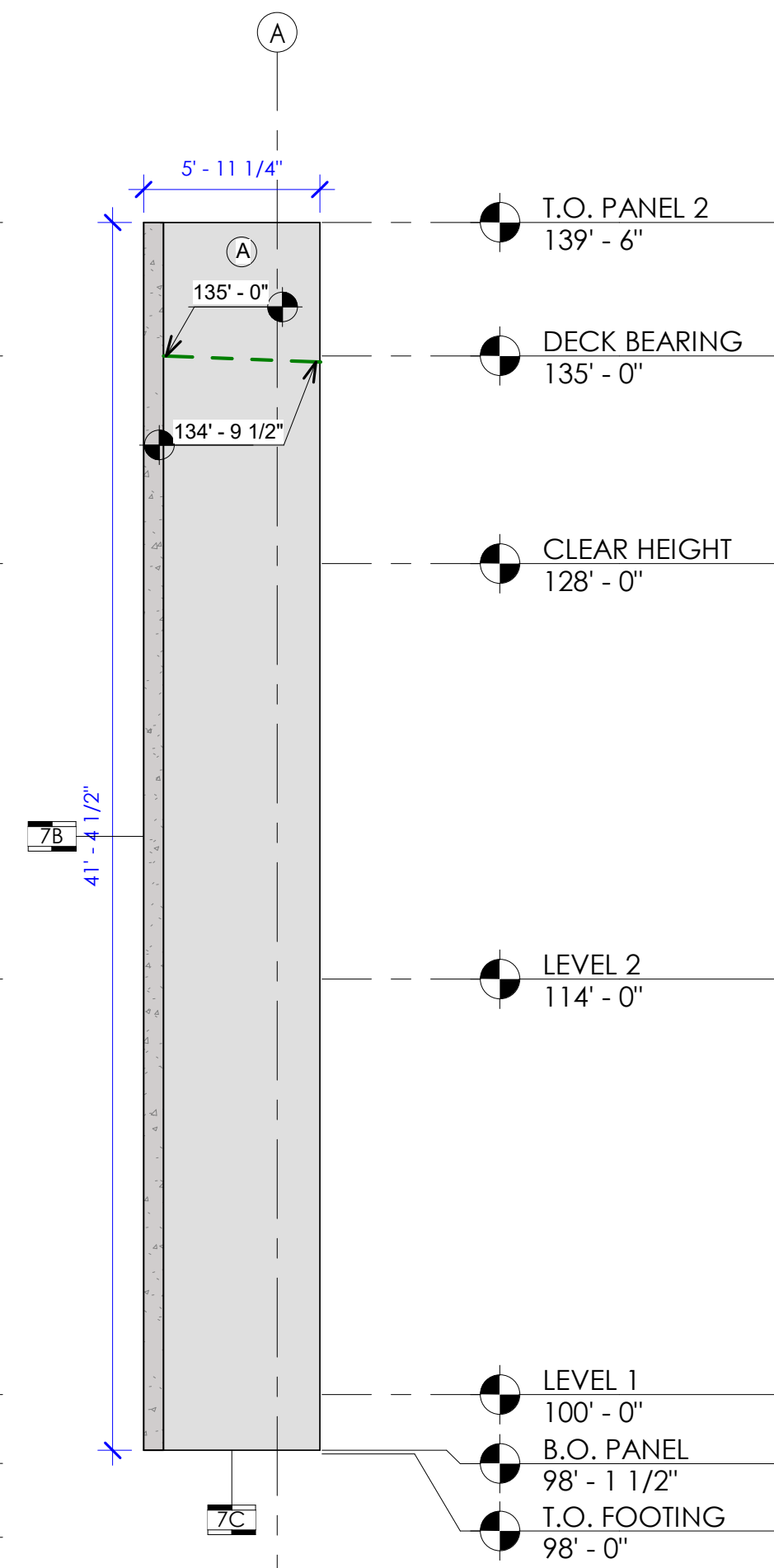
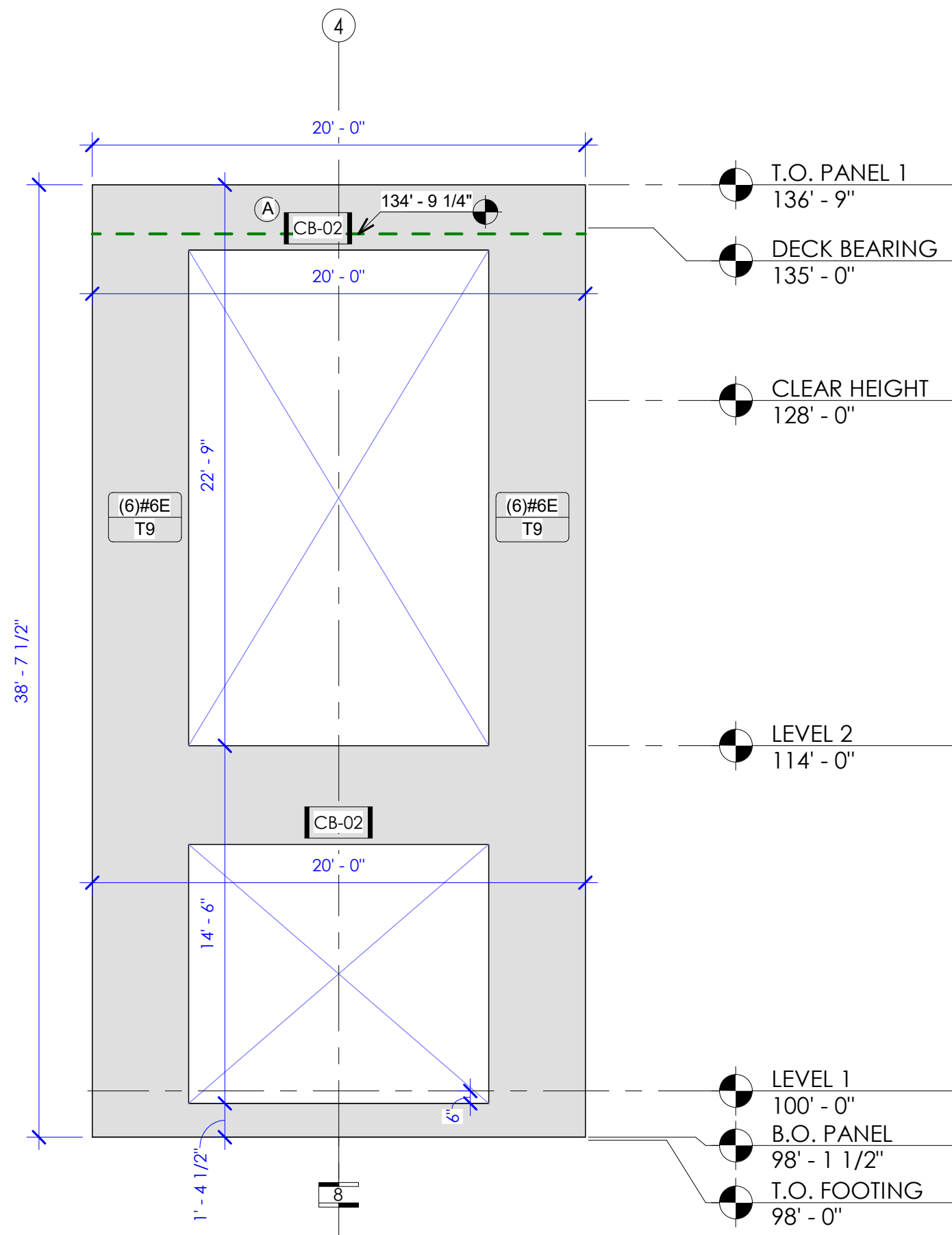
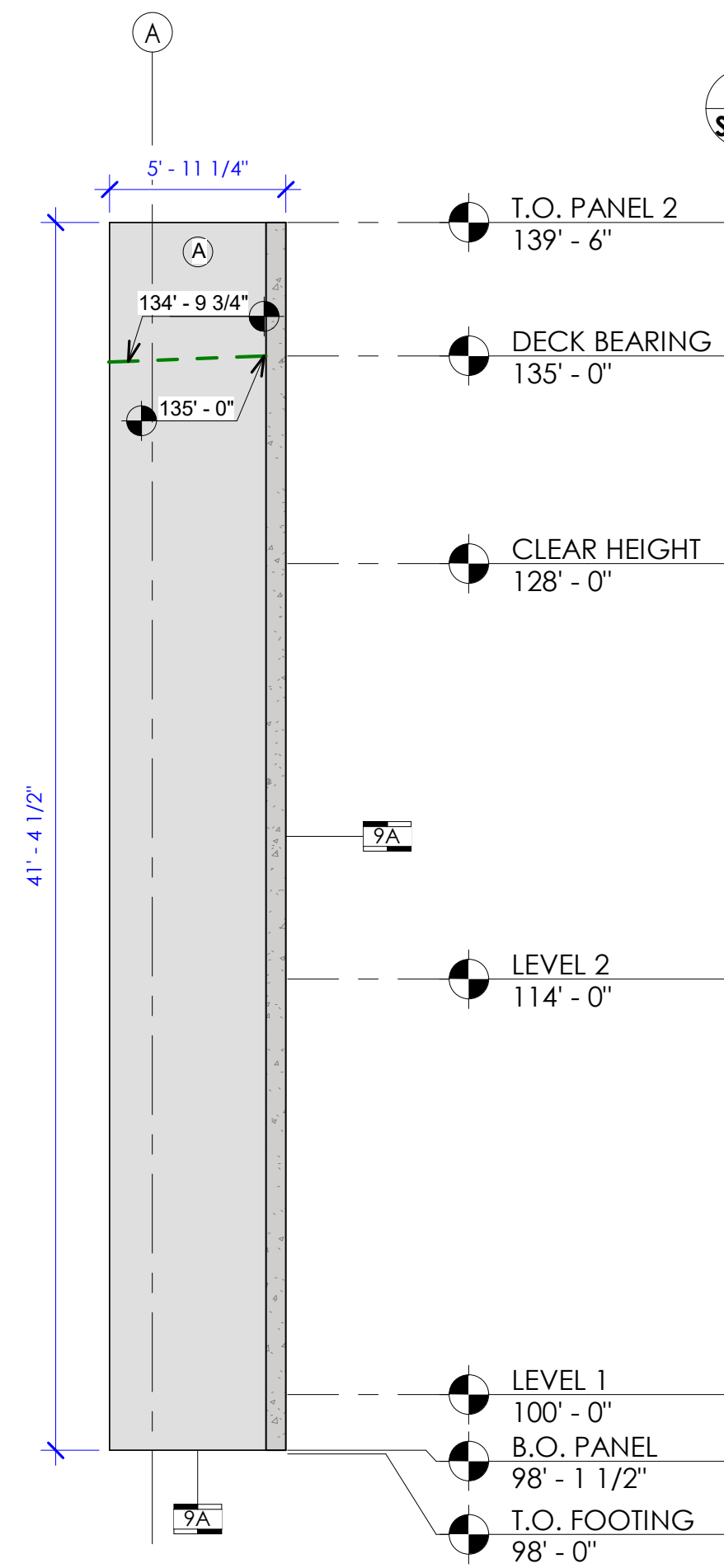
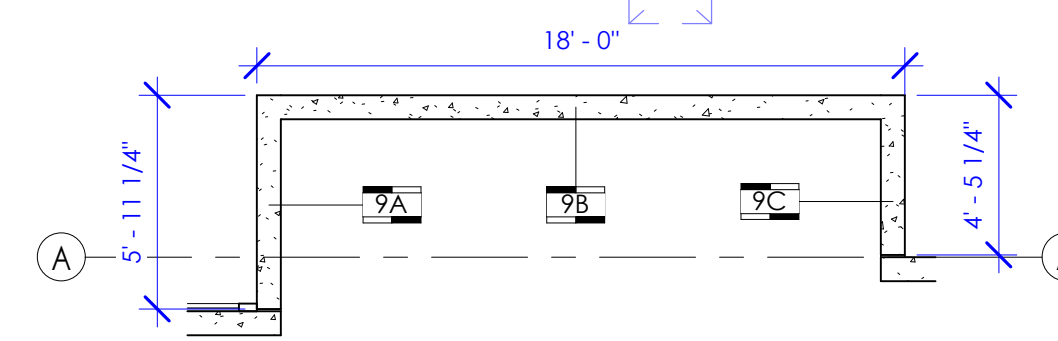
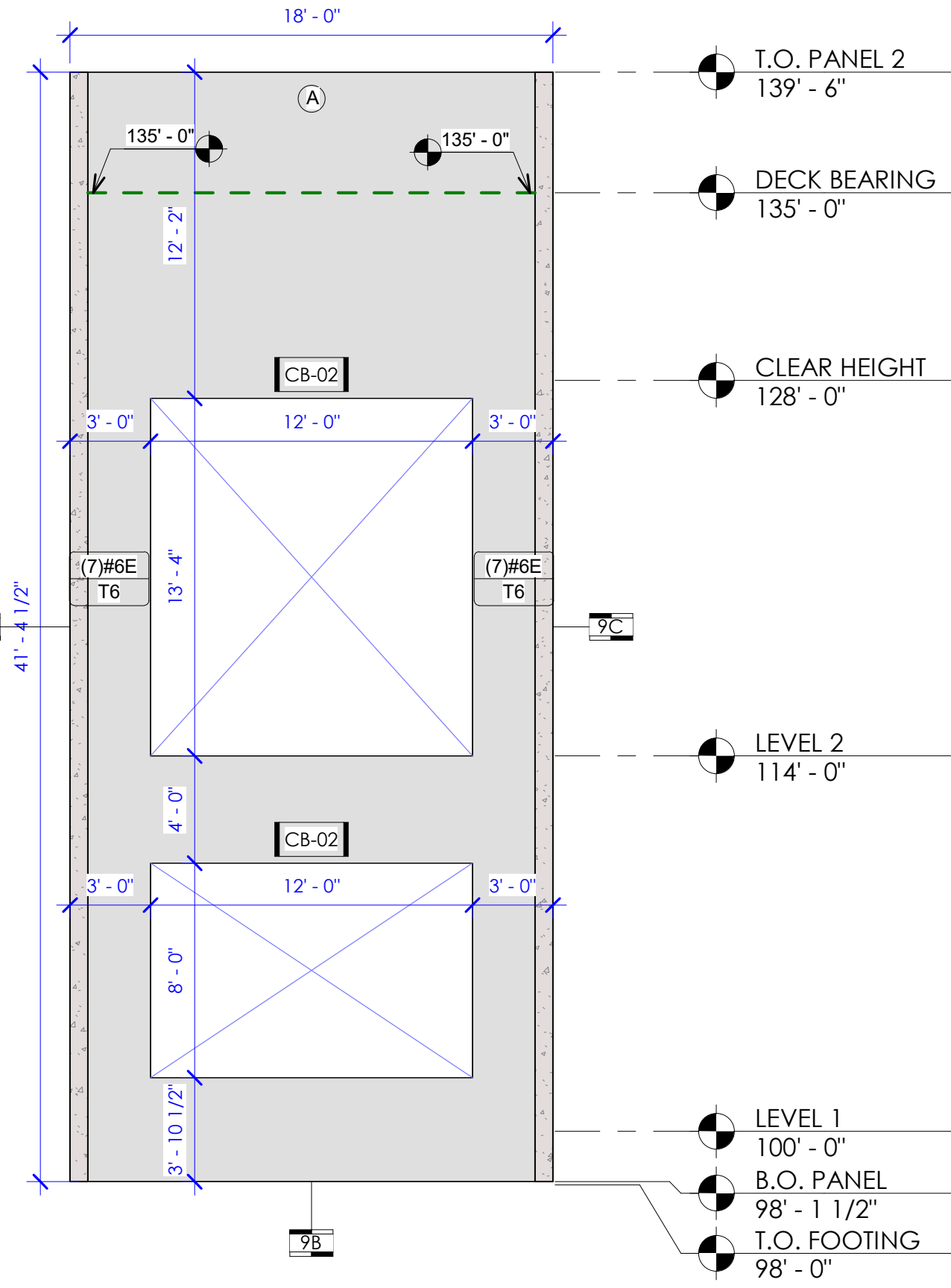
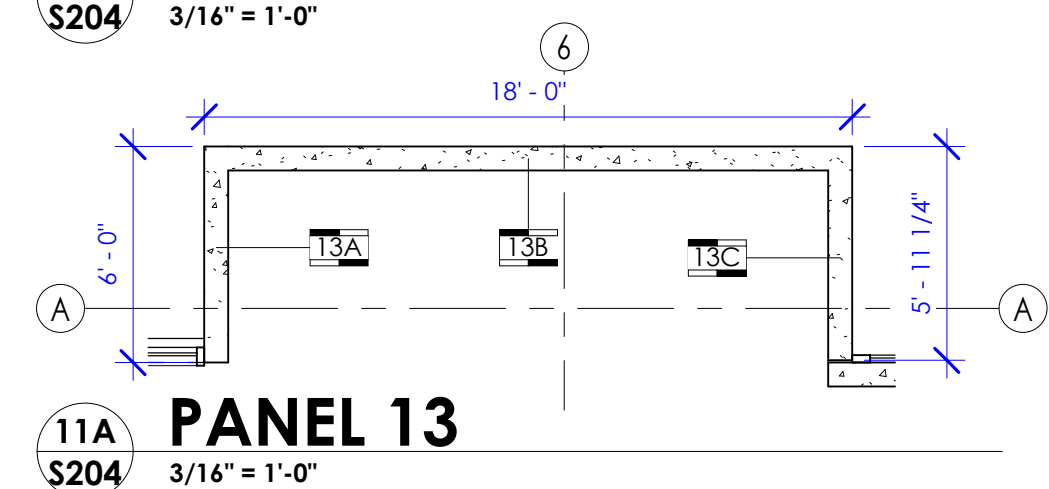
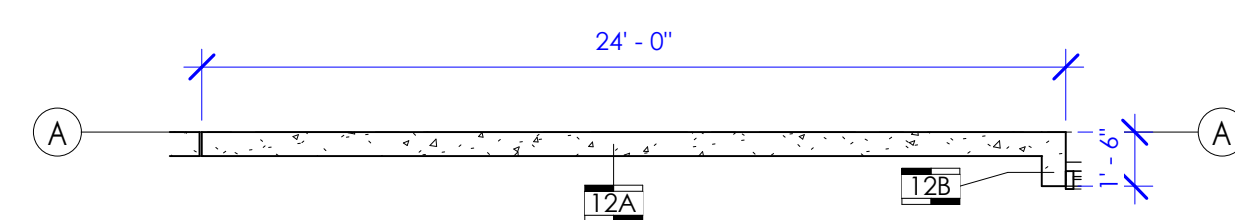
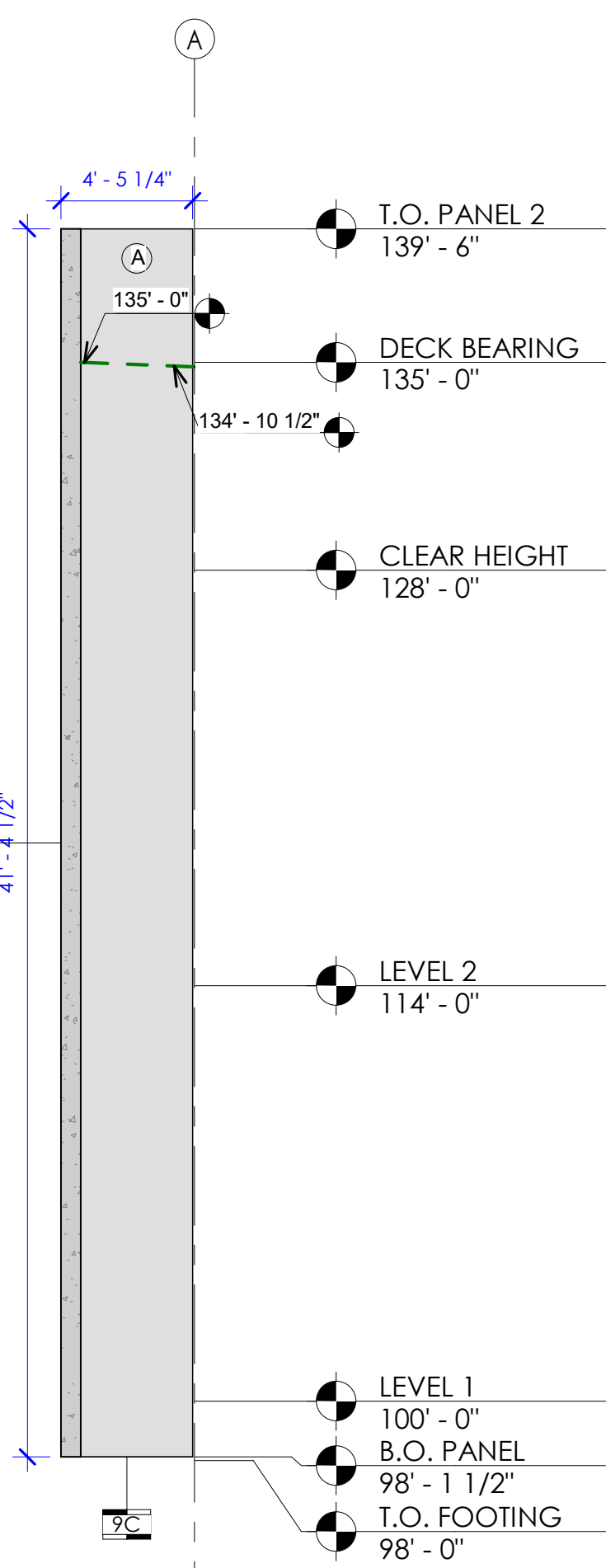
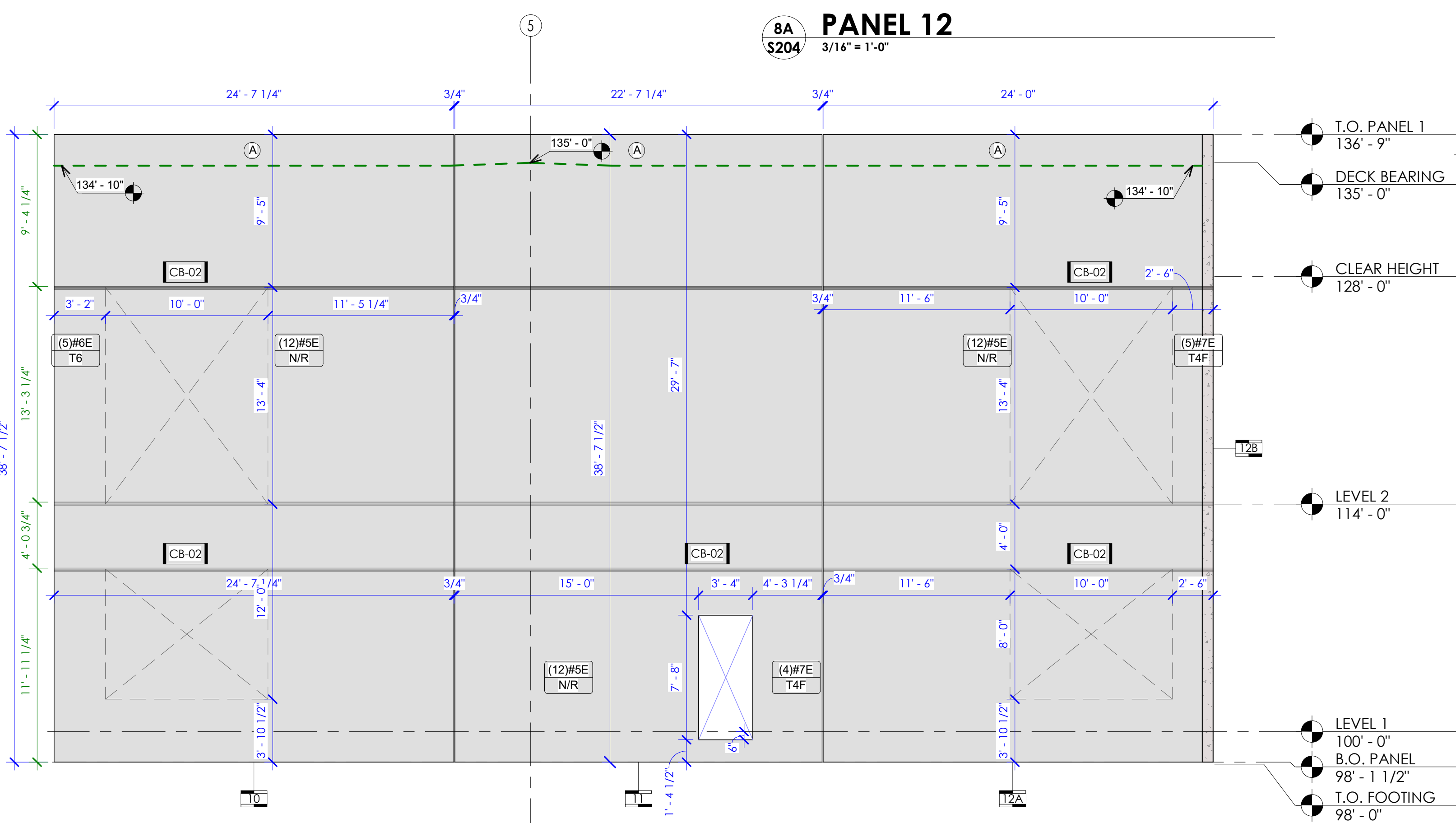
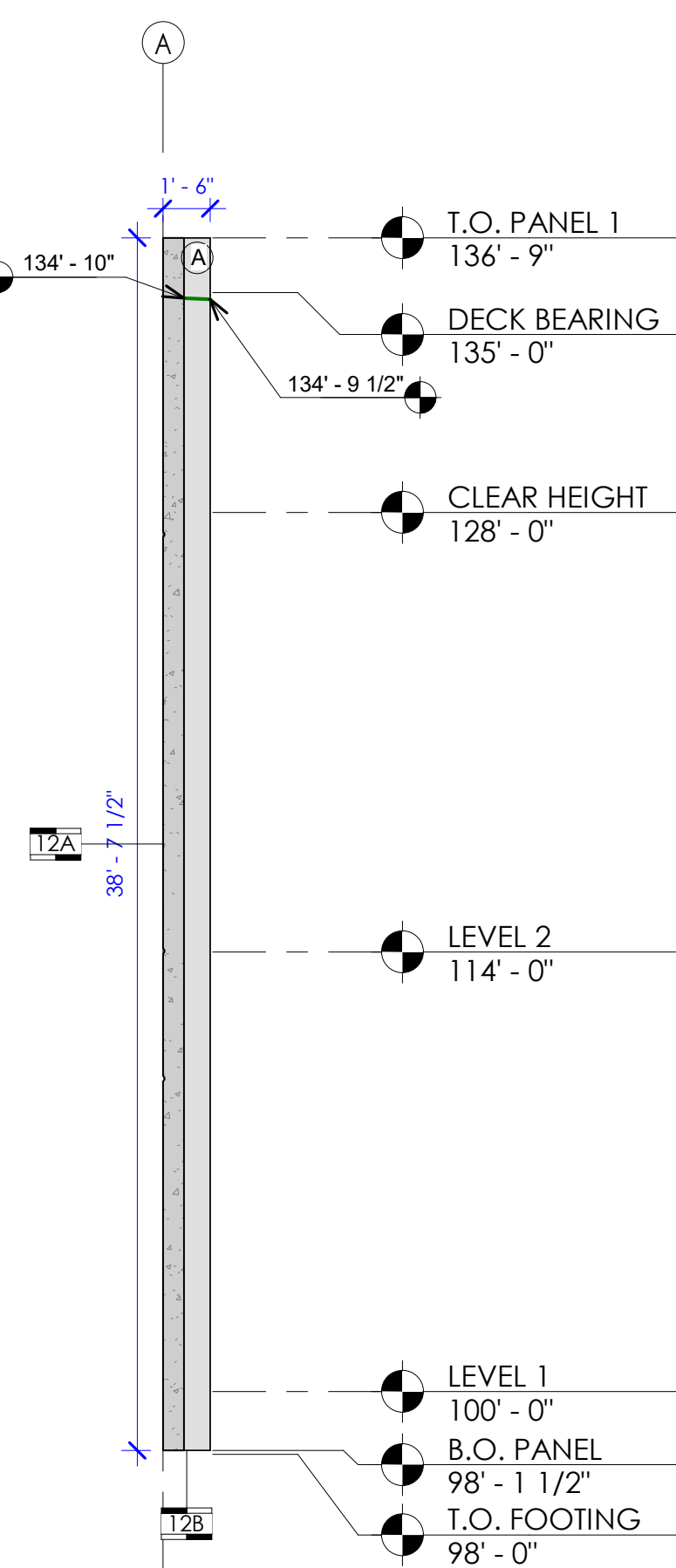
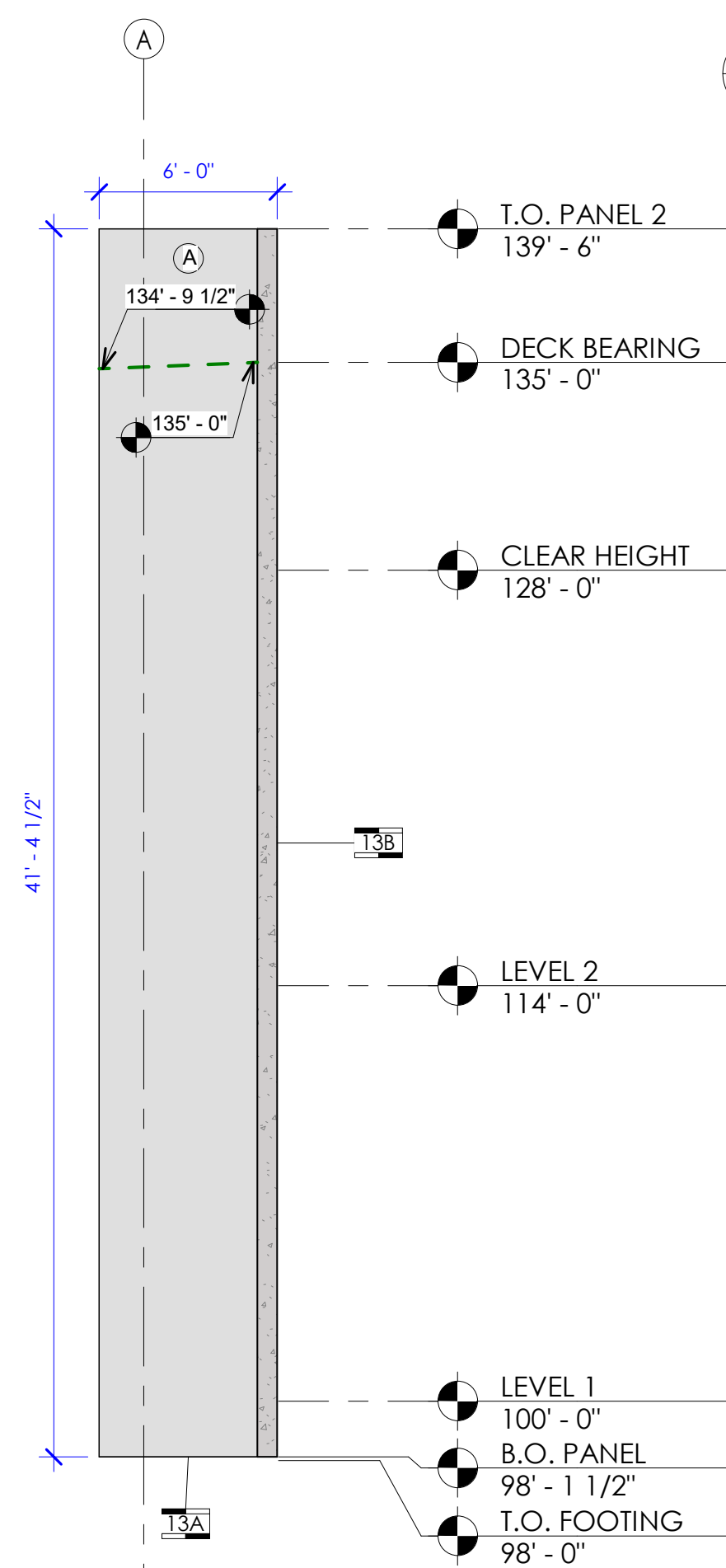
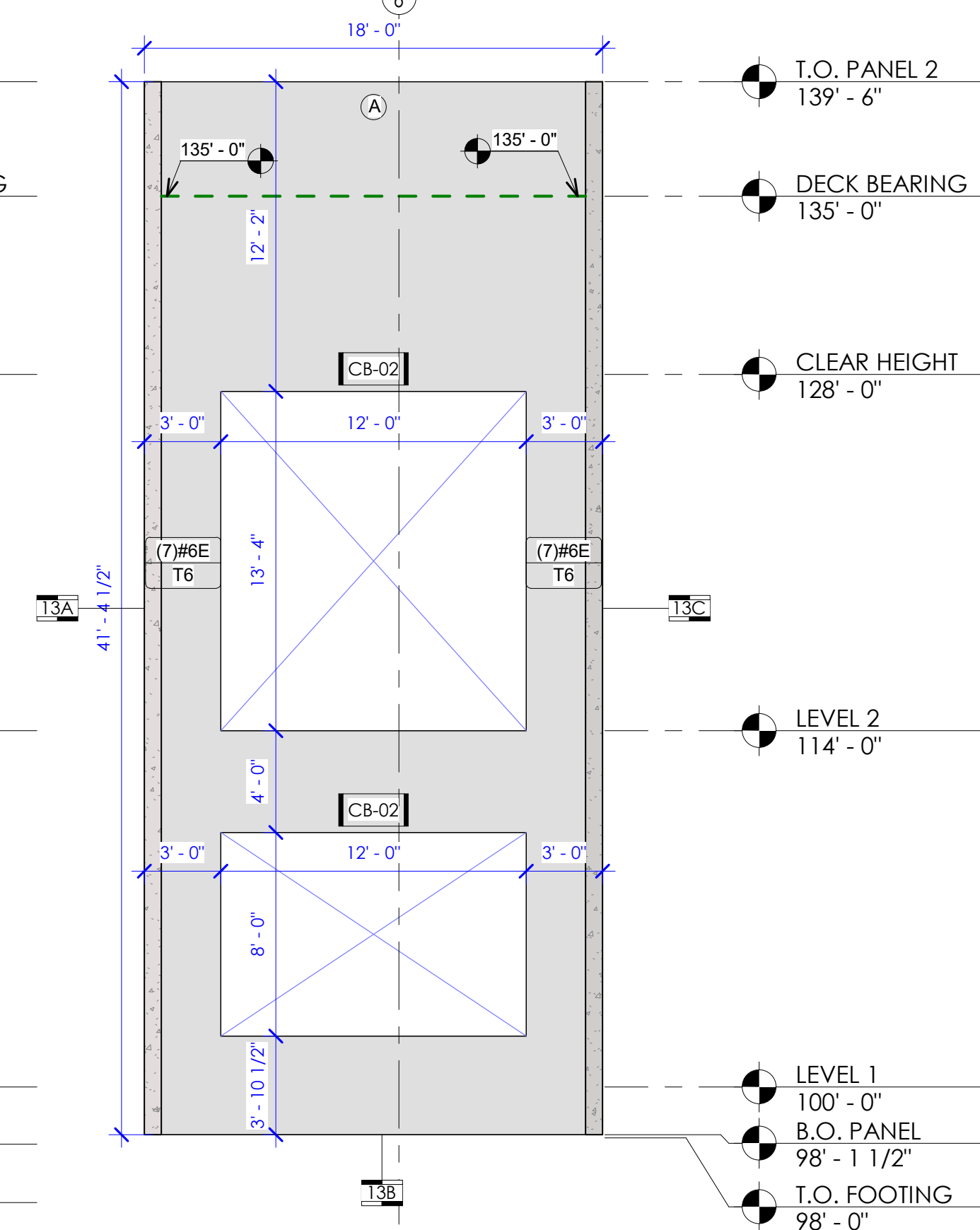
9A PANEL 4
S203 3/16" = 1'-0"



9 PANEL 4B - 6
S203 3/16" = 1'-0"

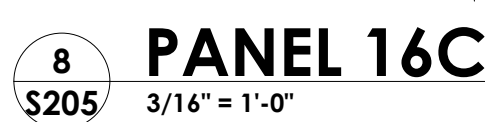
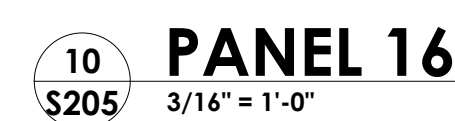
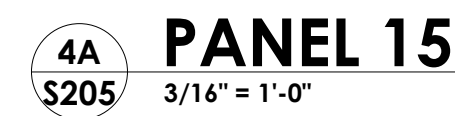
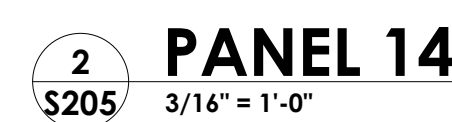
TILT-UP PANEL LEGEND:






- (A) - PANEL REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- (10)#5E T6 - PANEL JAMB REINFORCING, SEE DETAIL 7/S202
- CB-xx - PANEL HEADER REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- X - PANEL OPENING
- X - FUTURE PANEL OPENING

**PANEL 7**
S204 3/16" = 1'-0"**PANEL 7A**
S204 3/16" = 1'-0"**PANEL 7B**
S204 3/16" = 1'-0"**PANEL 7C**
S204 3/16" = 1'-0"**PANEL 8**
S204 3/16" = 1'-0"**PANEL 9A**
S204 3/16" = 1'-0"**PANEL 9**
S204 3/16" = 1'-0"**PANEL 9B**
S204 3/16" = 1'-0"**PANEL 13**
S204 3/16" = 1'-0"**PANEL 12**
S204 3/16" = 1'-0"**PANEL 9C**
S204 3/16" = 1'-0"**PANELS 10 - 12A**
S204 3/16" = 1'-0"**PANEL 12B**
S204 3/16" = 1'-0"**PANEL 13A**
S204 3/16" = 1'-0"**PANEL 13B**
S204 3/16" = 1'-0"

TILT-UP PANEL LEGEND:

- (A) - PANEL REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- (10#5E T6) - PANEL JAMB REINFORCING, SEE DETAIL 7/S202
- (CB-02) - PANEL HEADER REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- (X) - PANEL OPENING
- (X) - FUTURE PANEL OPENING

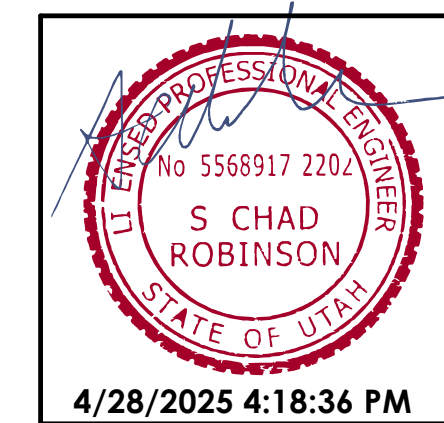


-  - PANEL REINFORCING, SEE SCHEDULE & DETAILS ON SHEET **S202**
-  - PANEL JAMB REINFORCING, SEE DETAIL **7/S202**
-  - PANEL HEADER REINFORCING, SEE SCHEDULE & DETAILS ON SHEET **S202**
-  - PANEL OPENING
-  - FUTURE PANEL OPENING



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RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule		Revision Date
MARK	DESCRIPTION	

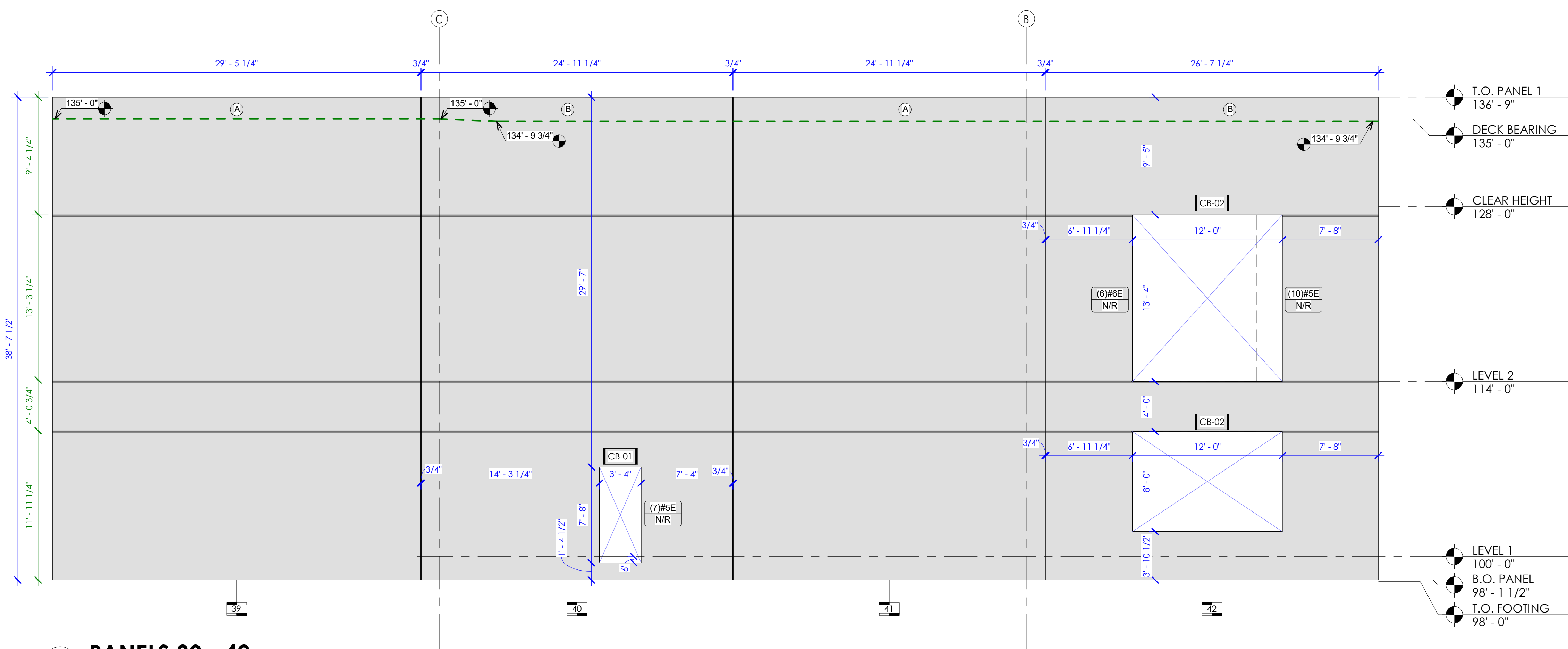
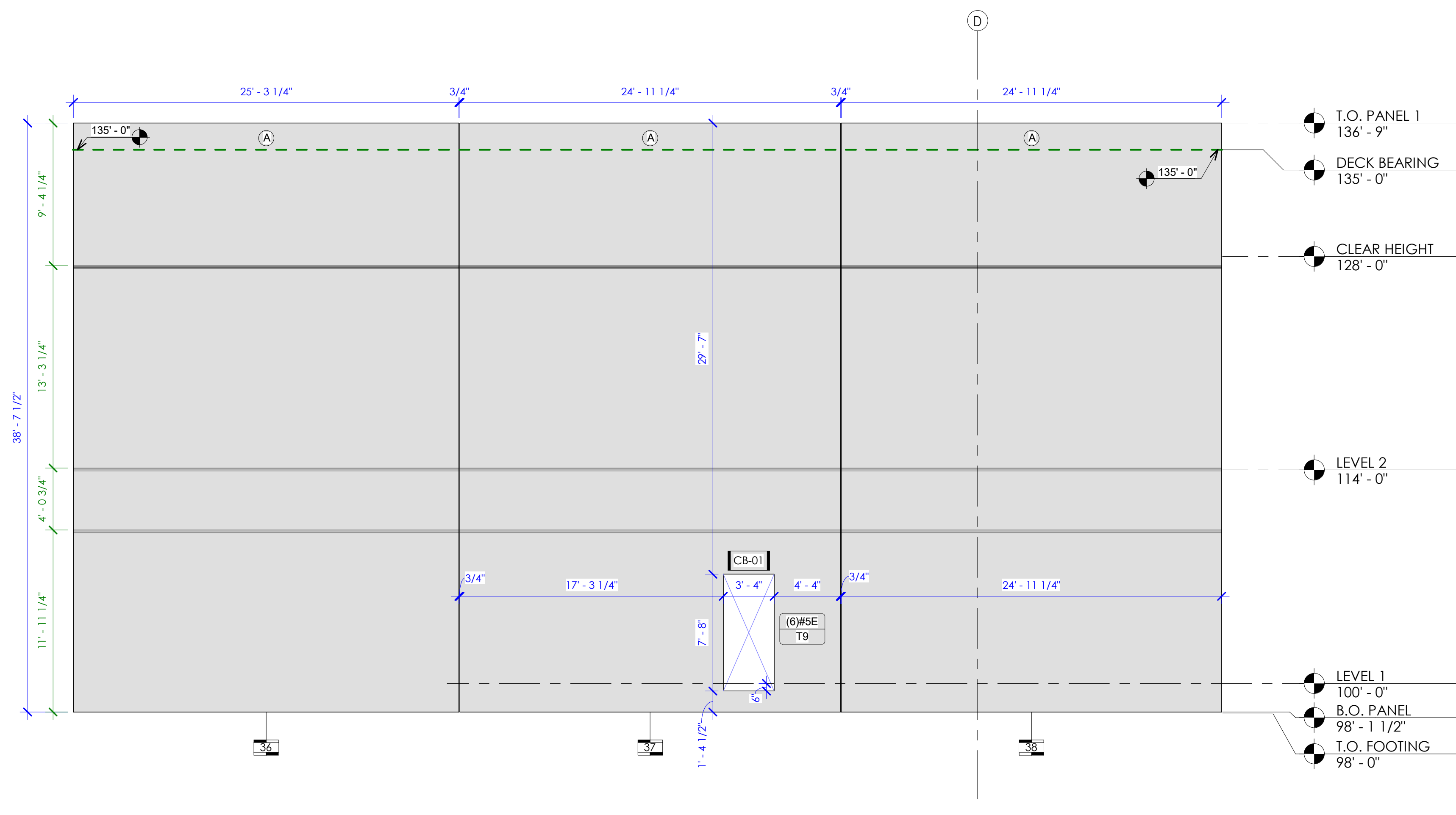
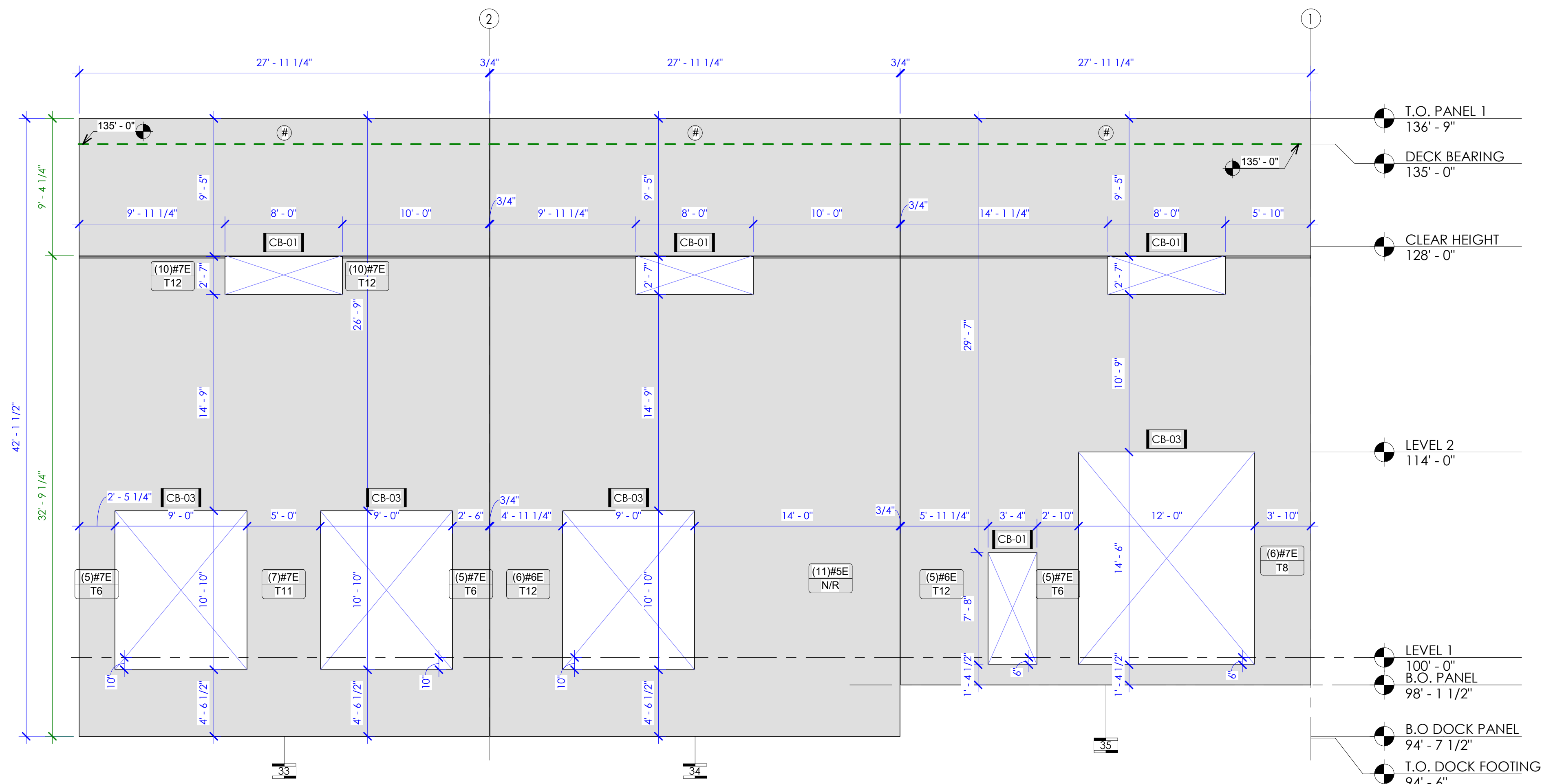
ITEMS / BID SET	AE2022.290
	PANEL ELEVATIONS 21 - 32

DATE: 04/23/2025

SHEET #

S206

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TILT-UP PANEL LEGEND:

- (A) - PANEL REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- (10)#5E T6 - PANEL JAMB REINFORCING, SEE DETAIL 7/S202
- CB-xx - PANEL HEADER REINFORCING, SEE SCHEDULE & DETAILS ON SHEET S202
- X - PANEL OPENING
- X - FUTURE PANEL OPENING

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision	Schedule	Description	Revision Date
1			

AE2022.290

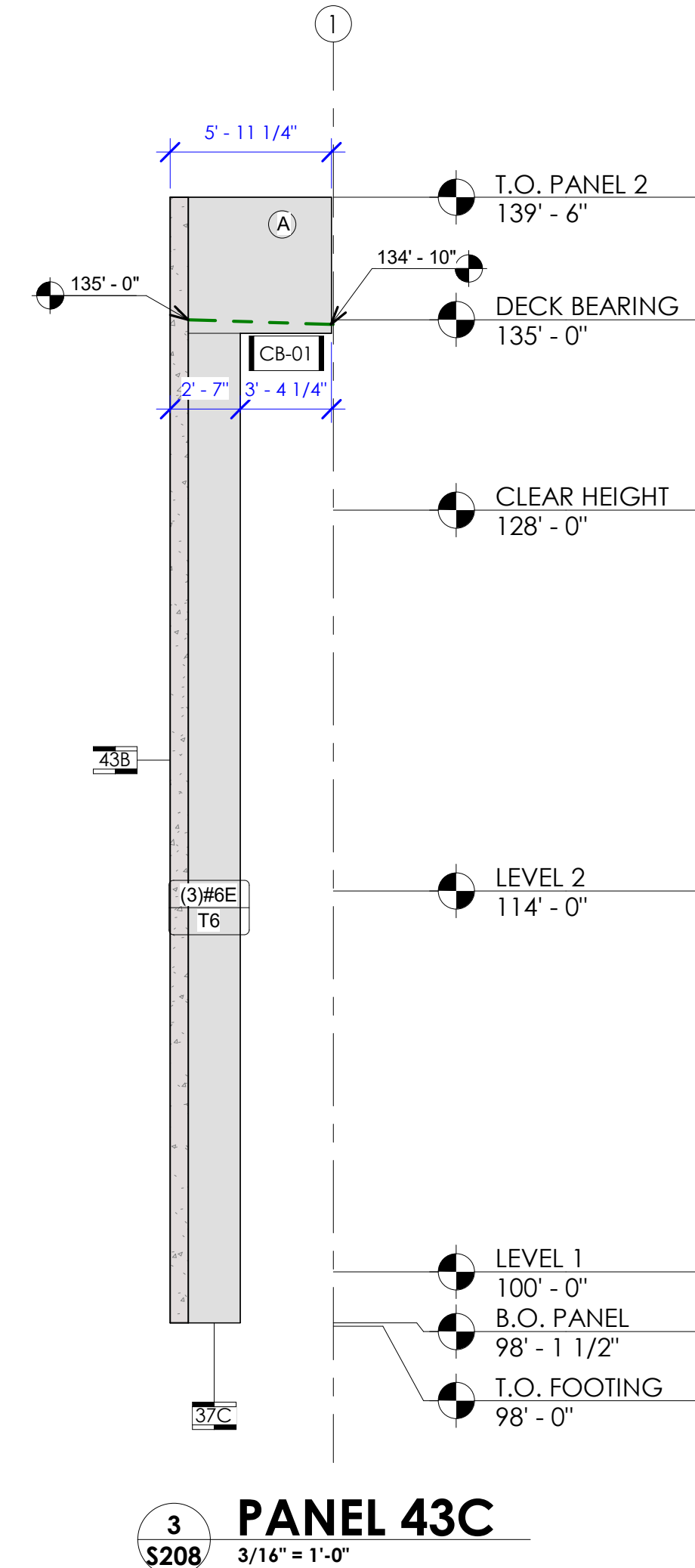
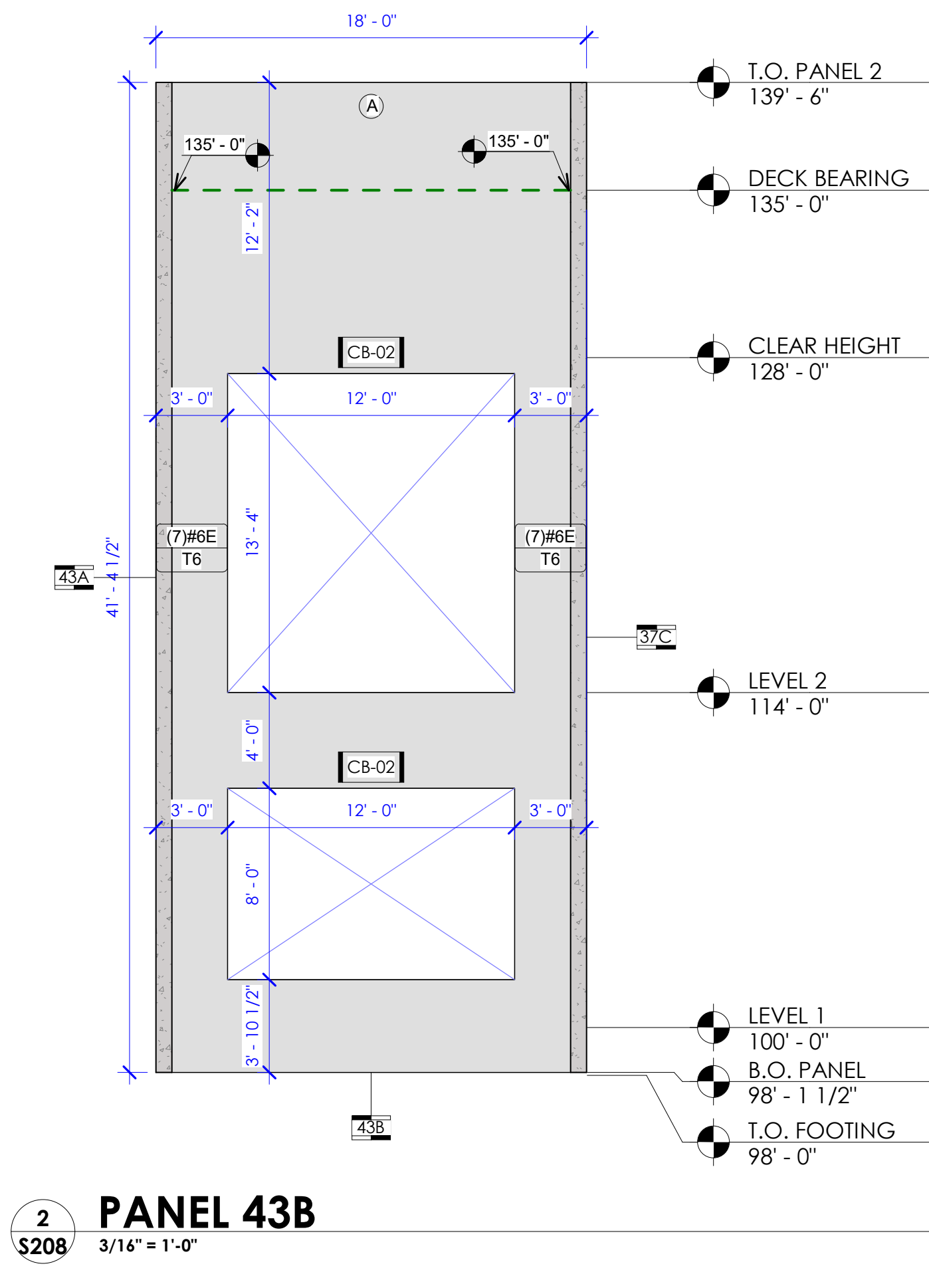
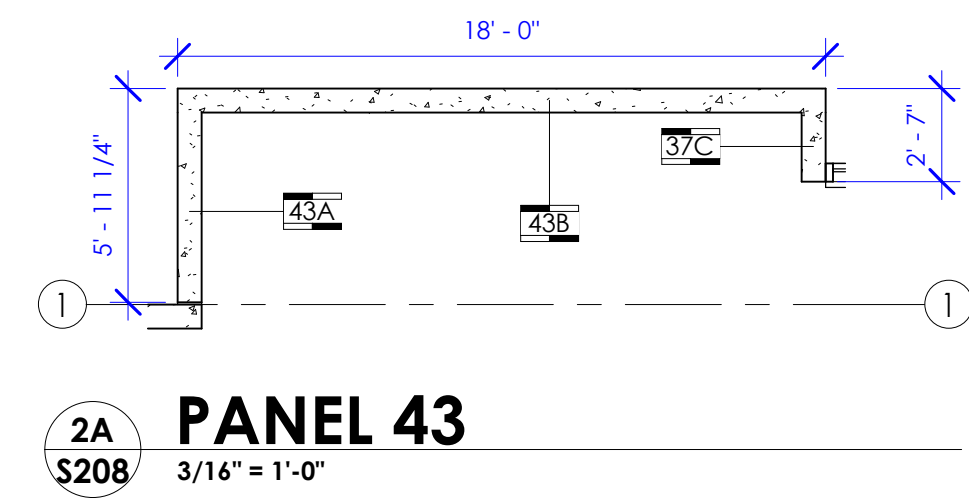
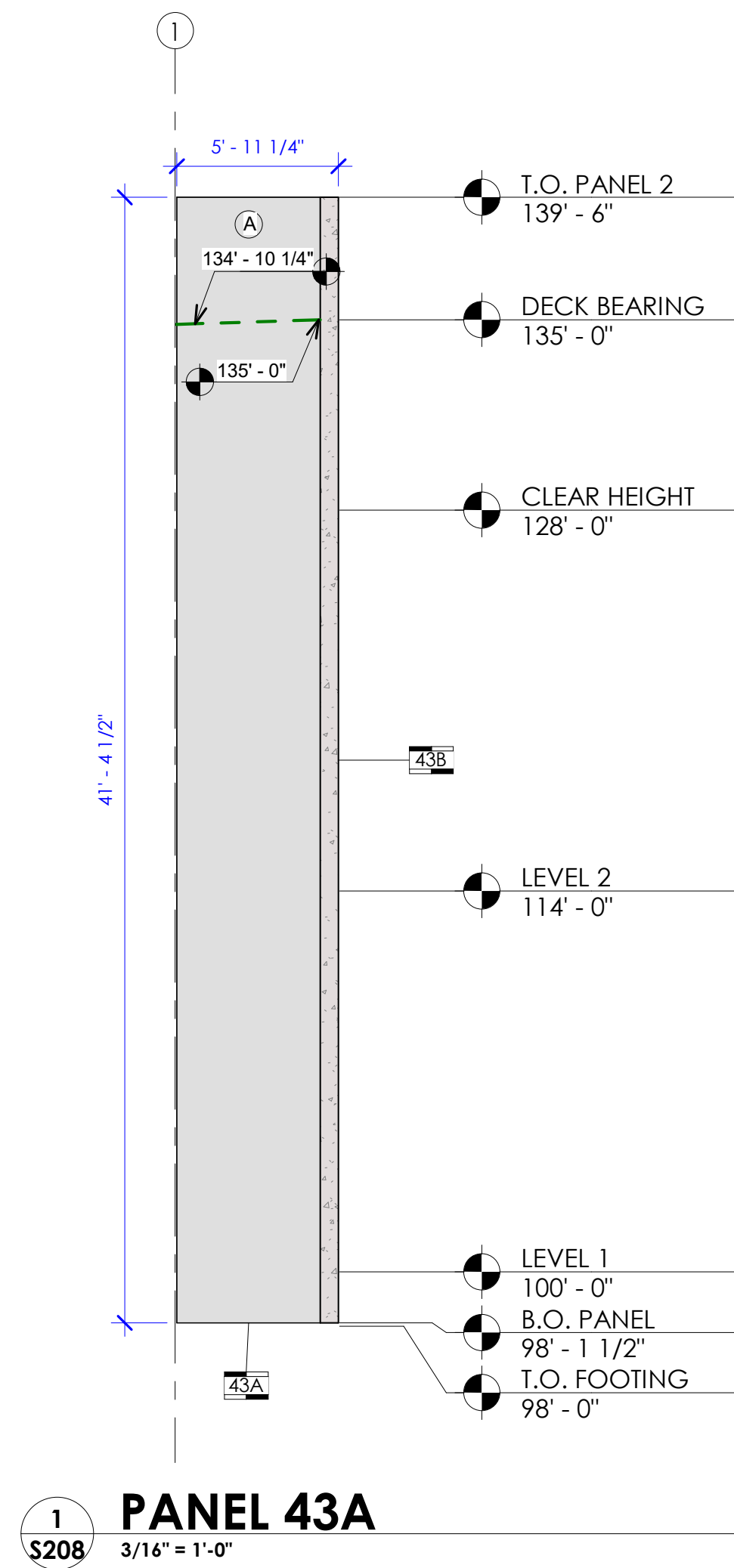
PANEL ELEVATIONS
33 - 43B

DATE: 04/23/2025

SHEET #:

S207

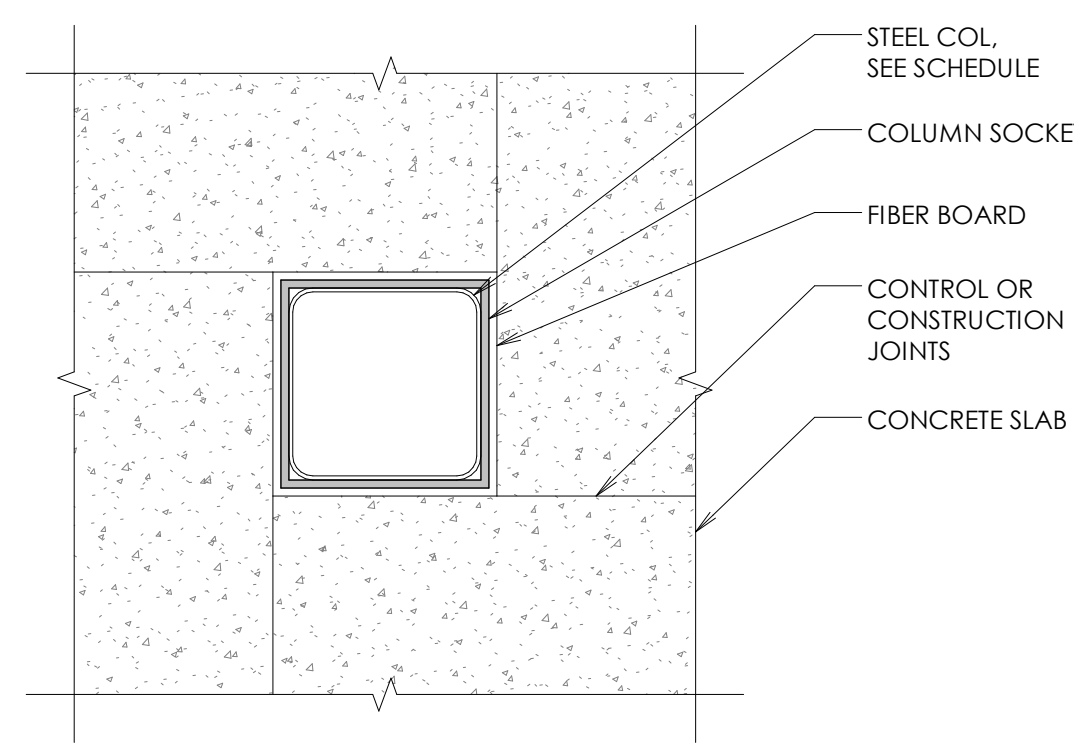
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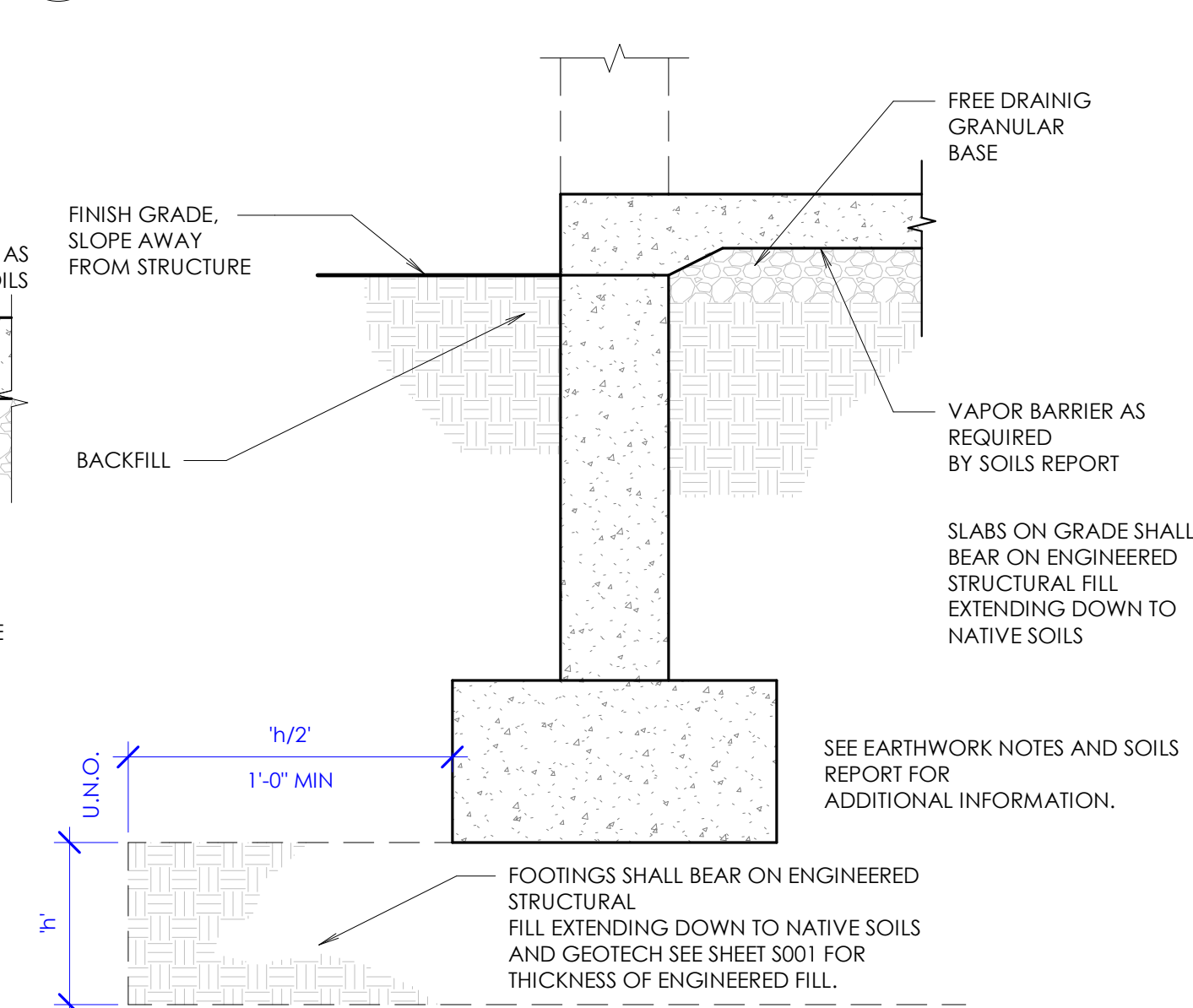
TILT-UP PANEL LEGEND:

- (A) - PANEL REINFORCING, SEE SCHEDULE & DETAILS ON SHEET **S202**
- (10)#5E
T6 - PANEL JAMB REINFORCING, SEE DETAIL **7/S202**
- CB-xx - PANEL HEADER REINFORCING, SEE SCHEDULE & DETAILS ON SHEET **S202**
- X - PANEL OPENING
- X - FUTURE PANEL OPENING

Revision Schedule	Revision Date
MARK	DESCRIPTION



13 PIPE THROUGH FOOTING DETAIL



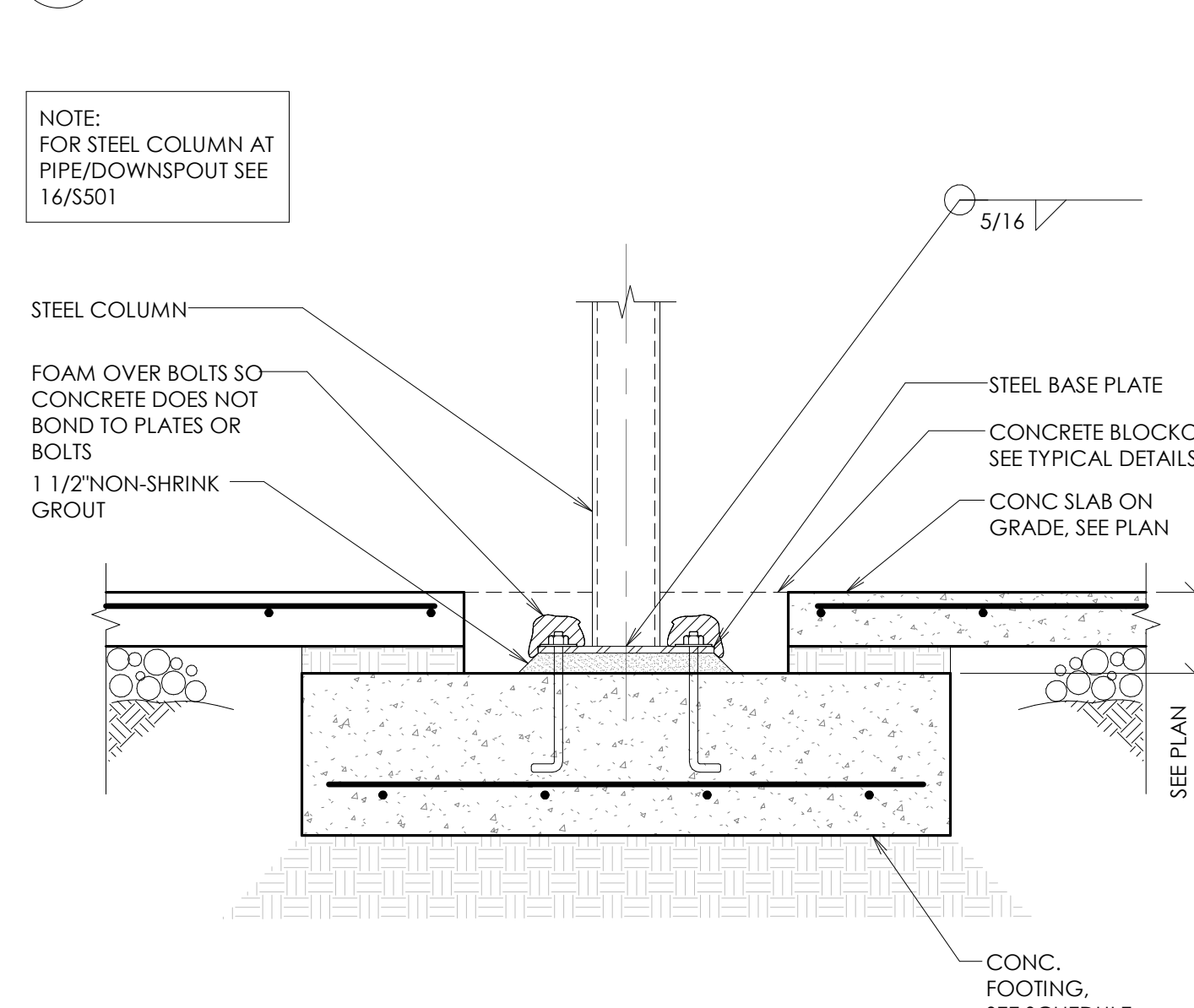
14 TYPICAL ENGINEERED FILL DETAIL



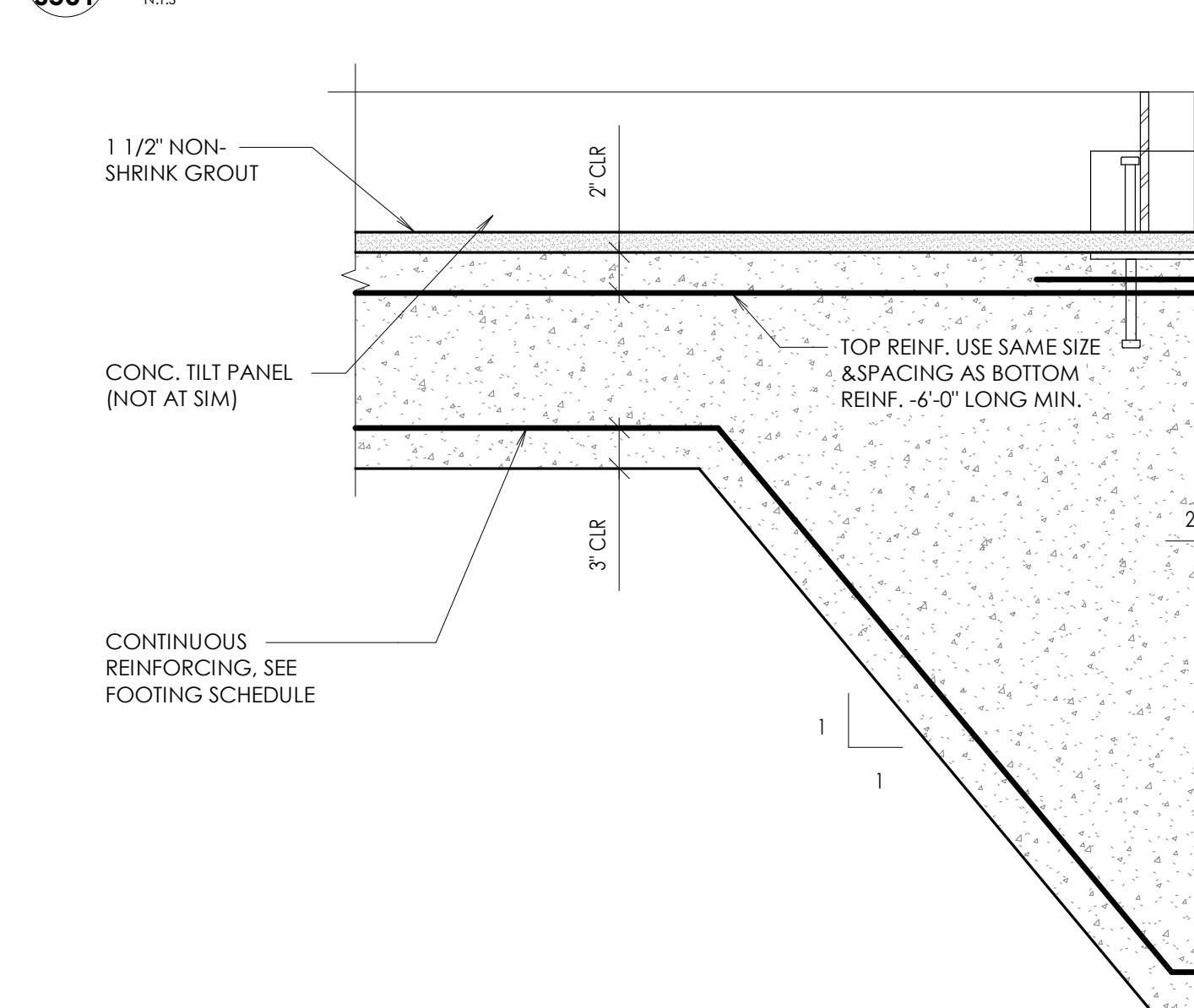
19 TYPICAL SLAB DEPRESSION DETAIL



10 SLEEVE FOR PIPE AT SLAB



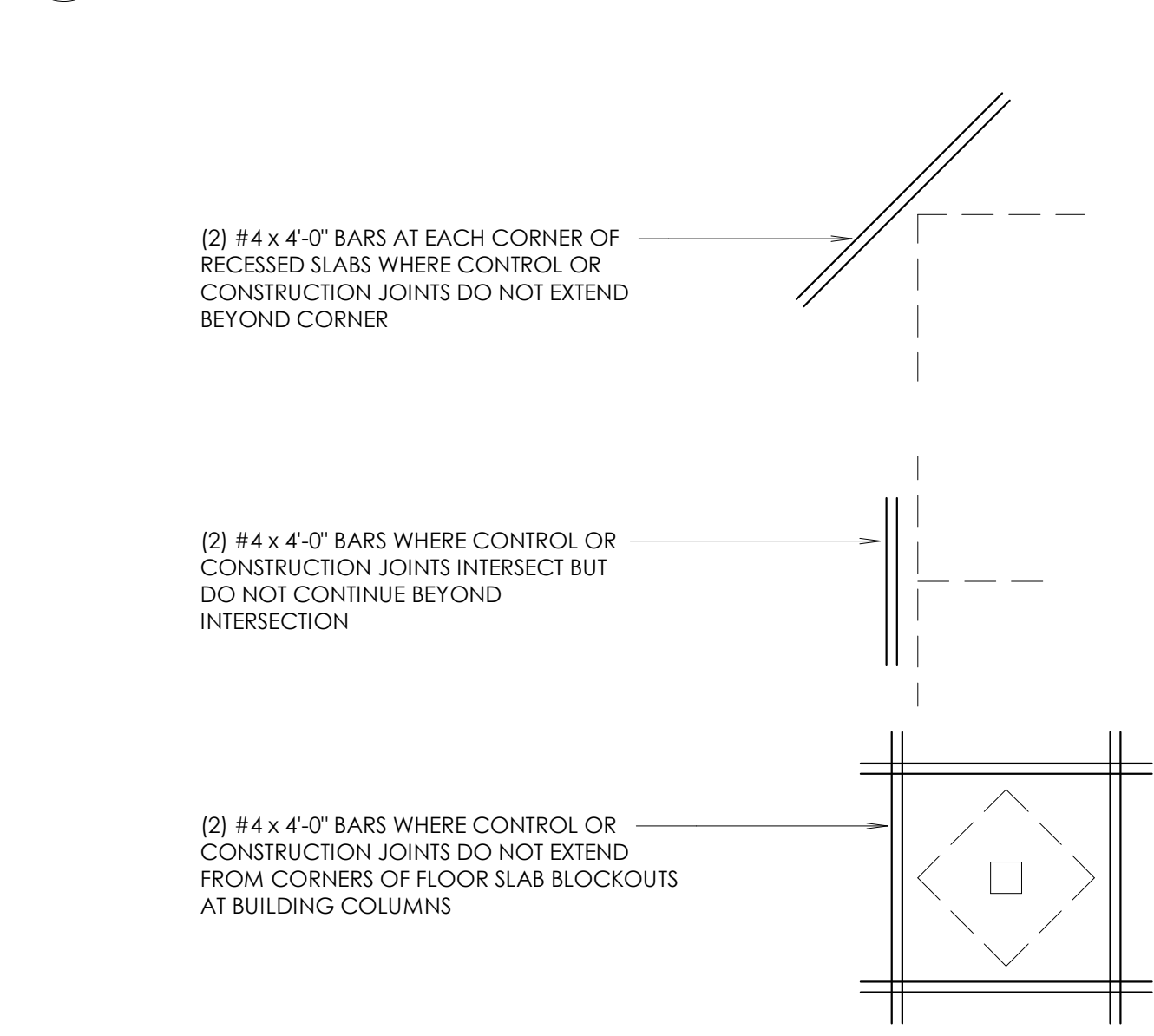
11 STEEL COLUMN AT INTERIOR SPOT FOOTING



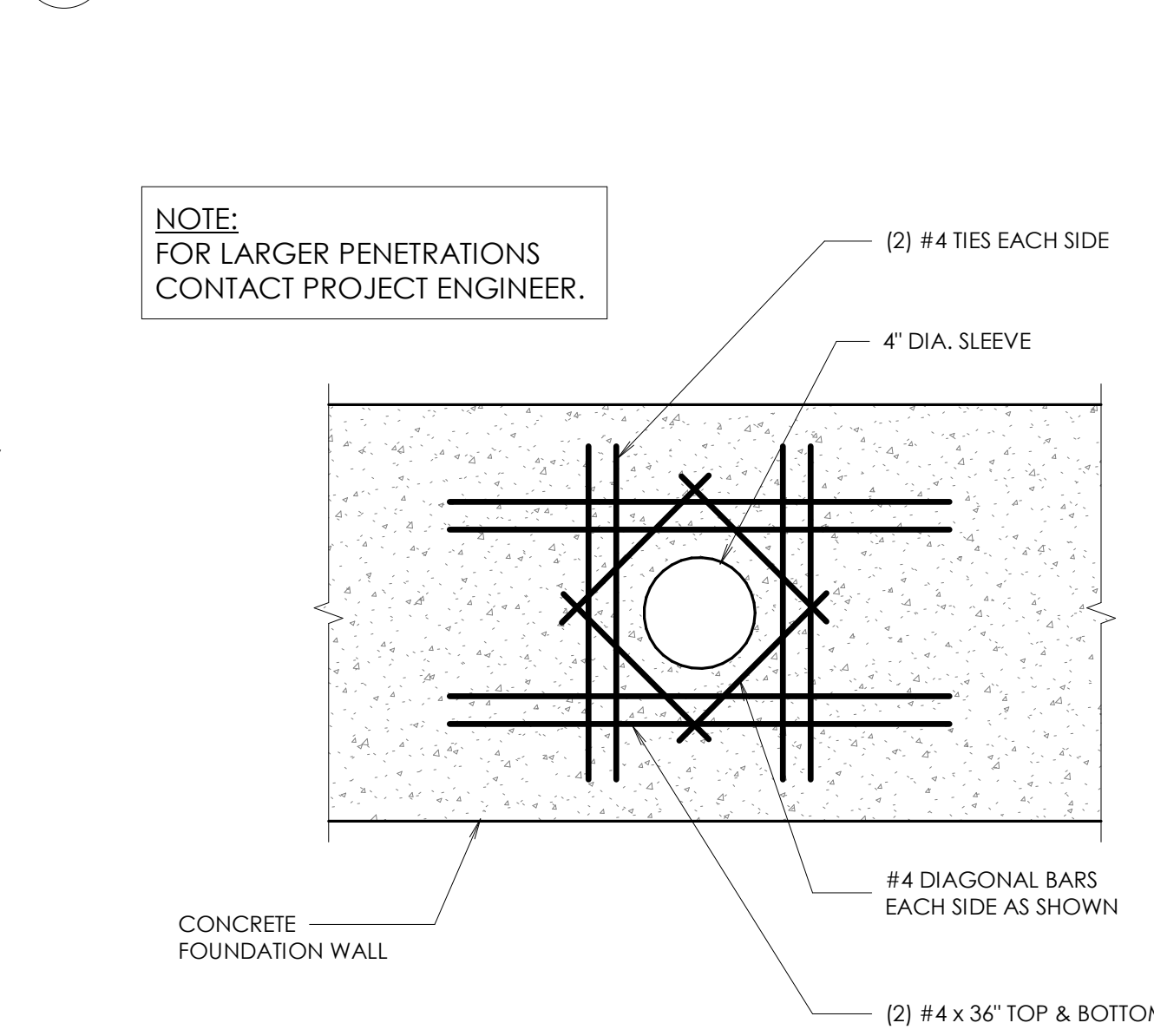
12 FOOTING STEP AT PANEL JOINT



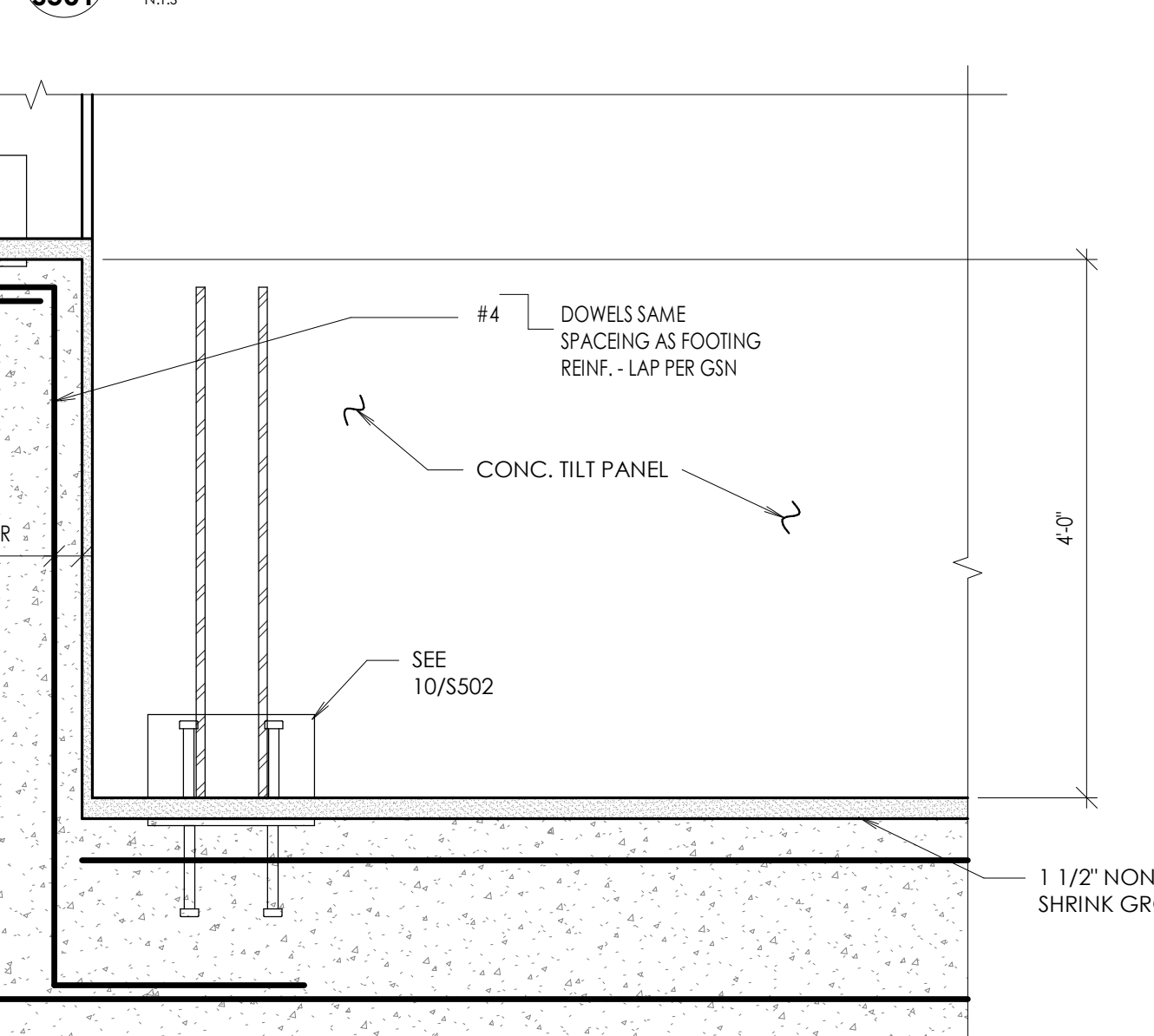
5 CONTROL JOINTS - SAW CUT JOINTS



6 SLAB REINFORCING DETAIL - TYP.



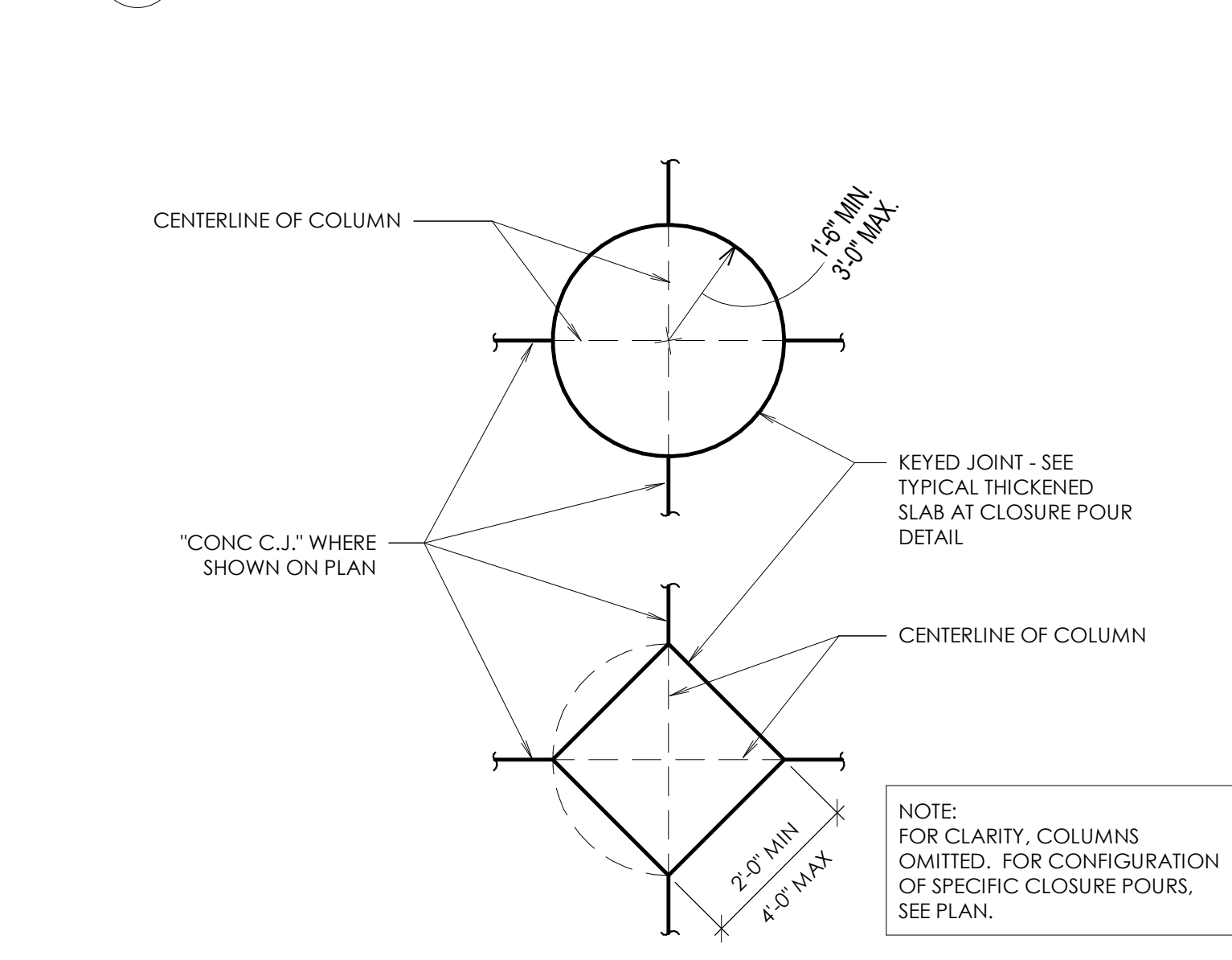
7 TYPICAL WALL PENETRATION DETAIL



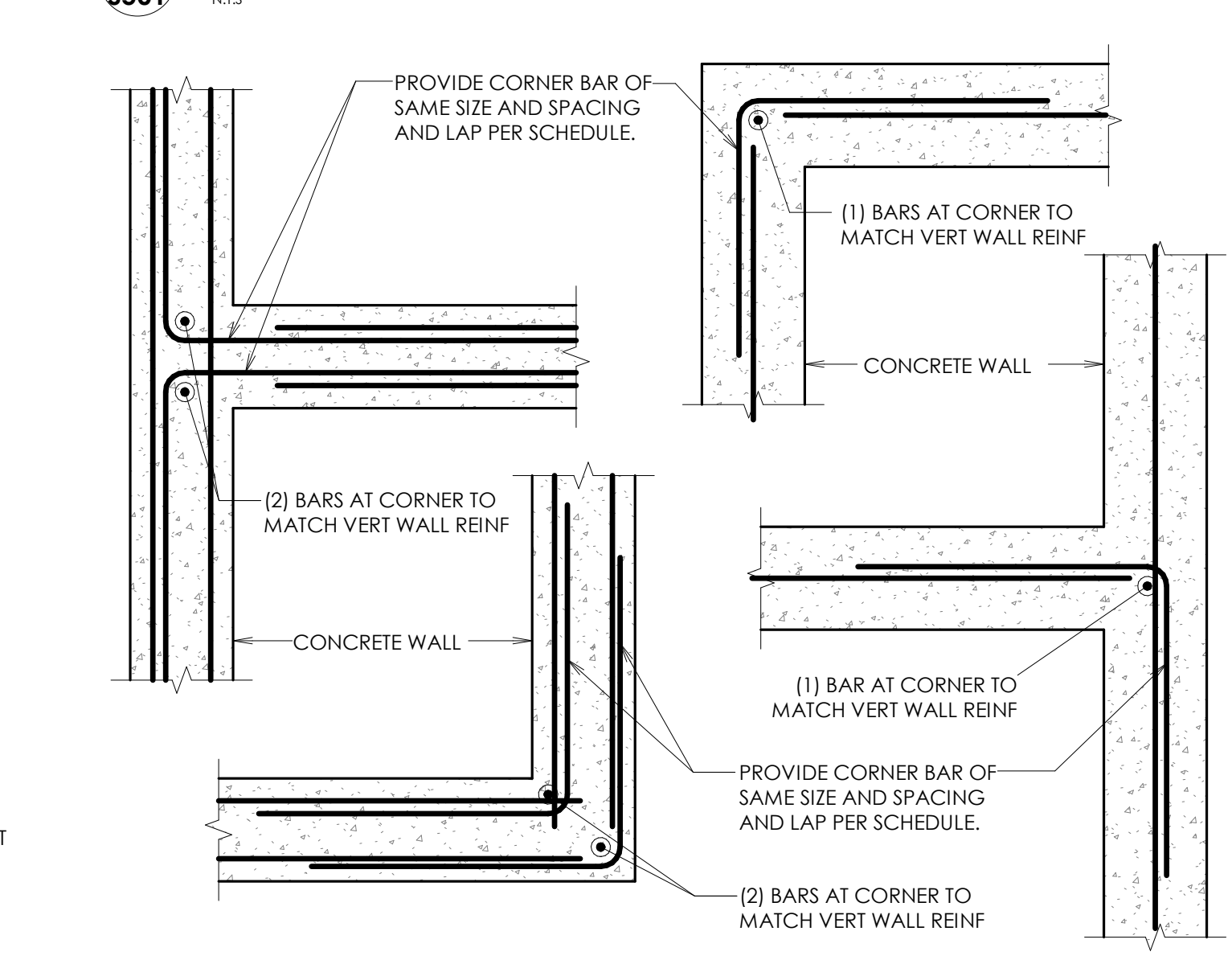
4 TYPICAL CORNER WALL REINF. DETAIL



2 CONSTRUCTION JOINTS

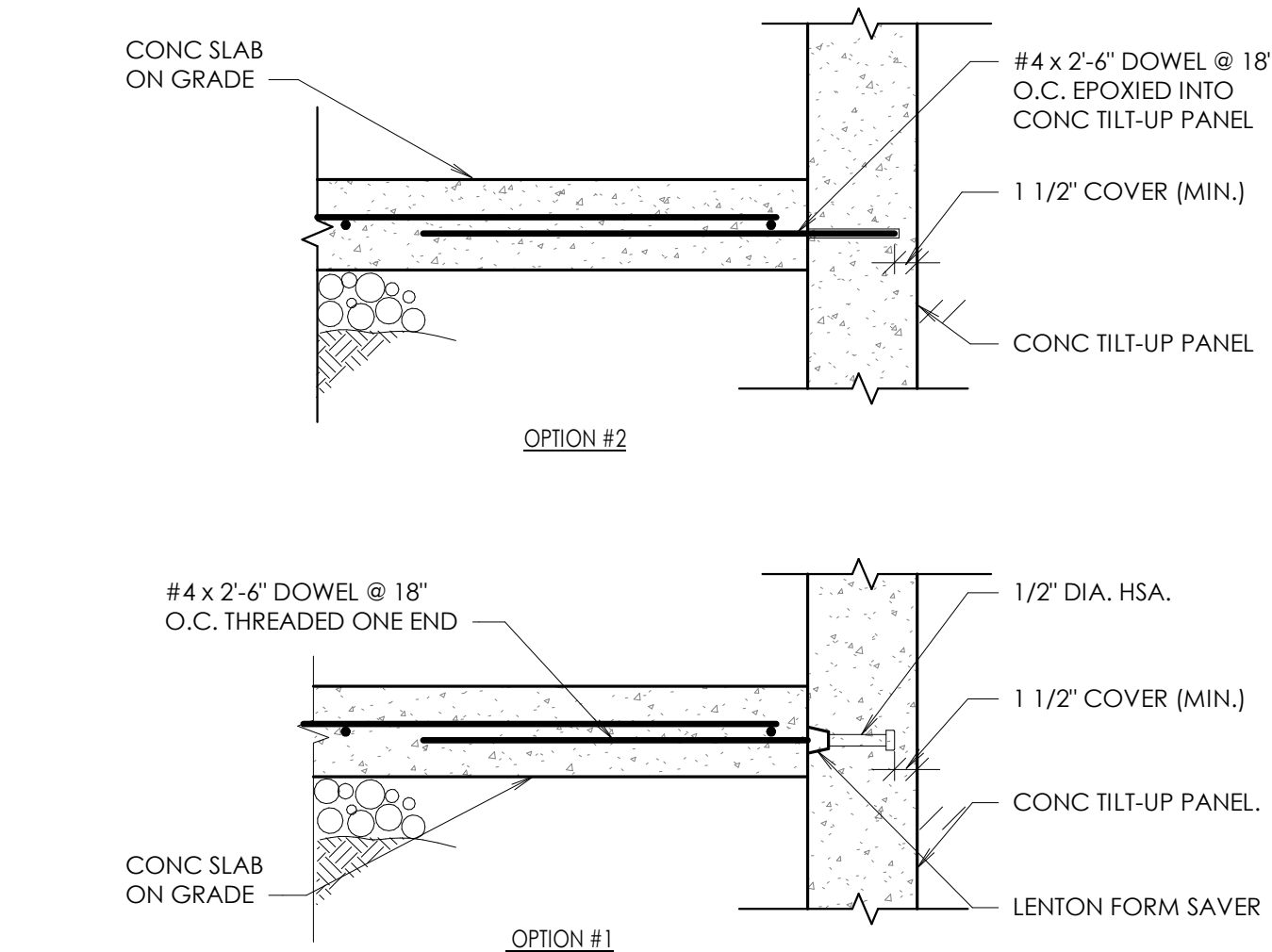


3 TYPICAL CONCRETE BLOCKOUT AT COLUMNS

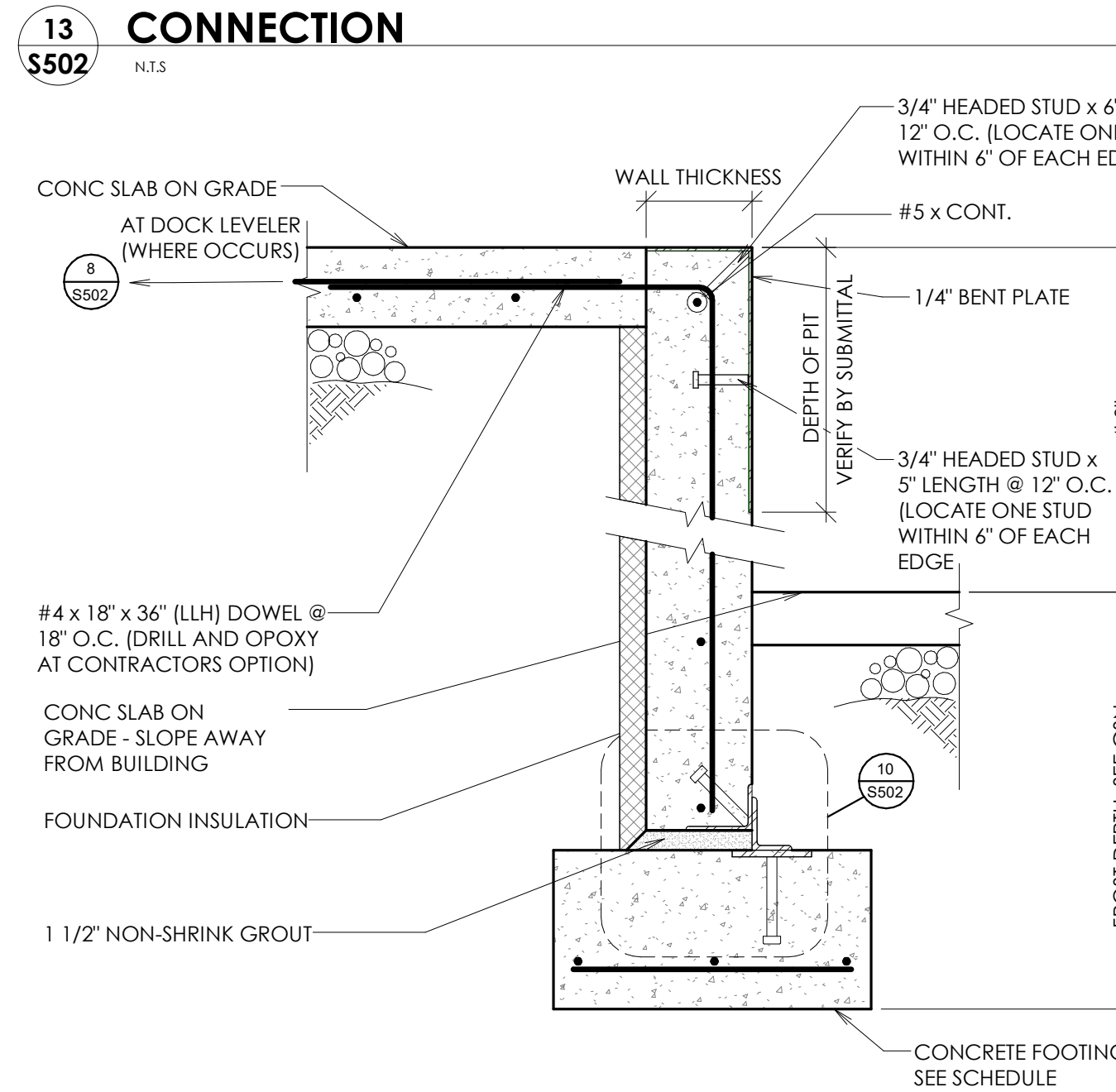


4 TYPICAL CORNER WALL REINF. DETAIL

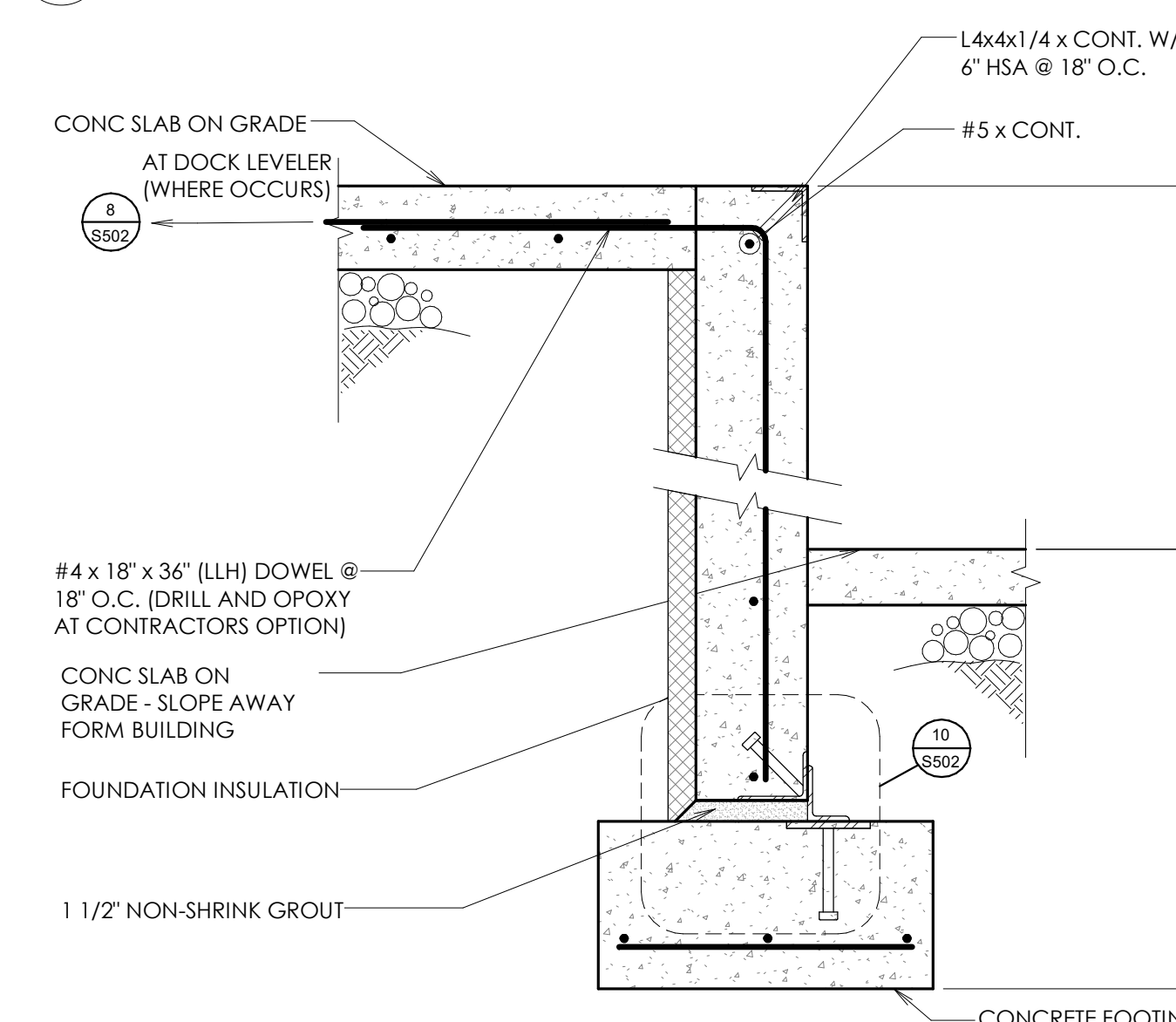




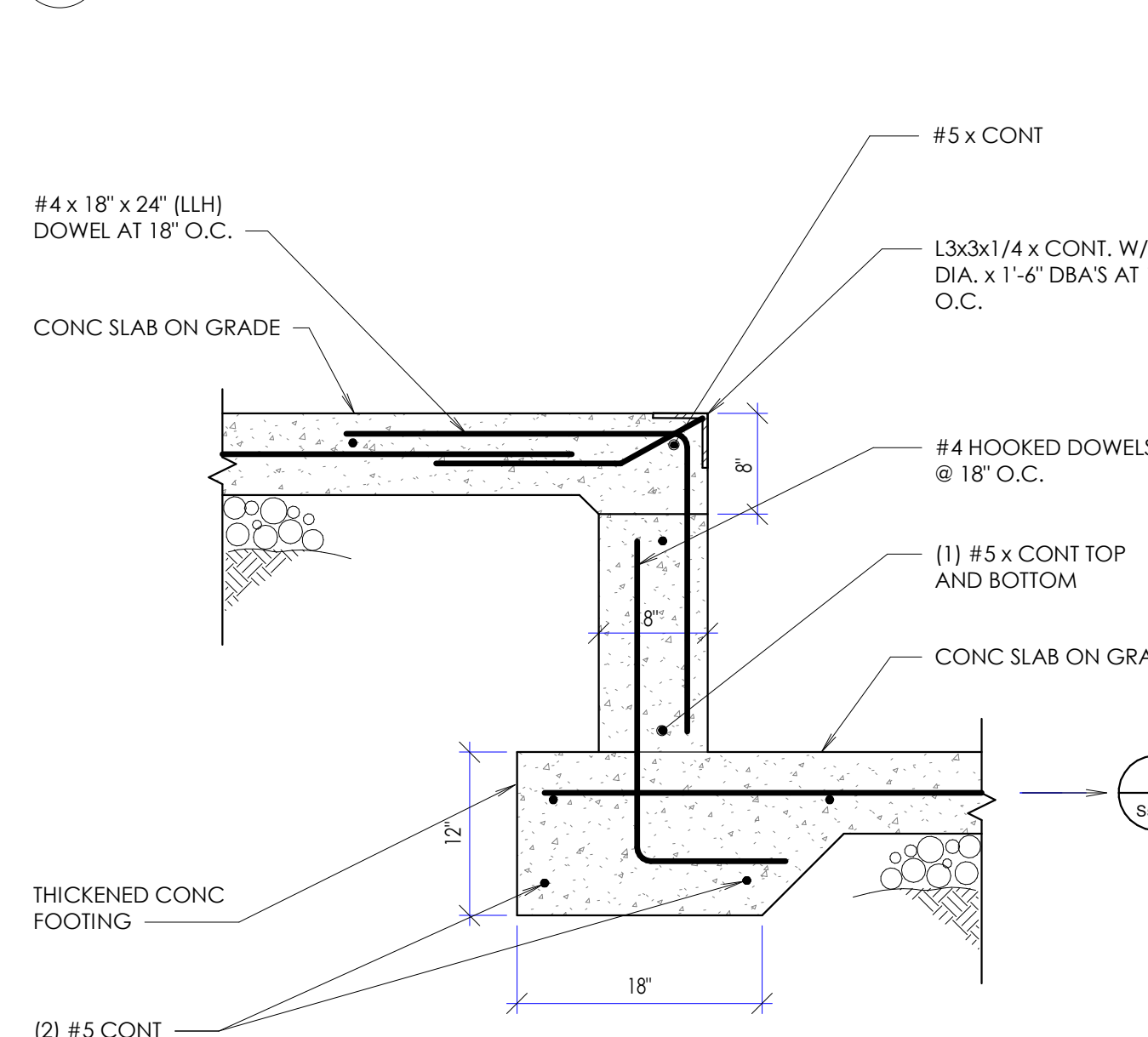
OPTIONAL TILT-UP PANEL TO SLAB ON GRADE CONNECTION



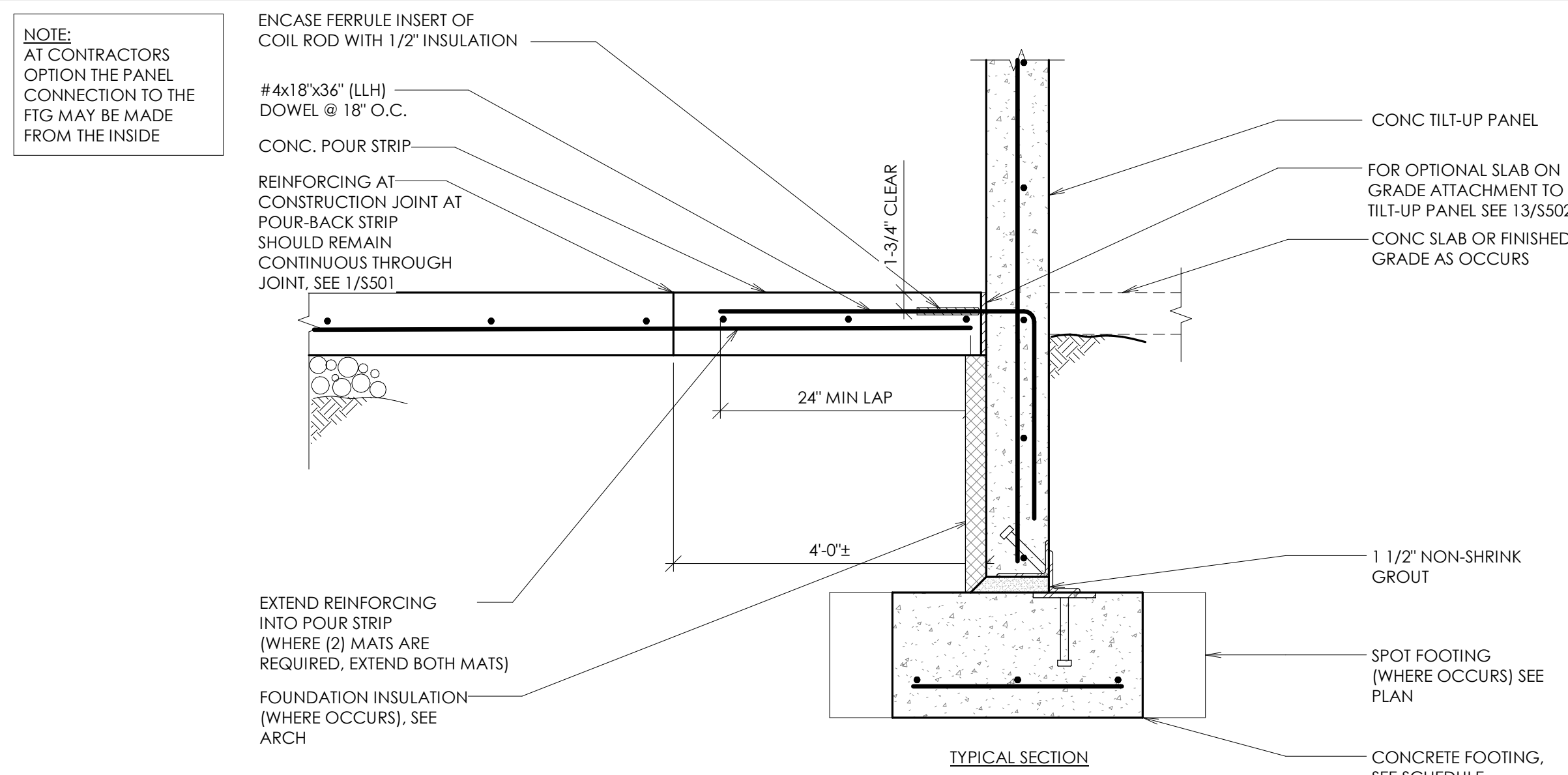
BUMPER PLATE AT DOC



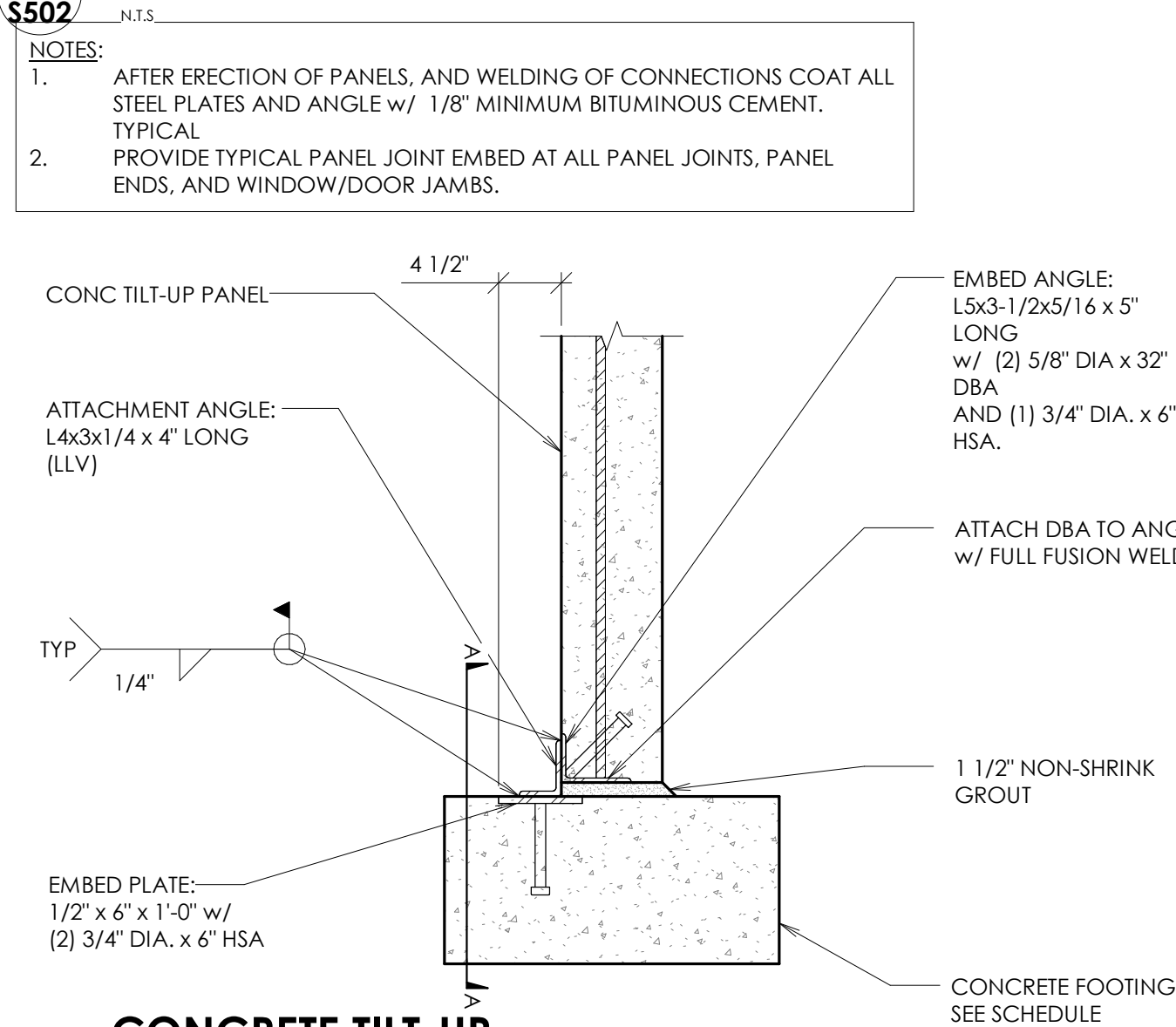
BUMPER PLATE AT DOC



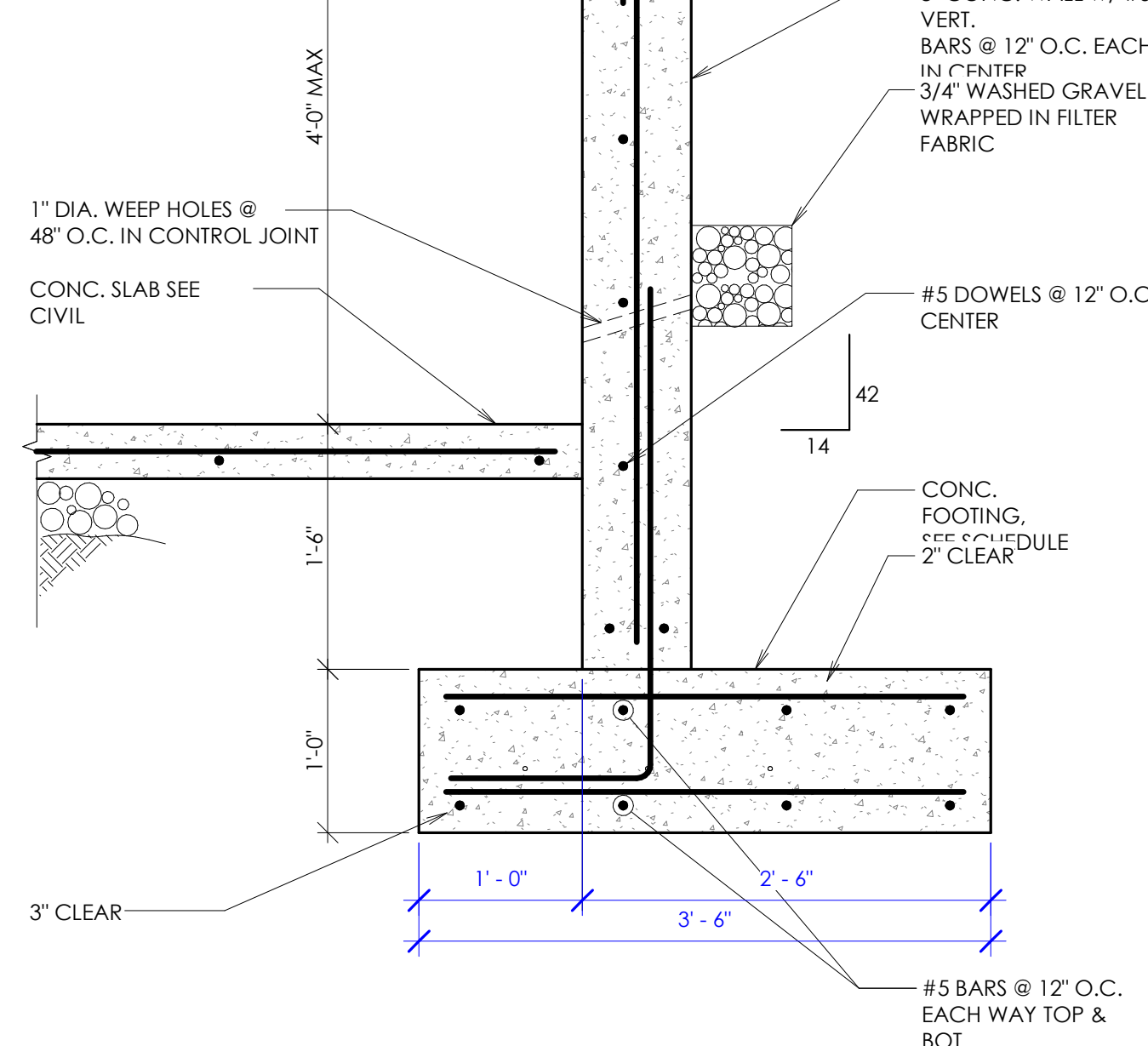
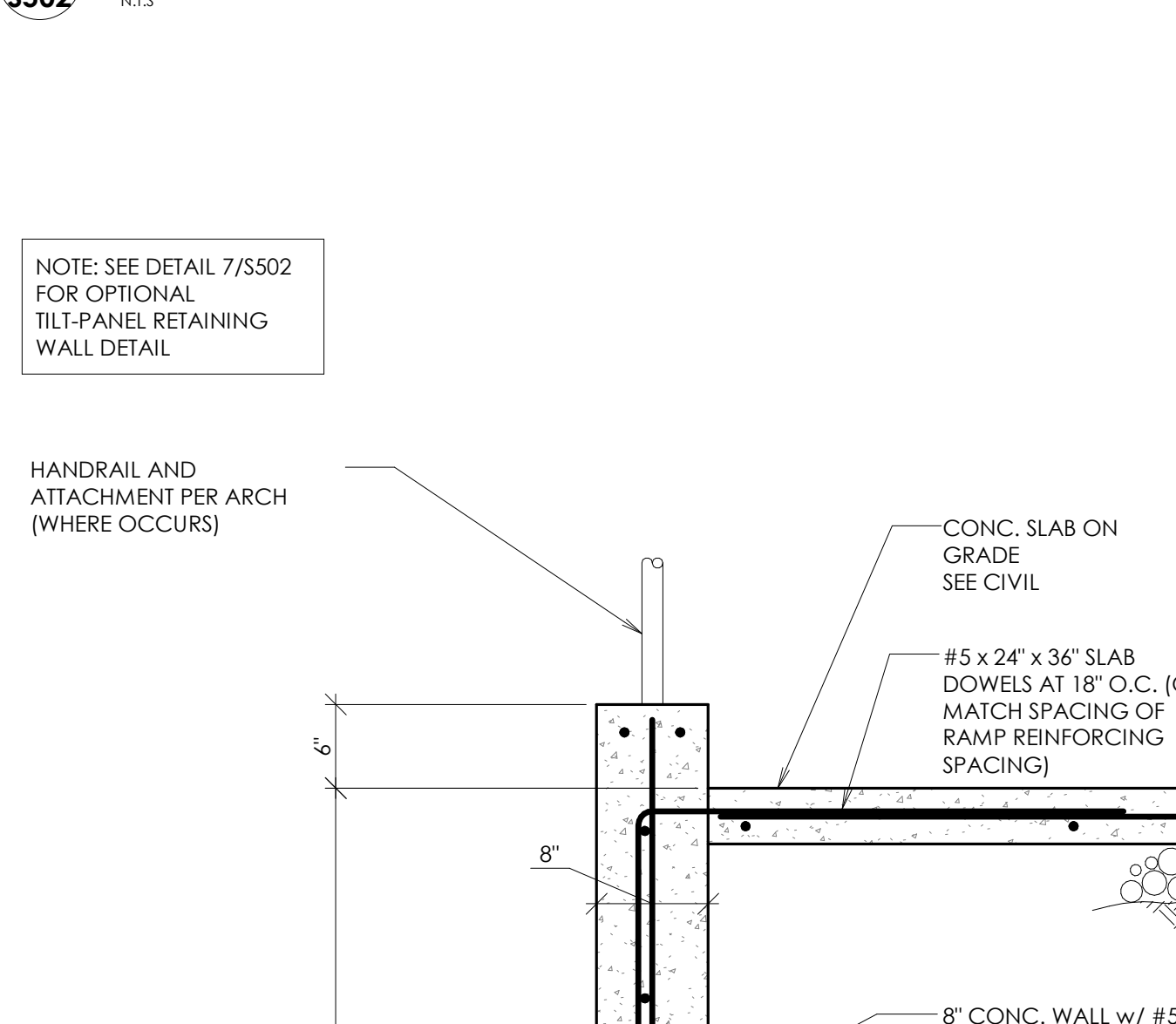
TYPICAL DOCK LEVELER PIT DETAIL



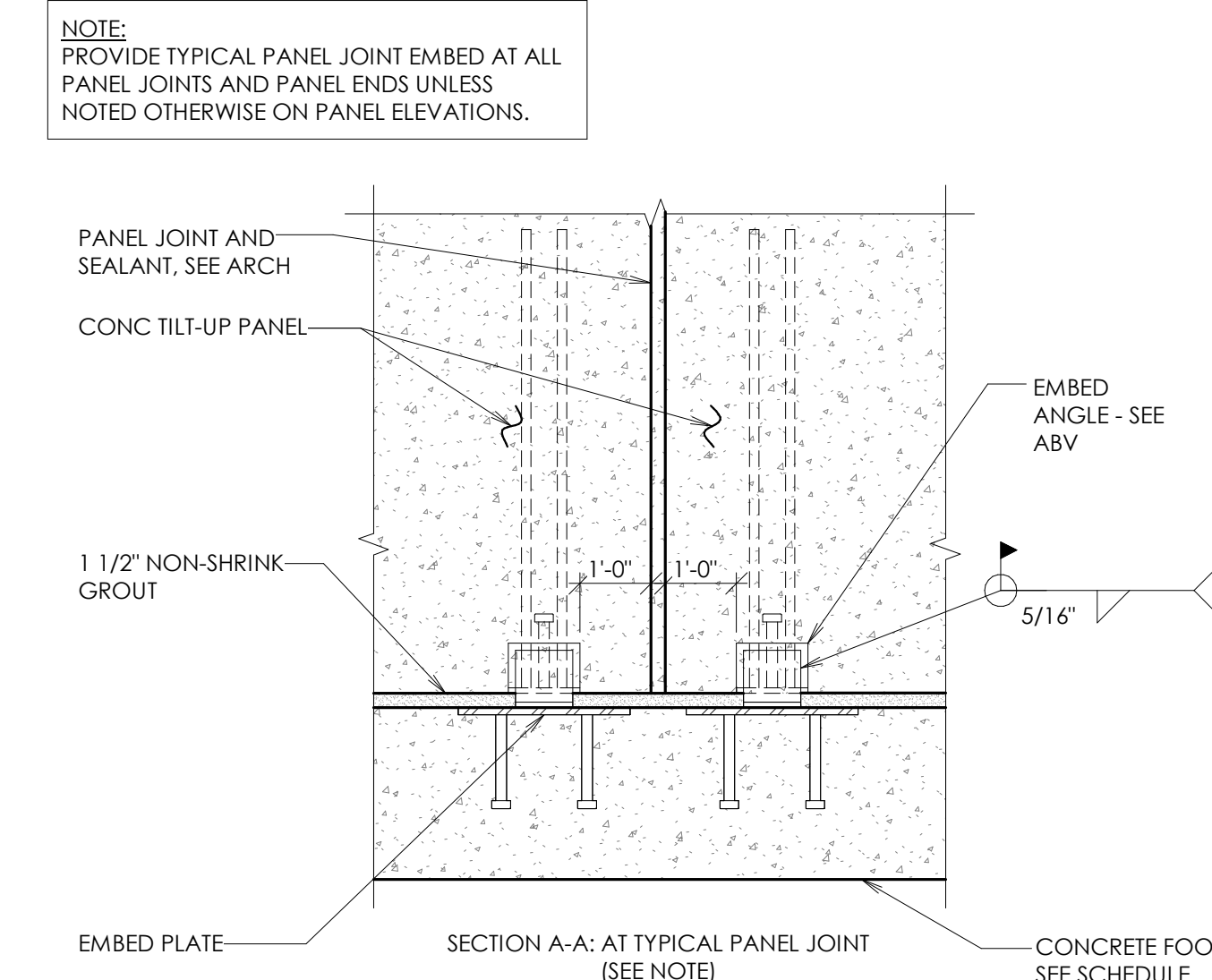
TYPICAL CONC-TILT UP WALL AT FOOTING DETAIL



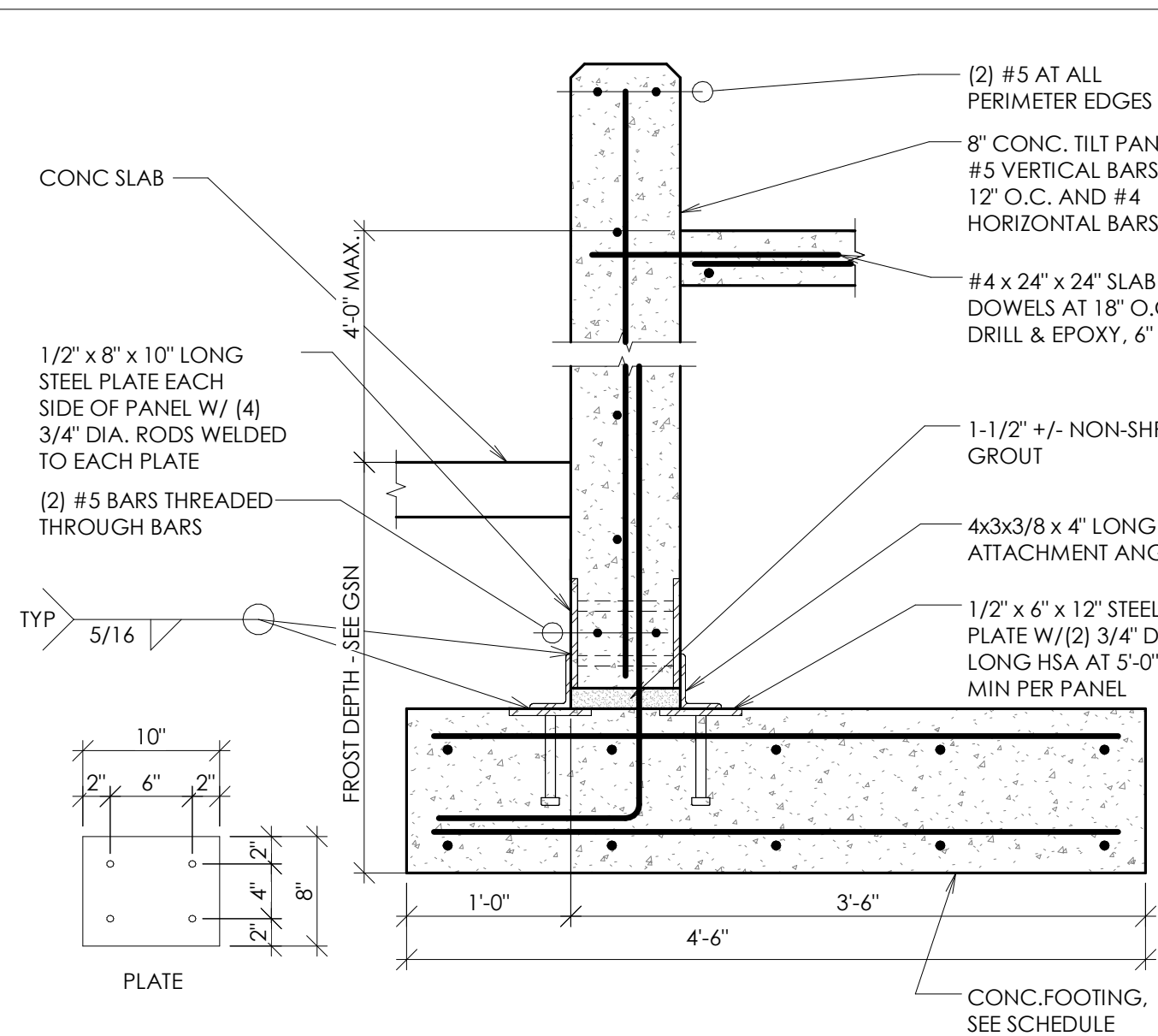
CONCRETE TILT-UP PANEL TO FOOTING CONNECTION DETAIL



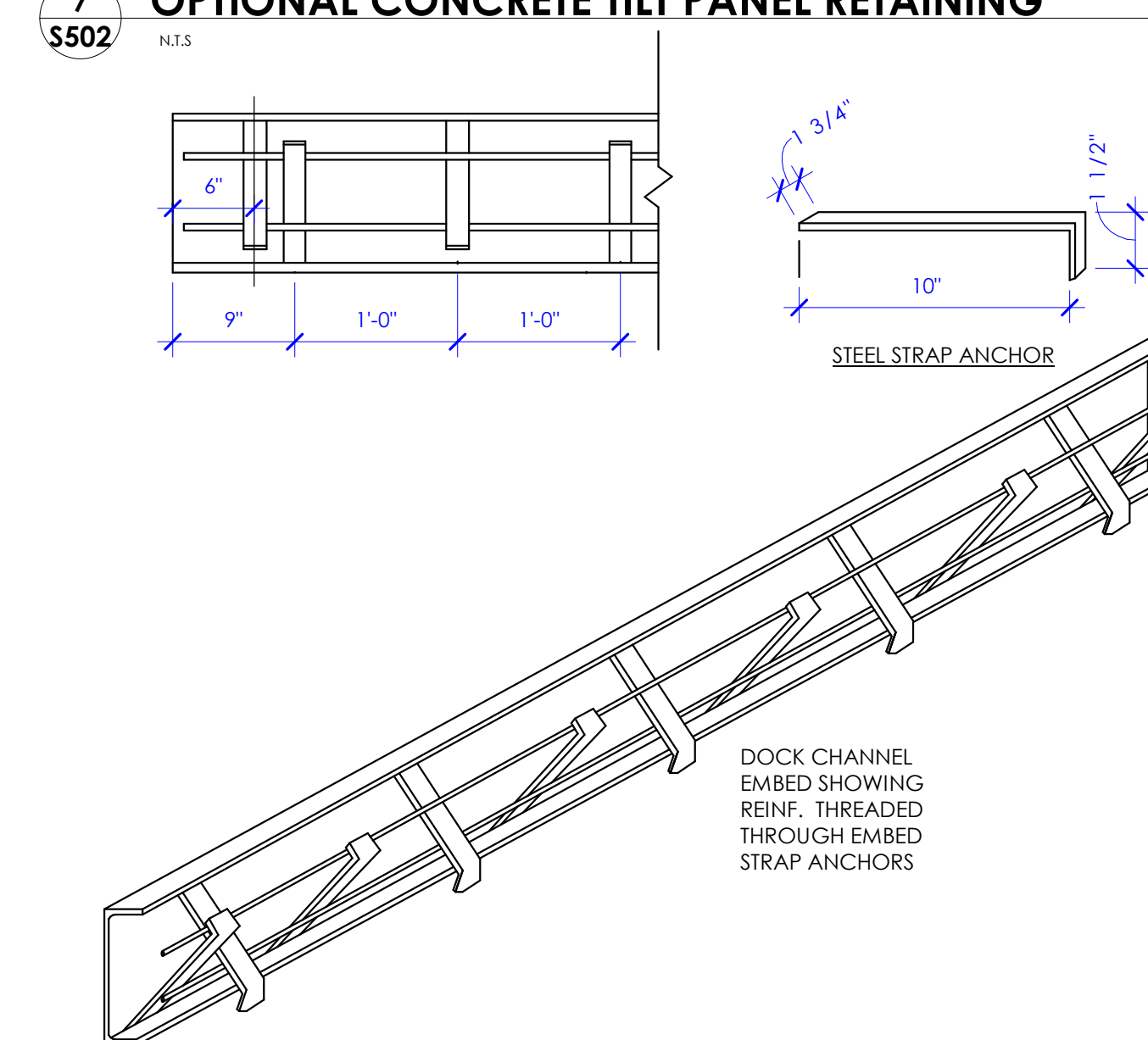
CONCRETE TILT-UP PANEL TO FOOTING CONNECTION DETAIL



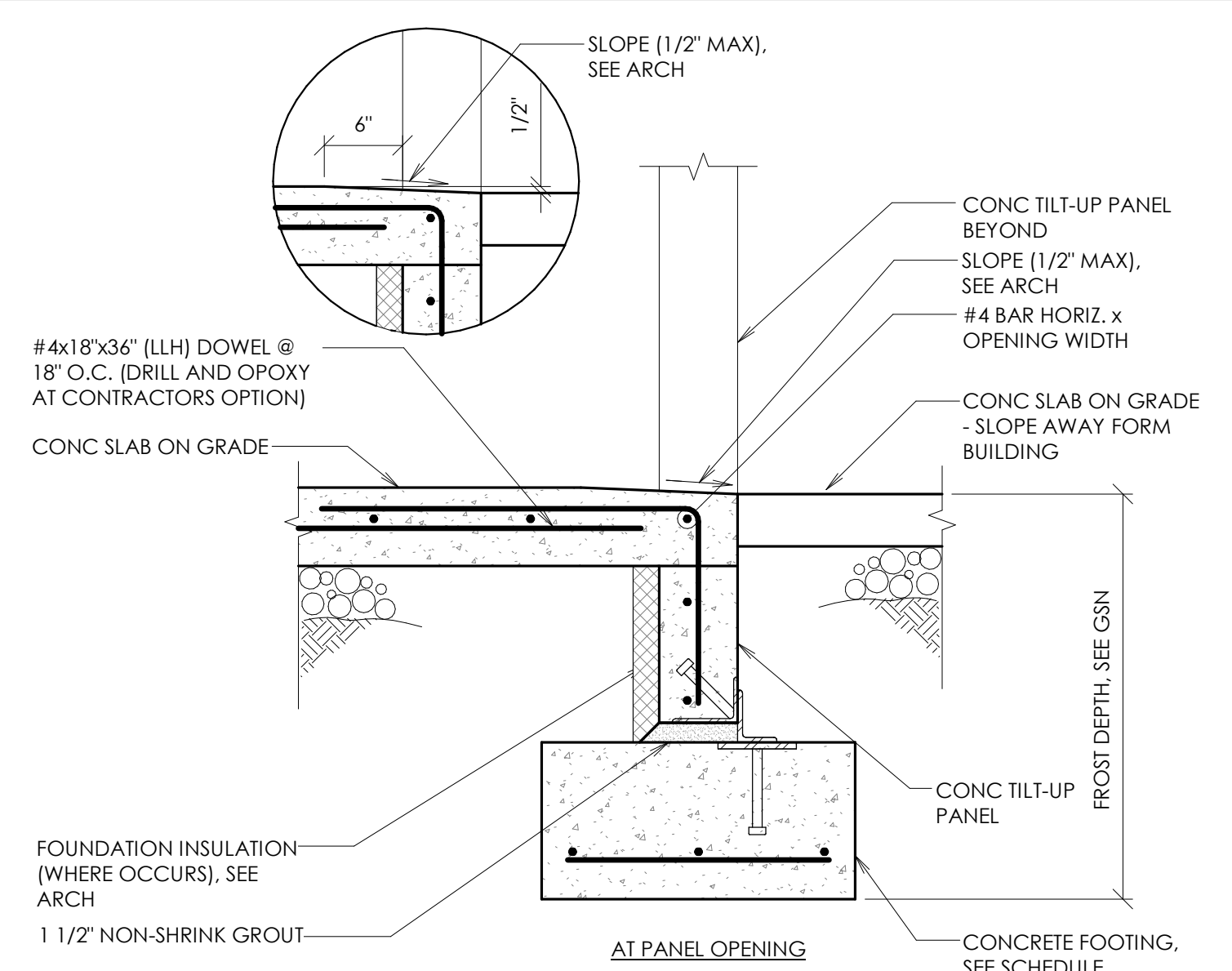
TYPICAL CONC-TILT UP WALL AT FOOTING DETAIL



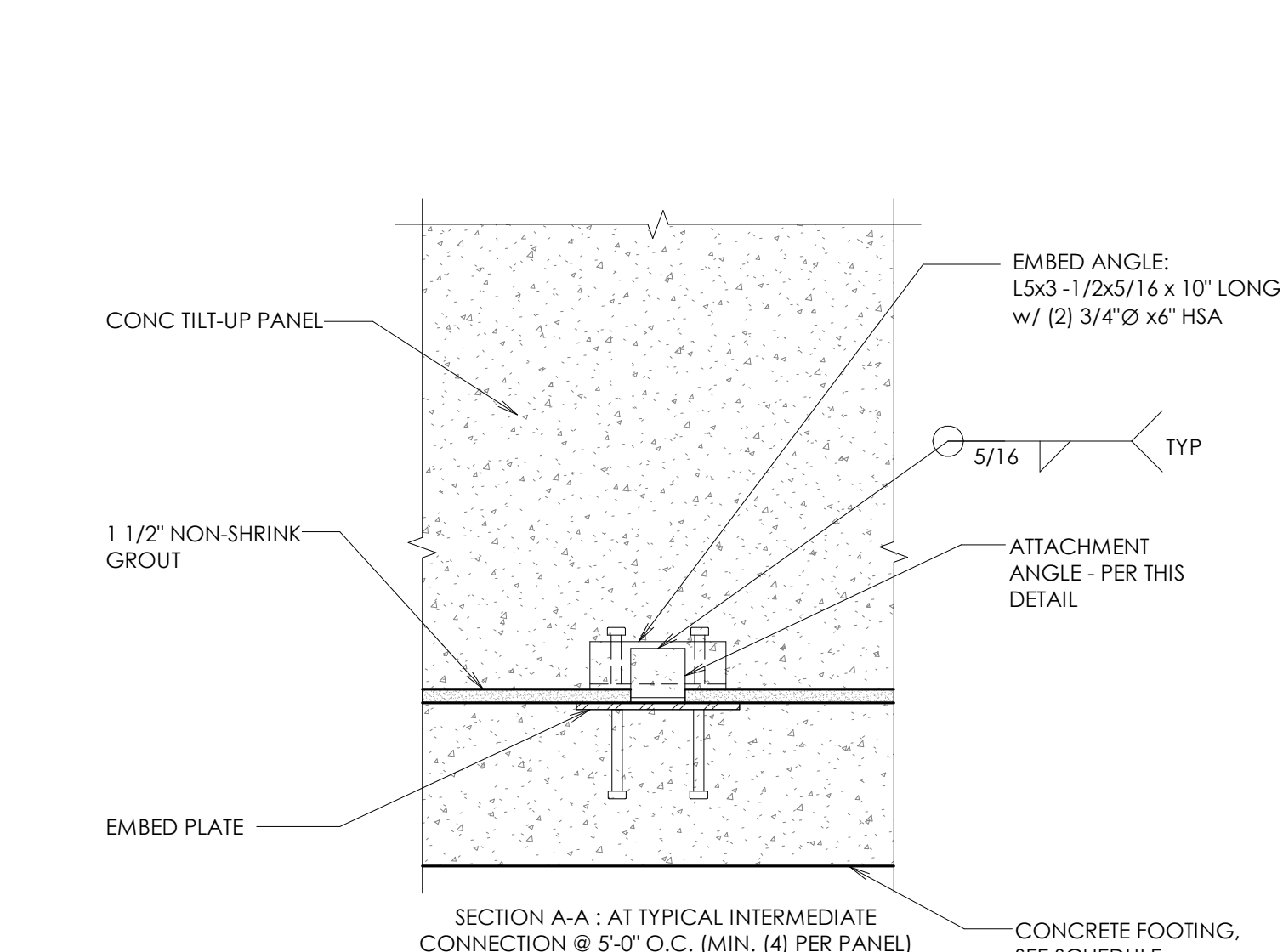
OPTIONAL CONCRETE TILT PANEL RETAINING



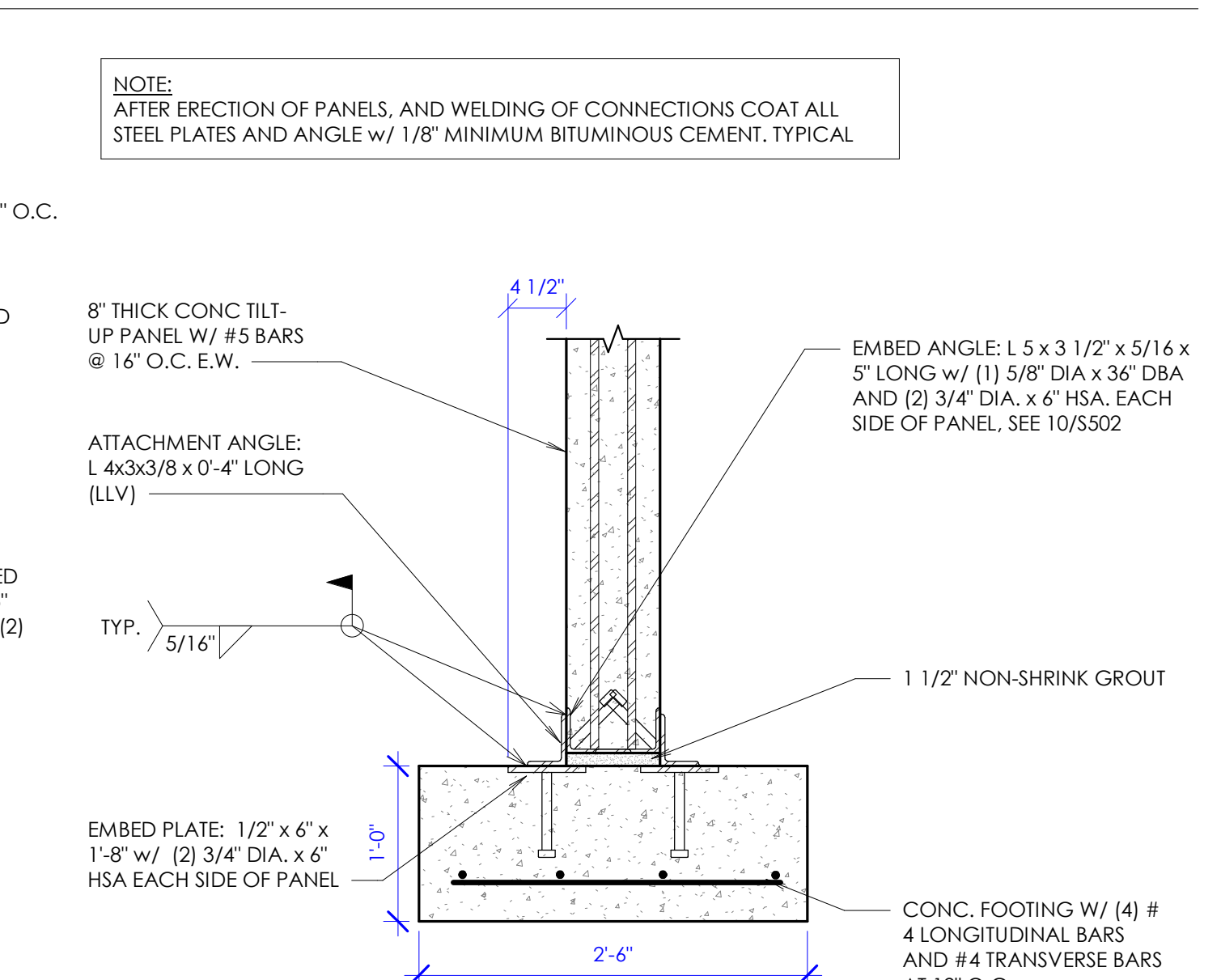
OPENING THRU CONC TILT-UP PANEL AT DOCK DOOR



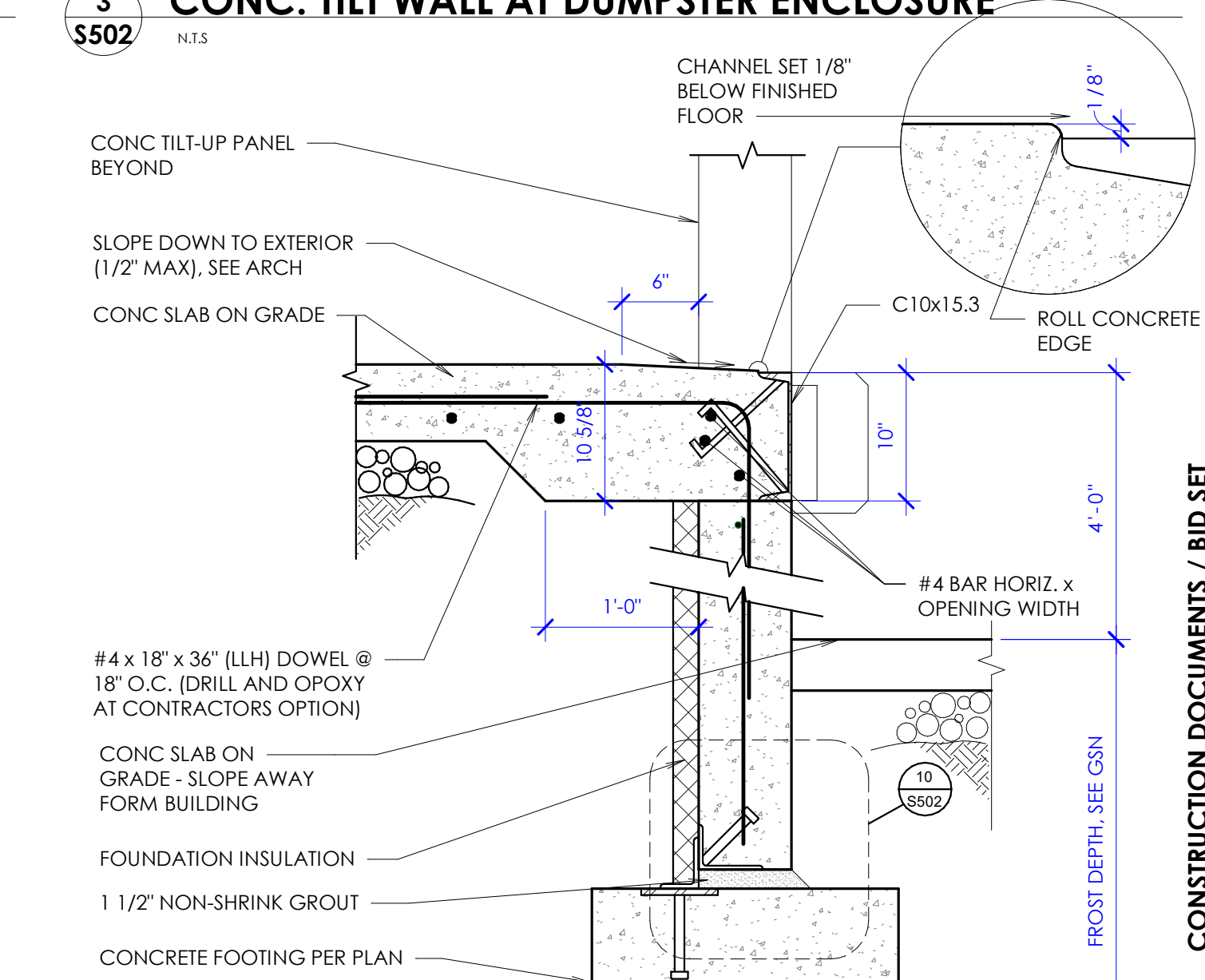
CONC. TILT WALL AT DUMPSTER ENCLOSURE



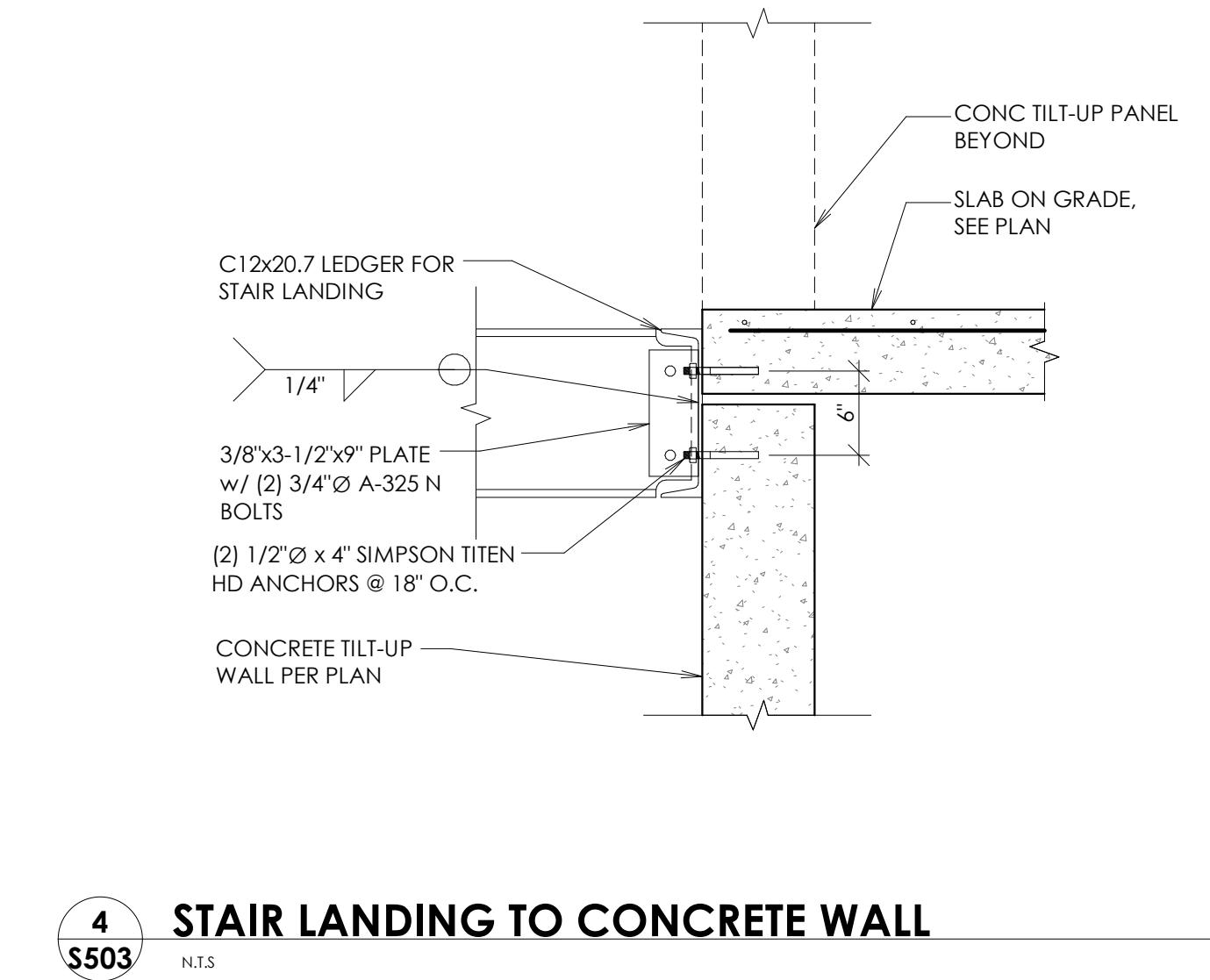
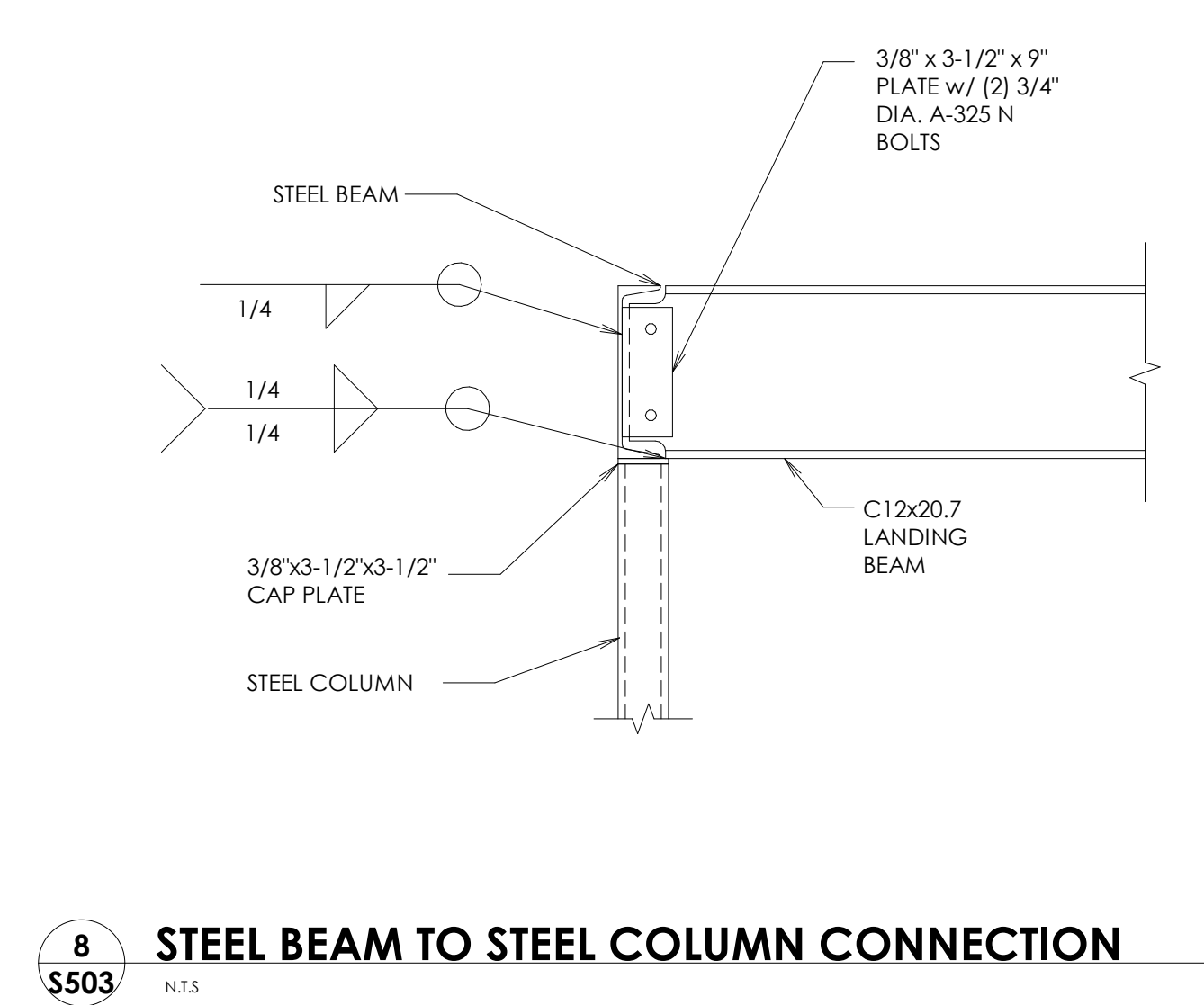
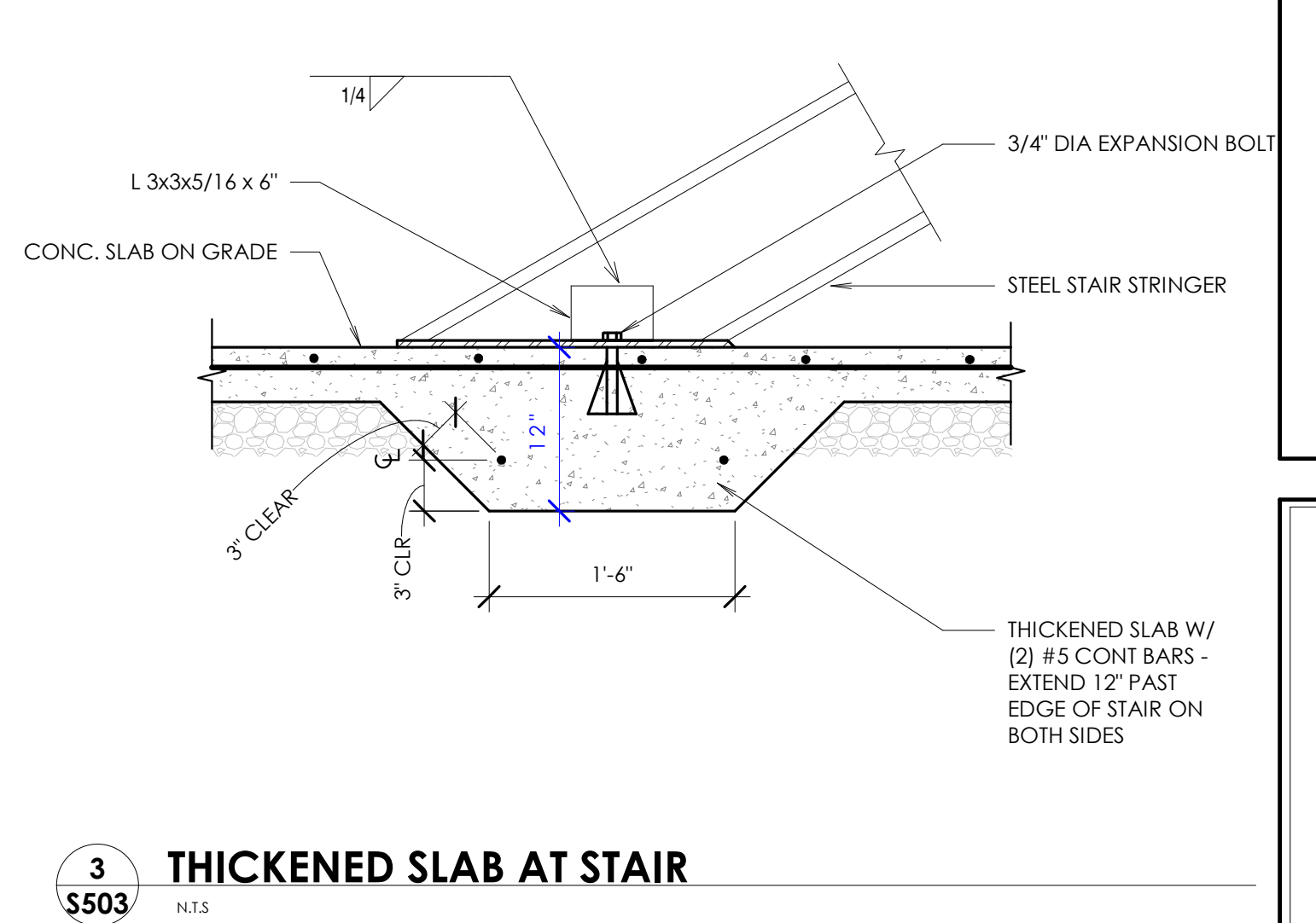
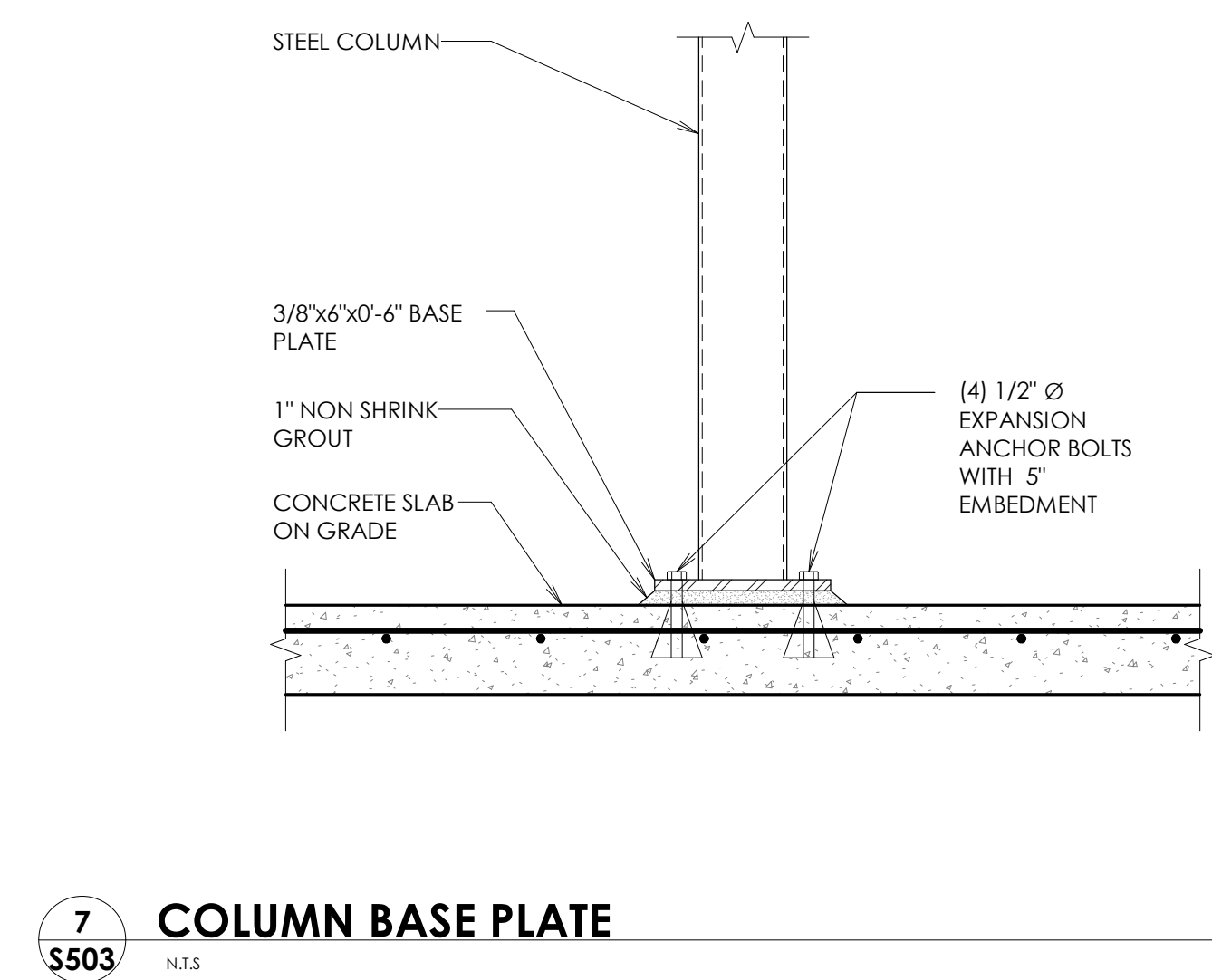
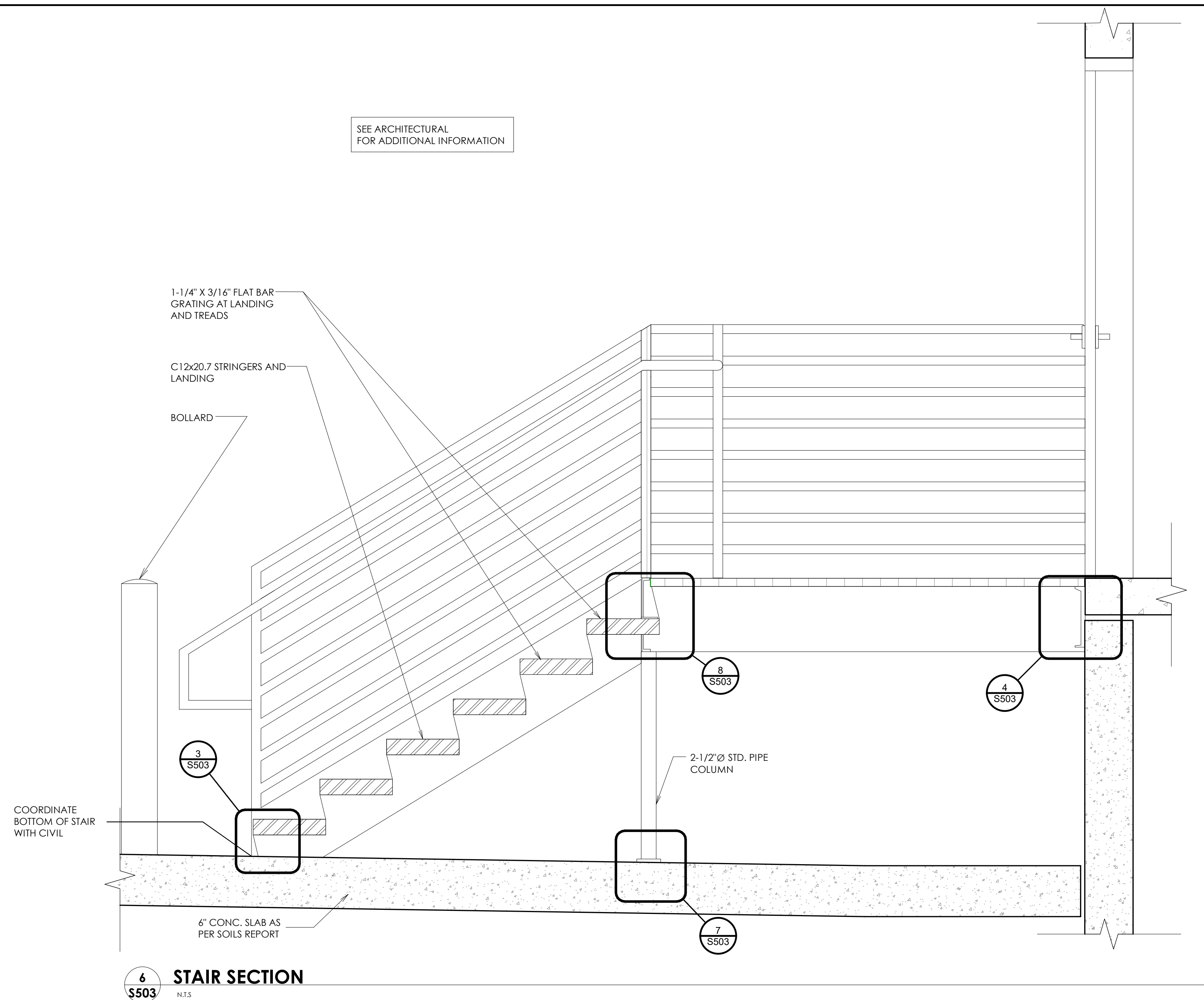
CONC. TILT WALL AT DUMPSTER ENCLOSURE



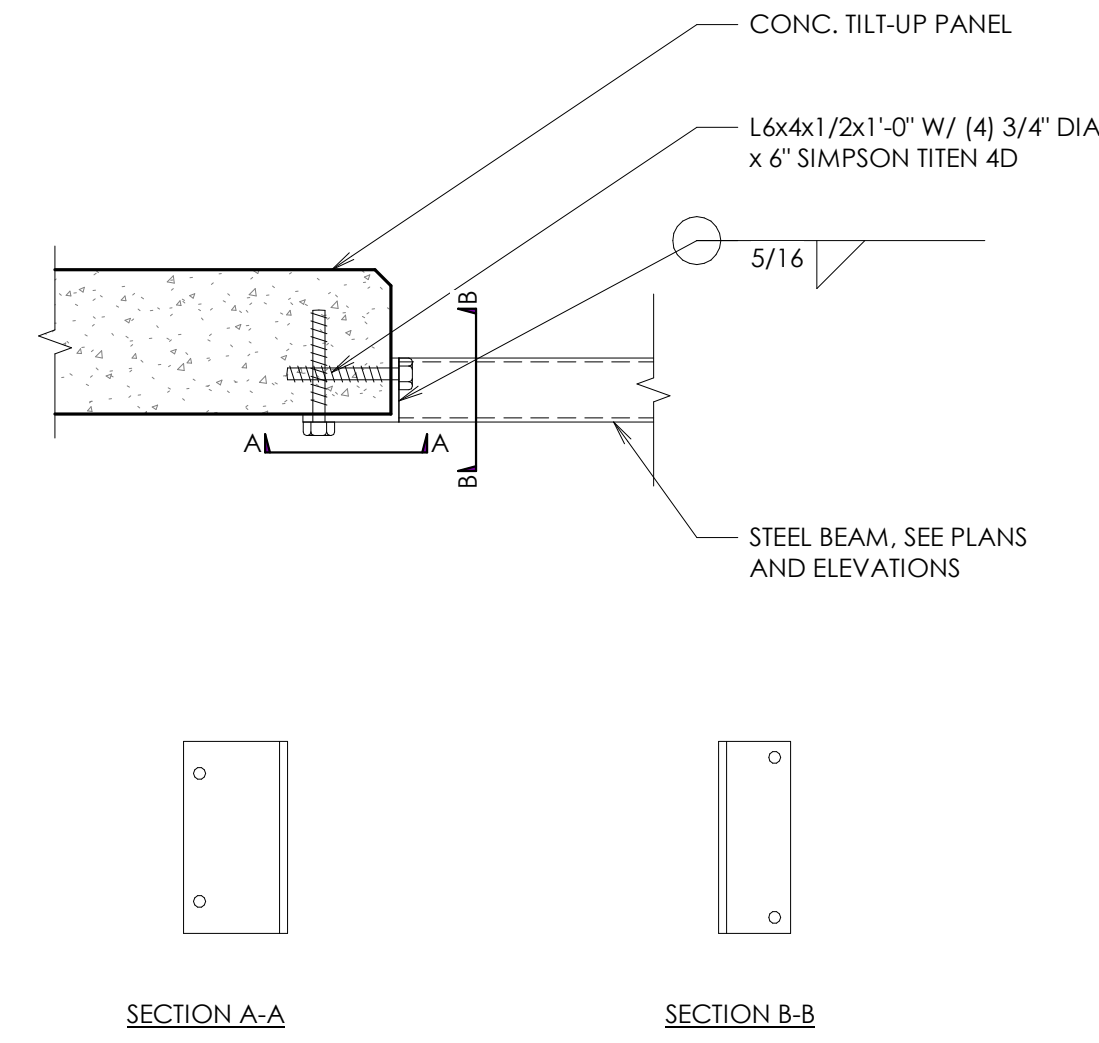
CONC. TILT WALL AT DUMPSTER ENCLOSURE



CONC. TILT WALL AT DUMPSTER ENCLOSURE

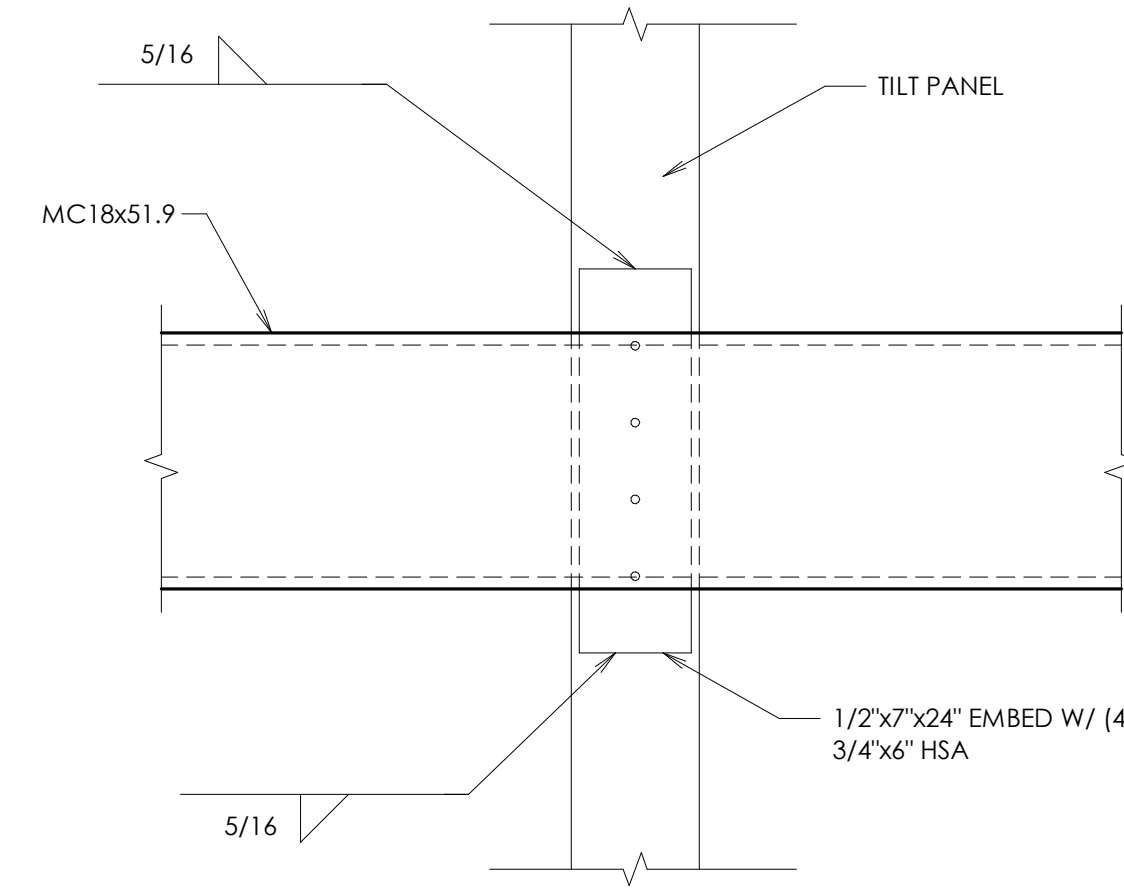


Revision	DESCRIPTION	DATE
1	MARK	



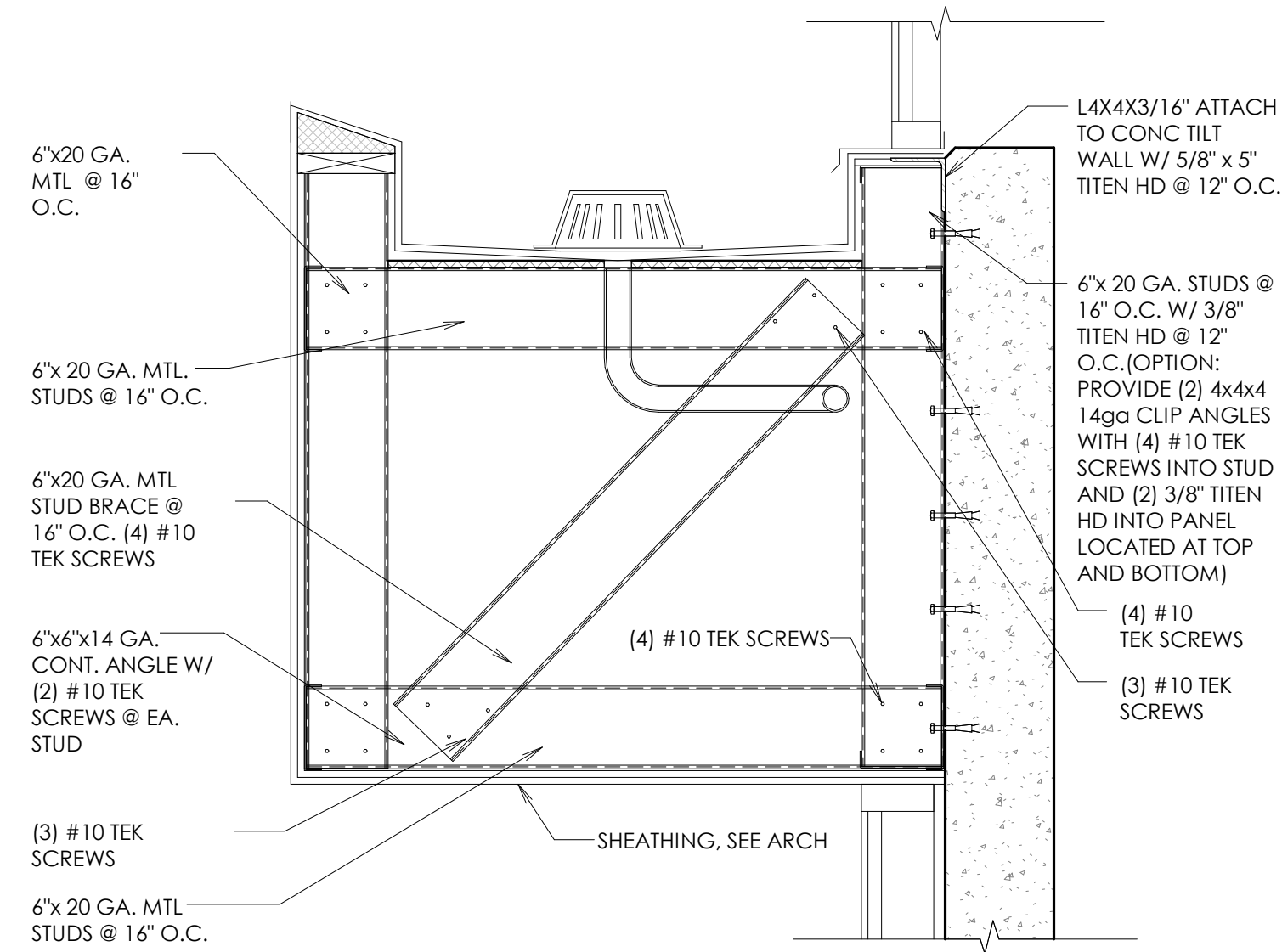
5
S702
N.T.S.

WIND GIRT @ TILT-UP PANEL



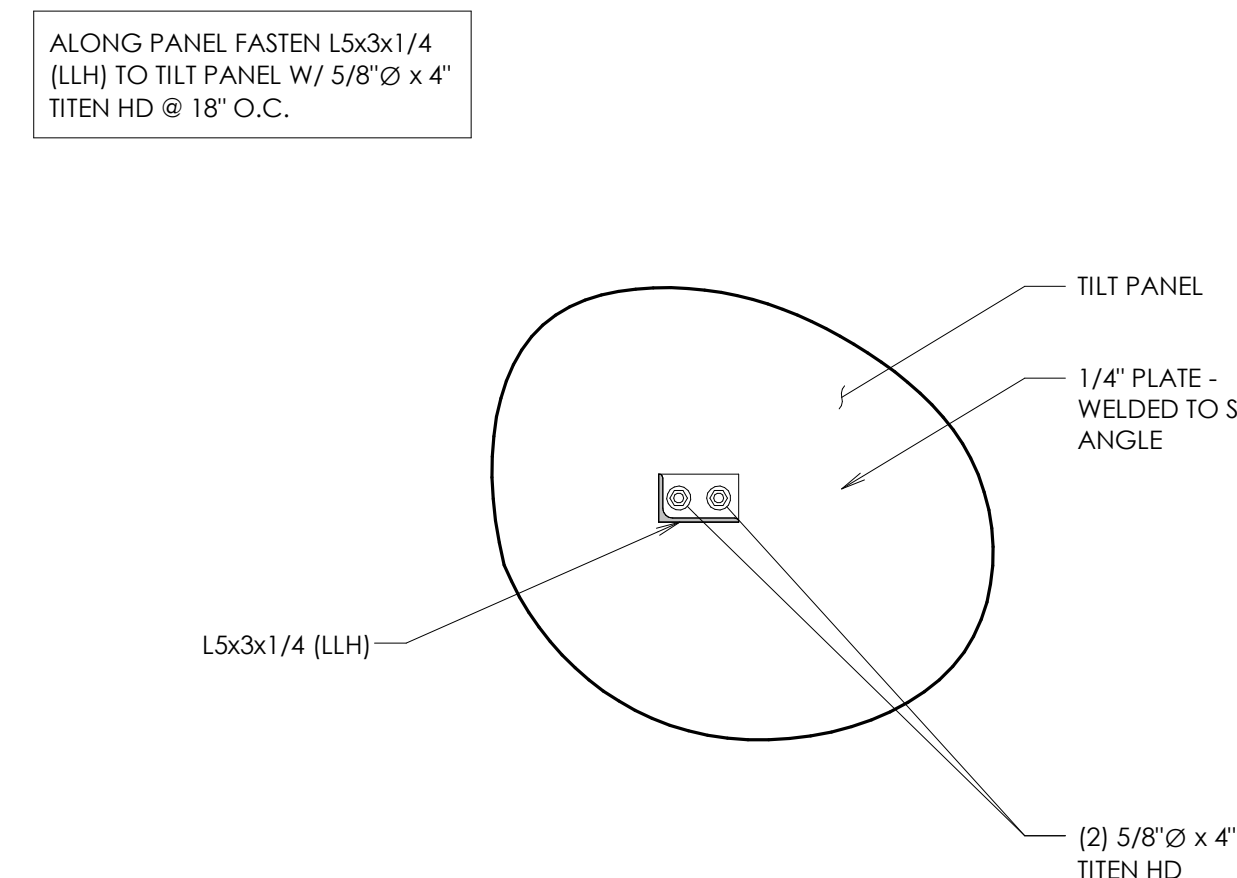
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S702
N.T.S.

STEEL CHANNEL @ TILT PANEL



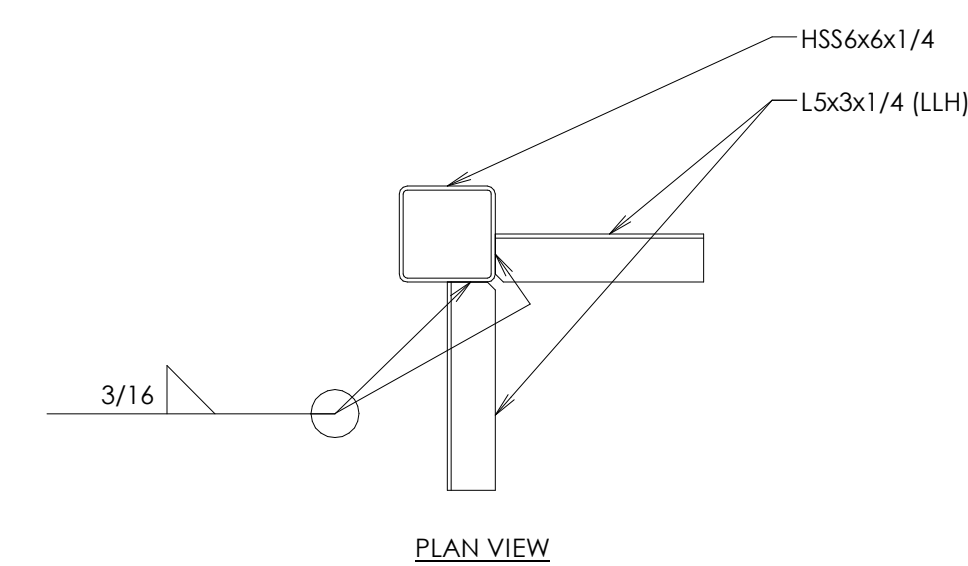
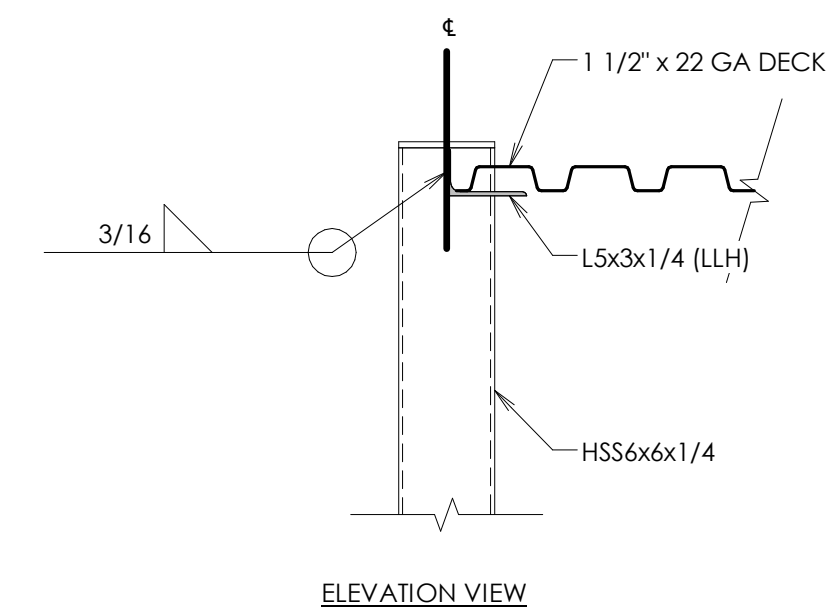
6
S702
N.T.S.

ENTRANCE CANOPY



2
S702
N.T.S.

STEEL ANGLE TO TILT PANEL



4
S702
N.T.S.

ANGLE TO COLUMN CONNECTION

MARK	DESCRIPTION	Revision Date

ELECTRICAL GENERAL NOTES		
GENERAL NOTES:	CONDUCTORS, CONCRETE PAD/VAULT, ETC. AS NEEDED FOR A COMPLETE ELECTRIC SERVICE TO THIS FACILITY.	
1. THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND THE SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL THE RELEVANT DOCUMENTS, AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION, OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING THEIR BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIERS SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS INCLUSIVE OF THE ORIGINAL BID. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM ITS PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE PRIOR TO PROJECT CLOSEOUT.	27. THE EC SHALL COORDINATE LOCATION OF TELEPHONE PEDESTAL, ROUTING/SIZE OF TELEPHONE SERVICE CONDUIT, AND OPERABLE MAIN TELEPHONE SERVICE BOARD REQUIREMENTS WITH THE TELEPHONE COMPANY PRIOR TO ROUGH-IN. INSTALL A 3/4" CONDUIT WITH (1) #8 BARE COPPER CONDUCTOR FROM TELEPHONE TERMINAL BOARD (TTB) TO THE MAIN BUILDING GROUNDING SYSTEM.	
2. THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.	28. UNDERGROUND CONDUIT FOR SITE LIGHTING SHALL BE BURIED 24" B.F.G. AND SHALL HAVE ONE (1) #10 THIN GREEN GROUND CONDUCTOR TO GROUND ALL LUMINAIRES.	
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS, AND LABOR FOR THE CONNECTIONS OF ALL EQUIPMENT SHOWN ON THE PLANS - ARCHITECTURAL, MECHANICAL, ETC.	29. PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL COORDINATE WITH COMMUNICATIONS/DATA, CABLE TV, GAS, AND WATER UTILITY PROVIDERS (BLUE STAKES), AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. IN ADDITION, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUBCONTRACTOR SPECIALIZING IN THE LOCATION OF UNDERGROUND STRUCTURES TO IDENTIFY ANY OBSTACLES IN THE PATH OF TRENCHING PRIOR TO COMMENCING WORK. DAMAGE TO ANY UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR.	
4. THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST RECENT LOCAL, STATE, AND NATIONAL CODES. IF AT ANY TIME DURING OR AFTER CONSTRUCTION SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THESE CODES LISTED ABOVE, IT SHALL BE CORRECTED BY THE CONTRACTOR.	LIGHTING NOTES:	
5. WHERE A RACEWAY ENTERS A BUILDING OR STRUCTURE FROM THE OUTSIDE, IT SHALL BE SEALED AS PER NEC 225.27.	30. ALL BATTERY POWERED OR CONTINUOUS BURN LUMINAIRES SHOWN ON THE PLANS, SUCH AS EXIT LIGHTS, NIGHT LIGHTS, OR EMERGENCY LIGHTS, SHALL BE CONNECTED TO THE UN-SWITCHED LEG OF THE LIGHTING CIRCUIT FEEDING THAT AREA.	
6. ALL ELECTRICAL EQUIPMENT THAT IS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD OR FACTORY LABELED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER NEC 110.16. THE LABEL SHALL ALSO CONTAIN THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATIONS WERE PERFORMED AS PER NEC 110.24.	31. LUMINAIRES INSTALLED IN THE MECHANICAL ROOM SHALL BE PLACED SO THAT ALL EQUIPMENT IS ADEQUATELY ILLUMINATED AFTER THE MECHANICAL EQUIPMENT IS IN PLACE.	
7. ALL PANELBOARDS AND SWITCHBOARDS SHALL BE PERMANENTLY MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THEIR POWER ORIGINATES AS PER NEC 408.4B.	32. ALL LUMINAIRES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND NOT THE CEILING GRID OR OTHER NONSTRUCTURAL MEMBERS.	
8. ALL EQUIPMENT PROVIDED BY THE EC SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, AND BE PROPERLY INSTALLED FOR THE CONDITIONS AND SPACE THAT EQUIPMENT IS BEING INSTALLED WITHIN.	33. TO MAINTAIN CONSISTENT LIGHT QUALITY, FOR ANY ONE LAMP TYPE SUPPLIED, LAMPS SHALL BE OF THE SAME MANUFACTURER, SURFACE TEMPERATURE, COLOR RENDERING INDEX, LAMP EFFICACY, LUMEN OUTPUT, AND STARTING CHARACTERISTICS FOR ALL INSTALLED.	
9. THE EC SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN. CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE EC SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.	34. LIGHT FIXTURES INSTALLED IN DAMP OR WET LOCATIONS SHALL BE UL LISTED FOR INSTALLATION IN THE PROPER ENVIRONMENT. CARE SHOULD BE TAKEN TO ENSURE THAT DIFFUSERS AND LENSES ARE APPROPRIATE FOR THEIR INSTALLED USE AND PREMATURE DISCOLORATION WILL NOT RESULT DUE TO EXPOSURE TO UV LIGHT, CHEMICALS, OR OTHER CONDITIONS.	
10. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE ROUTING REQUIRED. THE EC SHALL ROUTE THE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION AND SHALL COORDINATE WITH DUCTWORK, PIPING, EQUIPMENT, BUILDING STRUCTURE, AND OTHER POTENTIAL OBSTRUCTIONS.	35. ELECTRICAL CONTRACTOR SHALL PROVIDE LIGHTING CONTROL SHOP DRAWINGS WITH ELECTRICAL SUBMITTAL FOR REVIEW.	
11. THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC. A DISTANCE OF 10 FEET WITHOUT REQUIRING ADDITIONAL COST TO THE PROJECT.	POWER NOTES:	
12. THE EC SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY STANDARD METHODS AND PRACTICES. TO ASSURE ALL DEVICES ARE ROUGHLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION.	36. ELECTRICAL CONTRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS IF REJECTED BY AN INSPECTOR. IF CLEARANCE IS NOT POSSIBLE, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN WRITING.	
13. MINIMUM SIZE CONDUIT SHALL BE 3/4" UNO. CONDUIT INSTALLED WITHIN THE BUILDING IN DRY LOCATIONS WITHIN WALL, CEILING, OR EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE SHALL BE INSTALLED WITH STEEL SET SREW FITTINGS. IN EXTERIOR LOCATIONS (EXCEPT FOR THE SERVICE ENTRANCE) THE CONDUIT SHALL BE EMT WITH COMPRESSION GLAND TYPE FITTINGS. UNDERGROUND CONDUIT SHALL BE PVC (SCH. 40) WITH GRC ELBOWS AND RISERS WRAPPED IN CORROSION RESISTANT MATERIALS WHERE IN DIRECT CONTACT WITH THE SOIL.	37. WIRING DEVICES SHALL HAVE A NYLON COVER PLATE. COLOR SHALL BE COORDINATED WITH ARCHITECT. EXTERIOR OUTLETS SHALL HAVE CAST COVERS WITH FLIP TYPE LIDS UNO.	
14. FLEXIBLE CONDUIT SHALL BE LIMITED TO CONNECTIONS TO LIGHT FIXTURES AND FINAL CONNECTIONS TO MOTORS OR OTHER EQUIPMENT SUBJECT TO VIBRATION. LENGTHS OF FLEXIBLE OR SEAL-TITE CONDUIT SHALL NOT BE GREATER THAN 72 INCHES.	38. THE EC SHALL MAINTAIN ELECTRICAL CONTINUITY TO REMAINING EQUIPMENT WHEN ANY EXISTING ELECTRICAL EQUIPMENT IS REMOVED.	
15. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL EMPTY CONDUITS WITH 200LB RATED NYLON PULL CORD.	39. EC SHALL COORDINATE WITH EQUIPMENT SUPPLIERS ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN. THE EC SHALL MAKE THE FINAL CONNECTION TO ALL EQUIPMENT UNLESS OTHERWISE DIRECTED BY THE EQUIPMENT SUPPLIER. OBTAIN FROM SUPPLIERS ALL WIRING DIAGRAMS FOR EQUIPMENT PRIOR TO ANY ROUGH-IN. TO ASSURE THAT PROPER CHARACTERISTICS ARE PROVIDED, ANY INCORRECT WIRING OR DEVICES INSTALLED BY THE EC WITHOUT THE WIRING DIAGRAM SHALL BE CORRECTED AT THE EC'S EXPENSE. PROVIDE COPIES OF WIRING DIAGRAMS WITHIN EACH PIECE OF EQUIPMENT AND ADDITIONAL COPIES WITH THE OPERATION AND MAINTENANCE MANUALS.	
16. BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL BE APPROVED BY THE INSPECTING OFFICER (INSPECTOR).	40. EC SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR TO PROVIDE CONDUIT AND DEVICE MOUNTING BOXES FOR THERMOSTATS AND OTHER MECHANICAL CONTROLS. REFER TO MECHANICAL DRAWINGS FOR THE LOCATION OF THERMOSTATS.	
17. WHERE WIRE SIZE IS NOT SHOWN ON THE DRAWINGS FOR 20A, 120VAC BRANCH CIRCUITS, THE CIRCUIT SHALL CONSIST OF 2#12 (CU, THHN) + 1#12 (CU, THHN) GND IN 3/4" EMT CONDUIT. THIS WIRE SIZE SHALL BE INCREASED TO #10 (CU, THHN) FOR BRANCH CIRCUITS WITH OVERALL LENGTHS EXCEEDING 125' TO ACCOMMODATE FOR VOLTAGE DROP. REFER TO EQUIPMENT SCHEDULES, FEEDER SCHEDULES, AND NOTES ON DRAWINGS FOR ALL OTHER BRANCH CIRCUIT AND FEEDER WIRE/CONDUIT SIZING.	41. PROVIDE A 20AMP, 120VAC RECEPTACLE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITIONING, AND REFRIGERATION EQUIPMENT PER NEC 210.63. RECEPTACLE SHALL BE OF THE GROUND FAULT CIRCUIT INTERRUPTING TYPE, INSTALLED WITHIN A CAST METAL BOX, AND WITHIN 2' OF ALL REQUIRED EQUIPMENT.	
18. CONDUCTORS SHALL BE COPPER, 600VAC RATED, TYPE THHN/THWN-2 UNO. CONDUCTORS UP TO #10AWG SHALL BE SOLID AND CONDUCTORS #8AWG OR LARGER SHALL BE STRANDED.	DATA/TELECOM NOTES:	
19. METAL CLAD CABLING MAY BE USED BETWEEN DEVICES SUCH AS LIGHTING, RECEPTACLES, SWITCHES, ETC. UNLESS OTHERWISE REQUIRED BY THE NEC. HOME RUNS SHALL BE INSTALLED IN CONDUIT. MC CABLE SHALL NOT BE INSTALLED EXPOSED.	42. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-IN ONLY FOR THE TELECOM/CAT6 SYSTEMS. THIS SHALL CONSIST OF A FOUR SQUARE DEVICE MOUNTING BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE OR TO THE CEILING SPACE ABOVE IF OPEN. CABLING, JACKS, FACEPLATES, TESTING AND TERMINATIONS SHALL BE PROVIDED AND INSTALLED BY OTHERS.	
20. EC SHALL CLEAN THE ENTIRE ELECTRICAL SYSTEM AFTER COMPLETION OF THE INSTALLATION. REMOVE ALL FINGER PRINTS, FOREIGN MATTER, PAINT, DIRT, GREASE, AND UN-NEEDED LABELS OR STICKERS FROM FIXTURES AND EQUIPMENT. REMOVE ALL RUBBISH AND DEBRIS ACCUMULATED DURING INSTALLATION FROM THE PREMISES.	FIRE ALARM NOTES:	
21. IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS FOR ALL DEVICES TO BE FLUSH MOUNTED AND CONDUIT/CABLING INSTALLED CONCEALED WITHIN WALLS/CEILINGS. IN AREAS WHERE CONDUIT MUST BE INSTALLED EXPOSED IT SHALL BE COORDINATED WITH THE ARCHITECT AND/OR ENGINEER. ALL EFFORTS SHALL BE MADE TO CONCEAL WIRING METHODS.	43. PROVIDE AND INSTALL AN ADDRESSABLE FIRE ALARM SYSTEM TO MEET THE REQUIREMENTS OF CURRENT NFPA 72, IBC, IFG, AND OTHER PERTINENT LOCAL/STATE CODES. THE SYSTEM SHALL MONITOR FLOW/TAMPER SWITCHES ON THE FIRE SPRINKLER RISER, DUCT MOUNTED SMOKE DETECTORS IN ALL AIR HANDLING EQUIPMENT OVER 2000CFM, PULL STATIONS AT EGRESS DOORS, HEAT/SMOKE DETECTORS AS SHOWN ON THE CONSTRUCTION DOCUMENTS, AND PROVIDE ELEVATOR RECALL/SHUNT TRIP WHERE APPLICABLE. THE FIRE ALARM CONTROL PANEL SHALL PROVIDE AUDIOVISUAL ANNUNCIATION THAT THE BUILDING FIRE ALARM SYSTEM HAS ACTIVATED IN ALL COMMON SPACES AND AS OTHERWISE REQUIRED/SHOWN ON THE DRAWINGS. THE EC SHALL GENERATE FIRE ALARM SHOP DRAWINGS AND SUBMIT THEM TO THE FIRE MARSHAL AND THE ENGINEER FOR APPROVAL. SUBMISSION REQUIREMENTS SHALL CONFORM TO NFPA 72 AND THE FIRE MARSHAL. NO FIRE ALARM WORK SHALL COMMENCE IN THE BUILDING PRIOR TO RECEIPT OF APPROVED FIRE ALARM SHOP DRAWINGS FROM THE FIRE MARSHAL.	
22. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED WITH FIRE STOPPING, IE. 3M BRAND CAULK, PUTTY, STRIP AND SHEET FORMS, DOW CORNING 3-6548 SILICONE RTV FOAM.	44. PLENUM RATED FIRE ALARM WIRE MAY BE RUN EXPOSED ABOVE ACCESSIBLE CEILING SPACES AND WHERE CONCEALED IN WALLS, ALL FIRE ALARM WIRING MUST BE IN 3/4" EMT CONDUIT WHERE IT IS NOT POSSIBLE TO CONCEAL IN WALLS OR CEILING SPACES.	
23. COORDINATE LOCATION OF WALL MOUNTED DEVICES WITH CABINETRY AND OTHER WALL OBSTRUCTIONS. COORDINATE CEILING MOUNTED DEVICES WITH CEILING OBSTRUCTIONS. ANY DEVICES THAT NEED TO BE RELOCATED MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ROUGH-IN FOR NEW LOCATION.	45. SIGNAL LINE CIRCUIT IS TO BE CLASS A, NAC CIRCUIT IS TO BE CLASS B. T-TAPPING OF SLC CIRCUIT IS NOT PERMITTED.	
24. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE PLACEMENT OF ALL DEVICES INSTALLED WITHIN THE CEILING SUCH AS LIGHTING, SPEAKERS, FIRE SPRINKLERS, SMOKE/HEAT DETECTORS, ETC. ANY EXISTING DEVICES THAT NEED TO BE RELOCATED IN ORDER TO ACCOMMODATE NEW CONSTRUCTION/REMODEL MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ROUGH-IN FOR RESOLUTION AND FURTHER DIRECTION.	46. FIRE ALARM SYSTEM TO CONFORM TO CURRENT NFPA 72, IBC, AND IFG.	
25. THE STATE OF UTAH ADOPTED NEC 2020.	47. INCOMING AND OUTGOING SLC WIRES ARE TO MAINTAIN A 5' SEPARATION WHERE RUNS ARE LONGER THAN 10'.	
SITE NOTES:	48. IN ALL AREAS WHERE MORE THAN ONE FIRE ALARM STROBE IS IN SIGHT OF EACH OTHER, THEY ARE TO BE SYNCHRONIZED TO FLASH AT THE SAME RATE AND TIME. PROVIDE A SYNCHRONIZATION MODULE.	
26. ELECTRICAL CONTRACTOR SHALL COORDINATE AND CONFIRM THE EXACT LOCATION OF THE POWER COMPANY SERVICE TRANSFORMER BEFORE INSTALLING THE PAD, PRIMARY CONDUIT, AND SECONDARY SERVICE LATERAL. PROVIDE LABOR AND CONDUIT, CONDUCTORS, WIRE WAYS, TRANSFORMER LUGS, METER BASES, METER CONDUIT,	49. IN SMALLER AREAS WHERE 15CD HORN/STROBES ARE USED, THE 4B LEVEL OF THE HORN SHALL BE TURNED DOWN TO 15dB ABOVE AMBIENT NOISE LEVEL. SEE NFPA 72 TABLE A.7.4.2 FOR AVERAGE AMBIENT SOUND LEVELS.	
	50. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. FIRE ALARM SHOP DRAWINGS SHALL BE SIGNED/SEALED BY A PROFESSIONAL FIRE PROTECTION ENGINEER REGISTERED IN THE STATE OF UTAH.	
	51. BRANCH CIRCUIT BREAKERS PROVIDING POWER TO FIRE ALARM SYSTEMS SHALL BE IDENTIFIED IN POWER PANELS WITH RED LABELS STATING "FIRE ALARM CIRCUIT" AS REQUIRED BY NEC 760.41(B).	

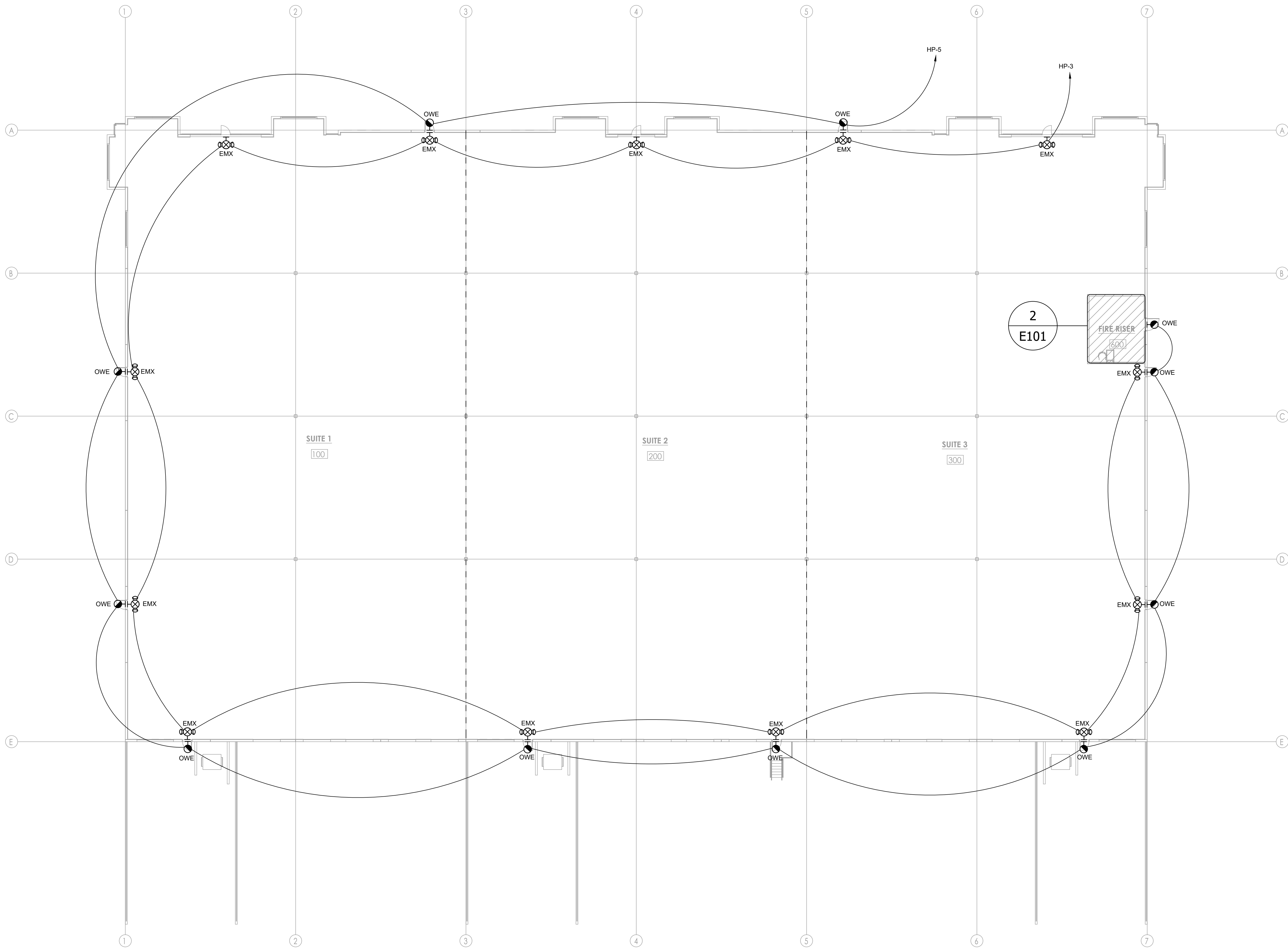
ELECTRICAL SYMBOL SCHEDULE			
SYMBOL	DESCRIPTION	MOUNTING	NOTES
	LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAWINGS	1
	EMERGENCY LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAWINGS	1, 2
	LIGHT FIXTURE - OPEN STRIP	SEE DRAWINGS	1
	EMERGENCY LIGHT FIXTURE - OPEN STRIP	SEE DRAWINGS	1, 2
	LIGHT FIXTURE - WALL MOUNTED	WALL	1
	EMERGENCY LIGHT FIXTURE - WALL MOUNTED	WALL	1, 2
	LIGHT FIXTURE - DOWNLIGHT	CEILING	1
	EMERGENCY LIGHT FIXTURE - DOWNLIGHT	CEILING	1, 2
	LIGHT FIXTURE - WALL WASH DOWNLIGHT	CEILING	1
	LIGHT FIXTURE - CEILING MOUNTED	CEILING	1
	LIGHT FIXTURE - PENDANT/CHANDELIER	CEILING	1
	LIGHT FIXTURE - WALL BRACKET	WALL	1
	EMERGENCY LIGHT FIXTURE - WALL BRACKET	WALL	1, 2
	LIGHT FIXTURE WITH FIXTURES	SURFACE	1
	EXIT FIXTURE - WALL MOUNT	WALL	1, 2, 3
	EXIT FIXTURE - CEILING MOUNT	CEILING	1, 2, 3
	EXIT FIXTURE W/ EMERGENCY HEADS - WALL MOUNT	WALL	1, 2, 3
	EXIT FIXTURE W/ EMERGENCY HEADS - CEILING MOUNT	CEILING	1, 2, 3
	DUAL HEAD EMERGENCY LIGHT FIXTURE	WALL	1, 2
	AREA LIGHT FIXTURE - POLE MOUNTED	POLE	1
	OCCUPANCY SENSOR - CEILING MOUNT	CEILING	1
	PHOTO-ELECTRIC CELL WITH RELAY	SURFACE	1
	LIGHTING RELAY/POWER PACK	SURFACE	1
	TIME CLOCK - 7 DAY	5' - 0"	
	WALL OCCUPANCY SENSOR SWITCH	4' - 0"	
	SINGLE POLE SWITCH	4' - 0"	
	DOUBLE POLE SWITCH	4' - 0"	
	THREE WAY SWITCH	4' - 0"	
	FOUR WAY SWITCH	4' - 0"	
	DIMMER SWITCH	4' - 0"	
	LOW VOLTAGE SWITCH	4' - 0"	
	THERMAL OVERLOAD SWITCH	4' - 0" UNO	
	PILOT LIGHT SWITCH	4' - 0"	
	DUPLEX OUTLET, 20A, 120VAC	1' - 6" UNO	
	DUPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UNO	
	DUPLEX OUTLET - SPLIT WIRED	1' - 6" UNO	
	DUPLEX OUTLET - ISOLATED GROUND	1' - 6" UNO	
	DUPLEX OUTLET WITH USB PORTS	1' - 6" UNO	
	DUPLEX OUTLET - OCCUPANCY SENSOR CONTROLLED	1' - 6" UNO	
	DUPLEX OUTLET, 20A, 120VAC - CEILING	CEILING	
	DUPLEX OUTLET, 20A, 120VAC - FLOOR	FLOOR	
	FOURPLEX OUTLET, 20A, 120VAC	1' - 6" UNO	
	FOURPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UNO	
	FOURPLEX OUTLET - ISOLATED GROUND	1' - 6" UNO	
	FOURPLEX OUTLET, 20A, 120VAC - CEILING	CEILING	
	FOURPLEX OUTLET, 20A, 120VAC - FLOOR	FLOOR	
	APPLIANCE OUTLET - 208/240V SINGLE PHASE	18" OR 48"	
	APPLIANCE OUTLET - 208/480V 3-PHASE	18" OR 48"	
	DATA OUTLET	1' - 6" UNO	
	TELEPHONE OUTLET	1' - 6" UNO	
	DUAL TELEPHONE/DATA OUTLET	1' - 6" UNO	
	DATA OUTLET - FLOOR	FLOOR	
	DUAL TELEPHONE/DATA OUTLET - FLOOR	FLOOR	
	CEILING DATA OUTLET/ WIRELESS ACCESS POINT	CEILING	
	CABLE TELEVISION OUTLET	1' - 6" UNO	
	JUNCTION BOX	SURFACE	
	WALL JUNCTION BOX	1' - 6" UNO	
	FLOOR JUNCTION BOX	FLOOR	
	DISCONNECT SWITCH - NON-FUSED	5' - 0" UNO	4
	DISCONNECT SWITCH - FUSED	5' - 0" UNO	4
	DISCONNECT SWITCH - SHUNT TRIP	5' - 0" UNO	4
	COMBINATION MAGNETIC STARTER/DISCONNECT	5' - 0" UNO	
	MOTOR STARTER	5' - 0" UNO	
	CONTACTOR	5' - 0" UNO	
	MOTOR	SURFACE	
	METER - PLAN VIEW	WALL	
	PUSH BUTTON SWITCH	4' - 0"	
	EMERGENCY POWER SHUTOFF SWITCH	4' - 0"	
	PANELBOARD - SURFACE MOUNTED	6' - 6" TO TOP	
	PANELBOARD - RECESSED	6' - 6" TO TOP	
	TRANSFORMER - PLAN VIEW	PAD/FLOOR	
	TELEPHONE TERMINAL BOARD	WALL	

ELECTRICAL SHEET INDEX	
E000	ELECTRICAL GENERAL SHEET
E001	ELECTRICAL SITE PLAN
E101	LIGHTING PLAN
E201	POWER PLAN
E501	ELECTRICAL DETAILS
E502	LIGHT FIXTURE MOUNTING HEIGHT DETAILS
E601	ELECTRICAL SCHEDULES
ES001	SITE PHOTOMETRIC

	FIRE ALARM HORN	7' - 6"	
	FIRE ALARM STROBE	7' - 6"	
	FIRE ALARM HORN STROBE	7' - 6"	
	FIRE ALARM GONG	7' - 6"	
	FIRE ALARM DUAL ACTION MANUAL PULL STATION	4' - 0"	
	FIRE ALARM ADDRESSABLE CONTROL RELAY		
	FIRE ALARM MONITOR MODULE		
	FIRE ALARM CONTROL PANEL	6' - 6" TO TOP	
	FIRE ALARM ANNUNCIATOR PANEL	4' - 0"	
	PHOTOELECTRIC SMOKE DETECTOR	SURFACE	
	RATE OF RISE/HEAT DETECTOR	SURFACE	
	CARBON MONOXIDE DETECTOR	SURFACE	
	DUCT SMOKE DETECTOR	DUCT	6
	FIRE SMOKE DAMPER		
	FIRE RISER TAMPER SWITCH		
	FIRE RISER FLOW SWITCH		
	ELECTROMAGNETIC DOOR HOLDER	2' - 0"	
	SECURITY CARD READER	4' - 0"	
	SECURITY KEYPAD	4' - 0"	
	ELECTRIC STRIKE		
	SECURITY CCTV CAMERA		
	SPEAKER - CEILING		
	SPEAKER - WALL		
	MICROPHONE CONNECTION		
	VOLUME CONTROL SWITCH	4' - 0"	
	CIRCUIT BREAKER		METER - ONE-LINE
	MLO PANEL - ONE-LINE		TRANSFORMER - ONE-LINE
	MCB PANEL - ONE-LINE		PAD MOUNT XFMR - ONE-LINE
	AUTOMATIC TRANSFER SWITCH		GROUND SLEEVE - ONE-LINE
	CT ENCLOSURE - ONE-LINE		FUSED DISCONNECT - ONE-LINE
	CURRENT TRANSFORMER		FUSED SWITCH
	OH RISER		GROUND
	KEYED NOTE TAG		CABLEWIRE SIZE TAG
	MECH/ELEC. EQUIPMENT TAG		DETAIL/VIEW NUMBER
	OTHER EQUIPMENT TAG		DETAIL/VIEW REFERENCE TAG
			SHEET NUMBER
	WIRING / CONDUIT		UNDERGROUND/FLOOR WIRING
	CONDUIT TURNED UP		CONDUIT TURNED DOWN
	CIRCUIT HOME RUN TO PANEL: # OF ARROWHEADS INDICATE # OF CIRCUITS (SEPARATE NEUTRAL PER CIRCUIT). BOTH EX. INCLUDE AN EQUIP. GROUND.		
NOTES			
1. SEE LIGHT FIXTURE SCHEDULE FOR TYPE, MOUNTING, AND OTHER SPECIFICS.			
2. CONNECT EMERGENCY AND/OR EXIT LIGHTS TO THE UNSWITCHED SIDE OF THE AREA LIGHTING BRANCH CIRCUIT.			
3. ARROW DENOTES EXIT DIRECTION.			
4. USE HEAVY DUTY FOR 480 VOLT.			
5. MOUNT SWITCH AT DOOR JAM PER MANUFACTURER'S INSTRUCTIONS.			
6. PROVIDE UL LISTED DEVICE TO BE USED WITH THE FIRE ALARM PANEL/SYSTEM OR PROVIDE A MONITOR MODULE TO CONNECT INTO FIRE ALARM SYSTEM.			
7. PROVIDE RACEWAY WITH OUTLETS 12" ON CENTER UNO.			
ABBREVIATIONS			
AFCI - ARC FAULT CKT INTERRUPTER	MCC - MOTOR CONTROL CENTER		
AFF - ABOVE FINISHED FLOOR	MDP - MAIN DISTRIBUTION PANEL		
AFO - ABOVE FINISHED GRADE	MLO - MAIN LUGS ONLY		
AIC - AMPS INTERRUPTING CAPACITY	MOCPP - MAX. OVERCURRENT PROTECTION		
AL - ALUMINUM	(N) - NEW		
ATS - AUTOMATIC TRANSFER SWITCH	NIC - NOT IN CONTRACT		
BC - BARE COPPER	NEC - NATIONAL ELECTRICAL CODE		
BFC - BELOW FINISHED CEILING	NFPA - NATIONAL FIRE PROT. ASSN.		
BFG - BELOW FINISHED GRADE	NL - NIGHT LIGHT		
CKT - CIRCUIT	NR - NOT REQUIRED		
CND, OR C - CONDUIT	NTS - NOT TO SCALE		
CLG - INSTALLED IN CEILING	PC - PLUMBING CONTRACTOR		
C/R - CORD REEL	PH - PHASE		
CT - CURRENT TRANSDUCER	PNL - PANEL		
CJ - COPPER	POC - POINT OF CONNECTION		
(E) - EXISTING TO REMAIN	POS - POINT OF SALE		
EC - ELECTRICAL CONTRACTOR	(R) - RELOCATED		
EM - EMERGENCY	REC - RECEPTACLES		
(F) - FUTURE	RMC - RIGID METAL CONDUIT		
FACP - FIRE ALARM CONTROL PANEL	SCA - SHORT CIRCUIT AMPERES		
FLA - FULL LOAD AMPS	SES - SERVICE ENTRANCE SWITCHGEAR		
FVNR - FULL VOLTAGE NON REVERSING	SPD - SURGE PROTECTIVE DEVICE		
GC - GENERAL CONTRACTOR	TL - TWIST LOCK		
GFCI - GROUND FAULT CKT INTERRUPTER	TTB - TELEPHONE TERMINAL BOARD		
GND - GROUND	TR - TAMPER RESISTANT		
HP - HORSEPOWER	TYP - TYPICAL		
IG - ISOLATED GROUND	UNO - UNLESS NOTED OTHERWISE		
KW - KILOWATTS	VA - VOLTAGES		
LDP - LIGHTING CONTROL PANEL	VIF - VERIFY IN FIELD		
LGT - LIGHTING	VR - VANDAL RESISTANT		
LV - LOW VOLTAGE	WP - WEATHERPROOF/NEMA 3R		
MC - MECHANICAL CONTRACTOR	WU - FURNISHED WITH UNIT		
MCA - MINIMUM CIRCUIT AMPS	XFMR - TRANSFORMER		
MCB - MAIN CIRCUIT BREAKER			

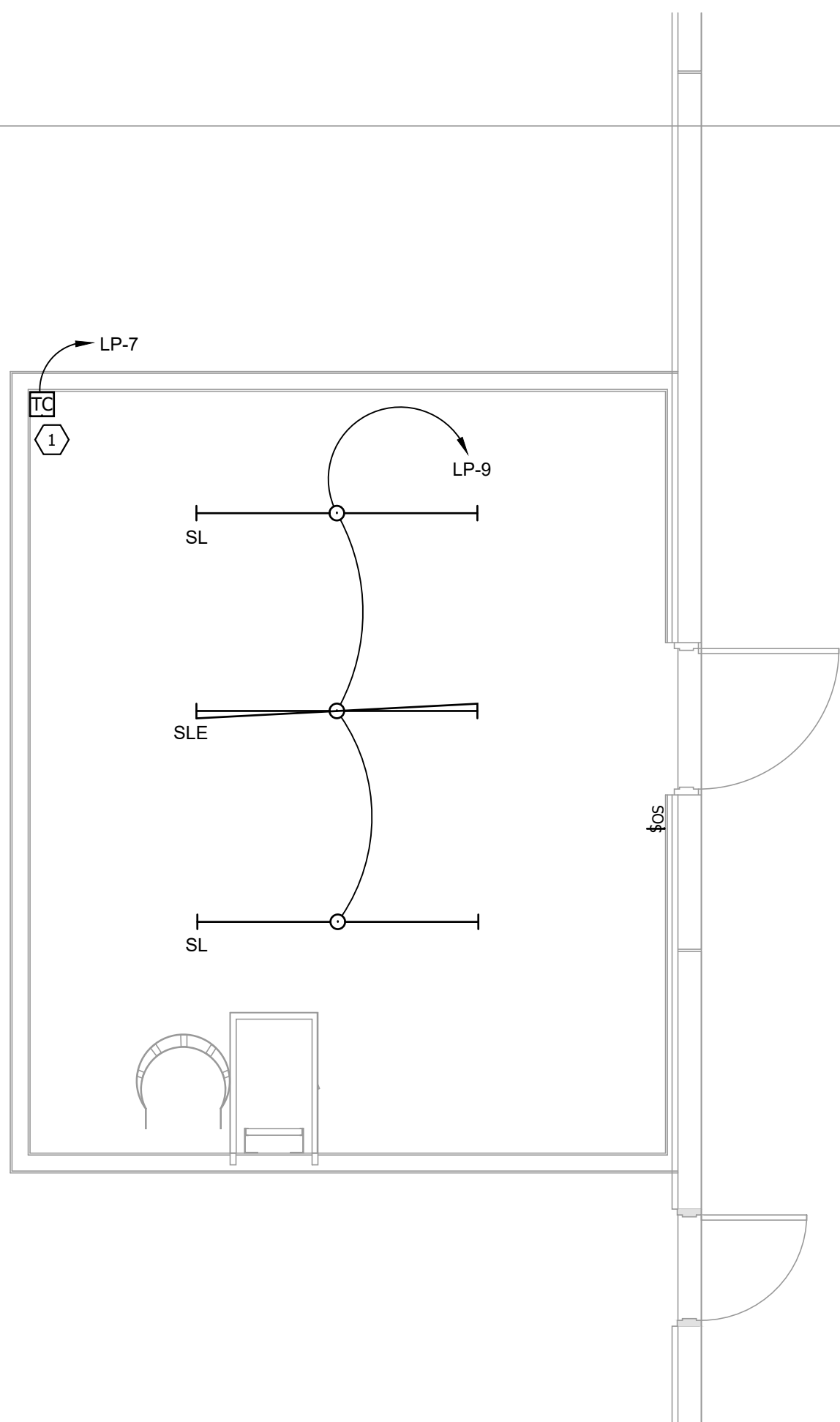
RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	
DESCRIPTION	



1 LIGHTING PLAN
SCALE: 1/32" = 1'-0"

2 ENLARGED FIRE RISER
SCALE: 1/4" = 1'-0"



KEYED NOTES

1. PROVIDE ASTRONOMICAL 2 CIRCUIT TIMECLOCK TORK EWZ201C WITH A 2 POLE 20A CONTACTOR TO CONTROL BUILDING MOUNT LIGHTING ON THE TIME CLOCK CIRCUIT #1 AND THE POLE LIGHTS ON THE TIME CLOCK CIRCUIT #2. COORDINATE EXTERIOR LIGHTING ON/OFF SWITCHING WITH OWNER PRIOR TO PROGRAMMING.

GENERAL NOTES

A. CONNECT ALL EMERGENCY AND EXIT LIGHT FIXTURES TO THE UNSWITCHED SIDE OF THE LIGHTING BRANCH CIRCUIT. LIGHT FIXTURES WITH EMERGENCY DRIVERS SHALL BE NORMALLY SWITCHED WITH THE AREA LIGHTING, BUT HAVE THEIR EMERGENCY DRIVERS CONNECTED AHEAD OF THE LIGHT SWITCH OR LIGHTING CONTROL PANEL RELAY. FIXTURES WILL REMAIN ON FOR NOT LESS THAN 90 MINUTES IN CASE OF POWER LOSS.

B. IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS THAT CONDUIT IS TO BE INSTALLED WITHIN WALLS AND ABOVE CEILINGS CONCEALED WHERE POSSIBLE.

C. COORDINATE MOUNTING HEIGHTS OF ALL PENDANT AND WALL MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS.

D. EC TO CONCEAL ALL FIXTURE DRIVERS IN ACCESSIBLE CEILING SPACE OUT OF DIRECT VIEW.

LTG CTRL SEQUENCE OF OPERATION

LIGHTING AND CONTROLS ARE DESIGNED TO MEET IECC 2016.

TIME CLOCK WILL BE PROGRAMMED TO TURN LIGHTS ON AND OFF FOR HOURS OF OPERATION.

OCCUPANCY SENSOR WILL CONTROL LIGHTING IN FIRE RISER ROOM.

EXTERIOR LIGHTING SHALL BE PROGRAMMED TO TURN ON AT 6 A.M. AND OFF AT MIDNIGHT. PHOTOCELL WILL AUTOMATICALLY TURN LIGHTS OFF WHEN DAYLIGHTING IS PRESENT AND SATISFIES THE LIGHTING NEEDS. (C405.2.6.1 - C405.2.6.3)

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PROFESSIONAL SEAL
DAVID W. STEWARD
No. 7945859-2202
4/25/2022
STATE OF UTAH

RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
MARK	DESCRIPTION

AE2022.290

LIGHTING PLAN

DATE: 04/25/2025

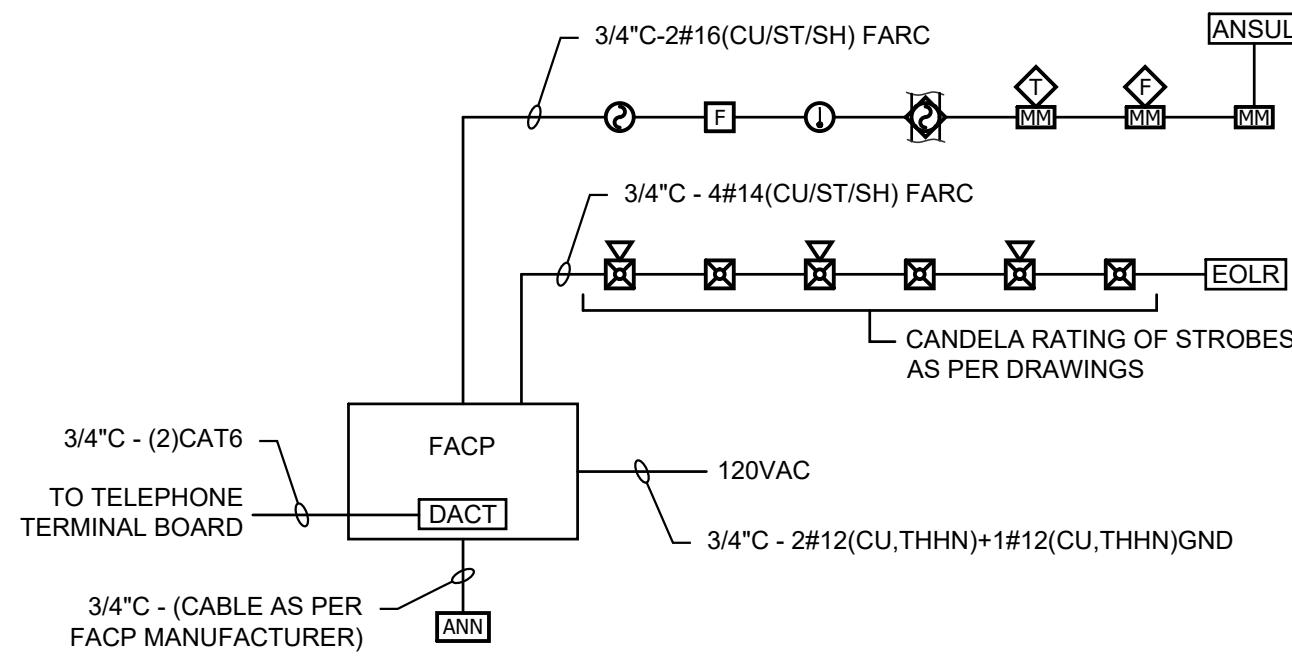
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E101

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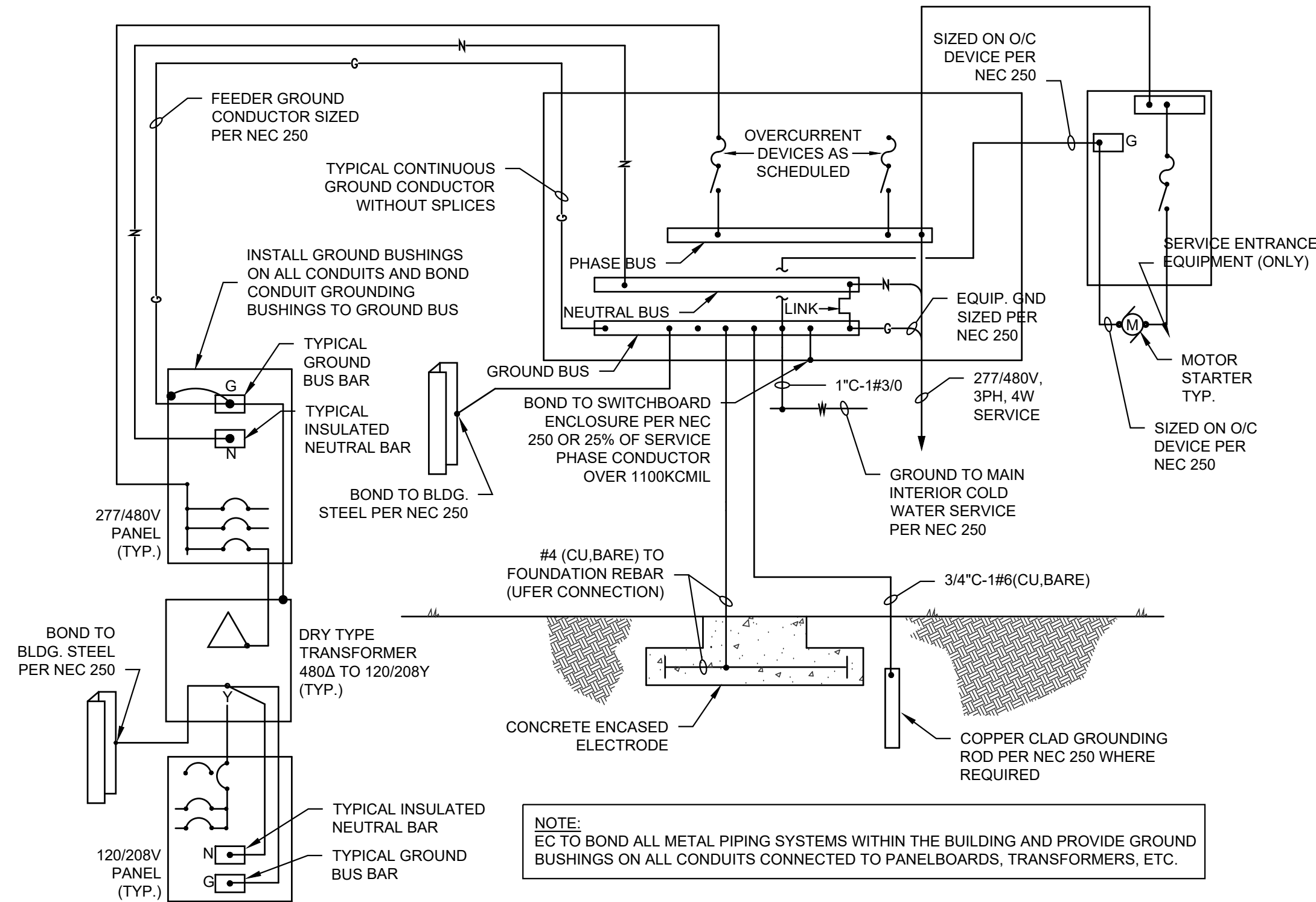


NOTES:

- NOT ALL DEVICES SHOWN IN THIS RISER MAY BE REQUIRED ON THIS PROJECT AND NOT ALL DEVICES PROVIDED BY THIS PROJECT MAY BE SHOWN ON THIS RISER. HOWEVER, ALL REQUIRED DEVICES SHALL BE PROVIDED BY THE CONTRACTOR NECESSARY FOR A COMPLETE AND OPERATIONAL FIRE ALARM SYSTEM AS REQUIRED BY THE APPLICABLE CODES AND THE AUTHORITY HAVING JURISDICTION. WHEN QUESTIONS ARISE CONTACT THE ENGINEER FOR FURTHER CLARIFICATION.
- SLC CIRCUIT IS TO BE CLASS B STYLE 4.5, NAC CIRCUIT TO BE CLASS B STYLE Y. T-TAPPING OF SLC IS NOT ACCEPTABLE.
- FIRE ALARM CONTROL PANEL AND ALL REMOTE FIRE ALARM POWER SUPPLIES ARE TO BE ON A DEDICATED, 20A, 1P LOCKING TYPE CIRCUIT BREAKER LABELED "FIRE ALARM CIRCUIT" WITH RED MARKING PER NFPA-72: 4.4.1.4.2.2.
- RISER DIAGRAM IS FOR DIAGRAMMATIC PURPOSES ONLY. ELECTRICAL CONTRACTOR TO VERIFY EXACT NUMBER OF DEVICES IN PROJECT FROM DRAWINGS, NOT FROM THE RISER DIAGRAM.
- THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL PANEL AND POWER SUPPLIES.
- PROVIDE A SMOKE OR HEAT DETECTOR ABOVE AND WITH IN 5' OF FIRE ALARM CONTROL PANEL AND EVERY REMOTE FIRE ALARM POWER SUPPLY PER NFPA-72: 4.4.5.
- THE LOCATION AND NUMBER OF REQUIRED POWER SUPPLIES SHALL BE AS PER THE MANUFACTURER OF THE FIRE ALARM EQUIPMENT. FIRE ALARM SUB-CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO ENSURE THAT NECESSARY CONDUIT AND WIRE (NOT NECESSARILY SHOWN ON THE DRAWINGS) ARE PROVIDED TO ALL REQUIRED AUXILIARY POWER SUPPLIES.

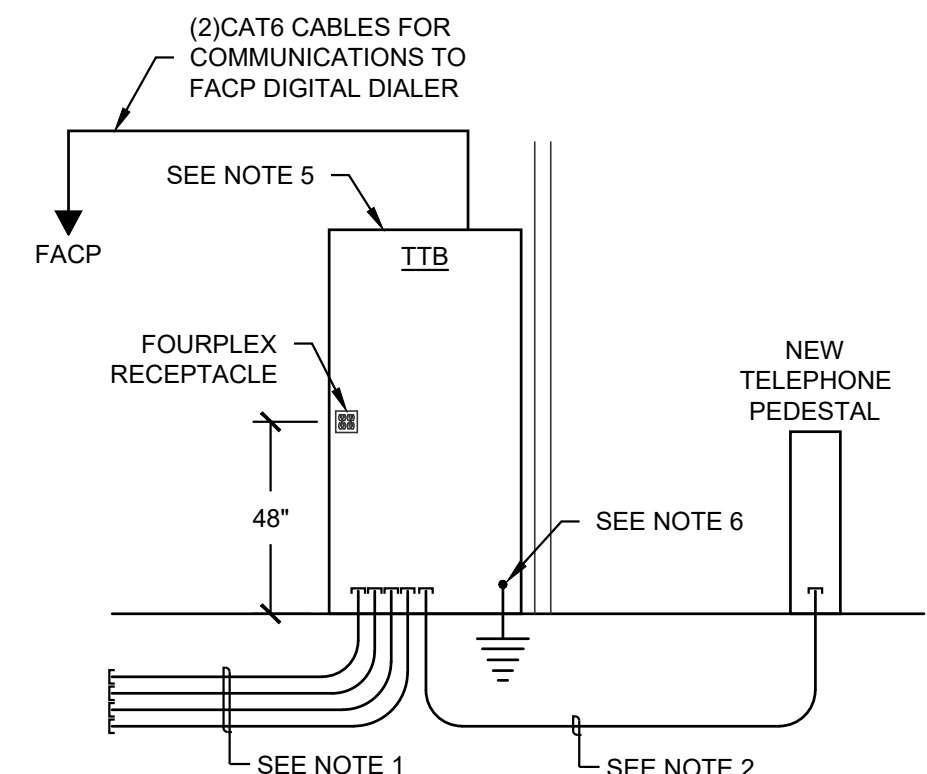
1 TYPICAL FIRE ALARM RISER DIAGRAM

E501 NO SCALE



2 TYPICAL GROUNDING/BONDING DETAIL

E501 NO SCALE



NOTES:

- STUB 2" PVC CONDUIT UNDERGROUND FROM THE TELEPHONE TERMINAL BOARD OUT INTO EACH TENANT SPACE. FUTURE TENANTS SHALL BE RESPONSIBLE FOR EXTENDING FROM THIS LOCATION TO THEIR RESPECTIVE SPACES.
- PROVIDE A 3" PVC-FOOTAGE TAPE FROM THE NEW TELEPHONE PEDESTAL LOCATION TO THE TELEPHONE TERMINAL BOARD FOR TELEPHONE SERVICE. STUB CONDUIT UP UNDERNEATH THE TERMINAL BOARD.
- WHERE ELBOW AND/OR SWEEPS PENETRATE FOUNDATION OR FLOOR SLABS THE CONDUIT SHALL BE GALVANIZED RIGID CONDUIT (GRC) WRAPPED WITH CORROSION RESISTANCE TAP. CONDUITS SHALL BE STUBBED UP THROUGH THE FLOOR TO A HEIGHT OF 6" ABOVE FLOOR LEVEL AND CAPPED WITH PLASTIC BUSHINGS.
- PROVIDE A 4x8x3/4" PLYWOOD BACKBOARD PAINTED WITH FIRE RESISTIVE COATING FOR THE TELEPHONE TERMINAL BOARD (TTB) IN THE BUILDING.
- PROVIDE A #6 GREEN GROUNDING CONDUCTOR FROM THE TTB PLYWOOD BACKBOARD TO THE BUILDING GROUNDING SYSTEM.
- PROVIDE TYPE 66 PUNCHDOWN BLOCKS FOR LANDING ALL INTERIOR BUILDING TELEPHONE CABLES. CONNECTIONS TO THE TELEPHONE SERVICE DEMARC SHALL BE BY TELECOM COMPANY.
- INSTALL TWO DEDICATED TELEPHONE LINE (CAT6) CABLES FROM THE TELEPHONE TERMINAL BOARD TO THE FIRE ALARM DIALER.

3 TYPICAL TELECOM RISER DIAGRAM

E501 NO SCALE

FAULT CURRENT CALCULATIONS

480 Volts	Panel	SES7	HP	H1	H2	H3
Feed From	SES7	SES7	SES7	SES7	SES7	SES7
Available Fault Current	33083	166	13	164	354	31546
(L) Length to panel	53	166	13	164	354	31546
Conduit Type (P.S)	P	P	P	P	P	P
Conductor Size	750	1	250	250	250	250
Conductor Type (c.a)	A	A	A	A	A	A
No of Runs	5	1	2	2	2	2
C - from chart	25976	4678	12862	12862	12862	12862
Voltage	480	480	480	480	480	480
f	0.04871303	4.03926869	0.05752541	0.72570517	1.56646117	0.07436433
m	0.95354971	0.19644149	0.94560376	0.57947326	0.38964159	0.93078295
I s.c. at Panel	31546	6260	29830	18280	12292	

FAULT CURRENT CALCULATIONS

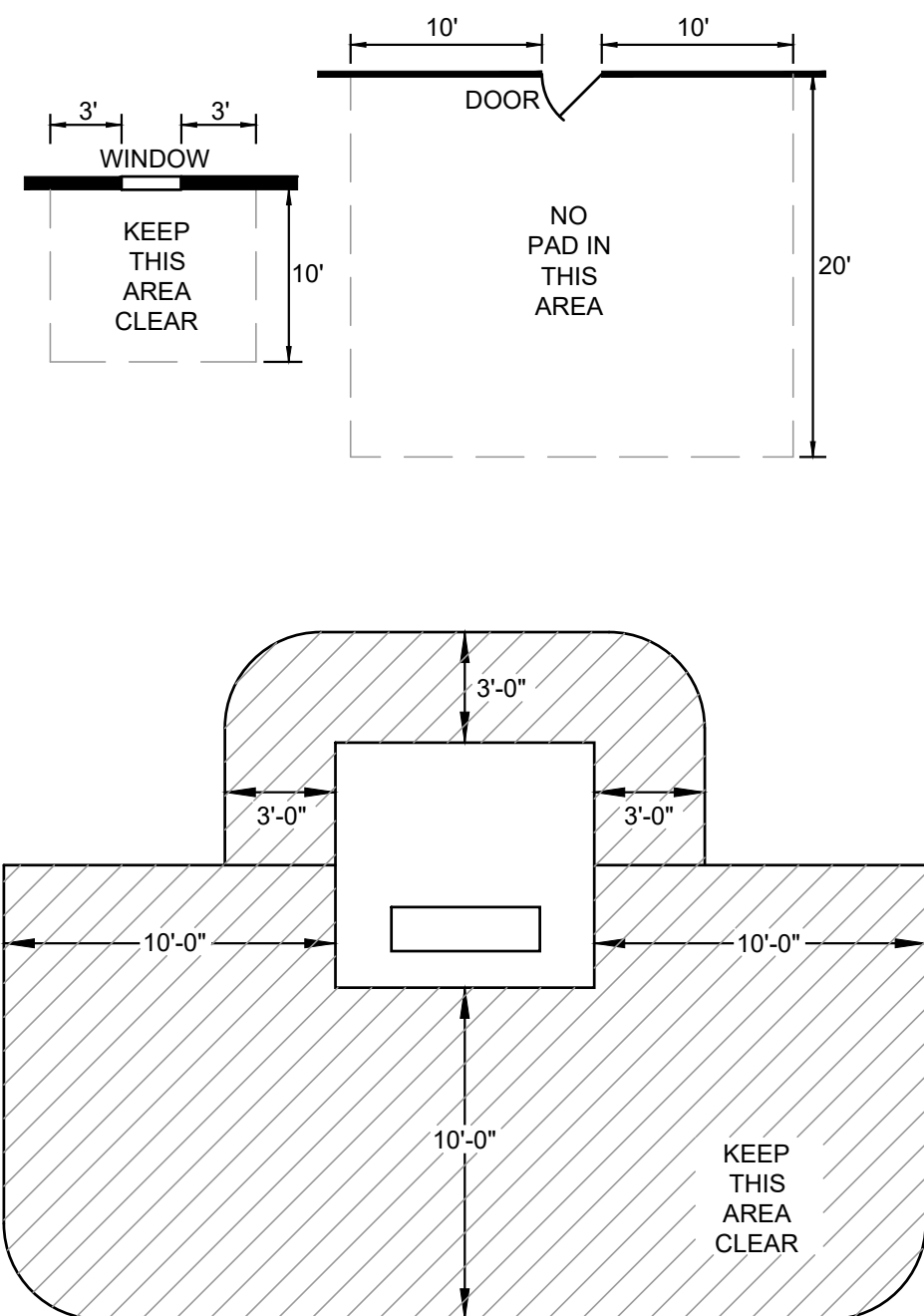
480 Volts	Panel	XFMR H	XFMR T1	XFMR T2	XFMR T3
Feed From	HP	H1	H2	H3	
Available Fault Current	6260	29830	18280	12292	
(L) Length to panel	8	8	8	8	
Conduit Type (P.S)	P	P	P	P	
Conductor Size	6	250	250	250	
Conductor Type (c.a)	C	A	A	A	
No of Runs	1	1	1	1	
C - from chart	2430	12862	12862	12862	
Voltage	480	480	480	480	
f	0.07436433	0.06694858	0.04102649	0.02758739	
m	0.93078295	0.93725229	0.96059035	0.97315324	
I s.c. at Panel	5827	27958	17560	11962	

FAULT CURRENT CALCULATIONS

Transformer	XFMR H	XFMR T1	XFMR T2	XFMR T3
Feed From	HP	H1	H2	H3
I s.c. Primary	5	5827	5	17560
%Z	5	5	5	5
KVA	30	150	150	150
Constant	100000	100000	100000	100000
Primary Voltage	480	480	480	480
Secondary Voltage	208	208	208	208
f	8.07347724	7.74778629	4.86611404	3.31490933
m	0.11021133	0.11431464	0.1704706	0.23175458
I s.c. at secondary	1463	7375	6908	6397

FAULT CURRENT CALCULATIONS

208 Volt	Panel	LP	L1	L2	L3
Feed From	XFMR H	XFMR T1	XFMR T2	XFMR T3	
Available Fault Current	1463	7375	6908	6397	
(L) Length to panel	8	8	8	8	
Conduit Type (P.S)	P	P	P	P	
Conductor Size	1	250	250	250	
Conductor Type (c.a)	C	A	A	A	
No of Runs	1	2	2	2	
C - from chart	7493	12862	12862	12862	
Voltage	208	208	208	208	
f	0.01317485	0.01909966	0.01788866	0.01856708	
m	0.98699647	0.9812583	0.98242572	0.98370291	
I s.c. at Panel	1463	7237	6786	6293	



4 RMP TRANSFORMER PAD VAULT DETAILS

E501 NO SCALE

AVAILABLE FAULT CURRENTS

A 33,083A	E 18,280A	I 6,786A
B 31,546A	F 12,292A	J 6,293A
C 6,260A	G 1,463A	
D 29,830A	H 7,237A	

NOTE:
AS PER NEC 240.87, A MEANS OF ARC ENERGY REDUCTION SHALL BE PROVIDED FOR ANY CIRCUIT BREAKER RATED 1200A OR HIGHER. EC TO PROVIDE REQUIRED PERFORMANCE TESTING FROM AN AGENCY THAT IS APPROVED BY THE BUILDING DEPARTMENT FOR GROUND-FAULT PROTECTION CIRCUIT BREAKERS RATED 1000A OR MORE AS PER NEC 230.95.

CONDUIT/CONDUCTOR SCHEDULE						
MARK	AMPS	CONDUIT	CONDUCTORS (TOTAL)			NOTES
			PHASE	NEUTRAL	GROUND	
[36]	55	1"	CU	(3) 6	-	10 1
[41]	100	2"	CU	(3) 1	-	8 1
[325]	205	2.5"	AL	(3) 250	-	4 1
[2425]	410	(2) 2.5"	AL	(6) 250	(2) 250	(2) 110 1
[2450]	620	(2) 4"	AL	(6) 500	(2) 500	(2) 310 1 & 4
[016]	-	-	AL	-	-	110 2
[66]	-	-	AL	-	-	6 2
[250]	-	-	AL	-	-	250 2
[3]	-	3"	-	-	-	- 3
[66]	-	(6) 6"	-	-	-	- 3

- NOTES:
- CONDUCTOR INSULATIONS TO BE RATED THHN/2THHN 90°C.
 - GROUNDING ELECTRODE CONDUCTOR TO BE BONDED TO ALL AVAILABLE GROUNDING ELECTRODES.
 - CONTRACTOR TO PROVIDE SERVICE LATERAL CONDUIT FROM THE TRANSFORMER TO THE METER. CONDUCTORS ARE TO BE PROVIDED, INSTALLED, AND TERMINATED BY RMP.
 - SIZED FOR VOLTAGE DROP.

5 ONE-LINE DIAGRAM

E501 NO SCALE

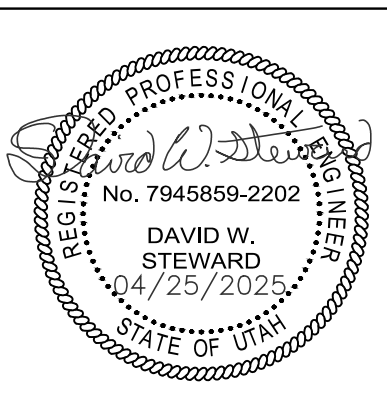
KEYED NOTES

- PROVIDE A NAME PLATE ON EACH ELECTRICAL PANEL AND SERVICE DISCONNECT WITH AVAILABLE FAULT CURRENT AND THE DATE WHICH THE CALCULATIONS WERE PERFORMED (06/06/24) PER NEC 110.24.

GENERAL NOTES

- COORDINATE MOUNTING HEIGHTS OF ALL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND MILL WORK CONTRACTOR PRIOR TO ROUGH IN.
- VERIFY AND COORDINATE EXACT ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLATION OF EQUIPMENT.

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RODERICK CATALYST BUILDING #7
68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision Schedule	Revision Date
DESCRIPTION	
MARK	

AE0202.290

ELECTRICAL
DETAILS

DATE: 04/25/2025

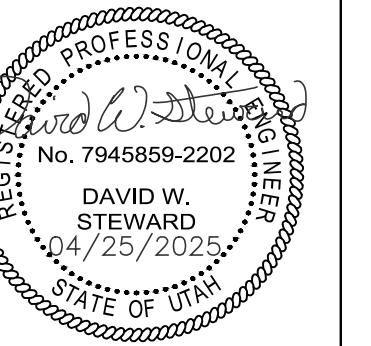
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E501

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ROCKY MOUNTAIN
CONSULTING ENGINEERS, INC.
2332 West 12600 South Suite F, Riverton, UT 84065
(801) 566-0503 www.rmceut.com Project #24191

CONSTRUCTION DOCUMENTS / BID SET



MARK	DESCRIPTION	Revision Date
------	-------------	---------------

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LIGHT FIXTURE SCHEDULE								
TYPE	MANUFACTURER	CATALOG NO.	VOLTAGE	LAMPING	CONTROL	MOUNTING	LOAD(VA)	DESCRIPTION
DL	COOPER	HO6150010-HM60526840-61WDB8	UNV	LED 1500 LUMENS 4000K	0-10V	RECESSED	15	6" LED DOWNLIGHT W/ BLACK BAFFLE
DLE	SAME AS "DL" WITH EMERGENCY BATTERY BACKUP							
SL	COOPER	4WNLED-LD4-S0SL-F-UNV-L840-CD1-U	UNV	LED 5000 LUMENS 4000K	0-10V	SUSPENDED	42.4	4" LED WRAP AROUND WITH SUSPENSION KIT @ 9' AFF
SLE	SAME AS "SL" WITH EMERGENCY BATTERY BACKUP							
OW	RAB LIGHTING	WFLPD 104 SCBA	UNV	LED 14,159 LUMENS 5000K	-	WALL	108	LED WALL PACK WITH A 15 DEGREE CUTOFF FIXTURE TO BE PAINTED BY PAINTER
PL	MCGRAW EDISON	GLEON-SASC-750-U-T4W	UNV	LED 21,442 LUMENS 5000K	0-10V	POLE	168	LED SINGLE HEAD POLE LIGHT WITH MOTION SENSOR FOR DIMMING WITH POLE FOR 20' OFF MOUNTING - SEE POLE BASE DETAIL
OWE	EVENLITE	WLEM B2 CT	UNV	LED 10500 LUMENS 5000K	0-10V	WALL	15	EXTERIOR EGRESS WITH BATTERY BACKUP AND COLD WEATHER RATED @ 8' AFF
EMX	EVENLITE	TCXCOM-G-U-W	UNV	LED	-	WALL	5	THERMOPLASTIC EXIT SIGN WITH LED LAMP HEAD - 1 FC AVG OVER 24" DISTANCE AT 7.5' MOUNTING HEIGHT
NOTES: 1. ALL LIGHT FIXTURES SHOWN HALF SHADED SHALL BE PROVIDED WITH AN EMERGENCY BATTERY PACK CAPABLE OF PROVIDING 90 MIN. OF EGRESS ILLUMINATION. 2. ALL LIGHTING VALUE ENGINEERING PROVIDED FOR THIS PROJECT SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER FOR REVIEW AND APPROVAL AFTER THE PROJECT HAS BEEN BID AND AWARDED. ANY CREDITS FOR VE SHALL INCLUDE TIME TO COMPENSATE OUR OFFICE FOR ENGINEERING REVIEW AND VERIFICATION OF BRANCH CIRCUIT LOADING AND/OR ENERGY CODE COMPLIANCE. NO VE SUBMITTALS WILL BE APPROVED WITHOUT THIS PROCESS IN PLACE. VE SUBMITTALS SHALL INCLUDE PHOTOMETRIC ANALYSIS TO ENSURE NEW LIGHT FIXTURES PROVIDE COMPARABLE LIGHT LEVELS TO THOSE ORIGINALLY DESIGNED. 3. PRIOR APPROVALS SHALL BE SUBMITTED TO OUR OFFICE NO LESS THAN 5 BUSINESS DAYS OF THE PROJECT BID DATE. ANYTHING SUBMITTED AFTER THIS TIME FRAME WILL NOT BE REVIEWED AND WILL BE CONSIDERED NON-APPROVED FOR BIDDING PURPOSES. ALL LIABILITY ASSOCIATED WITH NON-APPROVED FIXTURES THAT DO NOT MEET THE PROJECT REQUIREMENTS WILL REST SOLELY WITH THE CONTRACTOR. 4. FIXTURES TO MATCH OTHER BUILDINGS. NO EXCEPTIONS.								

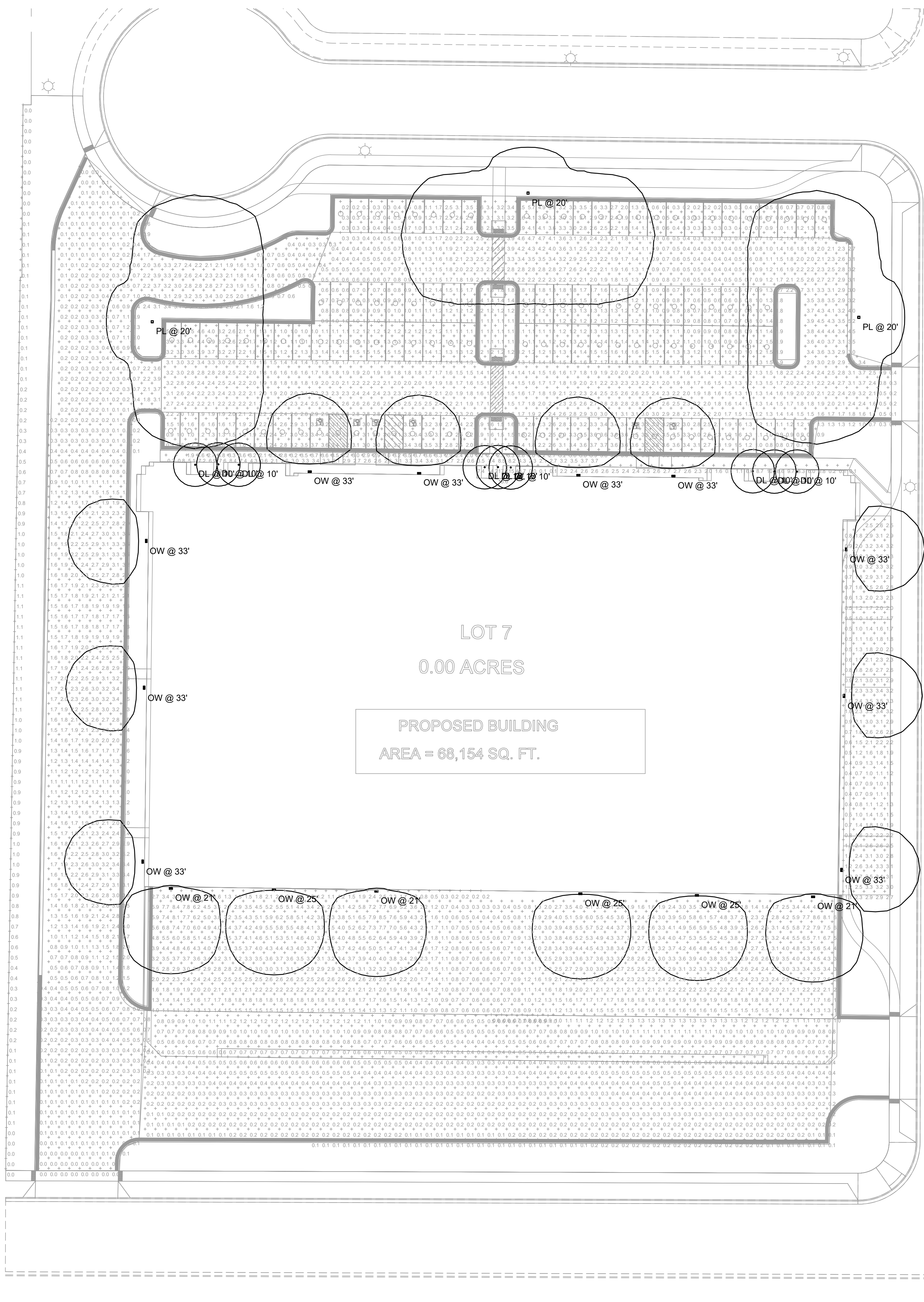
PANEL SCHEDULE				H3 (OWNER PROVIDED)												
VOLT/PHASE/WIRE: 277/480V/3PH/4W				AIC RATING: 15,000				AIC		MAIN BREAKER: 400A						
MOUNT/ENCLOSURE: SURFACE/NEMA 1				LOCATION:						MAIN LUGS:						
Q	CT	DESCRIPTION	LOAD	AMPS	POLES	A	B	C	POLES	AMPS	LOAD	DESCRIPTION	Q	CT		
1	SPARE	0	20	1	0			1	20	0	SPARE		1	SPARE		
3	SPARE	0	20	1	0			1	20	0	SPARE		3	SPARE		
5	SPARE	0	20	1	0			0	1	20	0	SPARE		5	SPARE	
7	SPARE	0	20	1	0			0	1	20	0	SPARE		7	SPARE	
9	SPARE	0	20	1	0			0	1	20	0	SPARE		9	SPARE	
11	SPARE	0	20	1	0			0	1	20	0	SPARE		11	SPARE	
13	SPARE	0	20	1	0			0	1	20	0	SPARE		13	SPARE	
15	SPARE	0	20	1	0			0	1	20	0	SPARE		15	SPARE	
17	SPARE	0	20	1	0			0	1	20	0	SPARE		17	SPARE	
19	SPARE	0	20	1	0			0	1	20	0	SPARE		19	SPARE	
21	SPARE	0	20	1	0			0	1	20	0	SPARE		21	SPARE	
23	SPARE	0	20	1	0			0	1	20	0	SPARE		23	SPARE	
25	SPARE	0	20	1	0			0	1	20	0	SPARE		25	SPARE	
27	SPARE	0	20	1	0			0	1	20	0	SPARE		27	SPARE	
29	SPARE	0	20	1	0			0	1	20	0	SPARE		29	SPARE	
31	SPARE	0	20	1	0			0	1	20	0	SPARE		31	SPARE	
33	SPARE	0	20	1	0			0	1	20	0	SPARE		33	SPARE	
35	SPARE	0	20	1	0			0	1	20	0	SPARE		35	SPARE	
37	SPARE	0	20	1	1260			3	200	1260		MPFR TO PANEL L3		37	SPARE	
39	SPARE	0	20	1			1596					*****		39	SPARE	
41	SPARE	0	20	1				696	-	-	696	*****		41	SPARE	
TOTALS						1,260	1,596	696								
TOTAL LOAD:		3,552														
LOADS						DEMAND FACTOR/CALCULATION						DEMAND LOAD				
EXISTING		0		CONTINUOUS		0 125% x 0						0				
LIGHTING		0		NON-CONTINUOUS		0 125% x 0 + 100% x 0						0				
RECEPTACLE		0				360 100% x 360 + 50% x 0						360				
MOTOR		0				0 125% x 0 + 100% x 0						0				
FIXED HEAT		0				3,192 100% x 3192						3192				
A/C		0				0 100% x 0						0				
KITCHEN EQUIP.		0				0 100 % x 0						0				
MISC		0				0 125% x 0 + 100% x 0						0				

PANEL SCHEDULE														L1 (OWNER PROVIDED)																			
VOLT/PHASE/WIRE: 120/208V/3PH/4W														AIC RATING: 10,000										MAIN BREAKER: 400A									
MOUNT/ENCLOSURE: SURFACE/NEMA 1														LOCATION:										MAIN LUGS:									
Q	CT	Q	CT	DESCRIPTION	LOAD	AMPS	POLES	A	B	C	POLES	AMPS	LOAD	DESCRIPTION	Q	CT	Q	CT															
1	REC- NEAR PANEL	0	360	20	1	1260					1	20	0	UNIT HEATER (UH-1)	2	4	1	4															
3	UNIT HEATER (UH-1)	696	20	1	1596						1	20	0	UNIT HEATER (UH-1)	3	6	1	6															
5	UNIT HEATER (UH-1)	696	20	1	0					696	1	20	0	SPARE	4	4	1	4															
7	SPARE	0	20	1	0						1	20	0	SPARE	8	8	1	8															
9	SPARE	0	20	1	0			0			1	20	0	SPARE	10	10	1	10															
11	SPARE	0	20	1	0					0	1	20	0	SPARE	12	12	1	12															
13	SPARE	0	20	1	0						1	20	0	SPARE	14	14	1	14															
15	SPARE	0	20	1	0			0			1	20	0	SPARE	16	16	1	16															
17	SPARE	0	20	1	0						1	20	0	SPARE	18	18	1	18															
19	SPARE	0	20	1	0						1	20	0	SPARE	20	20	1	20															
21	SPARE	0	20	1	0			0			1	20	0	SPARE	22	22	1	22															
23	SPARE	0	20	1	0						1	20	0	SPARE	24	24	1	24															
25	SPARE	0	20	1	0					0	1	20	0	SPARE	26	26	1	26															
27	SPARE	0	20	1	0			0			1	20	0	SPARE	28	28	1	28															
29	SPARE	0	20	1	0					0	1	20	0	SPARE	30	30	1	30															
31	SPARE	0	20	1	0						1	20	0	SPARE	32	32	1	32															
33	SPARE	0	20	1	0						1	20	0	SPARE	34	34	1	34															
35	SPARE	0	20	1	0					0	1	20	0	SPARE	36	36	1	36															
37	SPARE	0	20	1	0						1	20	0	SPARE	38	38	1	38															
39	SPARE	0	20	1	0						1	20	0	SPARE	40	40	1	40															
41	SPARE	0	20	1	0					0	1	20	0	SPARE	42	42	1	42															
TOTALS								1,260	1,596	696																							
TOTAL LOAD:					3,552																												
LOADS					CONTINUOUS					NON-CONTINUOUS					DEMAND FACTOR/CALCULATION					DEMAND LOAD													
EXISTING					0	0					125% x					0					0												
LIGHTING					0	0					125% x					+ 100% x					0	0											
RECEPTACLE					0	360					100% x					360	+ 50% x					0	360										
MOTOR					0	0					125% x					+ 100% x					0	0											
FIXED HEAT					0	3,192					100% x					3192																	
A/C					0	0					100% x					0					5192												
KITCHEN EQUIP.					0	0					100 % x					0					0												
MISC					0	0					125% x										0												
															TOTAL DEMAND LOAD:					3,552 VA													
																				10 A													
PANEL NOTES:																																	
ALL OVERCURRENT PROTECTION DEVICES SHALL HAVE THE SAME AIC RATING AS THE EQUIPMENT THEY ARE LOCATED IN.																																	

PANEL SCHEDULE					HP														
VOLT/PHASE/WIRE: 277/480V/3PH/4W					AIC RATING: 15,000					AIC					MAIN BREAKER: 100A				
MOUNT/ENCLOSURE: SURFACE/NEMA 1					LOCATION:					MAIN LUGS:									
Q	CT	DESCRIPTION	LOAD	AMPS	POLES	A	B	C	POLES	AMPS	LOAD	DESCRIPTION	Q	CT					
1	SPARE		0	20	1	3333			3	20	3333	UNIT HEATER (UH-2)							
3	LTG - OWIE W, N, E		105	20	1		3438			-	3333								
5	LTG - BMK		80	20	1			3413	-	-	3333								
7	LTG - POLES		500	20	1	3833			3	20	3333	UNIT HEATER (UH-2)							
9	LTG - SITE 1		893	20	1		4226		-	-	3333			8					
11	LTG - SITE 2		850	20	1			4183	-	-	3333			12					
13	SPARE		0	20	1	0			1	20	0	SPARE		14					
15	SPARE		0	20	1	0			1	20	0	SPARE		16					
17	SPARE		0	20	1			0	1	20	0	SPARE		18					
19	SPARE		0	20	1	0			1	20	0	SPARE		20					
21	SPARE		0	20	1		0		1	20	0	SPARE		22					
23	SPARE		0	20	1			0	1	20	0	SPARE		24					
25	SPARE		0	20	1	0			1	20	0	SPARE		26					
27	SPARE		0	20	1		0		1	20	0	SPARE		28					
29	SPARE		0	20	1			0	1	20	0	SPARE		30					
31	SPARE		0	20	1	0			1	20	0	SPARE		32					
33	SPARE		0	20	1		0		1	20	0	SPARE		34					
35	SPARE		0	20	1			0	1	20	0	SPARE		36					
37	SPARE		0	20	1	1500			3	50	1500	KFMR TO PANEL LP		38					
39	SPARE		0	20	1		488				488			40					
41	SPARE		0	20	1				360	-	-	360		42					
TOTALS							8,666	8,152	7,956										
TOTAL LOAD: 24,724																			
LOADS		CONTINUOUS	NON-CONTINUOUS		DEMAND FACTOR/CALCULATION						DEMAND LOAD								
EXISTING	0	0	125% x 0		0						0								
LIGHTING	500	2,556	125% x 500		+ 100% x 2556						3,181								
RECEPTACLE	0	729	100% x 729		+ 50% x 0						729								
MOTOR	0	0	125% x 0		+ 100% x 0						0								
FIXED HEAT	0	19,998	100% x 19998								19998								
A/C	0	0	100% x 0								0								
KITCHEN EQUIP.	0	0	100 % x 0								0								
MISC.	0	1,000	125% x 0		+ 100% x 1000						1,000								
TOTAL DEMAND LOAD:												24,899 VA							
												30 A							
PANEL NOTES:																			
ALL OVERCURRENT PROTECTION DEVICES SHALL HAVE THE SAME AIC RATINGS AS THE EQUIPMENT THEY ARE LOCATED IN.																			

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Drive	+	1.2 ft.	4.9 ft.	0.0 ft.	N/A	N/A
Front	+	1.9 ft.	3.5 ft.	0.4 ft.	8.1 ft.	4.8 ft.
Parking Lot	+	1.8 ft.	5.7 ft.	0.1 ft.	57.0 ft.	18.6 ft.
Receiving	+	2.9 ft.	8.6 ft.	0.2 ft.	43.0 ft.	14.0 ft.
Utility	+	4.2 ft.	17.7 ft.	0.0 ft.	N/A	N/A
Western Prop. Line	+	0.5 ft.	1.1 ft.	0.0 ft.	N/A	N/A
Back Drive	+	0.4 ft.	1.2 ft.	0.1 ft.	12.0 ft.	4.0 ft.

Schedule									
Symbol	Label	QTY	Manufacturer	Description	Number Lamps	Lamp Output	Catalog	LLF	Input Power
	PL	3	COOPER LIGHTING SOLUTIONS - MCGRAW-EDISON (FORMERLY EATON)	GALLEON AREA AND ROADWAY LUMINAIRE (3) TO CIR. 500W, 1050W LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS	48	376	GLEON-AF-03-LED-E1-T4W-7050	0.9	166
	OW	16	RAB LIGHTING INC.	WPLED104	1	14159		0.9	108.41
	DL	9	COOPER LIGHTING SOLUTIONS - HALO COMMERCIAL (FORMERLY EATON)	HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM	1	1475	HCE1SD010-HM05284-61WYDB	0.9	14



Plan View

Project	Catalog #	Type
Prepared By	Notes	Date



McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Product Features

Product Certifications

Connected Systems

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 5

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 LPW
- Options to meet Buy American and other domestic preference requirements

Dimensional Details

Number of Luminaire	W" Width	H" Mounting Arm Length	D" Exhaust Arm Length	W" Overall Luminaire	H" Overall Luminaire	D" Overall Luminaire
1-4	15-1/2"	7"	10"	10-5/8"	--	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	--	16-9/16"
7-8	27-5/8"	7"	12"	10-5/8"	10-5/16"	--
9-10	33-3/4"	7"	16"	--	10-5/16"	--



Page 1 of 1

WPLED104W

RAB

LED 104W Wai pads, 3 control points, color, pinning thermal management system, waterproof and IP68, 5 year, 100,000 hours life expectancy

Color Temp:

Input: 27.1 kw

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.8A
208V	0.39A
240V	0.31A
277V	0.44A
Input Watts	107.5W

LED Info

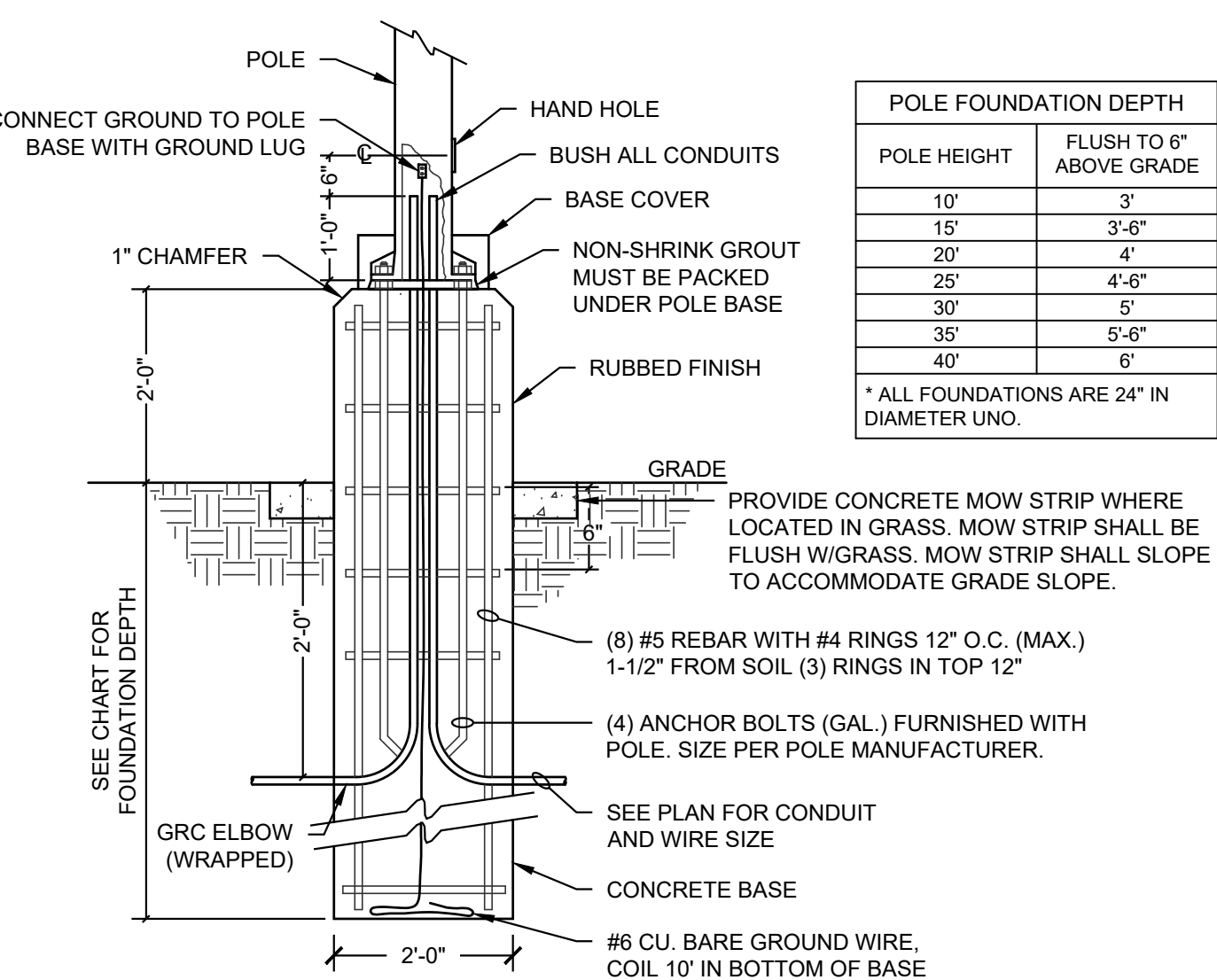
Watts	104W
Color Temp	5000K (Cool)
Color Accuracy	71 CRI
L70 lifespan	100,000 Hours
Lumens	14,159 lm
Efficacy	131.7

Technical Specifications

Compliance UL Listed UL Suitable for Wet Locations as Light and Downlight Wall Mount Only	Color Stability: LED color temperature is warranted to shift no more than 2000K in color temperature over 50 year period	Performance Lifespan: 100,000-hour L70 lifespan based on IES LM-80 results and TM-21 calculations
IP Rating: Ingress protection rating of IP66 for dust and water	Color Uniformity: RAB's range of Combined Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SLS) Products, ANSI C78.377-2011.	Wattage Equivalency: Equivalent to 400W Metal Halide
IESNA LM-79 & LM-80 Testing: RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.	Electrical Driver: Constant current, Class 1, 120-277V, 50/60 Hz, 48V Surge Protection, 120V-277V, 208V-240V, 240V-0, 0-1A, 277V-0.44A	Construction Maximum Ambient Temperature: Suitable for use up to 40°C (104°F)
DLC Listed: This product is listed for Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebate from DLC Member Utilities. Designed to meet DLC S1 requirements. DLC Product Code: P00007766	Dimming Driver: Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.	Housing: Precision die-cast aluminum housing, door frame arm and wall bracket
LED Characteristics LEDs: Four multi-chip, high-output, long-life LEDs	THD: 1.22% at 120V, 7.6% at 277V	Arm: Die-cast aluminum with wiring access plate
Color Consistency: 7-step MacAdam Ellipse binning to achieve consistent future-to-future color	Power Factor: 99.7% at 120V, 92.4% at 277V	Canof: Standard (5°)
		Lens: Tempered glass
		Reflector: Specular vacuum metallized polycarbonate
		Gaskets: High temperature silicone

Need Help? Tech Help Line: (888) 722-1000 Email: techsupport@rablighting.com Website: www.rablighting.com
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Page 1 of 3



2 LIGHT POLE BASE DETAIL

ES001 NO SCALE



RODERICK CATALYST BUILDING #7

68 EAST 1600 SOUTH, AMERICAN FORK, UTAH 84003

Revision	Schedule	Revision Date
MARK	DESCRIPTION	

AE0202.290

SITE PHOTOMETRIC

DATE: 04/25/2025

SHEET #:

ES001

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