

GENERAL

1. THESE NOTES SERVE AS PART OF THE SPECIFICATIONS FOR THE WORK AND SERVE AS THE BASIS OF WORK UNLESS A MORE STRINGENT REQUIREMENT IS SET FORTH IN THE PROJECT SPECIFICATIONS MANUAL OR AS REQUIRED BY APPLICABLE CODE REQUIREMENTS.
2. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE BUILDING CODE OF PENNSYLVANIA, 2021 EDITION, BASED ON THE INTERNATIONAL BUILDING CODE, 2021 EDITION, AND IN ACCORDANCE WITH LOCAL BUILDING CODE DEPARTMENT REQUIREMENTS. ALL DESIGN AND CONSTRUCTION CODES AND STANDARDS REFER TO THE EDITION REFERENCED BY THE GOVERNING BUILDING CODE.
3. DESIGN CRITERIA:
- A. LIVE LOADS
- a. ROOF LIVE LOAD 20 PSF, TYPICAL
- b. FLOOR LIVE LOAD (SLAB-ON-GRADE) 100 PSF, TYPICAL
- c. MECHANICAL AND ELECTRICAL (SLAB-ON-GRADE) 125 PSF
- d. STORAGE, LIGHT (SLAB-ON-GRADE) 125 PSF
- e. BLEACHERS 100 PSF; REFER TO SPECIFICATIONS FOR ADDITIONAL LOADING REQUIREMENTS
- f. MAINTENANCE BAY (SLAB-ON-GRADE) 250 PSF
- g. PEMB MEZZANINE (BY PEMB SUPPLIER) 100 PSF
- B. ROOF SNOW DESIGN DATA
- a. GROUND SNOW LOAD $p_g = 30$ PSF
- b. SNOW EXPOSURE FACTOR $C_e = 1.0$
- c. SNOW LOAD IMPORTANCE FACTOR $I_s = 1.0$
- d. MINIMUM ROOF SNOW LOAD $p_n = 2.0$ PSF
- e. UNHEATED ROOFS AND OPEN AIR STRUCTURES (BLEACHERS AND FREE ROOFS):
- THERMAL FACTOR $C_t = 1.2$
- f. FLAT-ROOF SNOW LOAD $p_f = 25.2$ PSF
- g. ENCLOSED BUILDINGS WITH VENTILATED ROOFS WITH THERMAL RESISTANCE, $R > 25$ BETWEEN VENTILATED AND HEATED SPACE:
- THERMAL FACTOR $C_t = 1.1$
- h. FLAT-ROOF SNOW LOAD $p_f = 25.1$ PSF
- i. LOCALIZED UNBALANCED, DRIFT, AND SLIDING SNOW LOADS PER ASCE 7.
- C. WIND DESIGN DATA
- a. ULTIMATE DESIGN WIND SPEED $V_{ult} = 115$ MPH
- b. NOMINAL DESIGN WIND SPEED $V_{nom} = 90$ MPH
- c. RISK CATEGORY II
- d. WIND EXPOSURE C
- e. INTERNAL PRESSURE COEFFICIENT ± 0.18 TYPICAL
- f. COMPONENTS AND CLADDING VARIES, BY SUPPLIER, PER IBC BASED ON LOCATION AND AREA WITH DESIGN DATA INDICATED
- D. SEISMIC DESIGN DATA
- a. SEISMIC RISK CATEGORY II
- b. SEISMIC IMPORTANCE FACTOR $I_e = 1.0$
- c. SEISMIC SITE CLASS C
- d. SPECTRAL RESPONSE COEFFICIENTS $S_a = 0.192g$ $S_{a1} = 0.166g$
 $S_1 = 0.048g$ $S_{01} = 0.048g$
- e. SEISMIC DESIGN CATEGORY A
- E. GEOTECHNICAL INFORMATION
- a. DESIGN NET ALLOWABLE BEARING CAPACITY FOR FOUNDATIONS 2500 PSF
- b. FROST DEPTH 3.0 FEET
- c. REFER TO FOUNDATIONS & EXCAVATIONS NOTES FOR ADDITIONAL INFORMATION.
4. ALL SAFETY REGULATIONS, METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
5. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION ANALYSIS AND ERECTION PROCEDURES INCLUDING CONSTRUCTION LOADINGS AND DESIGN AND ERECTION OF FALSEWORK, TEMPORARY BRACING, JACKING, AND ALL OTHER ERECTION AND SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED, FURNISHED, AND INSTALLED BY THE GENERAL CONTRACTOR.
6. THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, THE SIZE AND LOCATION OF ALL SLEEVES, PADS, DEPRESSIONS, OPENINGS, ETC., AS REQUIRED BY THE VARIOUS TRADES. ANY DISCREPANCIES OR VARIATIONS FROM THE CONDITIONS SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING. SLEEVES, INSERTS AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE COORDINATED BY THE GENERAL CONTRACTOR AT LOCATIONS DESIGNED BY AND UNDER THE SUPERVISION OF A REPRESENTATIVE OF EACH TRADE.
7. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS FOR LOCATIONS, QUANTITY TAKEOFFS, MATERIAL SIZES, ETC. IF THERE IS ANY QUESTION ABOUT DETAILS OR DIMENSIONS, CONTACT THE ARCHITECT FOR CLARIFICATION.
8. IF ANY BIDDER IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE DOCUMENTS, THEY SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT IN WRITING.

SUBMITTALS

1. THE CONTRACT DOCUMENTS ARE THE STRUCTURAL ENGINEER'S INSTRUMENTS OF SERVICE TO CONVEY DESIGN INTENT. THEY ARE NOT TO BE CONSIDERED FABRICATION OR LAYOUT DRAWINGS. SUBMITTALS THAT ARE COPIED FROM THE STRUCTURAL DRAWINGS WILL NOT BE REVIEWED OR RETURNED. SUBMITTAL REVIEW BY ENGINEER OF RECORD IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.
2. THE FOLLOWING ARE REQUIRED SUBMITTALS:
- A. CONCRETE MIX DESIGN(S)
- B. REINFORCING BAR DRAWINGS
- C. MASONRY MATERIAL CERTIFICATES, ACCESSORIES, AND GROUT MIX DESIGN
- D. STRUCTURAL STEEL
- E. ENGINEERED LUMBER PRODUCT DATA (APA-RATED SHEATHING, TJI, PSJ, LVL, AND SIMILAR)
- F. WOOD CONNECTOR AND ACCESSORIES PRODUCT DATA (INCLUDING BUT NOT LIMITED TO JOIST HANGERS AND HOLD-DOWNS)
- G. PRE-ENGINEERED WOOD ROOF TRUSSES
- H. DELEGATED DESIGN OF BLEACHER SYSTEM INCLUDING SUPPORT STRUCTURE, LATERAL FORCE RESISTING SYSTEM, AND FOUNDATIONS.
- I. (ALTERNATE A-1) - INDOOR PRACTICE FACILITY PRE-ENGINEERED BUILDING FRAME, INCLUDING ALL STRUCTURE ABOVE TOP OF FOUNDATIONS.
- J. STAIRS AND RAILINGS (INCLUDING BUT NOT LIMITED TO CALCULATIONS AND SHOP DRAWINGS)
- K. OTHER SUBMITTALS AS NOTED ON THE DRAWINGS AND SPECIFICATIONS.
3. SHOP DRAWINGS SHALL INCLUDE COMPLETE DETAILS AND SCHEDULES FOR FABRICATION AND ASSEMBLY OF MEMBERS, ACCESSORIES AND PROCEDURES AS REQUIRED TO CONSTRUCT PER THE CONTRACT DOCUMENTS.
4. FOR REVIEW OF EACH SUBMITTAL, THE SCHEDULE SHALL ALLOW FOR TEN BUSINESS DAYS (FOURTEEN CALENDAR DAYS) FOLLOWING ENGINEER'S RECEIPT.
5. THE CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT SUBMITTALS COMPLY WITH THE LATEST PROJECT PLANS SPECIFICATIONS, GOVERNING CODES AND REGULATIONS, AND IS SOLELY RESPONSIBLE FOR CONFIRMING ALL QUANTITIES, DIMENSIONS, FABRICATION TECHNIQUES AND COORDINATING WORK WITH OTHER TRADES. SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE ENGINEER AND SHALL BEAR THE CONTRACTOR'S STAMP ATTESTING TO THE SAME. DRAWINGS NOT STAMPED WILL NOT BE REVIEWED. SUBCONTRACTOR'S UNCHECKED SUBMITTAL DRAWINGS WILL NOT BE REVIEWED.
6. SUBMITTALS SHALL BE SUPPLIED ELECTRONICALLY (PDF OR TIFF FORMAT) FOR THE STRUCTURAL ENGINEER'S REVIEW. SUBMITTALS WILL BE RETURNED IN ELECTRONIC FORMAT. PAPER COPIES OR FAX COPIES OF SUBMITTALS WILL NOT BE ACCEPTED WITHOUT THE ENGINEER'S PRIOR APPROVAL. SUBMITTALS ARE TO BE ACCOMPANIED BY A LETTER OF TRANSMITTAL.
7. SUBMITTALS NOT TO SCALE MAY BE RETURNED WITHOUT REVIEW, AT THE ENGINEER'S DISCRETION.
8. SUBMITTALS MADE AFTER FABRICATION WILL NOT BE REVIEWED.
9. ANY DEVIATION IN DESIGN, DETAILS, DIMENSIONS, ETC. FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUDED ON THE SUBMITTAL AND VERIFICATION OF THE CHANGE SHALL BE REQUESTED. "VERIFY" MARKS NOT ADDRESSED SHALL NOT BE ASSUMED CORRECT AND SHALL BE RESUBMITTED TO THE ENGINEER OR CLARIFIED BY A REQUEST FOR INFORMATION. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY DEVIATIONS UNLESS ENGINEER REVIEWS AND ACKNOWLEDGES THE CHANGES IN WRITING.
10. THE ENGINEER WILL NOT REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
11. CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RE-SUBMITTALS MUST BE CLEARLY NOTED ON THE LETTER OF TRANSMITTAL WITH REVIEW LIMITED TO THOSE ITEMS CAUSING THE RE-SUBMISSION.
12. FOR CRITERIA APPLICABLE TO SHOP DRAWINGS REQUIRING ENGINEERING INPUT BY A SPECIALTY ENGINEER, SEE THE FOLLOWING NOTES FOR "DELEGATED DESIGN SUBMITTALS" AND THE NOTES FOR THE INDIVIDUAL COMPONENTS AND SYSTEMS.

DELEGATED DESIGN SUBMITTALS

1. SHOP DRAWINGS AND CALCULATIONS ARE REQUIRED TO BE PREPARED BY SPECIALTY ENGINEER (NOT THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD) WHO SPECIALIZES IN AND WHO UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN THE SPECIFIED SUBMITTALS FOR THIS PROJECT. SPECIALTY ENGINEER SHALL BE:
- A. AN EMPLOYEE OR OFFICER OF A FABRICATOR
- B. AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING COMPONENTS TO FABRICATOR
- C. AN INDEPENDENT CONSULTANT RETAINED BY THE FABRICATOR OR HIS SUPPLIER.
2. SHOP DRAWINGS REQUIRING A SPECIALTY ENGINEER ARE FABRICATION AND ERECTION DRAWINGS PREPARED FOR, BUT NOT LIMITED TO THE FOLLOWING ITEMS:
- A. CONCRETE AND MASONRY REINFORCEMENT BARS
- B. STEEL CONNECTIONS
- C. MISCELLANEOUS STRUCTURAL STEEL
- D. PRE-ENGINEERED WOOD TRUSSES
- E. FULL BLEACHER SYSTEM INCLUDING ASSOCIATED FOUNDATIONS.
- F. (ALTERNATE A-1) - INDOOR PRACTICE FACILITY - PRE-ENGINEERED METAL BUILDING. INCLUDES ALL STRUCTURE AND ACCESSORIES ABOVE CONCRETE FOUNDATIONS.
3. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCTS UTILIZED. GENERIC SUBMITTALS WILL NOT BE ACCEPTED.
4. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS, WHEN REQUIRED, PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE IMPRESSED SEAL AND SIGNATURE OF THE SPECIALTY ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS.
5. CATALOG INFORMATION ON STANDARD PRODUCTS DOES NOT REQUIRE THE SEAL OF A SPECIALTY ENGINEER.
6. REVIEW BY ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF SUBMITTALS IS LIMITED TO VERIFYING THE FOLLOWING:
- A. SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED
- B. STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE SPECIALTY ENGINEER.
- C. SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE.
- D. THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE.

POST-INSTALLED ANCHORAGE

1. ALL ANCHORS SHALL BE MANUFACTURED BY HILTI OR ENGINEER APPROVED EQUIVALENT. PROVIDE DETAILED BACK-UP DATA SHOWING ANY PROPOSED SUBSTITUTION MEETS OR EXCEED SPECIFIED HILTI ANCHORS FOR REVIEW.
2. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH HILTI'S INSTALLATION INSTRUCTIONS, INCLUDING BUT NOT LIMITED TO CLEANING OF THE HOLE PRIOR TO ANCHOR INSTALLATION.
3. EPOXY AND ANCHORS FOR MASONRY CONSTRUCTION SHALL BE HIT-HY 270 ADHESIVE MORTAR WITH HAS-V-36 THREADED RODS EMBEDDED INTO GROUTED SOLID CMU UNLESS NOTED OTHERWISE ON THE DRAWINGS. ANCHORS SHALL BE INSTALLED WITH DIAMETER, SPACING, AND EMBEDMENT AS SPECIFIED ON THE DRAWINGS.
4. EPOXY AND ANCHORS FOR CONCRETE CONSTRUCTION (AND STEEL REINFORCING) SHALL BE HIT-HY 200-V3 ADHESIVE MORTAR UTILIZING SAFE SET TECHNOLOGY WITH HAS-V-36 THREADED RODS (OR STEEL REINFORCING) UNLESS NOTED OTHERWISE ON THE DRAWINGS. ANCHORS SHALL BE INSTALLED WITH DIAMETER, SPACING, AND EMBEDMENT AS SPECIFIED ON THE DRAWINGS.

FOUNDATIONS & EXCAVATIONS

1. FOUNDATION DESIGN IS BASED ON MINIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF BASED ON A SITE-SPECIFIC GEOTECHNICAL REPORT BY BARRY ISETT & ASSOCIATES, INC., DATED APRIL 27, 2026. REFER TO GEOTECHNICAL REPORT FOR FOUNDATION SUBGRADE AND EARTHWORK REQUIREMENTS, INCLUDING DESCRIPTION OF BEARING MATERIAL, BEING THE IN-SITU SOILS OR PLACED COMPACTED STRUCTURAL FILL TO ACHIEVE THE DESIGN ALLOWABLE BEARING PRESSURE. RECOMMENDATIONS PROVIDED WITHIN THE GEOTECHNICAL REPORT OR AS MODIFIED BY THE ON-SITE GEOTECHNICAL (SOILS) ENGINEER SHALL BE MET UNLESS A MORE STRINGENT REQUIREMENT IS DIRECTED OTHERWISE WITHIN THE STRUCTURAL DOCUMENTS OR SPECIFICATIONS.
2. COMPACT SOIL, REMOVE OUTCROPS AND SHALLOW BEDROCK, AND PROVIDE STRUCTURAL FILL INCLUDING FOR TRANSITIONS FROM SOIL TO ROCK, IN ACCORDANCE WITH GEOTECHNICAL REPORT AND GEOTECHNICAL ENGINEER RECOMMENDATIONS.
3. REFER TO GEOTECHNICAL REPORT FOR OVEREXCAVATION OF EXISTING FILL SOILS TO UNDISTURBED NATIVE SOILS, COMPACTION, AND STRUCTURAL FILL REQUIREMENTS. REQUIRED DEPTH OF OVEREXCAVATION AND CUTBACK REQUIREMENTS SHALL BE AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
4. EXTERIOR FOOTINGS SHALL BEAR A MINIMUM 3'-0" BELOW THE LOWEST ADJACENT EXTERIOR GRADE, STEPPED DOWN AS NECESSARY TO AVOID UTILITY INTERFERENCE. DISCREPANCIES BETWEEN ACTUAL GRADES AND FOOTING ELEVATIONS SHOWN ON THE DRAWINGS RESULTING IN LESS THAN THE MINIMUM COVER SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
5. A REGISTERED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER SHALL BE PRESENT TO MONITOR COMPACTION AND SETTLEMENT AND VERIFY THE BEARING CAPACITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ON-SITE GEOTECHNICAL ENGINEER.
6. STRUCTURAL FILL AND BACKFILL MATERIAL FOR STRUCTURES SHALL BE PER THE GEOTECHNICAL REPORT AND OBSERVED AND APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER. BACKFILL MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3". REMOVE ALL UNSUITABLE MATERIAL OR LOOSE SOIL WHICH CANNOT BE ADEQUATELY COMPACTED AND REPLACE WITH ENGINEERED FILL. COORDINATE WITH GEOTECHNICAL REPORT FOR REQUIREMENTS FOR FOOTING TRANSITIONS FROM SOIL TO ROCK.
7. AT THE TIME THAT FOOTING CONCRETE IS PLACED, THE BEARING SURFACE SHOULD BE CLEAN AND DRY AND PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
8. BACKFILLING SHALL BE PERFORMED IN EQUAL LIFTS AROUND THE BUILDING PERIMETER TO BALANCE LATERAL EARTH PRESSURE ON THE BUILDING. WALK BEHIND COMPACTION EQUIPMENT IS REQUIRED WITHIN A DISTANCE OF TWO TIMES THE WALL HEIGHT.
9. FILL LIFT HEIGHT SHALL NOT EXCEED 12" LOOSE THICKNESS FOR HEAVY MECHANICAL COMPACTION AND 4" FOR MECHANICAL HAND METHODS UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER. A PLATE ATTACHMENT TO A BACKHOE OR A VIBRATORY PLATE TAMPER IS NOT CONSIDERED SUITABLE COMPACTION EQUIPMENT. FOR FOUNDATION SUPPORT, SLAB SUPPORT, AND WALL BACKFILL, COMPACT TO 98% OF THE MAXIMUM DRY DENSITY ACHIEVED PER ASTM D698 (STANDARD PROCTOR) OR 95% OF THE MAXIMUM DRY DENSITY ACHIEVED PER ASTM D1557 (MODIFIED PROCTOR) AS OUTLINED IN THE GEOTECHNICAL REPORT. STRUCTURAL FILL SHALL BE PLACED WITH A MOISTURE CONTENT WITHIN 3-PERCENT OF THE OPTIMUM MOISTURE CONTENT FOR COMPACTION AS DETERMINED BY ASTM D698 OR ASTM D1557.
10. BACKFILL AGAINST STRUCTURAL WALLS SHALL NOT BE PERFORMED UNTIL FOOTING, WALL, AND SLAB ON GRADE HAS OBTAINED SPECIFIED STRENGTH. FOR STRUCTURAL BUILDING RETAINING WALLS WITH UNBALANCED FILL, SOIL ON LOW SIDE OF RETAINING WALL SHALL BE IN PLACE TO MINIMUM ELEVATION INDICATED AND THE HIGH SIDE OF THE RETAINING WALL BACKFILLED PRIOR TO PLACING STEEL OR OTHER BUILDING ELEMENTS ABOVE.
11. IF REQUIRED BY THE GEOTECHNICAL REPORT OR THE ON-SITE GEOTECHNICAL ENGINEER, THE GROUND WATER TABLE SHALL BE LOWERED. DE-WATERING AS REQUIRED FOR INSPECTION, CONSTRUCTION OF FOOTINGS, AND PLACEMENT OF BACKFILL IS THE RESPONSIBILITY OF THE CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES AND TRENCHES. DIVERT SURFACE RUNOFF AWAY FROM THE EXCAVATION USING CURBING OR BARRIER PLACED ALONG THE TOP OF THE EXCAVATION. EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH OSHA REQUIREMENTS.
13. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL IN WRITING. THE CONTRACTOR SHALL LOCATE ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.
14. PRIOR TO EXCAVATION OR DEMOLITION, NOTIFY THE LOCAL ONE-CALL SYSTEM TO LOCATE AND IDENTIFY UNDERGROUND UTILITIES AND FACILITIES. NOTIFICATION SHALL OCCUR NO LESS THAN THREE, NOR MORE THAN TEN, WORKING DAYS PRIOR TO EXCAVATION. THE PHONE NUMBER FOR THE PENNSYLVANIA ONE-CALL SYSTEM IS 1-800-242-1786.
15. INSPECTIONS ARE REQUIRED FOR EXISTING SOILS CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS:
- A. SITE PREPARATION: PRIOR TO PLACEMENT OF PREPARED FILL, THE INSPECTOR SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.
- B. FILL PLACEMENT: PRIOR TO PLACEMENT OF FILL MATERIAL, THE INSPECTOR SHALL DETERMINE THAT THE PROPER FILL MATERIAL IS BEING USED AND THAT THE MAXIMUM LIFT THICKNESS IS FOLLOWED IN ACCORDANCE WITH THE ABOVE REFERENCED GEOTECHNICAL REPORT.
- C. EVALUATION OF IN-PLACE DENSITY: THE INSPECTOR SHALL DETERMINE, AT FREQUENCIES DETERMINED IN THE SOILS REPORT AND PROJECT SPECIFICATIONS, THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL COMPLIES WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.

CONCRETE

1. ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF ACI-318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. CAST-IN-PLACE CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH FOR BUILDING ELEMENTS; REFER TO SITE/CIVIL FOR OTHER CONCRETE SPECIFICATIONS:
- | DESCRIPTION | f _c - SPECIFIED STRENGTH (PSI) | WEIGHT PER CUBIC FOOT (PCF) | SUMP/AT POINT OF PLACEMENT | AGGREGATE | AIR ENTRAINMENT | EXPOSURE CLASS (ACI) |
|--|---|-----------------------------|----------------------------|-----------|-----------------|----------------------|
| FOOTINGS / FOUNDATIONS / WALLS | 4500 | 145 | 4" ±1" | ASTM C33 | YES | F2, S1, W0, C2 |
| TYPICAL INTERIOR SLAB-ON-GRADE | 4000 | 145 | 5" ±1" | ASTM C33 | NO | F0, S0, W0, C0 |
| MAINTENANCE MAIN BAY SLAB-ON-GRADE | 5000 | 145 | 5" ±1" | ASTM C33 | NO | F0, S0, W0, C2 |
| DUGOUT SLAB-ON-GRADE / FIELDDHOUSE PATIO | 5000 | 145 | 5" ±1" | ASTM C33 | YES | F3, S1, W0, C2 |
- A. EXPOSURE CATEGORIES PER ACI 318 REQUIREMENTS FOR SPECIFIC EXPOSURE CATEGORIES ARE INDICATED, INCLUDING BUT NOT LIMITED TO MAXIMUM WATER/CEMENT RATIO AND AIR CONTENT BASED ON EXPOSURE CATEGORY AND APPLICABLE NOMINAL MAXIMUM AGGREGATE SIZE.
- B. USE REGULAR WEIGHT CONCRETE WITH CEMENT OF TYPE III, TYPE II, OR TYPE I/MS, MODIFIED FOR SULFATE RESISTANCE, PER ASTM C150 OR ASTM C595.
- C. CEMENTITIOUS MATERIAL CONTENT SHALL BE PROPORTIONED TO MEET ACI REQUIREMENTS FOR EXPOSURE CLASSES INDICATED.
- D. WATER SHALL BE POTABLE PER ASTM C604.
- E. AIR-ENTRAINED CONCRETE SHALL NOT RECEIVE A STEEL TROWEL FINISH.
- F. CONCRETE ADMIXTURES TO ACHIEVE SPECIFIED PERFORMANCE REQUIREMENTS WILL BE REVIEWED WHEN INCLUDED AS PART OF THE CONCRETE MIX DESIGN SUBMITTAL AND SHALL CONFORM TO THE ASTM STANDARD FOR EACH ADMIXTURE TYPE.
- G. CONCRETE MIX SUBMITTAL SHALL INCLUDE TEST DATA FOR EACH SUBMITTED MIX DESIGN TO MEET THE ACI 318 REQUIREMENTS FOR MIX PROPORTIONING BASED ON FIELD EXPERIENCE OR TRIAL MIXTURES.
- H. WITHOUT WRITTEN APPROVAL FROM THE ENGINEER OF RECORD, CHLORIDES OR ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE INCLUDED AS PART OF THE CONCRETE MIX DESIGN.
3. SEE CONSTRUCTION DOCUMENT PACKAGE FOR JOINT SIZES AND FILLER MATERIALS.
4. LOCATION OF ALL CONSTRUCTION AND CONTROL JOINTS SHALL BE SUBMITTED FOR REVIEW PRIOR TO PLACEMENT OF REINFORCEMENT AND CONCRETE, EXCEPT THOSE SPECIFICALLY LOCATED ON THE CONSTRUCTION DRAWINGS.
5. WHERE NEW CONCRETE IS PLACED AGAINST HARD OR PARTIALLY HARDENED CONCRETE SURFACES, PROVIDE EPOXY-BONDING ADHESIVE, TYPE IV AND V, LOAD BEARING, TWO-COMPONENT EPOXY RESIN, CAPABLE OF HUMID CURING AND BONDING TO DAMP SURFACES, MEETING ASTM C 881.
6. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4" CHAMFER, UNLESS NOTED OTHERWISE WITHIN THE DRAWING PACKAGE.
7. SYNTHETIC FIBER REINFORCEMENT SHALL BE ENGINEERED AND DESIGNED FOR USE IN CONCRETE, POLYOLEFIN, SELF-FIBRILLATING, AND COMPLYING WITH ASTM C1118/1118M. TYPE III FIBER REINFORCED CONCRETE SHALL BE ADDED AT A MIX RATE AS RECOMMENDED BY MANUFACTURER FOR SPECIFIC PROJECT CONDITIONS FOR TEMPERATURE AND SHRINKAGE REINFORCEMENT AND TO MEET MINIMUM DOSAGE OF 3 POUNDS PER CUBIC YARD FOR SLABS-ON-GRADE.
- PROVIDE ONE OF THE FOLLOWING:
- A. STRUX 90/40 BY GCP APPLIED TECHNOLOGIES (FORMERLY GRACE CONSTRUCTION PRODUCTS)
- B. MASTERFIBER MAC MATRIX BY MASTERBUILDERS (FORMERLY BASF)
- C. FIBERMESH-650 BY Sika CORPORATION
8. COORDINATE EMBEDDED ITEMS WITH OTHER TRADES PRIOR TO CONCRETE POUR. PROVIDE PVC (OR OTHER NON-CORROSIVE MATERIAL) SLEEVES FOR ALL PENETRATIONS.
9. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING PROPOSED LOCATIONS OF ANY MATERIAL SUCH AS BUT NOT LIMITED TO CONDUITS, EMBEDMENTS, OR FIXTURES TO BE PLACED INSIDE ANY STRUCTURAL CONCRETE MEMBER SUCH AS BEAMS, WALLS, SLABS, COLUMNS OR FOOTINGS.
10. CONCRETE SLAB FLATNESS AND LEVELNESS TOLERANCES SHALL BE IN CONFORMANCE WITH ACI 117, AND SHALL BE SPECIFIED BY THE OWNER. UNLESS SUPERSEDED BY THE OWNER'S CRITERIA, CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:
- | SLAB ON GRADE | TOTAL AREA | | MINIMUM LOCAL F NUMBER | |
|---------------|------------|----|------------------------|----|
| | F1 | F1 | F1 | F1 |
| 25 | 20 | 17 | 15 | |
11. UNLESS SPECIFIED OTHERWISE, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318 SECTION 5.6 "EVALUATION AND ACCEPTANCE OF CONCRETE".
12. IN ADDITION TO ACI 318 THE FOLLOWING PROCEDURES FOR CONCRETE CONSTRUCTION INCLUDING REINFORCING AND EMBEDDED ITEMS SHALL MEET THE REQUIREMENTS OF THE REFERENCED CODE SECTIONS
- | PROCEDURE | REFERENCE SECTION |
|-------------------------------------|---|
| PREPARATION | ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE" |
| CONVEYING | ACI 318 SECTION 5.9 - "CONVEYING" |
| DEPOSITING | ACI 318 SECTION 5.10 - "DEPOSITING" |
| CONSOLIDATION | ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE" |
| CURING | ACI 308 - "STANDARD PRACTICE FOR CURING CONCRETE" |
| HOT WEATHER CONCRETING | ACI 305R - "HOT WEATHER CONCRETING" |
| COLD WEATHER CONCRETING | ACI 305R - "COLD WEATHER CONCRETING" |
| CONSTRUCTION TOLERANCES | ACI 117 - "TOLERANCES FOR CONCRETE CONSTRUCTION & MATERIALS" |
| FOR CONCRETE WITH FIBER REINFORCING | ACI 544.3R - "GUIDE FOR SPECIFYING, PROPORTIONING, AND PRODUCTION OF FIBER-REINFORCED CONCRETE" |
13. ADMIXTURES SHALL CONFORM TO THE FOLLOWING:
- A. WATER REDUCTION AND SETTING TIME MODIFICATION: ASTM C494
- B. PRODUCING FLOWING CONCRETE: ASTM C1017
- C. AIR ENTRAINMENT: ASTM C260
- D. INHIBITING CHLORIDE-INDUCED CORROSION: ASTM C1582
14. NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE NOT TO EXCEED THE LEAST OF:
- A. ONE-FIFTH THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS
- B. ONE-THIRD THE DEPTH OF SLABS
- C. THREE-FOURTHS THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL BARS
15. CONCRETE MIXTURE PROPORTIONS SHALL BE ESTABLISHED IN ACCORDANCE WITH ARTICLE 4.2.3 OF ACI 301. STRENGTH TEST RECORDS USED FOR ESTABLISHING AND DOCUMENTING CONCRETE MIXTURE PROPORTIONS SHALL NOT BE MORE THAN 24 MONTHS OLD.
- THE CONCRETE MATERIALS USED TO DEVELOP THE CONCRETE MIXTURE PROPORTIONS SHALL CORRESPOND TO THOSE SPECIFIED HEREIN.
- DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE SUBMITTED FOR REVIEW BEFORE THE MIXTURE IS USED AND BEFORE MAKING CHANGES TO MIXTURES IN USE.
- EVIDENCE OF THE PROPOSED MIXTURE TO COMPLY WITH THE CONCRETE MIXTURE REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS SHALL BE INCLUDED IN THE SUBMITTAL.
- THE PROPOSED MIXTURE DESIGN SHALL BE BASED ON LABORATORY TRIAL BATCH OR FIELD TEST RECORDS THAT REPRESENT CONDITIONS SIMILAR TO THEIR USE IN THE PROJECT.
16. FORMWORK CONSTRUCTION SHALL CONSIDER METHOD AND RATE OF CONCRETE PLACEMENT, CONSTRUCTION LOADS, INCLUDING VERTICAL, HORIZONTAL AND IMPACT, AND AVOIDANCE OF DAMAGE TO PREVIOUSLY CONSTRUCTED MEMBERS.
- FORMWORK FABRICATION AND INSTALLATION SHALL RESULT IN A FINAL STRUCTURE THAT CONFORMS TO SHAPED, LINES, AND DIMENSIONS OF THE MEMBERS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS.
- FORMWORK SHALL BE SUFFICIENTLY TIGHT TO INHIBIT LEAKAGE OF PASTE OR MORTAR.
- FORMWORK SHALL BE BRACED OR TIED TOGETHER TO MAINTAIN POSITION AND SHAPE.
17. CAST-IN ANCHORS, INCLUDING ANCHOR BOLTS FOR COLUMNS, SHALL BE SECURELY POSITIONED IN THE FORMWORK AND ORIENTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. PROPERLY CONSOLIDATE CONCRETE AROUND CAST-IN ANCHORS.

CONCRETE MATERIAL TESTING

1. SLUMP TESTING: ASTM C-143; ONE (1) TEST AT POINT OF DISCHARGE FOR EACH DAY'S POUR FOR EACH TYPE OF CONCRETE; ADDITIONAL TESTS IF CONCRETE CONSISTENCY IS DEEMED TO HAVE CHANGED.
2. AIR CONTENT TESTING: ASTM C-173, VOLUMETRIC METHOD FOR LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE; ASTM C-231 PRESSURE METHOD FOR NORMAL WEIGHT CONCRETE; ONE (1) FOR EACH DAY'S POUR OF EACH TYPE OF AIR ENTRAINED CONCRETE.
3. CONCRETE TEMPERATURE: ASTM C-1064; TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG. F (4 DEG. C) AND BELOW, AND WHEN 80 DEG. F (27 DEG. C) AND ABOVE; AND EACH TIME A SET OF COMPRESSION TEST SPECIMENS IS MADE. TEST OVERNIGHT WITH A HIGH LOW THERMOMETER.
4. UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATION, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318 SECTION 5.6 "EVALUATION AND ACCEPTANCE OF CONCRETE".
5. STRENGTH TEST SHALL BE THE AVERAGE OF THE STRENGTHS OF AT LEAST TWO 6X12 CYLINDERS OR AT LEAST THREE 4X8 CYLINDERS MADE FROM THE SAME SAMPLE OF CONCRETE AND TESTED CONCURRENTLY. THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL COMPLY WITH ASTM C1077.
- MAKE SAMPLES (6) 6X12 OR (9) 4X8 SAMPLES FOR (2) TESTS AT 7 DAYS, 28 DAYS, AND RESERVE SET. RESERVE CYLINDERS SHALL BE BROKEN IF NECESSARY AT A TIME DIRECTED BY ENGINEER
- QUALIFIED FIELD TESTING TECHNICIANS SHALL PERFORM TESTS ON FRESH CONCRETE AT THE JOB SITE, PREPARE SPECIMENS FOR STANDARD AND FIELD CURING AND RECORD THE TEMPERATURE OF FRESH CONCRETE WHEN PREPARING SPECIMENS FOR STRENGTH TESTS. ALL REPORTS SHALL BE PROVIDED TO THE ARCHITECT, CONTRACTOR AND ENGINEER.
- SAMPLES FOR PREPARING STRENGTH TEST SPECIMENS OF EACH CONCRETE MIXTURE PLACED EACH DAY SHALL BE TAKEN IN ACCORDANCE WITH THE FOLLOWING:
- AT LEAST ONCE A DAY
- AT LEAST ONCE FOR EVERY 150 CY OF CONCRETE
- AT LEAST ONCE FOR EVERY 5000 SF OF SURFACE AREA (ONE SIDE ONLY) OF WALLS OR SLABS.
- IF VOLUME OF CONCRETE IS SUCH THAT TESTING FREQUENCY WOULD PROVIDE FEWER THAN FIVE STRENGTH TESTS, SPECIMENS SHALL BE MADE FROM AT LEAST FIVE RANDOMLY SELECTED BATCHED (OR FROM EACH BATCH IF FEWER THAN FIVE BATCHES IS USED).
- SAMPLING OF CONCRETE FOR STRENGTH TEST SPECIMENS SHALL BE IN ACCORDANCE WITH ASTM C172. CYLINDERS FOR STRENGTH TESTS SHALL BE MADE AND STANDARD-CURED IN ACCORDANCE WITH ASTM C31 AND TESTED IN ACCORDANCE WITH ASTM C39
- STRENGTH LEVEL OF A CONCRETE MIXTURE SHALL BE ACCEPTED IF A) EVERY ARITHMETIC AVERAGE OF ANY THREE CONSECUTIVE TESTS EQUALS OR EXCEED f_c AND B.) NO STRENGTH TEST FALLS BELOW f_c BY MORE THAN 500 PSI FOR 5000 PSI CONCRETE OR LESS
- IF EITHER OF THE REQUIREMENTS (A OR B) ABOVE ARE NOT SATISFIED, THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN: TO INCREASE THE AVERAGE OF SUBSEQUENT STRENGTH RESULTS, AND FOR INVESTIGATING LOW STRENGTH TEST RESULTS IN ACCORDANCE WITH ACI 318

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
2. BAR SUPPORTS, DESIGN, DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318 AND "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
3. SPLICES FOR CONTINUOUS BARS SHALL BE CLASS B, UNLESS NOTED OTHERWISE.
4. MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS UNLESS A GREATER AMOUNT IS SPECIFIED OTHERWISE. IF STIRRUPS, TIES, OR SPIRALS ARE USED, COVERAGE SHALL BE TO THE OUTERMOST FACE OF THESE ELEMENTS.
- FOOTINGS, CAISSONS, OTHER MEMBERS WHERE CONCRETE IS DEPOSITED AGAINST SOIL (EXCEPT SLABS ON GRADE) 3"
 - CONCRETE EXPOSED TO WEATHER OR SOIL - #6 BAR AND LARGER 2"
 - CONCRETE EXPOSED TO WEATHER OR SOIL - #5 BAR AND SMALLER 1-1/2"
 - CONCRETE NOT EXPOSED TO WEATHER OR SOIL - SLABS, WALLS, JOISTS - #14 BAR AND LARGER 1-1/2"
 - CONCRETE NOT EXPOSED TO WEATHER OR SOIL - SLABS, WALLS, JOISTS - #11 BAR AND SMALLER 0-3/4"
 - CONCRETE NOT EXPOSED TO WEATHER OR SOIL - BEAMS AND COLUMNS 1-1/2"
5. PROVIDE BENT HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF ALL WALLS AND FOOTINGS. BENT BARS ARE TO MATCH THE SIZE AND SPACING OF HORIZONTAL BARS IN WALL OR FOOTING. USE CLASS B SPLICE EACH SIDE.
6. PROVIDE DIAGONAL BARS AT CORNERS OF OPENINGS IN SLABS AND WALLS. USE (1) #5 x 4'-0" EACH CORNER, EACH FACE UNLESS OTHERWISE NOTED ON THE DRAWINGS. PROVIDE 2" CLEAR COVER BETWEEN THE OPENING AND THE CORNER REINFORCING BARS.
7. PROVIDE DOWELS IN WALL FOOTING TO MATCH WALL VERTICALS UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE CLASS B SPLICE. USE STANDARD ACI 90° HOOK WITH 3" CLEAR TO BOTTOM OF FOOTING UNLESS NOTED OTHERWISE.

CONCRETE PIER SCHEDULE				
MARK	SIZE	REINFORCING		REMARKS
		VERT REINF	TIES / HORIZONTAL REINFORCING	
P-01	18" x 18"	(6) #6	#3 @ 12" OC	-
P-02	20" x 20"	(6) #6	#4 @ 12" OC	-
P-10	24" x 24"	(12) #7	#3 @ 12" OC	-
P-11	24" x 30"	(16) #7	#3 @ 12" OC	-

- NOTES:
1. SCHEDULED CONCRETE PIERS ARE CALLED OUT ON PLANS AS P-XX. SEE PLANS FOR LOCATIONS.
2. REFER TO TYPICAL DETAIL - CONCRETE PIER PLAN DETAILS FOR SCHEMATIC THE CONFIGURATIONS.
3. REFER TO TYPICAL DETAIL - STEEL COLUMN BASE AND FOUNDATION FOR ADDITIONAL INFORMATION.

SPREAD FOOTING SCHEDULE					
PLAN MARK	WIDTH	LENGTH	THICKNESS	TOP BARS, EACH WAY	BOTTOM BARS, EACH WAY
F4	4'-0"	4'-0"	1'-0"	(4) #6	(4) #6
F5	5'-0"	5'-0"	1'-0"	(10) #4	(10) #4
F6	6'-0"	6'-0"	1'-2"	(7) #5	(7) #5
F7	7'-0"	7'-0"	1'-6"	(6) #6	(6) #6
F8	9'-0"	9'-0"	1'-10"	(10) #6	(10) #6
F10	10'-0"	10'-0"	2'-0"	(9) #7	(9) #7

NOTES:

1. SCHEDULED CONCRETE SPREAD FOOTINGS ARE CALLED OUT ON PLANS AS Fx. SEE PLANS FOR LOCATIONS.

2. WHERE SPREAD FOOTING IS INTEGRAL WITH WALL, WALL FOOTING REINFORCING SHALL CONTINUE THROUGH SPREAD FOOTING AND CONCRETE FOR SPREAD AND WALL FOOTING SHALL BE MONOLITHIC.

3. REFER TO TYPICAL DETAIL - STEEL COLUMN BASE AND FOUNDATION FOR ADDITIONAL INFORMATION.

STAHL SHEAFFER
ENGINEERING

301 Science Park Road, Suite 333
State College, PA 16803
O: 814.689.1562 | F: 814.689.1885
E: staahl@ss-engineering.com
SS-ENGINEERING.COM
SEE PRODUCT NO. 35-327

DERCK
REDSON

CAMPUSES: DOWNTOWNS, ATHLETICS
301A SPRING STREET, SUITE 100, BELLEFONTE, PA 19803
WWW.DERCKREDSON.COM (717) 265-5251

STRUCTURAL NOTES
BID DOCUMENTS

GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
680E Main St., New Holland, PA 17137

RELEASES:

No.	DATE	DESCRIPTION OF CHANGES
1	08/14/26	BID SET

DATE: 8/14/2026
PROJECT #: 252540
DRAWN BY: ACK / HSM
P.N.: HSM
P.C.: PJB

DRAWING NO.

S-001

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CODE-REFERENCED AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, SPECIFICATION FOR STEEL BUILDINGS, AND CODE OF STANDARD PRACTICE.
2. STEEL FABRICATOR AND ERECTOR SHALL FOLLOW THE AISC 360, "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" REQUIREMENTS FOR FABRICATION, ERECTION, AND QUALITY CONTROL.
3. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
- A. WIDE FLANGE SECTIONS _____ ASTM A992 (Fy = 50 ksi)
- B. HOLLOW STRUCTURAL SECTIONS (HSS) _____ ASTM A500, GRADE C (Fy = 50 ksi FOR RECTANGULAR) (Fy = 46 ksi FOR ROUND)
- C. PLATES, BARS, ANGLES, C-SHAPES, MC-SHAPES _____ ASTM A36 (Fy = 36 ksi)
- D. WELDING ELECTRODES _____ E70xx
- E. HIGH-STRENGTH BOLTS _____ ASTM-F3125, GRADE A325-N
- F. ANCHOR RODS / ANCHOR BOLTS _____ ASTM-F1554, GRADE 36 HEX HEAD
4. MULTIPLE ANGLE LINTELS SHALL BE WELDED TOGETHER WITH 3/16" FILLET WELDS 3" LONG @ 12" ON CENTER STAGGERED EACH SIDE.
5. WELD OR BOLT SHOP CONNECTIONS, FOR FIELD CONNECTIONS USE 3/4" DIAMETER HIGH STRENGTH INSTALLED TO THE "SNUG TIGHT" CONDITION DESCRIBED IN AISC SPECIFICATIONS FOR STRUCTURAL JOINTS, USING ASTM F3125, GRADE A325 OR A490 BOLTS. FIELD WELDING WILL BE PERMITTED WHERE SPECIFICALLY CALLED FOR ON THE DRAWINGS. PROVIDE STIFFENERS, DOUBLER PLATES AND REINFORCING TO ADEQUATELY DESIGN AND FABRICATE ALL CONNECTIONS.

6. PROVIDE CONNECTIONS AS DETAILED IN STRUCTURAL SECTIONS, AT CONTRACTOR OPTION THE STEEL SHEAR CONNECTIONS AT ENDS OF MEMBERS MAY BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION" FOR THE ASD (ALLOWABLE STRESS DESIGN) LOAD REACTIONS GIVEN BELOW UNLESS NOTED OTHERWISE. REGARDLESS OF LOADING, THE MEMBERS WILL BE FURNISHED WITH NO FEWER THAN NUMBER OF WEB BOLTS GIVEN BELOW UNLESS SEATED CONNECTIONS ARE UTILIZED.

MEMBER DEPTHS	REACTIONS	MINIMUM WEB BOLTS (UNLESS INDICATED OTHERWISE)
W10	10 KIPS	3 BOLTS
W14	35 KIPS	3 BOLTS
W18	55 KIPS	4 BOLTS

7. WELDS SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (AWS D1.1) AND SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY THE STANDARD QUALIFICATION PROCEDURE OF THE AWS FOR TYPE OF WELD REQUIRED. WELDER CERTIFICATION SHALL BE SUBMITTED FOR REVIEW.
8. WELD LENGTHS NOT NOTED SHALL BE FULL LENGTH. TERMINATE WELDS IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AND AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE - STEEL (D1.1).
9. ELECTRODES SHALL BE SUITED TO GRADE AND METALLURGICAL COMPOSITION OF BASE MATERIAL.
10. PROVIDE 1/4" WELDED END PLATES WITH 3/16" CONTINUOUS SEAM WELD ON EACH END OF ALL HSS MEMBERS, TYPICAL UNLESS NOTED OTHERWISE.
11. ALL CUTTING AND BLOCKING OF STEEL SHALL BE SHOWN ON SHOP DRAWINGS AND PERFORMED IN SHOP. FIELD BURNING IS NOT ALLOWED.
12. HOLES LARGER THAN 1"Ø SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER. HOLES SHALL BE PUNCHED OR DRILLED, EXCEPT AS OTHERWISE PERMITTED BY THE STRUCTURAL ENGINEER.
13. NON-SHRINK GROUT SHALL BE NON-METALLIC, CEMENT-BASED GROUT MEETING THE REQUIREMENTS OF ASTM C821, ASTM C109 AND CRD C-621, WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 psi AT 28 DAYS.
14. ALL EXPOSED STRUCTURAL STEEL INCLUDING LINTELS, AND AS NOTED ON DRAWINGS, SHALL BE GALVANIZED IN CONFORMANCE WITH ASTM A123. FASTENERS AND SMALL PARTS REQUIRING GALVANIZING SHALL BE IN CONFORMANCE WITH ASTM A153. AREAS OF STEEL NOT COATED DURING THE HOT DIP GALVANIZING PROCESS OR AREAS DAMAGED OR REMOVED TO FACILITATE ERECTION SHALL BE TOUCHED UP IN THE FIELD WITH A ZINC RICH COATING WITH MINIMUM 95% ZINC BY WEIGHT IN A DRY FILM (Z.R.C. COLD GALVANIZING SYSTEM, OR EQUIVALENT). APPLY PER MANUFACTURER'S INSTRUCTIONS. FABRICATOR SHALL COORDINATE THE LOCATION OF HOLES REQUIRED TO FACILITATE GALVANIZING PROCESS. WHERE PROPOSED GALVANIZING HOLES WOULD BE EXPOSED IN FINAL CONSTRUCTION, PROPOSED LOCATIONS SHALL BE COORDINATED WITH ARCHITECT FOR VERIFICATION. ALL EXPOSED HOLES IN FINAL CONSTRUCTION SHALL BE SEALED TO PREVENT PEST OR WATER INFILTRATION.
15. THE CONTRACTOR SHALL DETERMINE, FURNISH AND INSTALL ALL TEMPORARY SUPPORTS SUFFICIENT TO SECURE THE STRUCTURAL STEEL FRAMING AGAINST LOADS PRESENT DURING ERECTION. TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL CONNECTIONS TO THE LATERAL LOAD RESISTING SYSTEM, INCLUDING HORIZONTAL DIAPHRAGMS, ARE COMPLETE.

WOOD FRAMING

1. ALL WOOD FRAMING MATERIAL, INCLUDING PRESSURE TREATED MATERIAL, SHALL BE SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT. ALL LUMBER SHALL BE VISUALLY GRADED SPRUCE-PINE-FIR NO. 1 / NO. 2 GRADE WITH THE ALLOWABLE STRESS CHARACTERISTICS IN ACCORDANCE WITH THE FOLLOWING (ALL UNITS POUNDS PER SQUARE INCH, UNLESS NOTED OTHERWISE):

LUMBER SIZE	F _b	F _t	F _v	F _c (perp)	F _c (par)	E
2" TO 4" THICK	875	450	135	425	1150	1,400,000
5"x5" AND LARGER BEAMS AND STRINGERS	600	300	125	425	425	1,000,000
5"x5" AND LARGER POSTS AND TIMBERS	500	325	125	425	500	1,000,000

2. ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATIONS. ALL WOOD IN CRAWL SPACES CLOSER THAN 6 INCHES TO THE GRADE SHALL BE PRESSURE TREATED. TREATMENT OF CUTS AND NOTCHES SHALL BE IN ACCORDANCE WITH SAME SPECIFICATION.

3. THE CONTRACTOR SHALL CAREFULLY SELECT LUMBER TO BE USED IN LOADEARING APPLICATIONS. THE LENGTH OF SPLIT ON THE WIDE FACE OF 2" NOMINAL LOADEARING FRAMING SHALL BE LIMITED TO LESS THAN HALF OF THE WIDE FACE DIMENSION. THE LENGTH OF SPLIT ON THE WIDE FACE OF 3" AND THICKER LUMBER SHALL BE LIMITED TO HALF OF THE NARROW FACE DIMENSIONS.

4. ALL NAILS SHALL BE "COMMON" TYPE WITH MINIMUM SHANK DIAMETERS AS LISTED:

NAIL TYPE	20d	16d	12d	10d	8d
MIN SHANK	0.192"	0.162"	0.148"	0.148"	0.131"

- UNLESS NOTED OTHERWISE, SEE NAILING SCHEDULE FOR REQUIRED NAIL SIZE AND SPACING. NAILS SHALL BE PLACED NO CLOSER THAN 1" FROM EDGE OR END OF LUMBER MEMBER. WHEN UTILIZING POWER DRIVEN NAIL GUNS, CALIBRATION SHALL BE PERFORMED PERIODICALLY IN ORDER TO ENSURE NAILS ARE NOT OVERDRIVEN.

5. PROVIDE HEADER BEAMS OF THE SAME SIZE AS JOISTS OR RAFTERS TO FRAME AROUND OPENINGS IN THE PLYWOOD DECK UNLESS OTHERWISE INDICATED.

6. STRUCTURAL STEEL PLATE CONNECTORS SHALL CONFORM TO ASTM A-36 SPECIFICATIONS AND BE 1/4" THICK UNLESS OTHERWISE INDICATED. BOLTS CONNECTING WOOD MEMBERS SHALL BE PER ASTM 1.307 AND BE 3/4" DIAMETER UNO. PROVIDE WASHERS FOR ALL BOLT HEADS AND NUTS IN CONTACT WITH WOOD SURFACES.

7. BOLT HOLES SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. BOLTED CONNECTIONS SHALL BE SNUGGED TIGHT BUT NOT TO THE EXTENT OF CRUSHING WOOD UNDER WASHERS.

8. PREFABRICATED METAL JOIST HANGERS, HURRICANE CLIPS, HOLD-DOWN ANCHORS AND OTHER ACCESSORIES SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, OR APPROVED EQUAL. INSTALL ALL ACCESSORIES PER THE MANUFACTURER'S REQUIREMENTS.

9. ALL PLATES, ANCHORS, NAILS, BOLTS, NUTS, WASHERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE HOT DIP GALVANIZED.

10. ALL HOLES AND NOTCHES DRILLED OR CUT INTO WOOD FRAMING SHALL CONFORM TO THE LIMITATIONS OF THE INTERNATIONAL BUILDING CODE.

11. PROVIDE FULL DEPTH (OR METAL) BRIDGING AT MIDSPAN OF ALL JOIST FRAMING AND AT A MAXIMUM SPACING OF 8'-0" O.C. IN BETWEEN.

PLYWOOD SHEATHING

1. ALL PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF "APA-THE ENGINEERED WOOD ASSOCIATION".
2. PLYWOOD PANELS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF VOLUNTARY PRODUCT STANDARD PS1, VOLUNTARY PRODUCT STANDARD PS2, OR APA PRG-108 PERFORMANCE STANDARDS.
3. ALL ROOF SHEATHING SHALL BE 19/32" THICK, 40/20, EXPOSURE 1, APA RATED SHEATHING, UNO. SEE WOOD FASTENER SCHEDULE FOR SHEATHING NAILING REQUIREMENTS.
4. ALL WALL SHEATHING SHALL BE 15/32" THICK, 32/16, EXPOSURE 1, APA RATED SHEATHING, UNO. SEE WOOD FASTENER SCHEDULE FOR SHEATHING NAILING REQUIREMENTS.
5. ALL PLYWOOD PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION OF THE PANEL PERPENDICULAR TO THE SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL ENDS AND EDGES. ALL PANEL EDGES SHALL BUTT ON AND BEAR ON FRAMING MEMBER'S CENTERLINE.
6. NAILS SHALL BE PLACED NOT LESS THAN 3/8" FROM PANEL EDGE. SEE WOOD FRAMING NOTES AND WOOD FASTENER SCHEDULE FOR OTHER NAILING REQUIREMENTS.
7. PROVIDE 2x BLOCKING AT ALL UNSUPPORTED PANEL EDGES.

TYPICAL WOOD FASTENER SCHEDULE (U.N.O.)

CONNECTION	FASTENER	NUMBER/SPACING
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d COMMON	16" OC
JOIST TO BAND JOIST, FACE NAIL	16d COMMON	2" OC
JOIST TO SILL OR GIRDER, TOE NAIL	8d COMMON	4
BRIDGING TO JOIST, TOE NAIL EACH END	8d COMMON	2
LEDGER STRIP	16d COMMON	3 AT EACH JOIST
1X8 OR LESS SUBFLOOR TO EACH JOIST, FACE NAIL	8d COMMON	2
OVER 1X8 SUBFLOOR TO EACH JOIST, FACE NAIL	8d COMMON	3
2-INCH SUBFLOOR TO JOIST OR GIRDER BLIND AND FACE NAIL	16d COMMON	2
TOP OR SOLE PLATE TO STUD, END NAIL	16d COMMON	2
STUD TO SOLE PLATE, TOE NAIL	8d COMMON	4
DOUBLED STUDS (OR STUDS SISTERED TO TRUSS WEB), FACE NAIL	16d COMMON	2 PER ROW AT 24" OC
DOUBLED TOP PLATES, FACE NAIL	16d COMMON	16" OC
TOP PLATES, LAP AND INTERSECTIONS FACE NAIL	16d COMMON	4
CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" OC ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	8d COMMON	3
CONTINUOUS HEADER TO STUD, TOE NAIL	8d COMMON	3
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	16d COMMON	3
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	16d COMMON	3
RAFTER TO PLATE, TOE NAIL	8d COMMON	3
1-INCH BRACE TO EACH STUD AND PLATE, FACE NAIL	8d COMMON	2
1X8 OR LESS SHEATHING TO EACH BEARING STUD, FACE NAIL	8d COMMON	2
OVER 1X8 SHEATHING TO EACH BEARING STUD FACE NAIL	8d COMMON	3
BUILT-UP CORNER STUDS	16d COMMON	24" OC, UNO
BUILT-UP GIRDERS AND BEAMS, OF THREE MEMBERS	20d COMMON	32" OC AT TOP & BOTTOM AND STAGGERED 2 ENDS & AT EACH SPLICE
2-INCH PLANKS STUDS TO SOLE PLATE, END NAIL	16d COMMON	2 EACH BEARING 2 EACH END
WOOD STRUCTURAL PANELS: ROOF SHEATHING	10d COMMON	6" OC AT PANEL EDGES AND 6" OC INTERMEDIATE
WOOD STRUCTURAL PANELS: WALL SHEATHING	10d COMMON	4" OC AT PANEL EDGES AND 12" OC INTERMEDIATE

STRUCTURAL MASONRY

1. ALL MASONRY WORK TO BE DONE IN ACCORDANCE WITH THE CODE-REFERENCED EDITION OF TMS-402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", AND TMS-402 "SPECIFICATION FOR MASONRY STRUCTURES."
2. THE CONCRETE MASONRY DESIGN IS BASED ON A COMPRESSIVE STRENGTH OF MASONRY (F_m) OF 2000 psi USING THE UNIT STRENGTH METHOD FOR COMPLIANCE (REFERENCE TMS-402 SECTION 1.4B). THIS METHOD REQUIRES THE FOLLOWING:
- A. CONCRETE MASONRY UNITS SHALL COMPLY WITH ASTM C90 WITH MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2000 psi.
- B. MORTAR BED JOINTS MUST NOT EXCEED 5/8" THICKNESS.
- C. GROUT MUST MEET THE PROPORTION SPECIFICATION OF ASTM C476. IF THE GROUT IS PROPORTIONED IN ACCORDANCE WITH TABLE 1 OF C476, NO COMPRESSION TESTS NEED TO BE PERFORMED.
- D. MORTAR SHALL MEET THE PROPORTION SPECIFICATION REQUIREMENTS OF ASTM C270 WITH PORTLAND CEMENT (ASTM C150). IF THE MORTAR IS PROPORTIONED IN ACCORDANCE WITH TABLE 2 OF C270, COMPRESSION TESTS ARE NOT REQUIRED.
- IF BLENDED HYDRAULIC CEMENT (ASTM C595) IS UTILIZED FOR MORTAR, MORTAR SHALL MEET THE PROPERTY SPECIFICATION REQUIREMENTS IN ACCORDANCE WITH TABLE 1 OF ASTM C270, PROPERTY TESTING IS REQUIRED IN ACCORDANCE WITH ASTM C270.

3. CLAY MASONRY UNITS SHALL HAVE A MINIMUM UNIT COMPRESSIVE STRENGTH OF 8000 psi. REFER TO ARCHITECTURAL DOCUMENTS FOR ASTM DESIGNATIONS.
4. MORTAR SHALL BE PORTLAND CEMENT-LIME AND CONFORM TO ASTM C270, TYPE S. WHEN CMU IS IN CONTACT WITH SOIL USE TYPE M MORTAR. DO NOT USE ADMIXTURES IN GROUT OR MORTAR WHICH CONTAIN CHLORIDES.
5. GROUT SLUMP SHALL BE 8 TO 11 INCHES. GENERAL CONTRACTORS OPTION TO USE LOW LIFT OR HIGH LIFT GROUTING PROCEDURES - SEE "MASONRY GROUT REQUIREMENTS" DETAIL. DO NOT SUBSTITUTE MORTAR FOR GROUT.
6. REINFORCING: ASTM A615 - GRADE 60. SEE "MASONRY GROUT REQUIREMENTS" DETAIL AND "MINIMUM CMU WALL REINFORCING REQUIREMENTS" DETAIL. SEE CHART BELOW FOR MINIMUM LAP SPlice LENGTH AND EMBEDMENT OF REINFORCING BARS. UNLESS NOTED OTHERWISE, REINFORCING SHALL BE CENTERED IN WALLS.

MASONRY REINFORCING LAP SPLICES AND EMBEDMENT LENGTH						
BAR SIZE	#4	#5	#6	#7	#8	
LAP SPLICE LENGTH (in)	24	30	36	42	48	54
EMBEDMENT (in)	18	24	28	32	36	42

7. "WET-STICKING" OF REINFORCING BARS IS NOT PERMITTED. REINFORCING BARS SHALL BE PLACED WITHIN TMS TOLERANCES AND SUPPORTED AND POSITIONED PRIOR TO PLACEMENT OF GROUT TO PREVENT DISPLACEMENT DURING GROUT PLACEMENT.
8. ALL MASONRY SHALL BE PLACED IN RUNNING BOND UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. SEE "INTERSECTING MASONRY WALLS" DETAIL FOR CONSTRUCTION AT WALL CORNERS AND TEES. SET MASONRY IN A FLUID BED OF MORTAR.
9. MASONRY PREPARATION, CONSTRUCTION AND PROTECTION IN HOT OR COLD WEATHER (GREATER THAN 90°F OR LESS THAN 40°F) SHALL BE IN CONFORMANCE WITH TMS-402 SECTION 1.8.
10. EMBEDDED CONDUITS, PIPES AND SLEEVES SHALL BE COMPATIBLE WITH MASONRY AND SHALL NOT BE LOCATED IN GROUTED CELLS. PIPES CONTAINING WATER SUBJECT TO FREEZING, MATERIALS IN EXCESS OF 150' OR PIPES UNDER PRESSURE IN EXCESS OF 55 psi SHALL NOT BE EMBEDDED IN MASONRY. GENERAL CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL EMBEDDED ITEMS WITH THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
11. ALL CONCRETE MASONRY SHALL BE GROUTED SOLID BELOW SLAB-ON-GRADE OR FINISHED GRADE ELEVATION.
12. CONTRACTOR SHALL DESIGN, FURNISH AND INSTALL SHORING AND BRACING REQUIRED FOR THE ERECTION OF THE MASONRY.
13. SUBMIT SHOP DRAWINGS DETAILING REINFORCING BARS FOR MASONRY WALLS AND PIERS. SHOP DRAWINGS SHALL INCLUDE ELEVATION VIEW OF EACH WALL.
14. PROVIDE LEVEL 2 QUALITY ASSURANCE AS PER TMS-402.

LINTELS IN MASONRY & VENEER AND VENEER SUPPORT

1. ALL STEEL LINTELS LOCATED IN MASONRY WALLS SHALL BE GALVANIZED. REFER TO SECTIONS AND DETAILS FOR OTHER VENEER SUPPORT LOCATIONS REQUIRED.
2. PROVIDE LINTELS AS SPECIFIED BELOW IN NON-LOAD BEARING CONCRETE MASONRY (CMU) WALLS AND MASONRY VENEER. REFER TO MASONRY NOTES AND DETAILS FOR ADDITIONAL REQUIREMENTS AROUND OPENINGS.

FOR OPENINGS IN 8" CONCRETE MASONRY WALLS, PROVIDE LINTELS AS NOTED BELOW:

CLEAR OPENINGS:	UP TO 5'-4"	8" DEEP BOND BEAM W/ (2) #5 BOTTOM BARS (TYPE 2)
	5'-5" TO 8'-0"	16" DEEP BOND BEAM W/ (2) #5 BOTTOM BARS (TYPE 2)

3. FOR OPENINGS IN VENEER AT CAVITY WALLS (4" VENEER AND 4" CAVITY, NOMINAL), IN ADDITION TO CMU BACKUP LINTELS LISTED ABOVE OR AT SCHEDULED CMU LINTELS, PROVIDE LOOSE STEEL ANGLES UNDER VENEER AND AIR SPACE PER SCHEDULE BELOW:

CLEAR OPENINGS:	UP TO 5'-4"	L6x4x5/16 (LLV) VENEER ANGLE W/ L3x3x1/4 CLOSURE ANGLE
	5'-5" TO 8'-0"	L7x4x3/8 (LLV) VENEER ANGLE W/ L3x3x1/4 CLOSURE ANGLE

4. BOND BEAM LINTELS SHALL HAVE 1 1/2" COVER TO BOTTOM REINFORCING. TYPICAL LINTELS SHALL BEAR A MINIMUM OF 8 INCHES AT EACH END ON A MINIMUM OF ONE BLOCK COURSE (MIN 8" HIGH X MIN 16" LONG) SOLID OR GROUTED SOLID MASONRY, UNLESS OTHERWISE NOTED. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

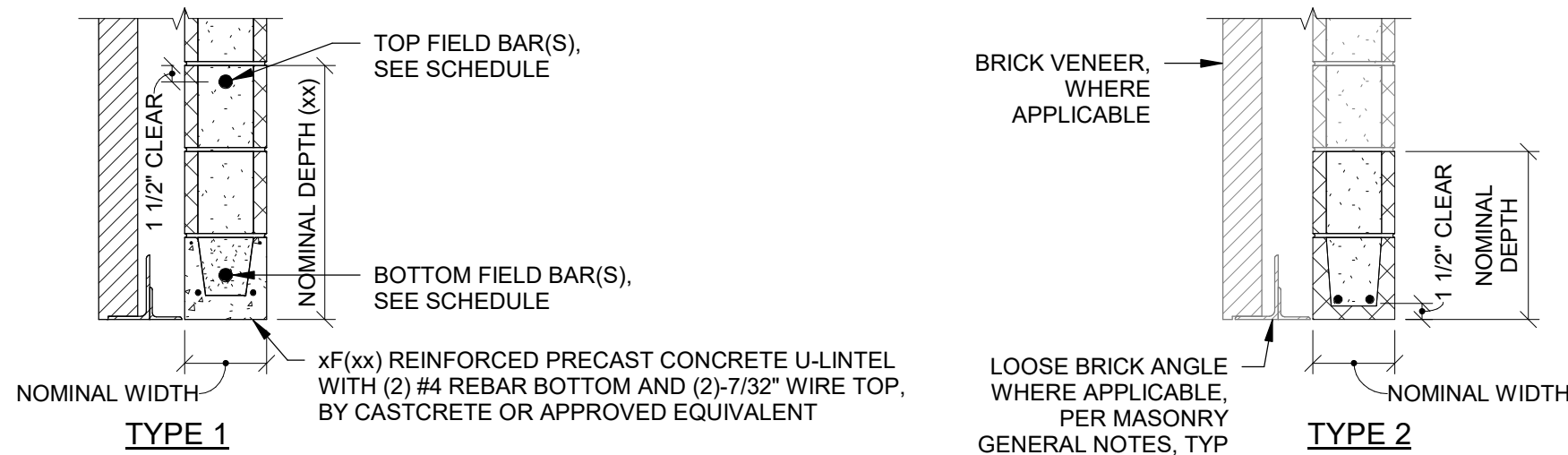
5. STEEL ANGLES SHALL BE WELDED TO EACH OTHER OR TO HSS AT 12" ON CENTER MAXIMUM TOP AND BOTTOM WITH 3" LONG X 1/4" WELDS. PROVIDE SMOOTH FINISH (PRIOR TO ANY GALVANIZING) WHERE BOTTOM OF ANGLES IS EXPOSED IN FINAL CONSTRUCTION.

6. AT BRICK VENEER ANGLES, LOOSE OR WELDED TO STRUCTURE, OR WHERE OTHER CONTINUOUS SUPPORT ANGLES OR PLATES ARE SHOWN PROVIDED IN SECTIONS OR DETAILS, TO SUPPORT VENEER, COORDINATE WITH ARCHITECTURAL FOR FLASHING AND OTHER DETAILING. IF VENEER SUPPORTS ON LINTELS OR CONTINUOUS SUPPORT ANGLES ARE SHOWN WITH LIPED BRICK FOR PARTIALLY CONCEALED CONDITIONS, HORIZONTAL LEG OR ANGLE OR BENT PLATE SHALL BE CUT BACK TO A MINIMAL DISTANCE IN ORDER TO ACCOMMODATE THE HORIZONTAL LIP DIMENSION IN THE BRICK PRIOR TO GALVANIZING. TYPICAL AT ALL LOCATIONS. A MINIMUM OF 2/3 THE FULL WIDTH OF THE VENEER SHALL BE FULLY SUPPORTED. PROVIDE FLUID-APPLIED INSULATIVE COATING PER SPECIFICATIONS, AS APPLICABLE.

LINTEL SCHEDULE		
MARK	SIZE	REMARKS
L-01	8" DEEP x 8" WIDE PRECAST CONCRETE W/ (1) #5 TOP AND BOTTOM (8F8-18/1T)	TYPE 1
L-02	8" DEEP x 12" WIDE PRECAST CONCRETE W/ (2) #5 TOP AND BOTTOM (12F8-28/2T)	TYPE 1
L-03	16" DEEP x 8" WIDE PRECAST CONCRETE W/ (1) #5 TOP AND BOTTOM (8F16-18/1T)	TYPE 1
L-04	16" DEEP x 12" WIDE PRECAST CONCRETE W/ (2) #5 TOP AND BOTTOM (12F16-28/2T)	TYPE 1

NOTES:

1. SCHEDULED LINTELS ARE CALLED OUT ON PLANS AS L-xx. SEE PLANS FOR LOCATIONS. COORDINATE MASONRY OPENING HEIGHT, WIDTH, AND LOCATIONS WITH ARCHITECTURAL. PRECAST LINTELS SHALL BE CAST-CRETE OR APPROVED EQUIVALENT; DESIGNATIONS PROVIDED IN SCHEDULE ARE BASED ON CAST-CRETE DESIGNATIONS.
2. PROVIDE LOOSE ANGLE LINTELS PER MASONRY GENERAL NOTES IN ADDITION TO SCHEDULED CMU LINTELS TO SUPPORT VENEER AT EXTERIOR OPENINGS UNDER 7'-4" WIDE WITH VENEER. SEE ARCHITECTURAL FOR EXTENT OF VENEER.
3. EACH END OF ALL LINTELS SHALL BEAR ON A MINIMUM OF ONE BLOCK COURSE (1'-4" MIN LONG X 8" MIN HIGH) OF SOLID OR GROUTED SOLID MASONRY, UNLESS NOTED OTHERWISE.
4. PROVIDE 1 1/2" COVER TO BOTTOM BARS IN BOND BEAM LINTELS, TYP UNLESS NOTED OTHERWISE.
5. SEE TYPICAL BEAM OR LINTEL TO MASONRY PIER OR WALL DETAILS FOR ADDITIONAL INFORMATION.



MASONRY WALL CONSTRUCTION SCHEDULE

MINIMUM REQUIREMENT (UNLESS NOTED OTHERWISE)			REFERENCE TYPICAL DETAIL
VERTICAL REINFORCING BARS	SIZE	#5 (CENTERED, UNLESS NOTED OTHERWISE)	CMU WALL REINFORCING REQUIREMENTS
	SPACING	48" OC MAX, UNLESS NOTED OTHERWISE	
CMU JOINT REINFORCING	SIZE	(2) W1.7 (9 GAGE) WIRES @ 8" CMU	HORIZONTAL MASONRY REINFORCING
	SPACING	16" OC MAX	
BOND BEAM	SIZE	(2) #8 CONTINUOUS @ 8" CMU	CMU WALL REINFORCING REQUIREMENTS
	SPACING	(2) #5 CONTINUOUS @ 12" CMU	
CONTROL JOINT	SPACING	25 FEET MAX	CMU CONTROL JOINT
	SIZE	NOT REQUIRED	
VENEER REINFORCING	SPACING	NOT REQUIRED	HORIZONTAL MASONRY REINFORCING
	TIE SPACING	24" HORIZONTAL x 16" VERTICAL	

NOTES:

1. REINFORCING SHOWN IN THIS SCHEDULE SHALL BE PROVIDED UNLESS A GREATER AMOUNT IS INDICATED IN SECTIONS OR DETAILS. SCHEDULED REINFORCING SHALL BE PROVIDED EVEN IF NOT SHOWN IN SECTIONS OR DETAILS FOR CLARITY.
2. GROUT SOLID ALL CMU BELOW GRADE, IN CONTACT WITH SOIL, OR BELOW TOP OF SLAB-ON-GRADE.
3. WHERE TOP OF WALL IS SLOPED TO MATCH ARCHITECTURAL PROFILE OR BELOW SLOPED FRAMING ABOVE, PROVIDE BOND BEAM AT TOP PER TYPICAL DETAIL - SLOPED TOP OF WALL STEPPED BOND BEAM.
4. PROVIDE REINFORCING AND THICKENED SLAB AT NON-LOAD BEARING MASONRY PARTITIONS PER TYPICAL DETAIL - THICKENED SLAB AT NON-BEARING INTERIOR MASONRY WALL.
5. FOR ADDITIONAL REQUIREMENTS, SEE GENERAL NOTES, TYPICAL DETAILS INCLUDING THOSE NOT LISTED IN SCHEDULE, AND PROJECT SPECIFICATIONS.

PRE-ENGINEERED METAL BUILDING (ALTERNATE A-1)

1. THE PRE-ENGINEERED METAL BUILDING (PEMB) SYSTEM SHALL BE DESIGNED, FABRICATED AND ERECTED BY THE CONTRACTOR. THE BUILDING FRAMES SHALL MEET THE PROFILE AND DIMENSIONS INDICATED ON THE ARCHITECTURAL DRAWINGS AND SHALL SUPPORT THE DESIGN LOADS INDICATED IN THE GENERAL NOTES. DESIGN SHALL BE IN CONFORMANCE WITH THE BUILDING CODE REFERENCED IN SECTION I, AND SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS: AISC 360 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AISI S100 NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS, AND THE MBMA METAL BUILDING SYSTEMS MANUAL.
2. THE CONTRACTOR SHALL SUBMIT ANCHOR BOLT PLANS AND FRAME REACTION DIAGRAM(S) SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA FOR REVIEW BY THE STRUCTURAL ENGINEER BEFORE FABRICATION.
3. THE STRUCTURAL ENGINEER WILL CONFIRM THE PIER AND FOOTING REQUIREMENTS WITH THE INFORMATION SHOWN ON THE FOUNDATION PLAN AND MAKE ADJUSTMENTS IF NECESSARY.
4. THE METAL BUILDING DEFLECTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE AISC STEEL DESIGN GUIDE 3. SERVICEABILITY DESIGN CONSIDERATIONS FOR STEEL BUILDINGS UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS.
5. THE MEZZANINE, INCLUDING ALL FRAMING, COLUMNS, FLOOR DECK AND CONCRETE TOPPING, RAILINGS, AND STAIRS, AND ANY RELATED ACCESSORIES AND CONNECTIONS SHALL BE INCLUDED IN THE SCOPE PROVIDED BY THE PEMB DELEGATED DESIGN ENGINEER.
6. ANCHOR RODS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE TO THE ANCHOR ROD SETTING PLAN PROVIDED BY THE PEMB MANUFACTURER.
7. PEMB DRAWINGS ARE TO BE USED FOR LAYING OUT COLUMN CENTERS AND WALL LINES. ALL DIMENSIONS SHALL FIRST BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS. LAYOUT SHALL BE CHECKED BEFORE WORK COMMENCES.
8. ANCHOR ROD SIZE AND EMBEDMENT DEPTHS SHALL BE PROVIDED BY THE PEMB MANUFACTURER. THE CONTRACTOR SHALL VERIFY FRAME AND COLUMN BASE LOCATIONS AND SIZES WITH THE FINAL PEMB DRAWINGS PRIOR TO PLACING ANY FOUNDATIONS. BRACING LOCATIONS SHOWN ARE ASSUMED AS THE ONLY LOCATIONS NEEDED. IF ADDITIONAL BRACING IS REQUIRED OR ALTERNATE LOCATIONS REQUESTED, SUBMIT A REQUEST FOR APPROVAL PRIOR TO COMPLETING THE PEMB DESIGN.
9. ADDITIONAL MEMBERS SHOWN CONNECTED TO THE PEMB SHALL BE SUPPLIED BY THE CONTRACTOR WHO SHALL COORDINATE ALL CONNECTIONS AND LOADS.
10. THE PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED TO SUPPORT A SUPERIMPOSED COLLATERAL DEAD LOAD OF 15 PSF ON THE UNDERSIDE OF THE ROOF STRUCTURE AND FOR THE MEZZANINE. ALL OTHER LOADINGS TO THE STRUCTURE SHALL BE DETERMINED BASED ON REQUIREMENTS SET FORTH IN THE METAL BUILDING SYSTEMS SPECIFICATIONS AND DESIGN CRITERIA IN STRUCTURAL DRAWING GENERAL NOTES. SELF-WEIGHT DEAD LOADS, SNOW (INCLUDING LOCALIZED EFFECTS DUE TO UNBALANCED, DRIFT, AND SLIDING SNOW AS APPLICABLE), WIND, AND SEISMIC LOADINGS. SUPPLIER SHALL COORDINATE WITH MEP FOR ADDITIONAL EQUIPMENT LOADS SUPPORTED BY THE STRUCTURE AS APPLICABLE THAT ARE IN ADDITION TO THE COLLATERAL LOADINGS INDICATED.
11. NO SELF DRILLING AND/OR SELF TAPPING FASTENERS SHALL BE USED TO CONNECT PEMB STRUCTURAL MEMBERS, INCLUDING COLD ROLLED C OR Z MEMBERS USED AS PURLINS AND GIRTS. ALL PEMB STRUCTURAL FRAMING MEMBERS SHALL BE SHOP PUNCHED OR DRILLED, DRILLING OR REMAINING OF PEMB FRAME MEMBERS IN THE FIELD IS PROHIBITED WITHOUT PRIOR REPRESENTATIVE APPROVAL. (THIS NOTE IS NOT APPLICABLE TO CLADDING SUCH AS ROOF AND WALL PANELS, OR CLIP FASTENERS FOR CLADDING OR FOR STEEL DECKING.)

WOOD TRUSS NOTES:

1. TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PENNSYLVANIA (TRUSS DESIGNER), TRUSSES SHALL BE DESIGNED FOR THE LOADS SHOWN ON THE DRAWINGS, USING THE LOAD COMBINATIONS AND DEFLECTION LIMITS IN THE APPLICABLE BUILDING CODE. DESIGN SHALL BE IN ACCORDANCE WITH THE PROVISION OF THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) AND THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (TPI 1).
2. WOOD MATERIALS SHALL BE AS SPECIFIED BY THE TRUSS DESIGNER, WITH A MAXIMUM MOISTURE OF 7% AT TIME OF MANUFACTURING.
3. THE WOOD TRUSS MANUFACTURER SHALL BE A CURRENT PARTICIPANT IN THE TPI (QUALITY ASSURANCE INSPECTION PROGRAM), INDICATING CONTINUOUS IN-PLANT QUALITY CONTROL.
4. NO ADDITIONAL LOADS SHALL BE APPLIED TO A TRUSS MEMBER WITHOUT SUCH LOAD BEING INCORPORATED INTO THE ENGINEERING DESIGN.
5. TRUSS MEMBERS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY UNLESS NOTED OTHERWISE. TRUSS MANUFACTURER SHALL DETERMINE PROFILE.
6. COMPLETE SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED SHOWING ALL INFORMATION REQUIRED BY THE INTERNATIONAL BUILDING CODE INCLUDING, BUT NOT LIMITED TO, MEMBER SIZES, SPECIES, GRADE, MOISTURE CONTENT, SPAN, CAMBER, DIMENSIONS, CHORD PITCH, BRACING REQUIREMENTS, AND LOCATIONS, TEMPORARY AND PERMANENT TRUSS BRACING AS REQUIRED BY THE TRUSS DESIGNER SHALL BE INDICATED ON THE TRUSS LAYOUT PLAN. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD AND SHALL BEAR THE SEAL OF THE TRUSS DESIGNER.
7. END TRUSSES SHALL BE DESIGNED WITH THE SAME PROFILE AS THE REMAINING BUILDING TRUSSES WITH DROP TOP CHORD AS SHOWN FOR ROOF OVERHANGS AND DESIGNED FOR OUT-OF-PLANE WIND LOADINGS. REFER TO SECTIONS AND TYPICAL DETAIL - GABLE END TRUSS AT WALL FOR ADDITIONAL INFORMATION.

STAHL SHEAFFER
ENGINEERING

301 Science Park Road, Suite 333
State College, PA 16803
O: 814.699.1562 | F: 814.699.1885
E: info@stahl-sheaffer.com
SEE PRODUCT NO. 35-357

DERCK
& DEDSON
CAMPUSES: DOWNTOWNS, ATHLETICS
3014 SPRINGS STREET, SUITE 102, BELLEVILLE, PA 19823
UNIVERSITY PARK, PENNSYLVANIA
(717) 265-5555

STRUCTURAL NOTES

BID DOCUMENTS

GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St., New Holland, PA 17157

RELEASES:

No.	DATE	DESCRIPTION OF CHANGES
1	08/14/26	BID SET

DATE: 8/14/2026
PROJECT #:
DRAWN BY: ZSS/SLD
ACM / HSM
P.N.:
HSM
P.C.:
P.J.B.

DRAWING NO.

S-002

STATEMENT OF SPECIAL INSPECTIONS - STRUCTURAL

PROJECT:GARDEN SPOT ATHLETICS CAMPUS

LOCATION:669 E Main St, New Holland, PA 17557

OWNER:Eastern Lancaster County School District

OWNER'S ADDRESS:669 E Main St, New Holland, PA 17557

ARCHITECT OF RECORD:DERCK & EDSON, LLC

STRUCTURAL ENGINEER OF RECORD:STAHL SHEAFFER ENGINEERING, INC.

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT AS WELL AS THE NAME OF THE SPECIAL INSPECTOR AND THE IDENTITY OF OTHER APPROVED AGENCIES INTENDED TO BE RETAINED FOR CONDUCTING THESE INSPECTIONS.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER AND ARCHITECT OF RECORD. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, STRUCTURAL ENGINEER AND ARCHITECT OF RECORD. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES.

INTERIM REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL, OWNER, STRUCTURAL ENGINEER AND ARCHITECT OF RECORD.

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

INTERIM REPORT FREQUENCY: PER ATTACHED SCHEDULE.

OWNER'S AUTHORIZATION:

BUILDING OFFICIAL'S ACCEPTANCE:

SIGNATURE

DATE

SIGNATURE

DATE

SCHEDULE OF STRUCTURAL SPECIAL INSPECTION SERVICES

THE FOLLOWING SHEETS COMPRISE THE REQUIRED SCHEDULE OF STRUCTURAL SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS INDICATED. SEE SPECIFIC DIVISIONS FOR FURTHER CLARIFICATION.

• SOILS AND FOUNDATIONS

• CAST-IN-PLACE CONCRETE

• PRECAST CONCRETE

• STRUCTURAL STEEL

• LIGHT STEEL FRAMING

• WOOD CONSTRUCTION

• MASONRY

• SEISMIC RESISTANCE

• WIND RESISTANCE

AGENT NO.	INSPECTION AGENTS	FIRM	ADDRESS
1.	SPECIAL INSPECTOR		
2.	STRUCTURAL ENGINEER OF RECORD	STAHL, SHEAFFER ENGINEERING, INC.	301 SCIENCE PARK ROAD SUITE 333 STATE COLLEGE, PA 16803
3.	ARCHITECT OF RECORD	DERCK & EDSON, LLC	33 SOUTH BROAD STREET LITITZ, PA 17543
4.	TESTING AGENT		
5.	GENERAL CONTRACTOR		

NOTE: THE INSPECTION AND TESTING AGENT SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL, PRIOR TO COMMENCING WORK.

SEISMIC DESIGN CATEGORY: A

ULTIMATE DESIGN WIND SPEED: V_{ult} = 115 MPH

NOMINAL DESIGN WIND SPEED: V_{nom} = 90 MPH

EXPOSURE CATEGORY: C

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF REQUESTED.

IT IS RECOMMENDED THAT THE PERSON ADMINISTERING THE SPECIAL INSPECTIONS PROGRAM BE A STRUCTURAL ENGINEER OR A PROFESSIONAL ENGINEER EXPERIENCED IN THE DESIGN OF BUILDINGS.

KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS:

WHEN THE STRUCTURAL ENGINEER OF RECORD DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING A STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION OR LICENSE AS INDICATED BELOW, SUCH DESIGNATION SHALL APPEAR BELOW THE AGENT NUMBER ON THE SCHEDULE OF SPECIAL INSPECTIONS.

SESTRUCTURAL ENGINEER - A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURES. THIS MAY BE REQUIRED FOR THE INSPECTION OF CRITICAL STRUCTURAL ELEMENTS.

GEOTECHNICAL ENGINEER - A LICENSED PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS. THIS MAY BE REQUIRED FOR THE INSPECTION OF DIFFICULT SOIL CONDITIONS OR DEEP FOUNDATIONS.

EITENGINEER-IN-TRAINING - A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTALS OF ENGINEERING EXAMINATION. THIS MAY BE REQUIRED FOR THE INSPECTION OF ELEMENTS THAT REQUIRE SOME ENGINEERING TRAINING TO PROPERLY EVALUATE.

ACIAMERICAN CONCRETE INSTITUTE - LEVEL I CERTIFIED CONCRETE FIELD TESTING TECHNICIAN. THIS CERTIFICATION IS APPROPRIATE FOR INDIVIDUALS PERFORMING CONCRETE SAMPLING, SLUMP TESTS, AIR CONTENT TESTS, TEMPERATURE TESTS, UNIT WEIGHT TESTS, AND CASTING COMPRESSION TEST CYLINDERS.

AWSAMERICAN WELDING SOCIETY - CERTIFIED WELDING INSPECTOR (CWI). THIS CERTIFICATION IS APPROPRIATE FOR INDIVIDUALS PERFORMING VISUAL INSPECTION OF WELDS.

ASNTAMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING - LEVEL II OR III. THIS CERTIFICATION IS APPROPRIATE FOR INDIVIDUALS PERFORMING ULTRA-SONIC TESTING OF WELDS.

SMSISTRUCTURAL MASONRY SPECIAL INSPECTOR - CERTIFICATION BY ICBO.

SWSISTRUCTURAL STEEL AND WELDING SPECIAL INSPECTOR - CERTIFICATION BY ICBO.

SFSPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR - CERTIFICATION BY ICBO.

PCSIPRESTRESSED CONCRETE SPECIAL INSPECTOR - CERTIFICATION JOINTLY SPONSORED BY ICBO, BOCA AND SBCCI WITH PARTICIPATION FORM PCI AND PTI.

RCSIREINFORCED CONCRETE SPECIAL INSPECTOR - CERTIFICATION JOINTLY SPONSORED BY ACI, ICBO, BOCA AND SBCCI.

SOILS AND FOUNDATIONS - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR VERIFICATION OF SOILS EXCEPT AS INDICATED IN "VII. SOILS AND FOUNDATIONS".		
ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 SHALLOW FOUNDATIONS	1 EIT	INSPECTION IN ACCORDANCE WITH SECTION VII OF THE SPECIAL PROGRAM
2 CONTROLLED STRUCTURAL FILL INSPECTIONS	1 EIT	INSPECTION IN ACCORDANCE WITH SECTION VII OF THE SPECIAL PROGRAM
3 DEEP FOUNDATIONS	1 EIT	INSPECTION IN ACCORDANCE WITH SECTION VII OF THE SPECIAL INSPECTIONS PROGRAM
4 SITE PREPERATION EVALUATION OF IN-PLACE DENSITY	1 EIT	INSPECTION IN ACCORDANCE WITH SECTION VII OF THE SPECIAL INSPECTIONS PROGRAM

CAST-IN-PLACE CONCRETE - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR THE FOLLOWING CONCRETE COMPONENTS:

- ISOLATED SPREAD COLUMN FOOTINGS
- CONTINUOUS WALL FOOTINGS
- NON-STRUCTURAL SLAB ON GRADE, DRIVEWAYS, SIDEWALKS, ETC.
- TOPPING SLAB ON METAL DECK
- CONCRETE WALLS INCLUDING EARTH RETAINING WALLS AND TILT-UP PANELS
- STRUCTURAL CONCRETE FRAME INCLUDING COLUMNS, BEAMS, FLOOR AND ROOF SYSTEMS

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 MIX DESIGN	5	COLLECT AND SUBMIT MIX DESIGN FOR ALL CAST-IN-PLACE CONCRETE
	2	REVIEW OF SUBMITTED CERTIFICATIONS
2 MATERIAL CERTIFICATION	5	COLLECT AND SUBMIT MATERIAL CERTIFICATION CONFORMING ASTM STDS
	2	REVIEW OF SUBMITTED CERTIFICATIONS
3 REINFORCEMENT INSTALLATION	1 RCSI	INSPECTION IN ACCORDANCE WITH SECTION X OF THE SPECIAL INSPECTIONS PROGRAM
4 POST TENSIONING OPERATIONS	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION X OF THE SPECIAL INSPECTIONS PROGRAM
5 CONCRETE PLACEMENT	1 RCSI	INSPECTION IN ACCORDANCE WITH SECTION X OF THE SPECIAL INSPECTIONS PROGRAM
6 EVALUATION OF CONCRETE STRENGTH	4 ACI	INSPECTION IN ACCORDANCE WITH SECTION X OF THE SPECIAL INSPECTIONS PROGRAM
7 CURING AND PROTECTION	1 RCSI	INSPECTION IN ACCORDANCE WITH SECTION X OF THE SPECIAL INSPECTIONS PROGRAM
8 OTHER		

PRECAST CONCRETE - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR STEEL CONSTRUCTION AS INDICATED IN "VIII. PRECAST CONSTRUCTION".

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 PLANT CERTIFICATION & CONTROL PROCEDURES	5	COLLECT AND SUBMIT MIX DESIGN FOR ALL CAST-IN-PLACE CONCRETE
	2	REVIEW OF SUBMITTED CERTIFICATIONS
2 MIX DESIGN	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
3 MATERIAL CERTIFICATION	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
4 REINFORCEMENT INSTALLATION	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
5 PRE-STRESS OPERATIONS	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
6 CONNECTIONS/EMBEDDED ITEMS	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
7 FORMWORK GEOMETRY	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
8 CONCRETE PLACEMENT	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
9 EVALUATION OF CONCRETE STRENGTH	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
10 CURING AND PROTECTION	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
11 ERRECTED PRECAST ELEMENTS	1 PCSI	INSPECTION IN ACCORDANCE WITH SECTION VIII OF THE SPECIAL INSPECTIONS PROGRAM
12 OTHER		

MASONRY - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR THE FOLLOWING MASONRY COMPONENTS:

- EXTERIOR WALLS
- EARTH RETAINING WALLS
- INTERIOR LOAD-BEARING OR SHEAR WALLS
- INTERIOR NON-LOAD-BEARING WALLS
- BRICK VENEER

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 MATERIAL CERTIFICATION	5	COLLECT AND SUBMIT MATERIAL CERTIFICATIONS TO COMPLY WITH THE UNIT STRENGTH METHOD. SEE SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
	2	PERIODIC INSPECTION OF SITE PREPARED MORTAR AND GROUT
2 MIXING OF MORTAR AND GROUT	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
3 INSTALLATION OF MASONRY	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
4 REINFORCEMENT INSTALLATION	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
5 GROUTING OPERATIONS	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
6 WEATHER PROTECTION	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
7 ANCHORS AND TIES	1 SMSI	INSPECTION IN ACCORDANCE WITH SECTION IX OF THE SPECIAL INSPECTIONS PROGRAM
8 OTHER		

STRUCTURAL STEEL - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR STEEL CONSTRUCTION AS INDICATED IN "XI. STRUCTURAL STEEL".

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 FABRICATION CERTIFICATION & QUALITY CONTROL PROCEDURES	5	- ENSURE FABRICATOR MEETS REQUIREMENTS OF THE IBC 1704.2.2 - COLLECT CERT. OF COMPLIANCE FROM FABRICATOR AT COMPLETION OF FABRICATION
	2	PERIODIC INSPECTION OF SITE PREPARED MORTAR AND GROUT
2 MATERIAL CERTIFICATION	5	- COLLECT CERTIFIED MILL TEST REPORTS - COLLECT IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS
	5	- ENSURE FABRICATOR MEETS REQUIREMENTS OF THE IBC 1704.2.2 - COLLECT CERT. OF COMPLIANCE FROM FABRICATOR AT COMPLETION OF FABRICATION
3 OPEN WEB STEEL JOISTS	5	- COLLECT IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS FOR BOLTS, NUTS, AND WASHERS - COLLECT CERTIFICATE OF COMPLIANCE FROM BOLT SUPPLIER
	2	REVIEW OF SUBMITTED SHOP DRAWINGS
4 BOLTING	1 SWSI	INSPECTION OF BOLTED CONNECTIONS IN ACCORDANCE WITH SECTION XI OF THE SPECIAL INSPECTIONS PROGRAM
	5	- COLLECT IDENTIFICATION MARKINGS TO CONFORM TO AWS STANDARDS - COLLECT CERTIFICATE OF COMPLIANCE FOR WELD FILLER MATERIAL
5 WELDING	1 SWSI	INSPECTION OF WELDS IN ACCORDANCE WITH SECTION XI OF THE SPECIAL INSPECTIONS PROGRAM
	1 SWSI	VERIFY NUMBER AND SPACING, EACH BEAM AND GIRDER
6 SHEAR CONNECTORS	1 SWSI	VERIFY NUMBER AND SPACING, EACH BEAM AND GIRDER
7 STRUCTURAL DETAILS	1 AWS	INSPECTION OF ALL STEEL FRAMING JOINT DETAILS TO ENSURE PROPER WELDS AND BOLTS
8 METAL DECK	5	COLLECT IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS FOR DECKING AND FASTENERS
	1 SWSI	VERIFY CONNECTION TO SUPPORTS AND SIDELAP FASTENERS
9 OTHER	1 AWS	INSPECTION OF SEISMIC WELDING IN ACCORDANCE WITH SECTION XI OF THE SPECIAL INSPECTIONS PROGRAM

LIGHT STEEL FRAMING - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR STEEL CONSTRUCTION AS INDICATED IN "XIII. WOOD AND LIGHT STEEL FRAMING CONSTRUCTION".

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 FABRICATION CERTIFICATION & QUALITY CONTROL PROCEDURES	5	- ENSURE FABRICATOR MEETS REQUIREMENTS OF THE IBC 1704.2.2 - COLLECT CERTIFICATION OF COMPLIANCE FROM FABRICATOR AT COMPLETION OF FABRICATION
	2	REVIEW OF SUBMITTED SHOP DRAWINGS
2 MATERIAL PROPERTIES STRENGTH, THICKNESS, ETC	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS
3 CONNECTIONS	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS
4 WELDING	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS
5 FRAMING DETAILS	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS

WOOD CONSTRUCTION - SCHEDULE OF SPECIAL INSPECTION SERVICES - SPECIAL INSPECTIONS ARE REQUIRED FOR WOOD CONSTRUCTION AS INDICATED IN "XII. WOOD AND LIGHT STEEL FRAMING CONSTRUCTION".

ITEM	AGENT NO QUALIFICATIONS	SCOPE
1 FABRICATION CERTIFICATION & QUALITY CONTROL PROCEDURES	5	- ENSURE FABRICATOR MEETS REQUIREMENTS OF THE IBC 1704.2.2 - COLLECT CERTIFICATION OF COMPLIANCE FROM FABRICATOR AT COMPLETION OF FABRICATION
	2	REVIEW OF SUBMITTED SHOP DRAWINGS
2 MATERIAL PROPERTIES GRADING, SIZE, SPACING, ETC	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS
3 CONNECTIONS	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS
4 FRAMING DETAILS	1 EIT	PERIODIC INSPECTION FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS

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301 N SPRING STREET, SUITE 100, BELLEFONTE PA 16823
WWW.DERCKEDSON.COM (717) 693-5555

SPECIAL INSPECTIONS STATEMENT AND PROGRAM
BID DOCUMENTS
GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17557

RELEASES:
No. DATE DESCRIPTION OF CHANGES
1 08/14/26 BID SET

DATE: 8/14/2026
PROJECT #: 252540
DRAWN BY: ACKM / HSM
P.N.:
HSM
P/C:
PUB

DRAWING NO.
S-003

8/19/2026 9:30:41 AM

STRUCTURAL SPECIAL INSPECTIONS PROGRAM

I. GENERAL

1. SPECIAL INSPECTIONS ARE DEFINED AS THE PERIODIC OR CONTINUOUS OBSERVATION OF WORK, INCLUDING THE PERFORMANCE OF TESTS IN ORDER TO VERIFY SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. SPECIAL INSPECTIONS WILL BE REQUIRED AS SPECIFIED IN SECTION 1704 OF THE INTERNATIONAL BUILDING CODE AND PER THE REQUIREMENTS OF THE LOCAL BUILDING OFFICIAL.

PERIODIC SPECIAL INSPECTIONS: PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.

CONTINUOUS SPECIAL INSPECTIONS: FULL-TIME OBSERVATION OF WORK REQUIRING INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.

2. THIS PROGRAM CLARIFIES WHAT WORK REQUIRES SPECIAL INSPECTIONS AND THE PROCEDURE FOR INSPECTING AND REPORTING THAT WORK. IT DEFINES THE DUTIES AND RESPONSIBILITIES OF THE PROJECT OWNER, ARCHITECT OR ENGINEER OF RECORD, SPECIAL INSPECTOR AND GENERAL CONTRACTOR.

3. THE STRUCTURAL SPECIAL INSPECTIONS PROGRAM IN NO WAY RELIEVES ANY PARTICIPANT FROM THE PROPER PERFORMANCE OF WORK ACCORDS TO CONTRACTS, PLANS, SPECIFICATIONS AND APPLICABLE BUILDING AND SAFETY CODES.

II. PRECONSTRUCTION MEETING

1. A PRECONSTRUCTION MEETING SHALL BE HELD FOR THE PURPOSE OF REVIEWING THE SPECIAL INSPECTION REQUIREMENTS FOR THAT PROJECT. THOSE REQUIRED TO ATTEND THE MEETING ARE THE OWNER OR AN INDIVIDUAL ACTING AS AN AGENT FOR THE OWNER, THE GENERAL CONTRACTOR AND THE SPECIAL INSPECTOR OF RECORD.

2. THE INFORMATION IN THE STRUCTURAL SPECIAL INSPECTIONS PROJECT PROGRAM WILL BE REVIEWED TO VERIFY THAT ALL PARTIES HAVE A CLEAR UNDERSTANDING OF THE SPECIAL INSPECTIONS PROVISIONS AND THE INDIVIDUAL DUTIES AND RESPONSIBILITIES OF EACH PARTY. A COPY OF THE SPECIAL INSPECTIONS PROJECT PROGRAM SHALL BE MADE AVAILABLE ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.

III. QUALIFICATIONS OF REQUIRED INSPECTIONS

1. THE REQUIREMENTS FOR THIS STRUCTURAL SPECIAL INSPECTIONS PROGRAM SHALL APPLY AS INDICATED IN THE SPECIFIC DIVISIONS OF THE STATEMENT OF SPECIAL INSPECTIONS.

2. NON-STRUCTURAL ITEMS - SPECIAL INSPECTIONS FOR NON-STRUCTURAL ITEMS SUCH AS EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS), SMOKE CONTROL SYSTEMS, SPRAYED FIRE RESISTANCE MATERIALS, MECHANICAL AND ELECTRICAL REQUIREMENTS, ETC. ARE NOT SPECIFIED IN THIS STRUCTURAL SPECIAL INSPECTIONS PROGRAM OR IN THE STATEMENT OF SPECIAL INSPECTIONS.

3. SPECIAL CASES - SPECIAL CASES WHICH, IN THE OPINION OF THE LOCAL BUILDING OFFICIAL INVOLVES UNUSUAL HAZARDS OR CONDITIONS, ARE ALSO NOT SPECIFIED IN THIS STRUCTURAL SPECIAL INSPECTIONS PROGRAM OR IN THE STATEMENT OF SPECIAL INSPECTIONS, AND SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS SET FOR BY THE LOCAL BUILDING OFFICIAL.

IV. QUALIFICATION OF SPECIAL INSPECTORS

1. ANY INDIVIDUAL PERFORMING THE INSPECTION AND/OR TESTING OF WORK REQUIRING SPECIAL INSPECTIONS SHALL BE APPROVED BY THE LOCAL BUILDING OFFICIAL. THE INSPECTORS PROFESSIONAL ENGINEER OR ARCHITECT RESPONSIBLE FOR SUPERVISING THE SPECIAL INSPECTOR'S WORK SHALL MAKE SUBMITTALS ON THE APPROPRIATE FORM.

2. EXCEPT FOR PROFESSIONAL ENGINEERS OR ARCHITECTS REGISTERED IN THE STATE OF THE PROJECTS LOCATION, SPECIAL INSPECTORS SHALL MEET THE FOLLOWING MINIMUM CRITERIA OF CERTIFICATION AND/OR DOCUMENTED EXPERIENCE. WORK EXPERIENCE SHALL BE RELATED TO THE FIELD FOR WHICH THE INSPECTOR IS BEING QUALIFIED AND MAY BE OBTAINED BY WORKING EITHER FOR AN INSPECTION/TESTING AGENCY OR ENGINEERING FIRM AS A TECHNICIAN OR INSPECTOR.

REINFORCED CONCRETE:

CURRENT ICBO REINFORCED CONCRETE SPECIAL INSPECTOR AND ACI CONCRETE FIELD TESTING TECHNICIAN - GRADE I CERTIFICATION OR, ENGINEER-IN-TRAINING (EIT) WITH TWO YEARS RELATED EXPERIENCE.

PRESTRESSED CONCRETE:

CURRENT ICBO REINFORCED CONCRETE CERTIFICATION AND ICBO PRESTRESSED CONCRETE CERTIFICATION AND ACI CONCRETE FIELD TESTING TECHNICIAN - GRADE I CERTIFICATION PLUS TWO YEARS RELATED EXPERIENCE, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE

WELDING

CURRENT AWS CERTIFIED WELDING INSPECTOR, OR

CURRENT ICBO STRUCTURAL STEEL AND WELDING CERTIFICATE PLUS TWO YEARS OF RELATED EXPERIENCE, OR

CURRENT NOT LEVEL II OR III (PROVIDED THEY HAVE PREVIOUSLY BEEN CERTIFIED FOR NOT LEVEL II).

HIGH STRENGTH BOLTING

CURRENT ICBO STRUCTURAL STEEL & WELDING CERTIFICATE AND TWO YEARS RELATED EXPERIENCE, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

STRUCTURAL MASONRY

CURRENT ICBO STRUCTURAL MASONRY CERTIFICATE AND TWO YEARS RELATED EXPERIENCE, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

SPRAYED FIRE-RESISTANT MATERIALS

CURRENT ICBO SPRAY APPLIED FIRE PROOFING CERTIFICATE, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

PILING AND DRILLED PIERS

CURRENT NICET LEVEL II CERTIFICATION IN GEOTECHNICAL ENGINEERING TECHNOLOGY/CONSTRUCTION, OR

REGISTERED GEOLOGIST, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE, OR

GEOLOGIST-IN-TRAINING (GIT) WITH TWO YEARS RELATED EXPERIENCE.

EXCAVATION AND FILLING

CURRENT NICET LEVEL II CERTIFICATION IN GEOTECHNICAL ENGINEERING TECHNOLOGY/CONSTRUCTION, OR

REGISTERED GEOLOGIST, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE, OR

GEOLOGIST-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

VERIFICATION OF SOILS

CURRENT NICET LEVEL II CERTIFICATION IN GEOTECHNICAL ENGINEERING TECHNOLOGY/CONSTRUCTION, OR

REGISTERED GEOLOGIST, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE, OR

GEOLOGIST-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

MODULAR RETAINING WALLS

CURRENT NICET LEVEL II CERTIFICATION IN GEOTECHNICAL ENGINEERING TECHNOLOGY/CONSTRUCTION, OR

REGISTERED GEOLOGIST, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE, OR

GEOLOGIST-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

STEEL FRAME INSPECTION

CURRENT ICBO STRUCTURAL STEEL & WELDING CERTIFICATE PLUS TWO YEARS OF RELATED EXPERIENCE, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

INSPECTION OF FABRICATORS

PRECAST: CURRENT ICBO REINFORCED CONCRETE CERTIFICATION OR PCI LEVEL II.

BAR JOIST: SEE WELDING REQUIREMENTS.

METAL BUILDING: SEE WELDING REQUIREMENTS.

STRUCTURAL STEEL: SEE WELDING REQUIREMENTS.

PRECAST CONCRETE ERECTION

CERTIFICATION AS REQUIRED FOR WELDING, OR

ENGINEER-IN-TRAINING WITH TWO YEARS RELATED EXPERIENCE.

SEISMIC RESISTANCE

PROFESSIONAL ENGINEER OR ARCHITECT, OR

AS RECOGNIZED ABOVE FOR THE SPECIFIC TYPE OF COMPONENT (STEEL, CONCRETE, MASONRY, ETC.).

SPECIAL CASES

APPROVAL ON A CASE-BY-CASE BASIS.

V. IMPLEMENTATION OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS AGENCY - WHEN SPECIAL INSPECTIONS ARE REQUIRED, THE PROJECT OWNER SHALL RETAIN THE SERVICES OF A QUALIFIED SPECIAL INSPECTION AGENCY TO INSPECT AND TEST THE WORK INDICATED WITHIN THE STATEMENT OF SPECIAL INSPECTIONS. UNDER NO CIRCUMSTANCES SHALL THESE SERVICES BE PROVIDED BY AN AGENCY RETAINED OR ENGAGED BY THE GENERAL CONTRACTOR OR ANY OF THEIR SUBCONTRACTORS. A QUALIFIED SPECIAL INSPECTIONS' AGENCY IS ONE THAT HAS BEEN APPROVED BY THE LOCAL BUILDING OFFICIAL.

2. APPROVED FABRICATORS - WHEN WORK IS BEING PERFORMED ON THE PREMISES OF A FACILITY/PLANT THAT IS APPROVED BY AN APPROVED NATIONALLY CERTIFIED ORGANIZATION, SHOP INSPECTIONS ARE NOT REQUIRED. THE APPROVED FABRICATOR SHALL CONTACT THE LOCAL BUILDING OFFICIAL TO DETERMINE THE OFFICIALS' REQUIREMENTS FOR OBTAINING PRE-APPROVAL.

3. QUALIFICATIONS - ANY INSPECTION/TESTING AGENCIES RETAINED TO PROVIDE SPECIAL INSPECTIONS SHALL BE APPROVED BY THE LOCAL BUILDING OFFICIAL. AS A MINIMUM, AN ACCEPTABLE SPECIAL INSPECTION AGENCY SHALL HAVE THE FOLLOWING QUALIFICATIONS:

A. BE UNDER THE DIRECT, FULL-TIME SUPERVISION OF A PROFESSIONAL ENGINEER OR ARCHITECT REGISTERED IN THE STATE OF THE PROJECT.

B. ALL LABORATORY FACILITIES MUST MEET THE REQUIREMENTS OF ASTM SPECIFICATION E-329 AND/OR ASTM SPECIFICATION D-3740, AS APPLICABLE.

C. EXCEPT FOR INDIVIDUALS WHO ARE PROFESSIONAL ENGINEERS OR ARCHITECTS REGISTERED IN THE STATE OF PROJECTS LOCATION, ALL TESTING TECHNICIANS, INSPECTORS AND ENGINEERS PERFORMING SPECIAL INSPECTIONS SHALL MEET THE QUALIFICATIONS OUTLINED IN SECTION IV AND BE APPROVED BY THE LOCAL BUILDING OFFICIAL.

VI. PROCEDURAL REQUIREMENTS

1. THE GENERAL CONTRACTOR SHALL ENSURE THAT COPIES OF THE APPROVED PLANS, SPECIFICATIONS AND SHOP DRAWINGS ARE PROVIDED TO THE SPECIAL INSPECTOR PRIOR TO THE START OF THE WORK.

2. IT IS THE SPECIAL INSPECTOR'S RESPONSIBILITY TO REVIEW THE APPROVED PLANS THOROUGHLY AND SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO ESTABLISH THAT ADEQUATE INFORMATION IS AVAILABLE TO CONDUCT THE REQUIRED INSPECTIONS AND TESTS. ALL ERRORS AND/OR OMISSIONS IN THE APPROVED PLANS THAT CREATE ANY FORM OF UNCERTAINTY OR AMBIGUITY SHALL BE RESOLVED THROUGH THE ARCHITECT OR ENGINEER OF RECORD.

3. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SPECIAL INSPECTIONS' AGENCY WHEN THE WORK IS READY FOR INSPECTION. A MINIMUM OF 24-HOURS NOTICE SHALL BE PROVIDED SO THAT THE SPECIAL INSPECTOR HAS TIME TO INSPECT THE WORK PRIOR TO CONCEALMENT. THE CONTRACTOR SHALL PROVIDE ACCESS TO AND MEANS FOR SAFE AND PROPER INSPECTION OF THE WORK.

4. THE SPECIAL INSPECTOR SHALL PERFORM INSPECTIONS AND/OR TESTS OF THE WORK FOR CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, SHOP DRAWINGS AND APPLICABLE PROVISIONS OF THE BUILDING CODE. IT IS THE SPECIAL INSPECTOR'S RESPONSIBILITY TO VERIFY THAT ALL WORK REQUIRING SPECIAL INSPECTIONS IS INSPECTED AND/OR TESTED PRIOR TO CONCEALMENT.

5. AFTER EACH INSPECTION, THE SPECIAL INSPECTOR SHALL GIVE THE CONTRACTOR AN INSPECTION REPORT ON THE DAILY REPORT FORM. THE FORM SHALL BE COMPLETED AND SIGNED BY AN APPROVED SPECIAL INSPECTOR. ANY NON-CONFORMING ITEMS SHALL BE NOTED AS A 'DISCREPANCY' AND BROUGHT TO THE IMMEDIATE ATTENTION OF THE GENERAL CONTRACTOR AND NOTED ON THE DAILY REPORT FORM.

6. THE GENERAL CONTRACTOR SHALL CREATE A FILE FOR THE SPECIAL INSPECTOR'S DAILY REPORTS. THIS FILE SHALL BE LOCATED IN A CONSPICUOUS PLACE IN THE PROJECT TRAILER/OFFICE TO ALLOW REVIEW BY THE LOCAL BUILDING OFFICIAL'S INSPECTORS. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL THE SPECIAL INSPECTOR OF RECORD'S FINAL REPORT HAS BEEN REVIEWED AND APPROVED BY THE LOCAL BUILDING OFFICIAL.

7. THE SPECIAL INSPECTOR OF RECORD SHALL SUBMIT A REPORT TO THE LOCAL BUILDING OFFICIAL AND ENGINEER AND/OR ARCHITECT OF RECORD BIWEEKLY UNTIL WORK REQUIRING SPECIAL INSPECTIONS IS COMPLETE. THIS REPORT SHALL BE SUBMITTED THE FIRST AND THIRD WEEK OF EACH MONTH AND SHALL BE SUBMITTED ON THE SPECIAL INSPECTIONS' REPORT FORM AND INCLUDE THE FOLLOWING:

• A BRIEF SUMMARY OF THE WORK PERFORMED DURING THE REPORTING TIME FRAME.

• CHANGES AND/OR DISCREPANCIES WITH THE APPROVED DRAWINGS OR SPECIFICATIONS THAT WERE OBSERVED DURING THE REPORTING PERIOD.

• DISCREPANCIES WHICH WERE RESOLVED OR CORRECTED.

• A LIST OF NONCONFORMING ITEMS REQUIRING RESOLUTION.

ALL APPLICABLE TEST RESULTS.

8. WHEN THE WORK REQUIRING SPECIAL INSPECTIONS IS COMPLETED AND ALL NONCONFORMING ITEMS HAVE BEEN RESOLVED, THE GENERAL CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR OF RECORD TO SUBMIT A FINAL SPECIAL INSPECTIONS' REPORT TO THE LOCAL BUILDING OFFICIAL, ENGINEER AND/OR ARCHITECT OF RECORD, AND GENERAL CONTRACTOR.

VII. SOILS AND FOUNDATIONS

1. VERIFICATION OF SOILS

A. THE SUBGRADE SUPPORTING THE FOOTINGS OF BUILDINGS OR STRUCTURES SHALL BE INSPECTED IMMEDIATELY PRIOR TO THE PLACEMENT OF REINFORCED CONCRETE. THE SPECIAL INSPECTOR SHALL OBSERVE AND TEST ALL FOOTING EXCAVATIONS TO VERIFY CONFORMANCE WITH APPROVED PLANS AND/OR GEOTECHNICAL ENGINEER'S REPORT. THE EXCAVATION SHALL BE OF PROPER SIZE AND DEPTH AND FREE OF ANY LOOSE, DELECTERIOUS OR FOREIGN MATERIAL.

B. WHERE UNSUITABLE BEARING CONDITIONS ARE OBSERVED, THE GEOTECHNICAL ENGINEER OF RECORD OR PROJECT ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY SO THAT REMEDIAL PROCEDURES CAN BE ESTABLISHED.

2. EXCAVATION AND FILLING

A. WHEN A PROJECT CONTAINS EXCAVATIONS WHOSE SLOPE LIMITS EXCEED GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND/OR STRUCTURAL FILL GREATER THAN ONE FOOT UNDER THE FOOTPRINT OF A FUTURE STRUCTURE, A SPECIAL INSPECTOR SHALL MONITOR THE OPERATIONS FOR CONFORMANCE WITH THE APPROVED PLANS AND/OR GEOTECHNICAL ENGINEER'S REPORT.

B. DURING THE ENGINEERED STRUCTURAL FILL, THE SPECIAL INSPECTOR SHALL PROVIDE SUFFICIENT OBSERVATION TO VERIFY THAT THE PLACEMENT AND PLACEMENT OF COMPACTED FILL IS BEING PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

C. EXCEPT WHERE PLACEMENT OF FILL IS LESS THAN 12" DEEP, AT LEAST ONE SPECIAL INSPECTOR SHALL BE PRESENT DURING THE ENTIRE PERIOD OF EACH DAY'S WORK TO MONITOR THE PLACEMENT OF ENGINEERED STRUCTURAL FILL SUPPORTING THE FOUNDATION. THE SPECIAL INSPECTOR SHALL MONITOR AND TEST ALL FILL TO DETERMINE WHETHER THE TYPE OF MATERIAL, MOISTURE CONTENT AND DEGREE OF COMPACTION ARE WITHIN THE RECOMMENDED LIMITS SET FORTH BY THE GEOTECHNICAL ENGINEER OF RECORD.

3. PIERS AND PILES - A SPECIAL INSPECTOR SHALL BE ON-SITE DURING THE CONSTRUCTION OF ALL PIERS, PILES AND PRESSURE-INJECTED FOOTINGS. WORK SHALL BE IN ACCORDANCE WITH THE APPROVED DRAWINGS AND AS SPECIFIED BY THE GEOTECHNICAL ENGINEER OF RECORD.

PIERS: THE SPECIAL INSPECTOR SHALL MONITOR CONSTRUCTION, TO MAINTAIN A PIER INSTALLATION RECORD, AND TO SUBMIT IT TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. ON THE RECORD INDICATE, FOR EACH DRIVEN PILE, ITS TYPE, SIZE, LOAD BEARING CAPACITY, TOP OF PIER ELEVATION, PLUMBNESS, LOCATION, AND PIER TIP ELEVATION. ADDITIONALLY, ANY PROBLEMS WITH ACHIEVED BEARING CAPACITY, TOLERANCE, ELEVATION, OR LOCATION SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

PILES: THE SPECIAL INSPECTOR SHALL MONITOR CONSTRUCTION, TO MAINTAIN A PILE DRIVING RECORD, AND TO SUBMIT IT TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. ON THE RECORD INDICATE, FOR EACH DRIVEN PILE, ITS DRIVING SPECIFICATION NUMBER, TYPE, SIZE, LOAD BEARING CAPACITY, TOP OF PILE CUT-OFF ELEVATION, DRIVING PLUMBNESS, ACTUAL LOCATION, AND PILE TIP ELEVATION. ADDITIONALLY, ANY PROBLEMS WITH ACHIEVED BEARING CAPACITY, TOLERANCE, ELEVATION, OR LOCATION SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

4. EARTH RETAINING STRUCTURES

A. ANY SLOPE RETENTION SYSTEM DESIGNED TO RESIST ACTIVE EARTH PRESSURE SHALL HAVE SPECIAL INSPECTIONS. THE SPECIAL INSPECTOR SHALL PERFORM THE NECESSARY INSPECTIONS AND TESTS TO ENSURE THE SYSTEM IS INSTALLED PER THE APPROVED PLANS AND SPECIFICATIONS.

B. AFTER A TEMPORARY EARTH-RETAINING STRUCTURE IS INSTALLED, A BIWEEKLY INSPECTION SHALL BE MADE THROUGHOUT THE LIFE OF THE PROJECT TO VERIFY THE SYSTEM IS PERFORMING AS INTENDED AND NO CHANGES HAVE OCCURRED. INSPECTION SCOPE AND FREQUENCY OF TEMPORARY EARTH-RETAINING STRUCTURES SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

VIII. PRECAST CONCRETE

1. INSPECTION OF FABRICATOR

A. THE FOLLOWING PROGRAMS ARE CURRENTLY APPROVED BY THE ENGINEER OF RECORD TO PROVIDE CERTIFICATION OF FABRICATORS (THE CONTRACTOR SHALL OBTAIN THE LOCAL BUILDING OFFICIAL'S LIST OF APPROVED FABRICATOR CERTIFICATIONS):

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO),

INTERNATIONAL CODE COUNCIL (ICC),

PRECAST/PRESTRESSED CONCRETE INSTITUTE (PCI)

B. WHEN PRECAST CONCRETE IS FABRICATED IN A PLANT WHICH IS NOT CERTIFIED BY AN APPROVED NATIONALLY RECOGNIZED ORGANIZATION, IN-PLANT INSPECTION IS REQUIRED AS FOLLOWS.

a. THE SPECIAL INSPECTOR SHALL PROVIDE IN-PLANT INSPECTIONS DURING THE FABRICATION OF PRECAST FOR COMPLIANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND SHOP DRAWINGS. EACH PRECAST MEMBER SHALL BE INSPECTED FOR PROPER FORM DIMENSION, REINFORCING STEEL, PRESTRESSING TENDONS, EMBEDS AND LIFTING DEVICES PRIOR TO CONCRETE PLACEMENT. IT IS THE FABRICATOR'S RESPONSIBILITY TO NOTIFY THE SPECIAL INSPECTIONS AGENCY PRIOR TO CONCRETE PLACEMENT AND TO HAVE THE REQUIRED PLANS ON-SITE FOR THE INSPECTION.

b. THE SPECIAL INSPECTOR SHALL MONITOR THE PLACEMENT OF CONCRETE DURING CASTING AND OBTAIN SAMPLES FOR STRENGTH TESTS AS REQUIRED BY PROJECT SPECIFICATIONS. CONCRETE COMPRESSIVE STRENGTH RESULTS AND STRESSING DATA SHALL BE RECORDED FOR EACH MEMBER AND SUBMITTED WITH THE SPECIAL INSPECTIONS' REPORT.

2. ERECTION OF PRECAST CONCRETE

A. ERECTED PRECAST CONCRETE MEMBERS SHALL BE INSPECTED FOR COMPLIANCE WITH THE APPROVED ERECTION DRAWINGS. THE SPECIAL INSPECTOR SHALL VERIFY PROPER MEMBER LOCATION AND THAT NO CRACKING, TIPPING OR SLIPPING

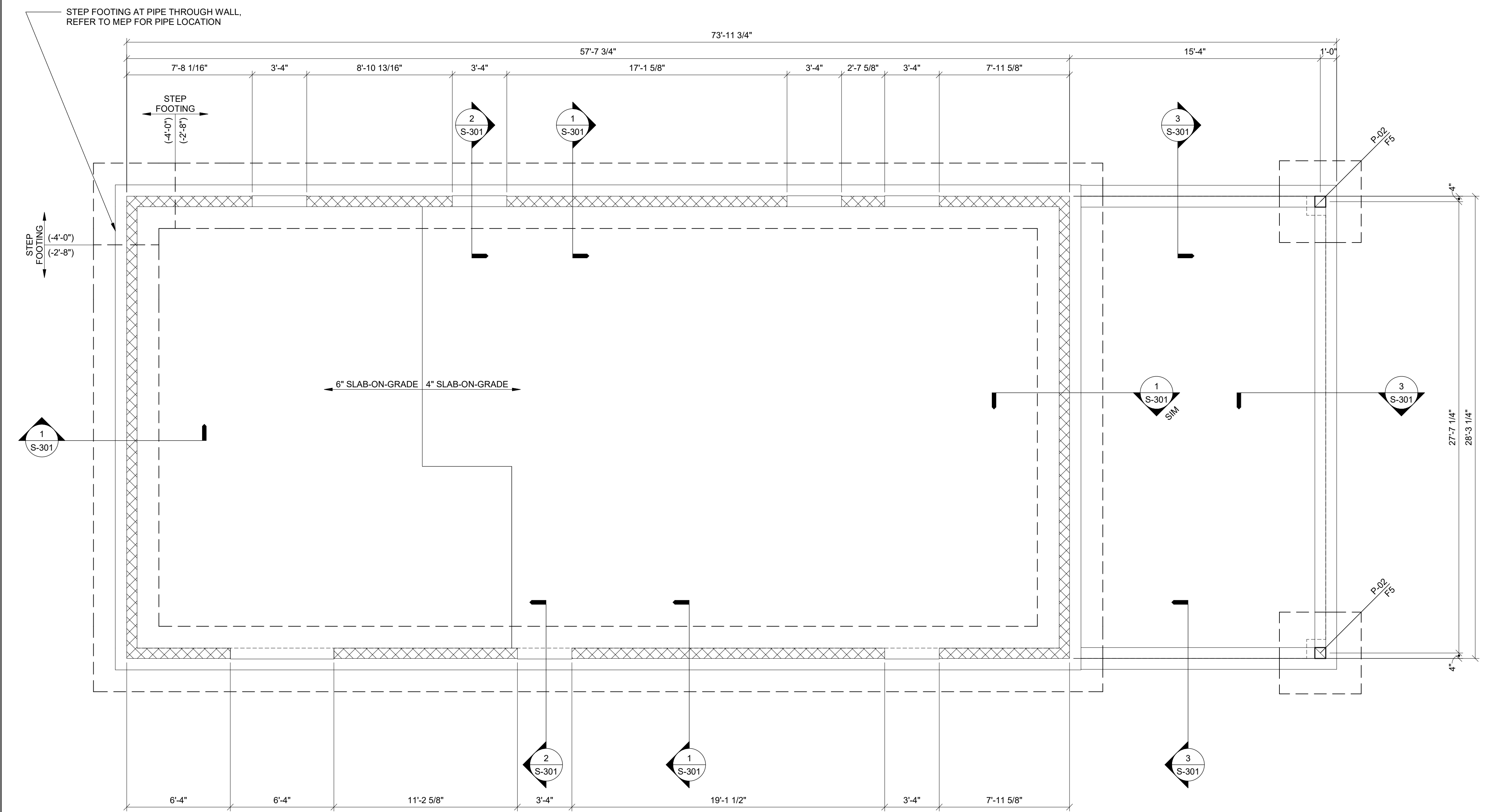
FIELDHOUSE FOUNDATION AND SLAB-ON-GRADE PLAN NOTES:

- SLAB-ON-GRADE CONSTRUCTION: 4" THICK NORMAL WEIGHT CONCRETE REINFORCED WITH SYNTHETIC FIBER REINFORCEMENT, TYPICAL UNLESS NOTED OTHERWISE (UNO) ON PLAN.
- WHERE INDICATED ON PLAN (AT STORAGE AND MECHANICAL ROOMS), PROVIDE 6" THICK NORMAL WEIGHT CONCRETE REINFORCED WITH SYNTHETIC FIBER REINFORCEMENT, TYPICAL UNLESS NOTED OTHERWISE (UNO) ON PLAN.
- ALL SLABS SHALL BE ON VAPOR BARRIER OVER 6" MINIMUM COMPACTED FREE DRAINING GRANULAR BASE COURSE COMPLYING WITH #57 STONE OR GEOTECHNICAL ENGINEER APPROVED EQUIVALENT.
- REFER TO TYPICAL DETAIL - SLAB-ON-GRADE FOR ADDITIONAL INFORMATION.
- TOP OF SLAB = 0'-0" (REFERENCE, ACTUAL = 542'-0", REFER TO SITE/CIVIL), TYPICAL UNO ON PLAN. SEE ARCHITECTURAL DRAWINGS FOR SLAB SLOPES TO DRAINS, AS REQUIRED.
- ALL ELEVATIONS SHOWN ON PLAN AND IN SECTIONS OR DETAILS REFERENCE THE TOP OF SLAB ELEVATION OF 0'-0".
- ELEVATIONS SHOWN ON PLAN THUS (± xx'-x") ARE TOP OF FOOTING AND PIER ELEVATIONS RELATIVE TO THE REFERENCE ELEVATION OF 0'-0".
TOP OF EXTERIOR FOOTINGS = -2'-8", UNLESS NOTED OTHERWISE
TOP OF INTERIOR FOOTINGS = -1'-4", UNLESS NOTED OTHERWISE
- PROVIDE SAWED CONTRACTION OR CONSTRUCTION JOINTS IN SLABS ON GRADE SPACED AT 12 FEET OC MAXIMUM EACH DIRECTION PER TYPICAL DETAILS.
- PROVIDE ACI CLASS B LAP SPLICE FOR ALL STEEL REINFORCING BARS IN CONCRETE. REFER TO GENERAL NOTES FOR REINFORCEMENT LAP IN STRUCTURAL MASONRY.
- PROVIDE #5 @ 48" OC REINFORCING BARS IN ALL INTERIOR AND EXTERIOR CMU WALLS SHOWN ON THE STRUCTURAL DRAWINGS UNLESS A GREATER AMOUNT IS INDICATED ON PLAN OR IN SECTIONS. REFER TO STRUCTURAL SCHEDULE, NOTES, AND DETAILS FOR ADDITIONAL WALL REINFORCEMENT REQUIREMENTS.
ALL EXTERIOR CMU WALLS ARE SHEAR WALLS.
- ALL FOOTINGS SHALL BEAR A MINIMUM OF 3'-0" BELOW FINISHED GRADE. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF STEPPED FOOTINGS OR WALL PENETRATIONS AT BELOW GRADE UTILITIES WITH SITE/CIVIL, PLUMBING, MECHANICAL, AND ELECTRICAL CONTRACTORS. COORDINATE CONSTRUCTION WITH THE TYPICAL DETAIL - FOOTING STEP, AS REQUIRED, FOR LOCATIONS SHOWN OR NOT SHOWN ON DRAWINGS.
- WHERE CONCRETE FOUNDATION WALL SUPPORTS MASONRY VENEER, COORDINATE AS REQUIRED FOR STEP AND EXTENTS OF LEDGES. REFER TO SITE/CIVIL DRAWINGS AND STRUCTURAL SECTIONS FOR REQUIREMENTS. FINAL COORDINATION OF ALL STEP LOCATIONS SHALL BE BY THE CONTRACTOR TO MAINTAIN 8" MIN AND 16" MAX BELOW FINISHED GRADE FOR TOP OF VENEER LEDGE.
- AT SITE UTILITIES, INCLUDING BUT NOT LIMITED TO PLUMBING AND ELECTRICAL SERVICE TO BUILDING, PROVIDE SLEEVES FOR ALL PIPES AND CONDUITS THROUGH FOUNDATION WALLS AND FOR ALL PIPES 12 INCHES OR LESS BELOW WALL FOOTINGS AS INDICATED IN THE TYPICAL DETAIL - PIPE THROUGH FOUNDATION WALL AND TYPICAL DETAIL - PIPE UNDER FOOTING. STEP FOOTINGS AS INDICATED IN TYPICAL DETAILS, WHERE REQUIRED.
- PROVIDE ADDITIONAL REINFORCING BARS IN SLAB AT ALL DISCONTINUOUS JOINTS AND RE-ENTRANT CORNERS (SHOWN OR NOT SHOWN ON PLAN) PER THE TYPICAL DETAIL - REINFORCING AT DISCONTINUOUS JOINTS AND RE-ENTRANT CORNERS IN SLABS-ON-GRADE.
- PROVIDE THICKENED SLABS BELOW INTERIOR NON-LOADBEARING MASONRY WALLS (NOT SHOWN ON STRUCTURAL PLANS) PER THE TYPICAL DETAIL - THICKENED SLAB AT NON-LOADBEARING INTERIOR MASONRY WALL. REFER TO THE ARCHITECTURAL DRAWINGS FOR NON-LOADBEARING MASONRY WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR INTERIOR WALLS NOT SHOWN, FOR INTERIOR AND EXTERIOR WALL OPENINGS, FOR STEPPED OR RECESSED SLAB AREAS, AND FOR ADDITIONAL INFORMATION NOT SHOWN.
- COORDINATE ALL INTERIOR CONCRETE EQUIPMENT HOUSEKEEPING PADS, WHICH MAY BE REQUIRED, WITH EQUIPMENT SUPPLIERS. REFER TO THE MECHANICAL DRAWINGS FOR INTERIOR EQUIPMENT HOUSEKEEPING PADS. WHERE INDICATED OR REQUIRED FOR VIBRATION ISOLATION, PROVIDE ISOLATED SLAB PER TYPICAL DETAIL - EQUIPMENT BASE AT SLAB-ON-GRADE, IN ADDITION TO ANY HOUSEKEEPING PAD REQUIRED. REFER TO THE CIVIL DRAWINGS FOR EXTERIOR EQUIPMENT PADS AND DETAILING NOT SHOWN.
- PROVIDE FROST PROTECTION UNDER EXTERIOR SLABS AT ALL EXTERIOR MAN DOORS PER THE TYPICAL DETAIL - FROST SLAB AND WALLS. REFER TO THE ARCHITECTURAL AND SITE DRAWINGS FOR THE NUMBER, SIZES, AND LOCATIONS.
- REFER TO THE ARCHITECTURAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR BELOW GRADE ITEMS, EMBEDMENT ITEMS, AND FOR ADDITIONAL INFORMATION NOT SHOWN.
- REFER TO GENERAL NOTES AND SECTIONS FOR BACKFILL REQUIREMENTS OF FOUNDATION AND RETAINING WALLS.
- REFER TO SCHEDULES FOR MASONRY WALLS, CONCRETE PIERS (SHOWN AS P-xx ON PLAN), SPREAD FOOTINGS (SHOWN AS Fx ON PLAN), AND REFER TO TYPICAL DETAILS, STRUCTURAL NOTES, AND PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

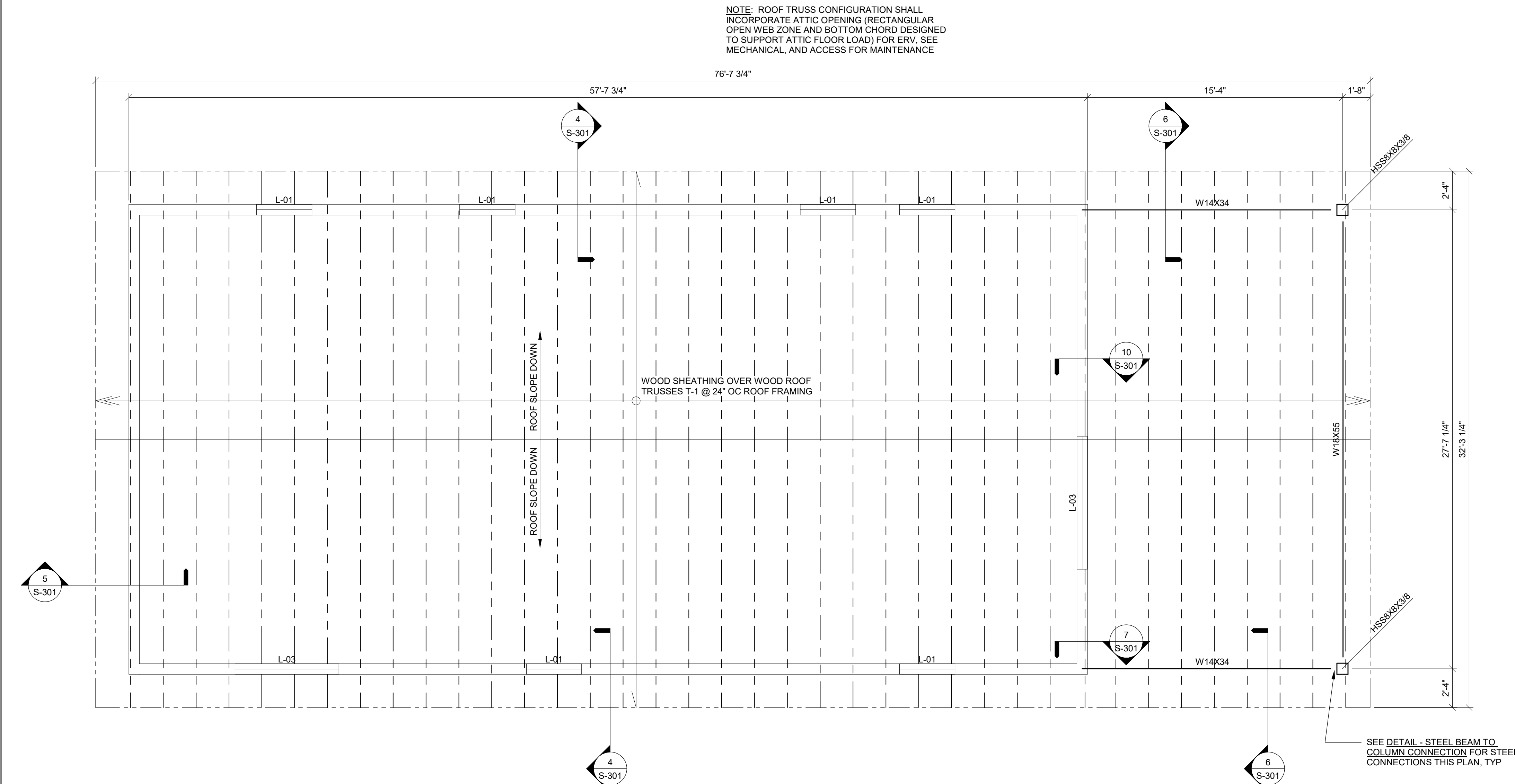
SPREAD FOOTING SCHEDULE					
PLAN MARK	WIDTH	LENGTH	THICKNESS	TOP BARS, EACH WAY	BOTTOM BARS, EACH WAY
F4	4'-0"	4'-0"	1'-0"	(4) #6	(4) #6
F5	5'-0"	5'-0"	1'-0"	(10) #4	(10) #4
F6	6'-0"	6'-0"	1'-2"	(7) #5	(7) #5
F7	7'-0"	7'-0"	1'-4"	(9) #6	(9) #6
F9	9'-0"	9'-0"	1'-10"	(10) #6	(10) #6
F10	10'-0"	10'-0"	2'-0"	(9) #7	(9) #7

FIELDHOUSE ROOF FRAMING NOTES:

- TRUSS BEARING ELEVATION INDICATED ON PLAN UNLESS NOTED ON PLAN AS THUS (±x'-x") ABOVE TOP OF SLAB ELEVATION.
TOP OF CMU = 10'-8"
TOP OF STEEL = 10'-8"
TRUSS BEARING = 10'-11"
- ALL FRAMING MEMBERS SHALL BE EQUALLY SPACED TO MEET MAXIMUM SPACING INDICATED ON PLAN.
- PROVIDE #5 @ 48" OC MINIMUM REINFORCING BARS IN ALL INTERIOR AND EXTERIOR CMU WALLS SHOWN ON THE STRUCTURAL DRAWINGS UNLESS A GREATER AMOUNT IS INDICATED ON PLAN OR IN SECTIONS. REFER TO STRUCTURAL SCHEDULE, NOTES, AND DETAILS FOR ADDITIONAL WALL REINFORCEMENT REQUIREMENTS.
ALL EXTERIOR CMU WALLS ARE SHEAR WALLS.
- TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. TRUSSES SHALL BE DESIGNED FOR THE LOADS SHOWN ON THE DRAWINGS, USING THE LOAD COMBINATIONS AND DEFLECTION LIMITS SPECIFIED IN THE APPLICABLE CODES.
- COMPLETE TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED SHOWING DESIGN ASSUMPTIONS, MEMBERS SIZES, TRUSS LAYOUT, DIMENSIONS, CONNECTION DETAILS, ETC. TRUSS DESIGNER SHALL DESIGN AND SPECIFY TRUSS TO TRUSS AND TRUSS TO SUPPORT CONNECTIONS.
- UNLESS NOTED OTHERWISE ON PLAN, TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS, USING THE LOAD COMBINATIONS IN THE 2021 INTERNATIONAL BUILDING CODE:
 - TOP CHORD DL: 10 PSF
 - TOP CHORD ROOF LL: 20 PSF (HORIZONTAL PROJECTION)
 - TOP CHORD SNOW LOAD: IN ACCORDANCE WITH ASCE 7-16 FOR GROUND SNOW LOAD OF 30 PSF, INCLUDING UNBALANCED LOAD CASES. (SEE GENERAL NOTES FOR ADDITIONAL INFORMATION)
 - BOTTOM CHORD DL: 15 PSF TYPICAL
 - BOTTOM CHORD LL: 10 PSF TYPICAL
 - WIND LOAD: IN ACCORDANCE WITH ASCE 7-16 FOR WIND SPEED OF 115 MPH (SEE GENERAL NOTES FOR ADDITIONAL CRITERIA)
 - TRUSS AND BRACING SELF WEIGHT: BY TRUSS MANUFACTURER
 - TRUSS DESIGNER SHALL ACCOUNT FOR ADDITIONAL MECHANICAL UNIT WEIGHTS WITH MECHANICAL CONTRACTOR. EXACT LOCATIONS OF LOADS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. ANY ADDITIONAL EQUIPMENT LOADS NOT SHOWN ON STRUCTURAL ON PLAN SHALL BE COORDINATED WITH THE TRUSS DESIGNER BY THE MECHANICAL CONTRACTOR.
- TRUSS LAYOUTS SHOWN FOR SCHEMATIC PURPOSED ONLY. TRUSS MANUFACTURER SHALL COORDINATE THE WEB MEMBER CONFIGURATION TO SATISFY THE REQUIRED DESIGN LOADS. CHORD AND WEB MEMBER SIZES SHALL BE DESIGNED AND SIZES BY THE TRUSS MANUFACTURER.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION OF TRUSSES, INCLUDING PERMANENT AND TEMPORARY BRACING. TEMPORARY BRACING SHALL BE INSTALLED IN ACCORDANCE WITH HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES.
- THE STRUCTURAL ENGINEER OF RECORD HAS PROVIDED DESIGN OF THE PERMANENT BRACING SYSTEM (SEE TYPICAL DETAIL) FOR THE BUILDING PERMANENT BRACING OF ALL TRUSS MEMBER FOR FLEXURAL AND COMPRESSIVE STRESSES SHALL BE DESIGNED BY THE TRUSS DESIGNER USING THE FOLLOWING ASSUMPTIONS:
 - THE TOP SIDE OF THE TOP CHORD IS BRACED CONTINUOUSLY BY THE ROOF DIAPHRAGM (SHEATHING).
 - THE WEB MEMBERS ARE NOT BRACED.
 - THE BOTTOM CHORD IS UNBRACED. IF BOTTOM CHORD BRACING IS REQUIRED, LAYOUT PLANS AND DETAILS SHALL BE PROVIDED BY THE TRUSS MANUFACTURER AS PART OF THE SHOP DRAWINGS SUBMITTAL PACKAGE. BRACING INSTALLATION SHALL BE INCLUDED WITH THE TRUSS ERECTION.
- EACH TRUSS SHALL BE INSTALLED AND ANCHORED AS INDICATED ON THE TRUSS MANUFACTURER'S DRAWINGS. TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, OR OTHERWISE ALTERED WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGNER.
- AT GABLE ENDS, TRUSS SUPPLIER SHALL PROVIDE GABLE END TRUSSES CAPABLE OF RESISTING OUT OF PLANE WIND LOADS, INCLUDING TO LIMIT OUT-OF-PLANE DEFLECTIONS TO 1/600 THE TRUSS HEIGHT WHERE BRACING MASONRY VENEER OR 1/240 THE TRUSS HEIGHT AT OTHER GABLE ENDS. GABLE END TRUSSES SHALL BE PROVIDED WITH VERTICAL ORIENTED FRAMING MEMBERS, SIMILAR TO WALL FRAMING, AT A SPACING NOT TO EXCEED 24" OC SHALL HAVE VERTICAL BLOCKING INSTALLED BETWEEN DIAGONAL WEBS FOR SHEATHING ATTACHMENT. SHEATHING OVER GABLE END WALLS SHALL BE CONTINUOUS OVER INTERSECTION WITH DOUBLE TOP PLATE BELOW AND PROVIDED OVER SURFACE OF GABLE END TRUSS. REFER TO TYPICAL DETAIL - GABLE END TRUSS AT WALL FOR ADDITIONAL REQUIREMENTS FOR TRUSSES PARALLEL TO WALLS. WALLS AND ROOF OVERHANGS ARE SHOWN IN SECTIONS TO HAVE OVER-FRAMED OVERHANGS (RAKES), PROVIDE DROP-TOP GABLE END TRUSS TO ACCOMMODATE OVER-FRAMING INSTALLATION.
- PLANS INDICATE INTENT FOR PRIMARY TRUSSES ONLY. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR ROOF SLOPES AND TO DETERMINE EXTENTS OF OVERFRAMING, DORMER TRUSSES AND OUTRIGGERS, OR HIP FRAMING, INCLUDING CORNER GIRDER, CORNER JACK, AND END JACK TRUSSES. TRUSS SUPPLIER SHALL ACCOUNT FOR LOADS ON PRIMARY TRUSSES DUE TO ANY OVERFRAMING OR HIP FRAMING.
- REFER TO TYPICAL DETAILS, GENERAL NOTES, AND PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 PLAN - FIELDHOUSE FOUNDATION AND GROUND SLAB
S-101 1/4" = 1'-0"



2 PLAN - FIELDHOUSE ROOF FRAMING
S-101 1/4" = 1'-0"

STAHL SHEAFFER
ENGINEERING
301 Science Park Road, Suite 333
State College, PA 16803
O: 814.699.1562 | F: 814.699.1885
www.stahlsheaffer.com
SEE PRODUCT NO. 25-357

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CAMPUSES DOWNTOWNS ATHLETICS
33 SOUTH BROAD STREET, SUITE 100, BELLEFONTE, PA 19803
301 N. SPRING STREET, SUITE 100, BELLEFONTE, PA 19803
(717) 265-2525

FIELDHOUSE PLANS
BID DOCUMENTS
GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E. Main St., New Holland, PA 17357

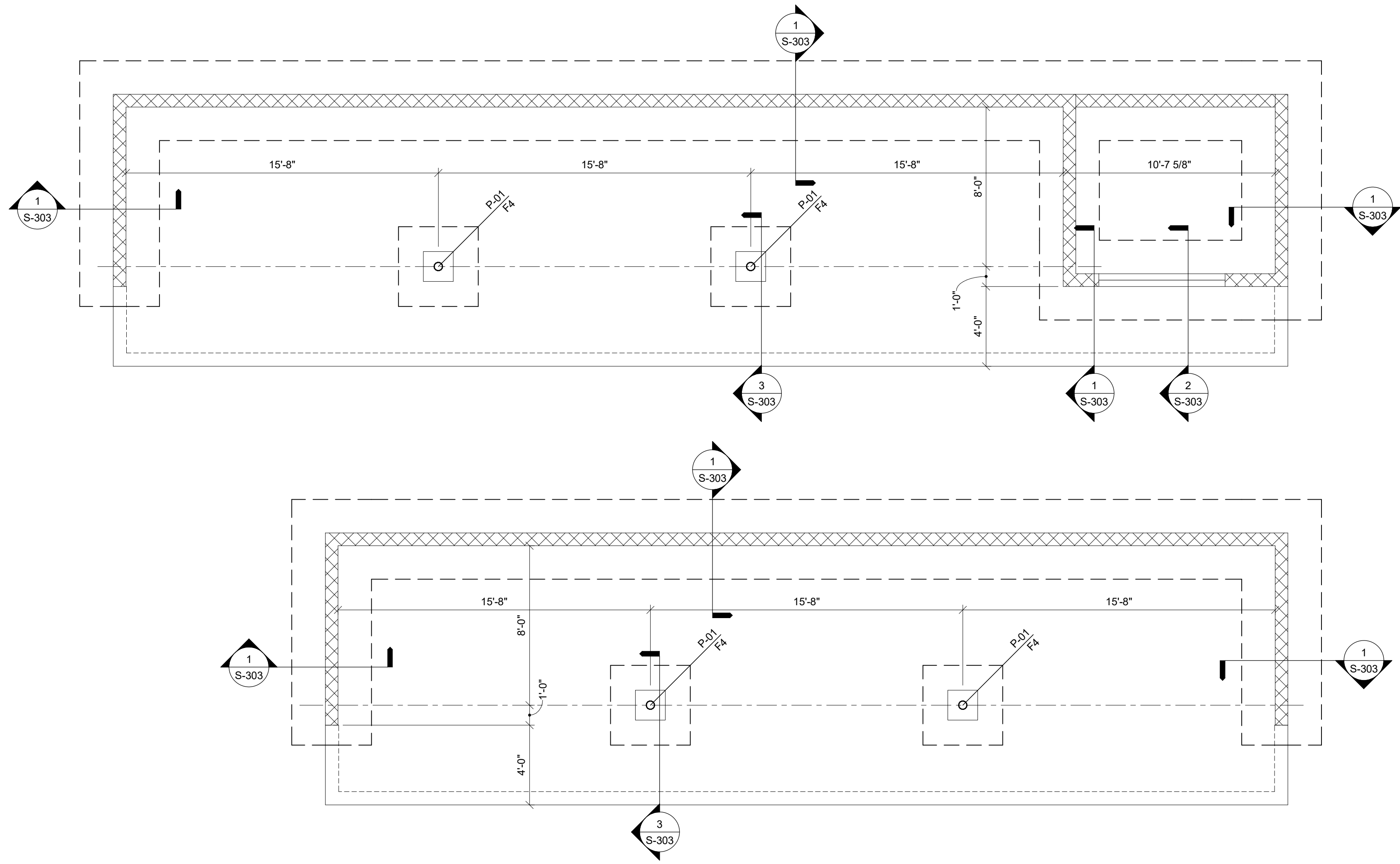
RELEASES:
No. DATE DESCRIPTION OF CHANGES
1 08/14/26 BID SET

DATE: 8/14/2026
PROJECT #: 25540
DRAWN BY: ACM / HSM
P.N.: HSM
P.C.: HSM
PUB.

DRAWING NO.
S-101

SOFTBALL DUGOUT FOUNDATION AND SLAB-ON-GRADE PLAN NOTES:

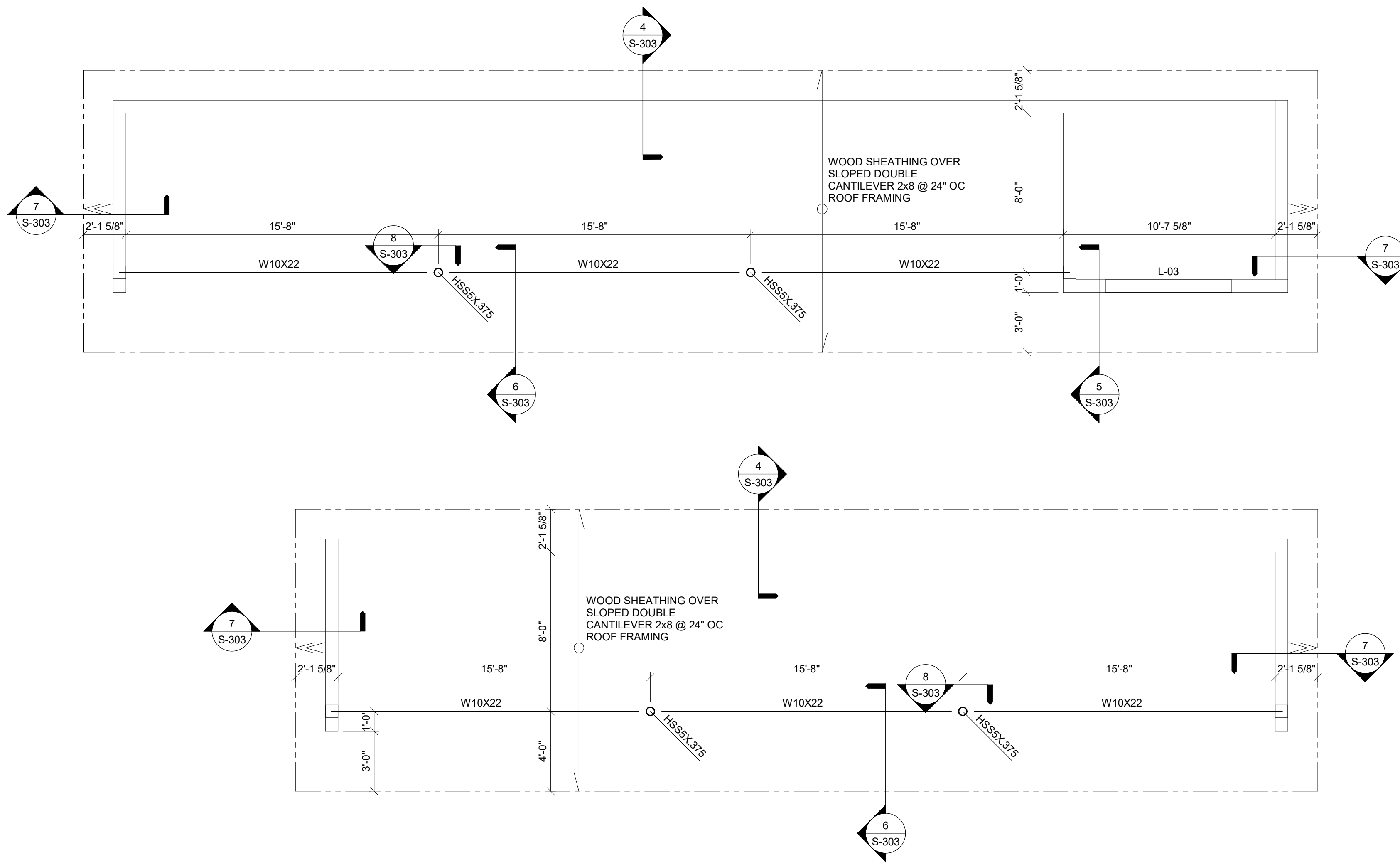
- SLAB-ON-GRADE CONSTRUCTION: 4" THICK NORMAL WEIGHT CONCRETE REINFORCED WITH SYNTHETIC FIBER REINFORCEMENT. TYPICAL UNLESS NOTED OTHERWISE (UNO) ON PLAN.
- ALL SLABS SHALL BE ON VAPOR BARRIER OVER 6" MINIMUM COMPACTED FREE DRAINING GRANULAR BASE COURSE COMPLYING WITH #57 STONE OR GEOTECHNICAL ENGINEER APPROVED EQUIVALENT.
- ALL ELEVATIONS SHOWN ON PLAN AND IN SECTIONS OR DETAILS REFERENCE THE REFERENCE FINISHED GROUND FLOOR ELEVATION OF 0'-0" (REFER TO SITE / CIVIL FOR ACTUAL).
- ELEVATIONS SHOWN ON PLAN THUS (xx'-x") ARE TOP OF FOOTING AND ELEVATIONS RELATIVE TO THE REFERENCE ELEVATION.
TOP OF FOOTINGS: -2'-8" FROM TOP OF SLAB ELEVATION
TOP OF PIERS: -0'-8" FROM TOP OF SLAB ELEVATION
- PROVIDE SAWED CONTRACTION OR CONSTRUCTION JOINTS IN SLABS ON GRADE SPACED AT 12 FEET OC MAXIMUM EACH DIRECTION PER TYPICAL DETAILS.
- PROVIDE ACI CLASS B LAP SPLICE FOR ALL STEEL REINFORCING BARS IN CONCRETE. REFER TO GENERAL NOTES FOR REINFORCEMENT LAP IN STRUCTURAL MASONRY.
- REFER TO STRUCTURAL NOTES AND DETAILS FOR ADDITIONAL WALL REINFORCEMENT REQUIREMENTS.
- ALL FOOTINGS SHALL BEAR A MINIMUM OF FROST DEPTH BELOW ADJACENT FINISHED GRADE, SEE GENERAL NOTES. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF WALL PENETRATIONS AT BELOW GRADE UTILITIES WITH SITE/CIVIL, PLUMBING, MECHANICAL, AND ELECTRICAL CONTRACTORS.
- PROVIDE STEEL SLEEVES FOR ALL PIPES THROUGH FOUNDATION WALLS AND FOR ALL PIPES 12 INCHES OR LESS BELOW WALL FOOTINGS. SLEEVES SHALL HAVE 4-INCH GREATER INSIDE DIAMETER THAN OUTSIDE DIAMETER OF PIPES COMING THROUGH FOUNDATION WALLS OR FOOTINGS WITH VOID BETWEEN SLEEVES AND PIPES BEING FILLED WITH COMPRESSIBLE MATERIAL AS INDICATED IN THE TYPICAL DETAIL - PIPE THROUGH FOUNDATION WALL AND TYPICAL DETAIL - PIPE UNDER FOOTING.
- PROVIDE THICKENED SLAB AT INTERIOR NON-BEARING CMU WALLS (NOT SHOWN ON STRUCTURAL DRAWINGS) PER TYPICAL DETAIL - THICKENED SLAB AT NON-BEARING INTERIOR MASONRY WALL.
- PROVIDE ADDITIONAL REINFORCING BARS IN SLAB AT ALL DISCONTINUOUS JOINTS AND RE-ENTRANT CORNERS PER THE TYPICAL DETAIL - RE-ENTRANT CORNER AND DISCONTINUOUS JOINTS IN SLAB-ON-GRADE.
- FOR JOINTS AND INTERSECTIONS OF MASONRY FOUNDATION WALLS, REFER TO TYPICAL DETAIL - VERTICAL REINFORCING IN MASONRY WALL.
- REFER TO THE TYPICAL DETAILS, STRUCTURAL NOTES, ARCHITECTURAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR BELOW GRADE ITEMS, EMBEDMENT ITEMS, AND FOR ADDITIONAL INFORMATION NOT SHOWN.



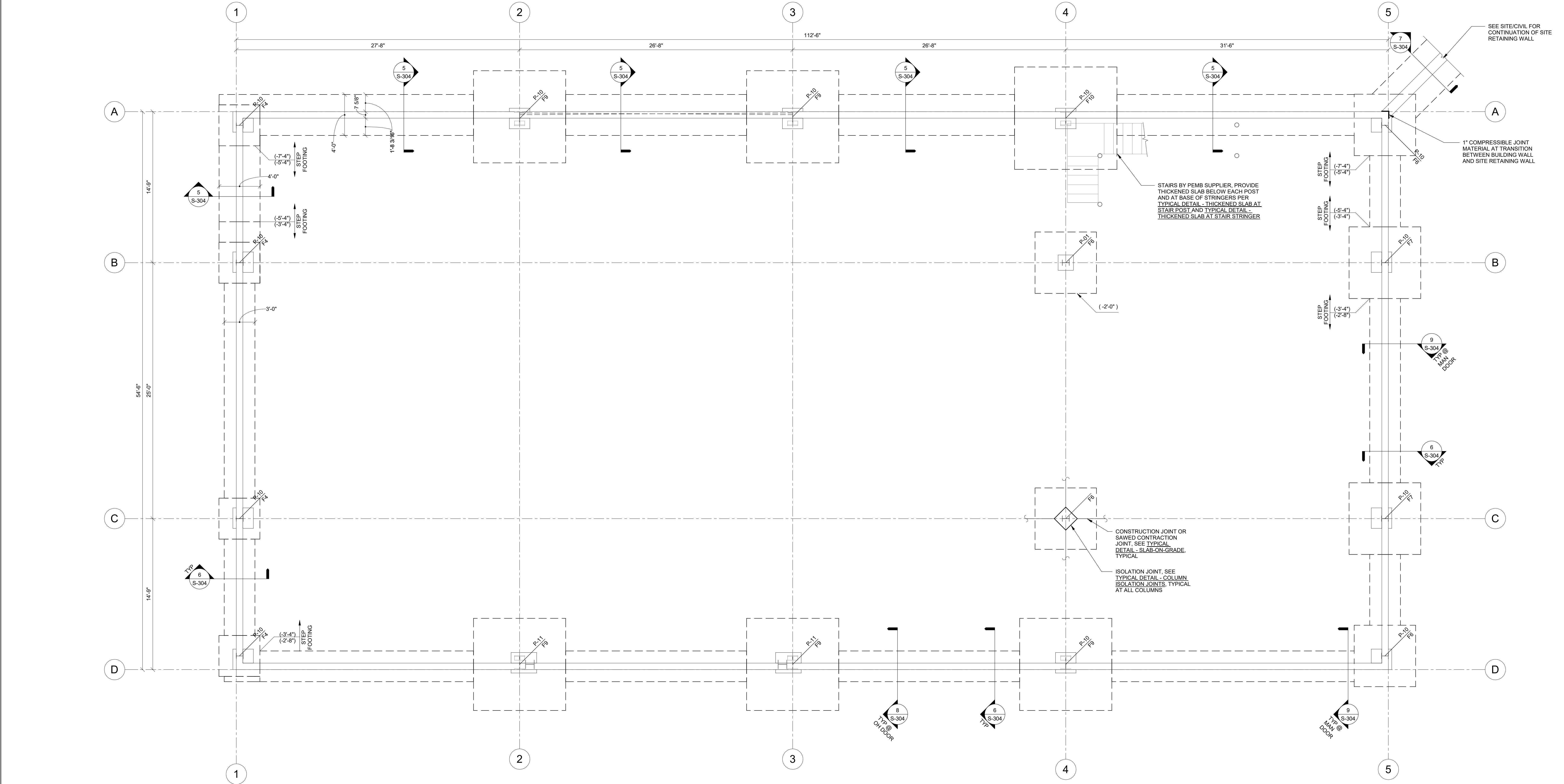
1 PLAN - SOFTBALL DUGOUT FOUNDATION AND GROUND SLAB
S-103 1/4" = 1'-0"

SOFTBALL DUGOUT ROOF FRAMING PLAN NOTES:

- ROOF CONSTRUCTION: 19/32" PLYWOOD (40/20 SPAN RATING) OVER 2x8 AT 24" OC, SPRUCE-PINE-FIR No. 2 GRADE OR BETTER. ALL SHEATHING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS UNLESS SHOWN OTHERWISE.
- THE TOP OF WALL OR TOP OR BOTTOM OF STEEL ELEVATIONS INDICATED IN SECTIONS SHALL REFERENCE THE DUGOUT TOP OF SLAB ELEVATION OF 0'-0" (REFERENCE, ACTUAL = SEE SITE/CIVIL).
- REFER TO SECTIONS FOR TOP OF WALL AND TOP OF STEEL ELEVATIONS.
- ALL FRAMING MEMBERS SHALL BE EQUALLY SPACED BETWEEN WALLS OR AS INDICATED ON PLANS.
- ALL STEEL BEAMS ATTACHED TO MASONRY SHALL BEAR EACH END ON BP-1, 7 1/2x5/8x0-7 1/2" STEEL BEARING PLATE WITH (2) #5 x 4'-0" WELDED REBAR. LAP REBAR WITH WALL REINFORCEMENT BELOW, GROUT SOLID MINIMUM TWO COURSES OF CMU BELOW. REFER TO TYPICAL DETAIL - BEAM BEARING IN MASONRY WALL FOR ADDITIONAL INFORMATION.
A. DIMENSIONS ARE GIVEN AS: (LENGTH PARALLEL TO BEAM)" x (THICKNESS)" x (WIDTH PERPENDICULAR TO BEAM)"
B. WELD EACH END OF STEEL BEAMS TO BEARING PLATES WITH 6" MIN (3" MIN EACH SIDE) OF 1/4" FILLET WELD, TYP UNLESS NOTED OTHERWISE.
C. EACH BEARING PLATE SHALL BE PLACED UPON A MINIMUM OF ONE BLOCK COURSE (1'-4" MIN LONG x 8" MIN HIGH) OF SOLID OR GROUTED SOLID MASONRY UNLESS NOTED OTHERWISE.
- FOR BEAM TO HSS COLUMN CONNECTIONS REFER TO TYPICAL DETAIL - DUGOUT BEAM TO COLUMN CONNECTION.
- CMU WALLS AT DUGOUTS SHALL HAVE #5 @ 16" OC VERTICAL REINFORCING IN ADDITION TO ANY OTHER REQUIREMENTS. REFER TO MASONRY WALL CONSTRUCTION SCHEDULE, PLAN, SECTIONS, TYPICAL DETAILS, AND PROJECT SPECIFICATIONS FOR REQUIRED REINFORCEMENT IN CMU WALLS.
- ALL STRUCTURAL STEEL AND CONNECTORS EXPOSED IN FINAL CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED IN ADDITION TO ANY PAINT SPECIFIED. IN ADDITION, ALL WELD SPATTER AND SHARP EDGES SHALL BE REMOVED. FABRICATOR SHALL COORDINATE VENT HOLES IF REQUIRED AND PLUG ANY OPEN HOLES WITH COMPATIBLE NON-CORROSIVE MATERIAL FOR FINAL CONSTRUCTION.
- ALL WOOD FRAMING SHALL BE PRESSURE TREATED, REFER TO GENERAL NOTES FOR ADDITIONAL WOOD REQUIREMENTS.
- ALL BOLTS SHALL BE INSTALLED ORIENTED WITH NUTS LOCATED ON INTERIOR SIDE OF DUGOUT.



2 PLAN - SOFTBALL DUGOUT ROOF FRAMING
S-103 1/4" = 1'-0"



INDOOR PRACTICE FACILITY FOUNDATION AND SLAB-ON-GRADE PLAN NOTES:

- SLAB-ON-GRADE CONSTRUCTION: 6" THICK NORMAL WEIGHT CONCRETE REINFORCED WITH SYNTHETIC FIBER REINFORCEMENT, TYPICAL UNLESS NOTED OTHERWISE (UNO) ON PLAN.
ALL SLABS SHALL BE ON VAPOR BARRIER OVER 6" MINIMUM COMPACTED FREE DRAINING GRANULAR BASE COURSE COMPLYING WITH #57 STONE OR GEOTECHNICAL ENGINEER APPROVED EQUIVALENT.
REFER TO TYPICAL DETAIL - SLAB-ON-GRADE FOR ADDITIONAL INFORMATION.
- TOP OF SLAB = 0'-0" (REFERENCE, ACTUAL = 547.20', REFER TO SITE/CIVIL), TYPICAL UNO ON PLAN. SEE ARCHITECTURAL DRAWINGS FOR SLAB SLOPES TO DRAINS, AS REQUIRED.
- ALL ELEVATIONS SHOWN ON PLAN AND IN SECTIONS OR DETAILS REFERENCE THE TOP OF SLAB ELEVATION OF 0'-0".
- ELEVATIONS SHOWN ON PLAN THUS ($\pm$ xx'-xx") ARE TOP OF FOOTING AND PIER ELEVATIONS RELATIVE TO THE REFERENCE ELEVATION OF 0'-0".
TOP OF EXTERIOR FOOTINGS = -2'-8", UNLESS NOTED OTHERWISE
TOP OF INTERIOR FOOTINGS = 0'-0", UNLESS NOTED OTHERWISE
TOP OF PIERS = -0'-8", UNLESS NOTED OTHERWISE
- PROVIDE SAWED CONTRACTION OR CONSTRUCTION JOINTS IN SLABS ON GRADE SPACED AT 12 FEET OC MAXIMUM EACH DIRECTION PER TYPICAL DETAILS.
- PROVIDE ACI CLASS B LAP SPLICE FOR ALL STEEL REINFORCING BARS IN CONCRETE. REFER TO GENERAL NOTES FOR REINFORCEMENT LAP IN STRUCTURAL MASONRY.
- PROVIDE #5 @ 48" OC REINFORCING BARS IN ALL INTERIOR AND EXTERIOR CMU WALLS SHOWN ON THE STRUCTURAL DRAWINGS UNLESS A GREATER AMOUNT IS INDICATED ON PLAN OR IN SECTIONS. REFER TO STRUCTURAL SCHEDULE, NOTES, AND DETAILS FOR ADDITIONAL WALL REINFORCEMENT REQUIREMENTS.
- ALL FOOTINGS SHALL BEAR A MINIMUM OF 3'-0" BELOW FINISHED GRADE. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF STEPPED FOOTINGS OR WALL PENETRATIONS AT BELOW GRADE UTILITIES WITH SITE/CIVIL, PLUMBING, MECHANICAL, AND ELECTRICAL CONTRACTORS. COORDINATE CONSTRUCTION WITH THE TYPICAL DETAIL - FOOTING STEP, AS REQUIRED, FOR LOCATIONS SHOWN OR NOT SHOWN ON DRAWINGS.

- AT SITE UTILITIES, INCLUDING BUT NOT LIMITED TO PLUMBING AND ELECTRICAL SERVICE TO BUILDING, PROVIDE SLEEVES FOR ALL PIPES AND CONDUITS THROUGH FOUNDATION WALLS AND FOR ALL PIPES 12 INCHES OR LESS BELOW WALL FOOTINGS AS INDICATED IN THE TYPICAL DETAIL - PIPE THROUGH FOUNDATION WALL AND TYPICAL DETAIL - PIPE UNDER FOOTING. STEP FOOTINGS AS INDICATED IN TYPICAL DETAILS, WHERE REQUIRED.
- PROVIDE ADDITIONAL REINFORCING BARS IN SLAB AT ALL DISCONTINUOUS JOINTS AND RE-ENTRANT CORNERS (SHOWN OR NOT SHOWN ON PLAN) PER THE TYPICAL DETAIL - REINFORCING AT DISCONTINUOUS JOINTS AND RE-ENTRANT CORNERS IN SLABS-ON-GRADE.
- PROVIDE THICKENED SLABS BELOW INTERIOR NON-LOADBEARING MASONRY WALLS (NOT SHOWN ON STRUCTURAL PLANS) PER THE TYPICAL DETAIL - THICKENED SLAB AT NON-BEARING INTERIOR MASONRY WALL. REFER TO THE ARCHITECTURAL DRAWINGS FOR NON-LOADBEARING MASONRY WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- PROVIDE THICKENED SLABS AT STAIR STRINGERS OR POSTS PER TYPICAL DETAIL - THICKENED SLAB AT STAIR STRINGERS AND TYPICAL DETAIL - THICKENED SLAB AT METAL STAIR POST. REFER TO THE ARCHITECTURAL DRAWINGS FOR STAIR CONFIGURATIONS AND LOCATIONS.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR INTERIOR WALLS NOT SHOWN, FOR INTERIOR AND EXTERIOR WALL OPENINGS, FOR STEPPED OR RECESSED SLAB AREAS, AND FOR ADDITIONAL INFORMATION NOT SHOWN.
- COORDINATE ALL INTERIOR CONCRETE EQUIPMENT HOUSEKEEPING PADS, WHICH MAY BE REQUIRED, WITH EQUIPMENT SUPPLIERS. REFER TO THE MECHANICAL DRAWINGS FOR INTERIOR EQUIPMENT HOUSEKEEPING PADS, WHERE INDICATED OR REQUIRED FOR VIBRATION ISOLATION, PROVIDE ISOLATED SLAB PER TYPICAL DETAIL - EQUIPMENT BASE AT SLAB-ON-GRADE, IN ADDITION TO ANY HOUSEKEEPING PAD REQUIRED. REFER TO THE CIVIL DRAWINGS FOR EXTERIOR EQUIPMENT PADS AND DETAILING NOT SHOWN.
- PROVIDE FROST PROTECTION UNDER EXTERIOR SLABS AT ALL EXTERIOR MAN DOORS PER THE TYPICAL DETAIL - FROST SLAB AND WALLS. REFER TO THE ARCHITECTURAL AND SITE DRAWINGS FOR THE NUMBER, SIZES, AND LOCATIONS.
- REFER TO THE ARCHITECTURAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR BELOW GRADE ITEMS, EMBEDMENT ITEMS, AND FOR ADDITIONAL INFORMATION NOT SHOWN.
- REFER TO GENERAL NOTES AND SECTIONS FOR BACKFILL REQUIREMENTS OF FOUNDATION AND RETAINING WALLS.
- REFER TO SCHEDULES FOR CONCRETE PIERS (SHOWN AS CP-xx ON PLAN), SPREAD FOOTINGS (SHOWN AS Fx ON PLAN), AND REFER TO TYPICAL DETAILS, STRUCTURAL NOTES, AND PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

CONCRETE PIER SCHEDULE - INDOOR PRACTICE FACILITY				
MARK	SIZE	REINFORCING		REMARKS
		VERT REINF	TIES / HORIZONTAL REINFORCING	
P-01	18" x 18"	(8) #6	#3 @ 12" OC	-
P-10	24" x 24"	(12) #7	#3 @ 12" OC	-
P-11	24" x 30"	(16) #7	#3 @ 12" OC	-

NOTES:

- SCHEDULED CONCRETE PIERS ARE CALLED OUT ON PLANS AS Px. SEE PLANS FOR LOCATIONS.
- REFER TO PLANS FOR ORIENTATIONS AND OFFSETS FROM GRID LINE AS APPLICABLE.
- REFER TO TYPICAL DETAIL - CONCRETE PIER PLAN DETAILS FOR SCHEMATIC TIE CONFIGURATIONS.
- REFER TO TYPICAL DETAIL - STEEL COLUMN BASE AND FOUNDATION FOR ADDITIONAL INFORMATION.

SPREAD FOOTING SCHEDULE - INDOOR PRACTICE FACILITY					
PLAN MARK	WIDTH	LENGTH	THICKNESS	TOP BARS, EACH WAY	BOTTOM BARS, EACH WAY
F4	4'-0"	4'-0"	1'-0"	(4) #6	(4) #6
F6	6'-0"	6'-0"	1'-2"	(7) #5	(7) #5
F7	7'-0"	7'-0"	1'-6"	(6) #6	(6) #6
F9	9'-0"	9'-0"	1'-10"	(10) #6	(10) #6
F10	10'-0"	10'-0"	2'-0"	(9) #7	(9) #7

NOTES:

- SCHEDULED FOOTINGS ARE CALLED OUT ON PLANS AS Fx. SEE PLANS FOR LOCATIONS.
- REFER TO PLANS FOR ORIENTATIONS AND OFFSETS FROM GRID LINE AS APPLICABLE.
- WHERE SPREAD FOOTING IS INTEGRAL WITH CONTINUOUS WALL FOOTING, WALL FOOTING REINFORCING SHALL CONTINUE THROUGH COLUMN FOOTING CONCRETE SHALL BE MONOLITHIC.
- REFER TO TYPICAL DETAIL - STEEL COLUMN BASE AND FOUNDATION FOR ADDITIONAL INFORMATION.

STAHL SHEAFFER
ENGINEERING
301 Science Park Road, Suite 333
State College, PA 16803
O: 814.693.1562 | F: 814.693.1885
www.stahlsheaffer.com
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33 SOUTH BROAD STREET, SUITE 100, BELLEVILLE, PA 19003
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WWW.DERCKANDDESDON.COM (717) 255-2525

INDOOR PRACTICE FACILITY FOUNDATION AND GROUND SLAB PLAN
BID DOCUMENTS
GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17157

RELEASES:		
No.	DATE	DESCRIPTION OF CHANGES
1	08/14/26	BID SET

DATE:	10/14/2026	PROJECT #:	252540	DRAWN BY:	GLW / HSM	PN:	HSM	PIC:	PJB
DRAWING NO.									

ALTERNATE A-1

S-104

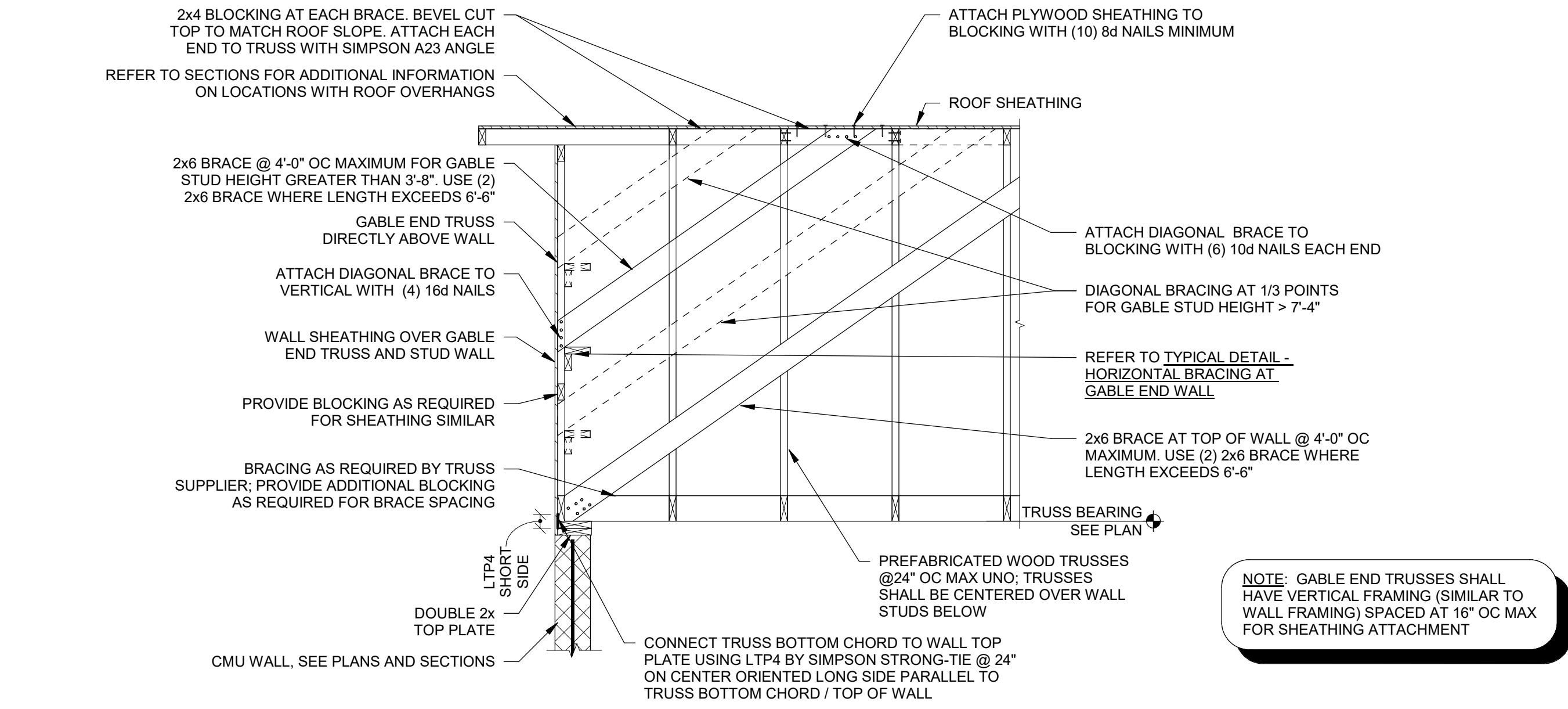
19	TYPICAL DETAIL - CONSTRUCTION JOINT AT CHANGE IN SLAB
S-201	ON GRADE THICKNESS

16	TYPICAL DETAIL - THICKENED SLAB AT NON-BEARING
S-201	INTERIOR MASONRY WALL

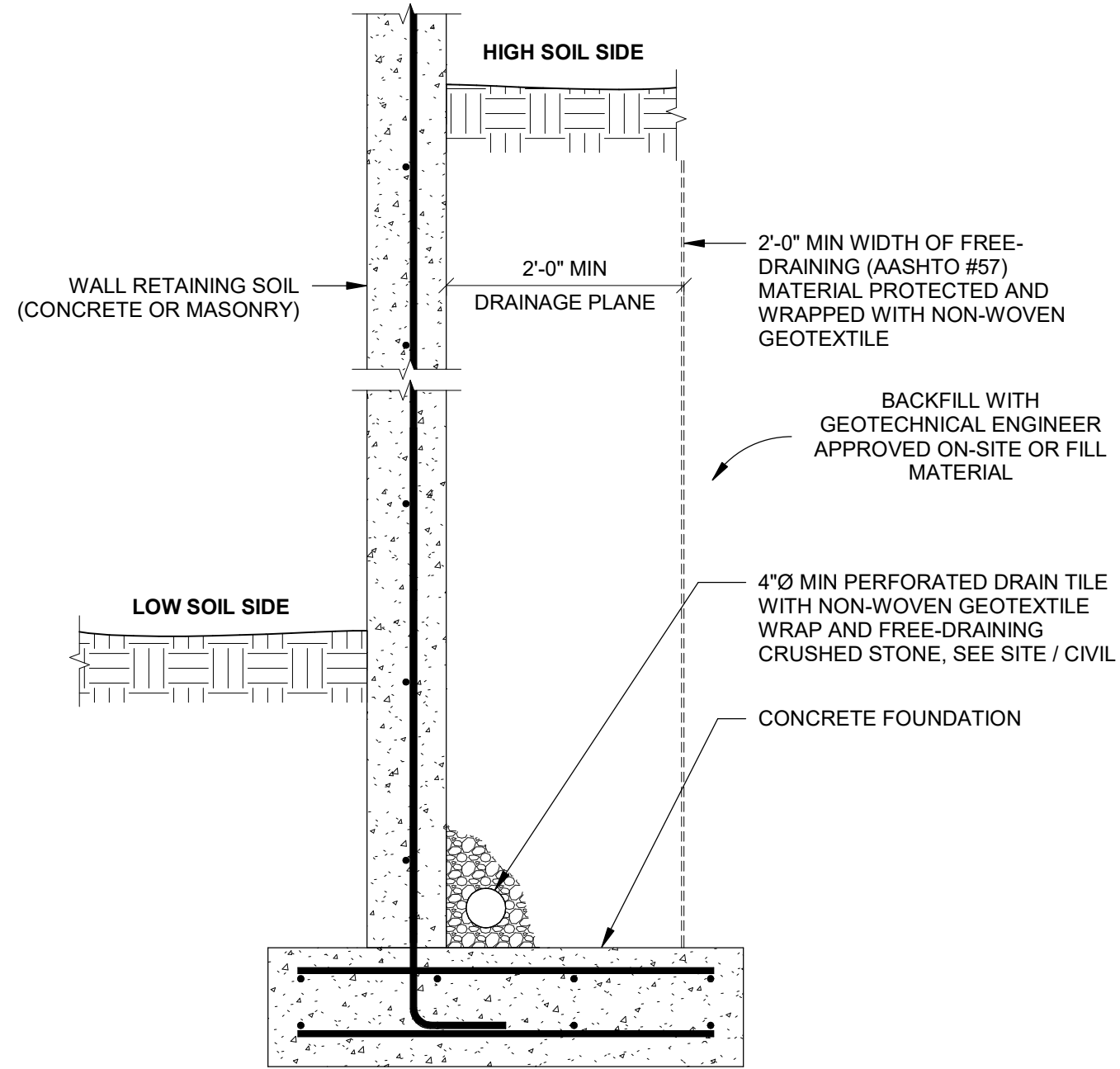
12	TYPICAL DETAIL - SLOPED TOP OF WALL / STEPPED BOND
-201	BEAM

	TYPICAL DETAIL - VERTICAL REINFORCING IN MASONRY WALL	
01		S

TYPICAL DETAIL - EXTERIOR FROST SLAB AND WALLS

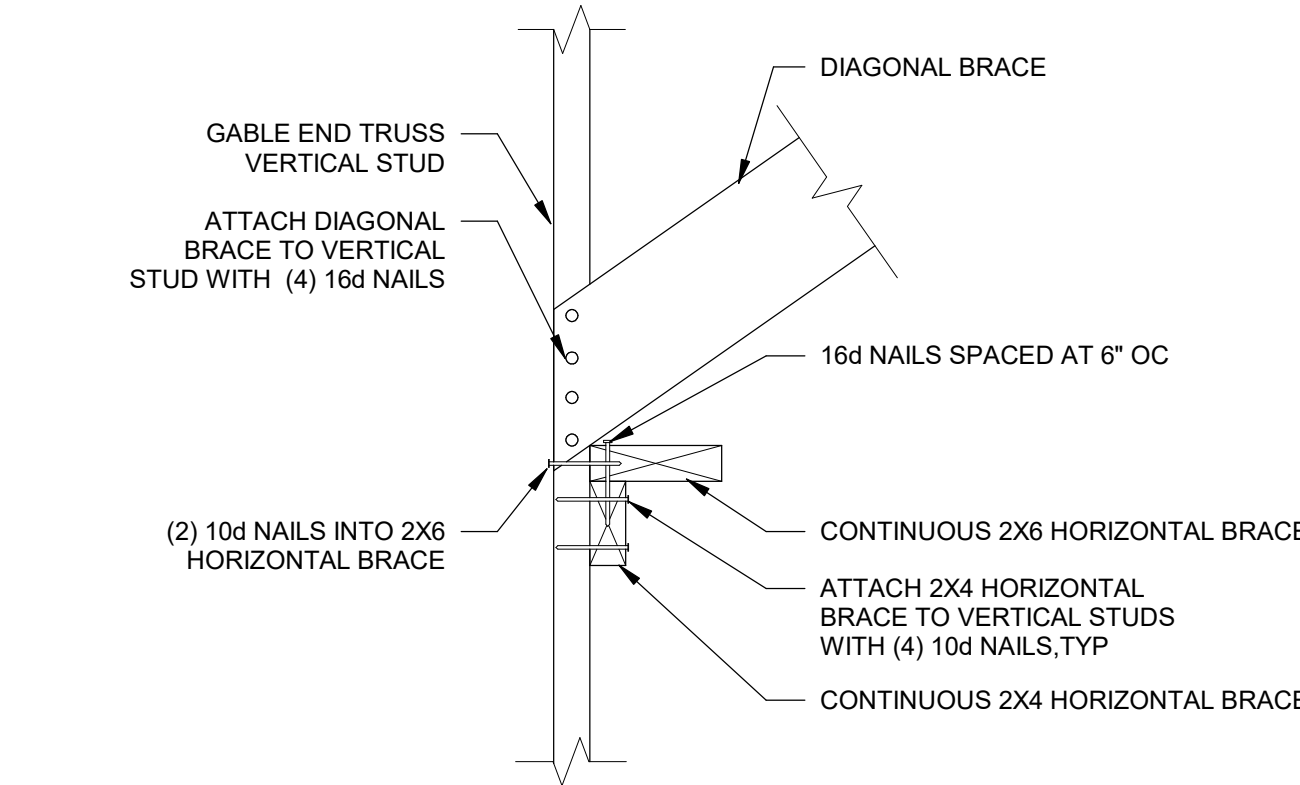


6 TYPICAL DETAIL - GABLE END TRUSS AT WALL
S-202

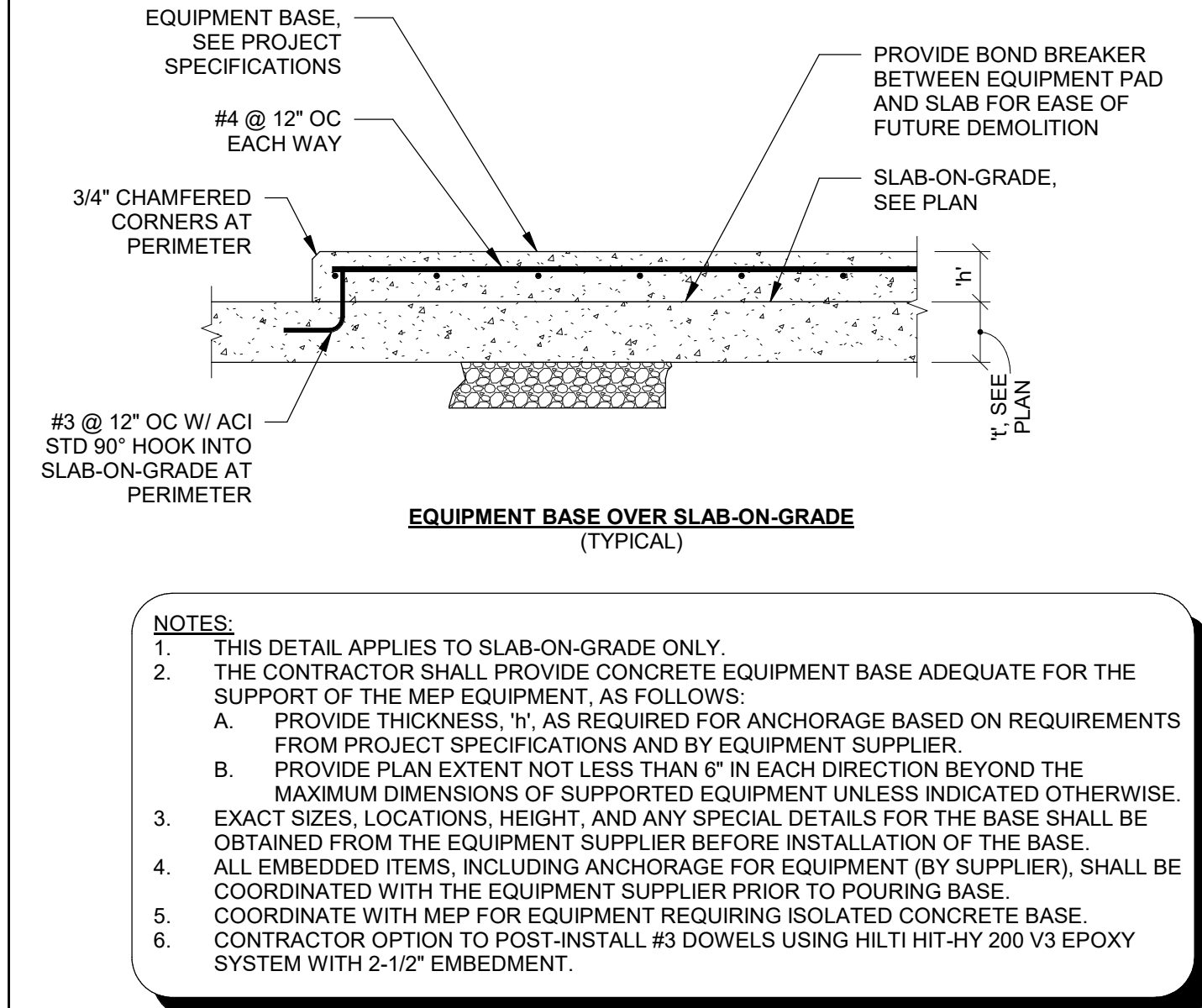


- NOTES:
- PROVIDE DRAINAGE PLANE AND PERFORATED DRAIN TILE AS INDICATED HERE FOR ALL WALLS THAT RETAIN SOIL WITH A SOIL DIFFERENTIAL OF MORE THAN 12" FROM HIGH SOIL SIDE TO LOW SOIL SIDE.
 - BASIS-OF-DESIGN BACKFILL IS MATERIAL WITH UNIT WEIGHT OF 120 LBS/CUBIC FOOT AND INTERNAL ANGLE OF FRICTION OF 30-DEGREES.
 - BACKFILL SHALL UTILIZE ON-SITE OR IMPORTED FILL MATERIAL MEETING GEOTECHNICAL ENGINEER APPROVAL. NOTIFY WALL DESIGN ENGINEER IF UNIT WEIGHT AND FRICTION ANGLE OF REQUESTED BACKFILL MATERIAL VARY FROM WHAT IS INDICATED AS BASIS OF DESIGN.
 - SEE SITE DRAWINGS FOR PLAN EXTENT AND GRADING.
 - REFER TO SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
 - THIS DETAIL APPLIES TO BOTH SITE WALLS AND BUILDING WALLS.

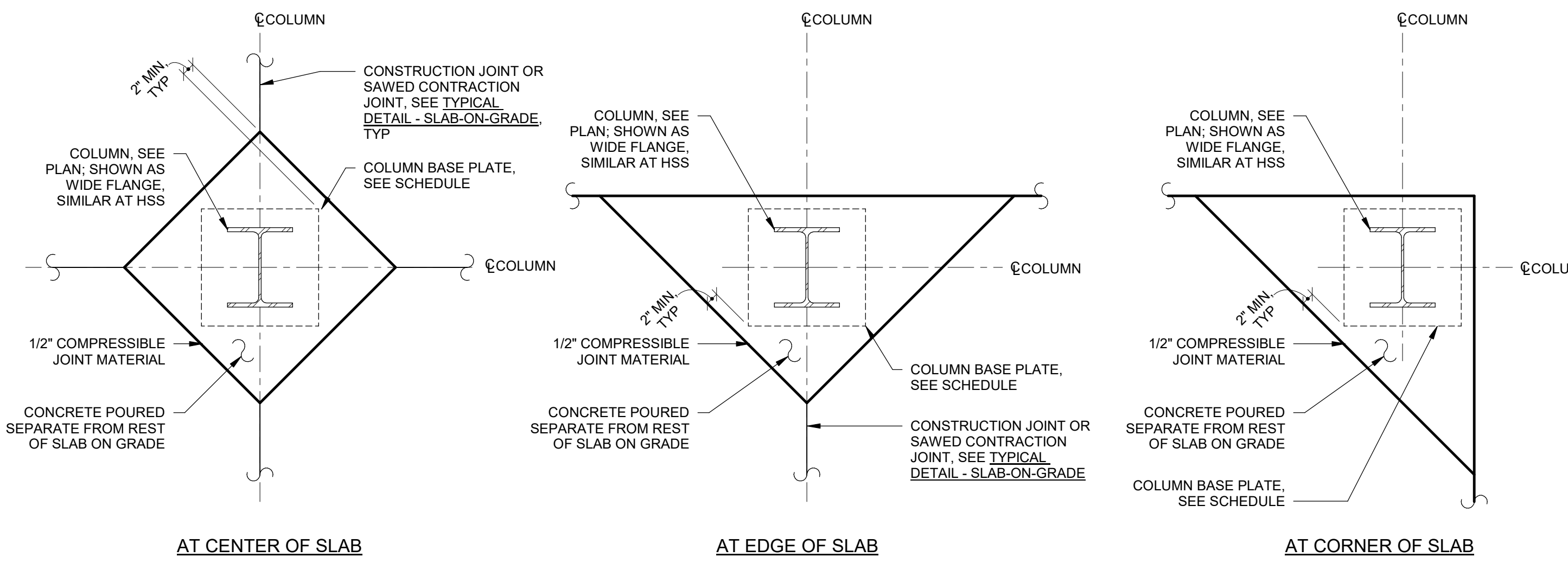
9 TYPICAL DETAIL - DRAINAGE PLANE AT WALL WITH RETAINED SOIL
S-202



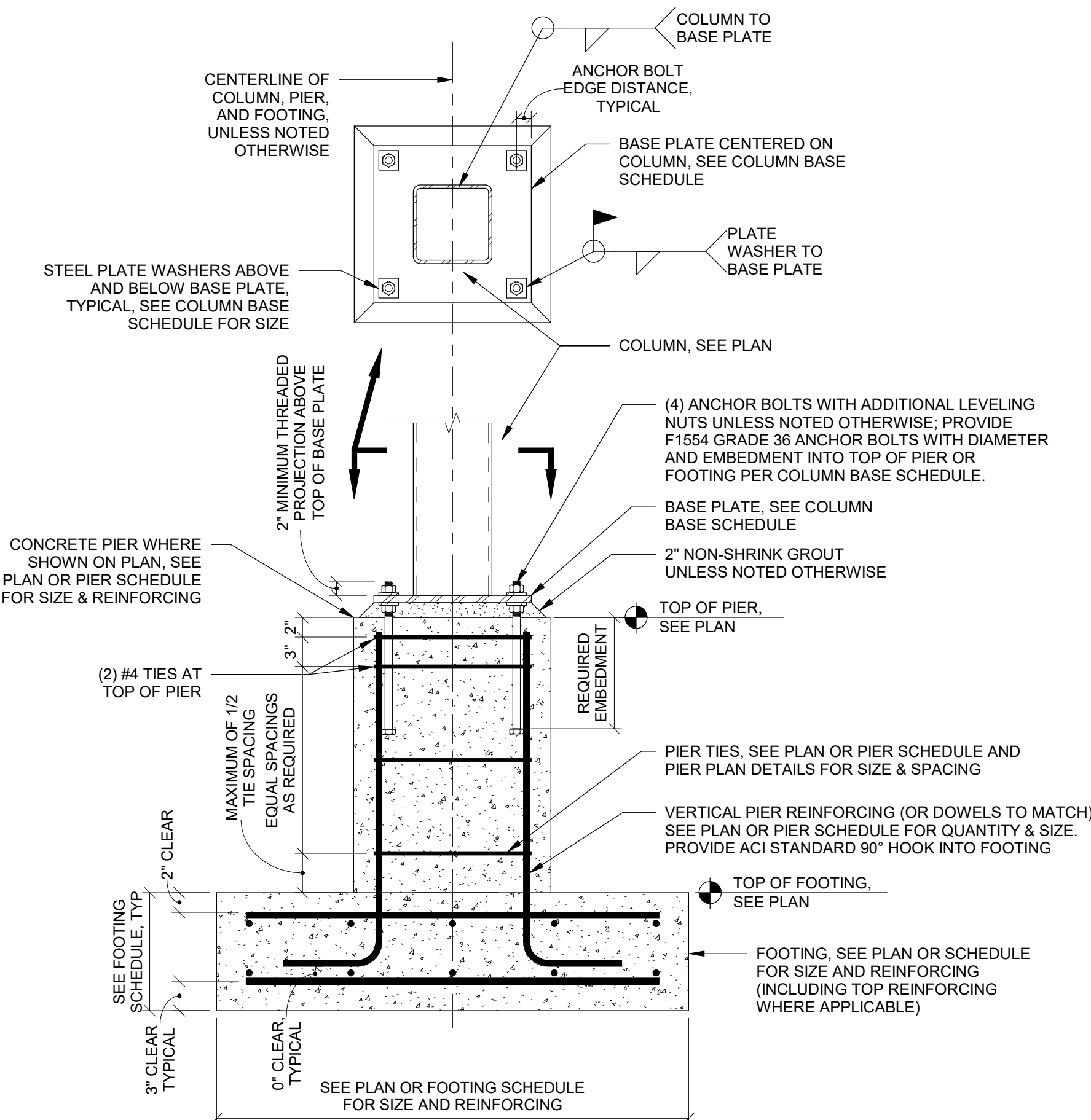
7 TYPICAL DETAIL - HORIZONTAL BRACING AT GABLE END WALL
S-202



4 TYPICAL DETAIL - EQUIPMENT SLAB-ON-GRADE
S-202

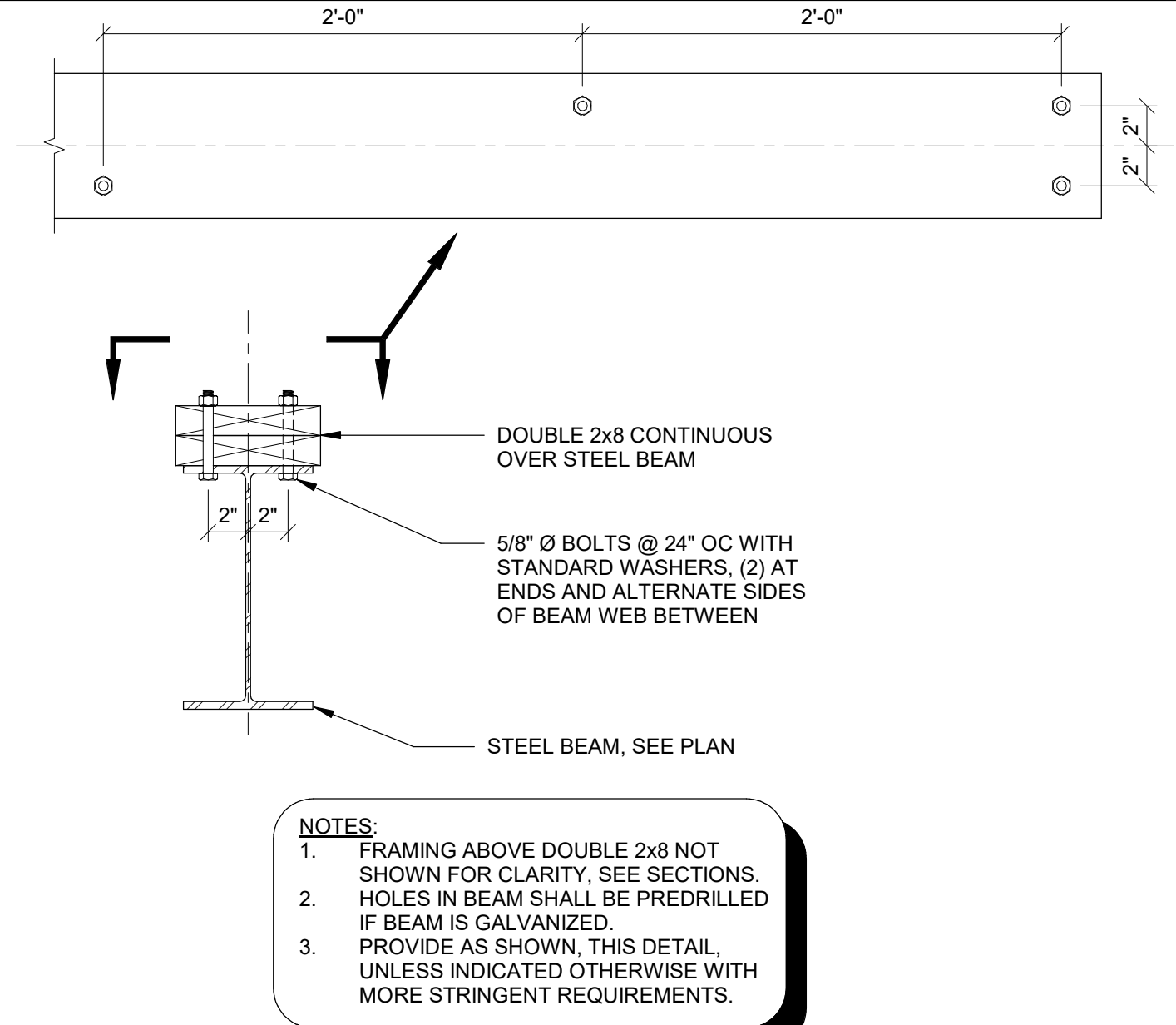


5 TYPICAL DETAIL - COLUMN ISOLATION JOINTS
S-202

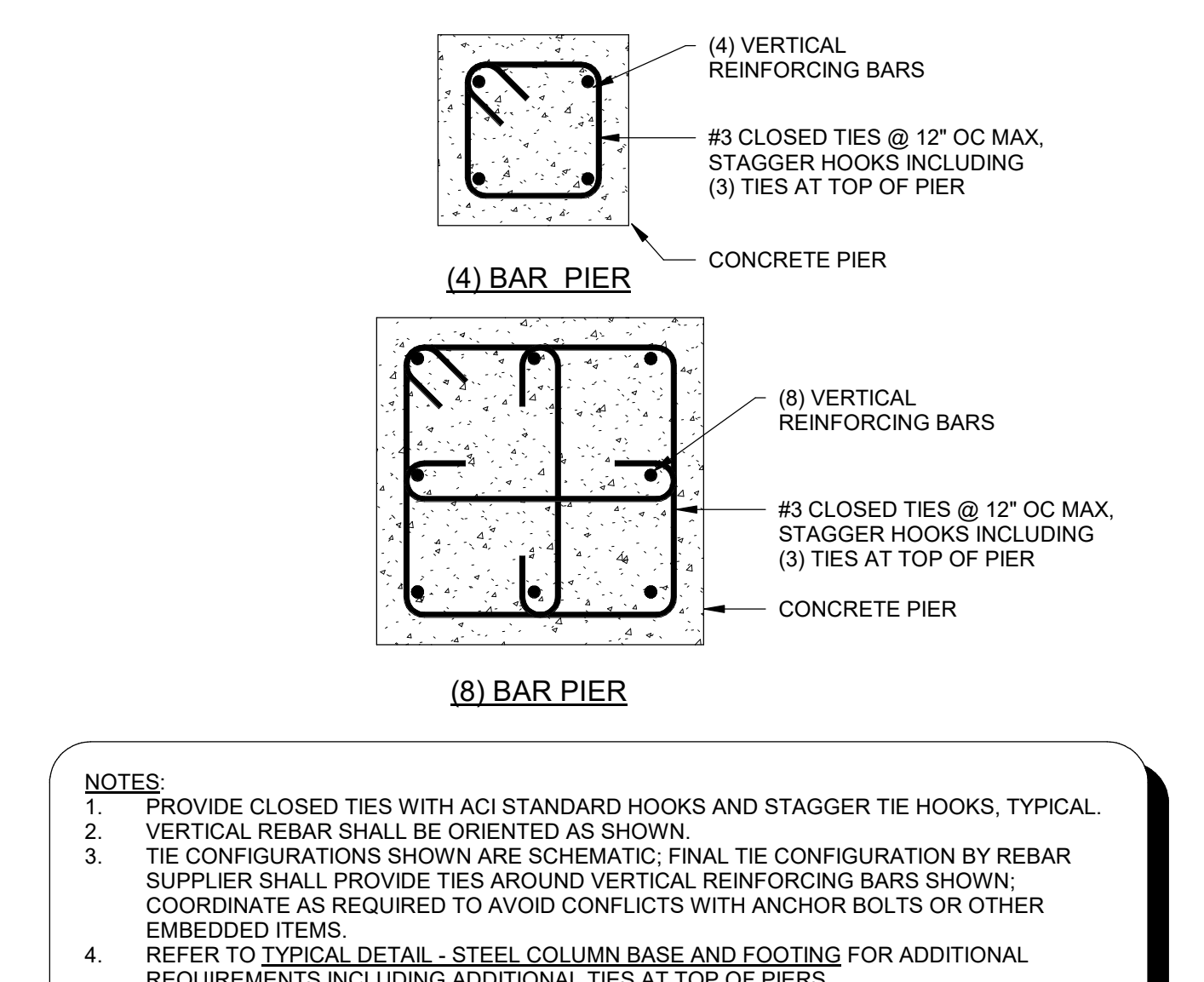


COLUMN BASE SCHEDULE							
COLUMN SIZE	BASE PLATE SIZE	ANCHOR BOLT NUMBER AND DIAMETER	ANCHOR BOLT EMBEDMENT REQUIRED	ANCHOR BOLT EDGE DISTANCE ON PLATE	COLUMN TO BASE PLATE SHOP WELD SIZE	STEEL PLATE WASHER SIZE	FIELD WELD SIZE, PLATE WASHER TO BASE PLATE
HSS8X8X3/8	14" x 14" x 1"	(4) 3/4"	9"	1 1/2"	1/4" FILLET	2" x 2" x 1/4"	3/16" FILLET
HSS5X0.375	12" x 12" x 1"	(4) 3/4"	9"	2"	1/4" FILLET	2" x 2" x 1/4"	3/16" FILLET

1 TYPICAL DETAIL - STEEL COLUMN BASE AND FOOTING
S-202



2 TYPICAL DETAIL - DOUBLE 2x8 OVER STEEL BEAM
S-202



3 TYPICAL DETAIL - CONCRETE PIER PLAN DETAILS
S-202

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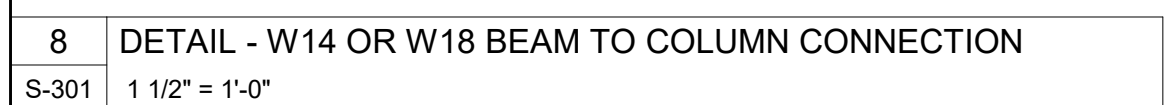
TYPICAL DETAILS
BID DOCUMENTS
GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17057

RELEASES:		
No.	DATE	DESCRIPTION OF CHANGES
1	08/14/26	BID SET

DATE:	PROJECT #:	DRAWN BY:	PN:	HSM	PJB
08/14/2026	252540	ACM/HSM			

DRAWING NO.

S-202



FIELDHOUSE SECTIONS

BID DOCUMENTS

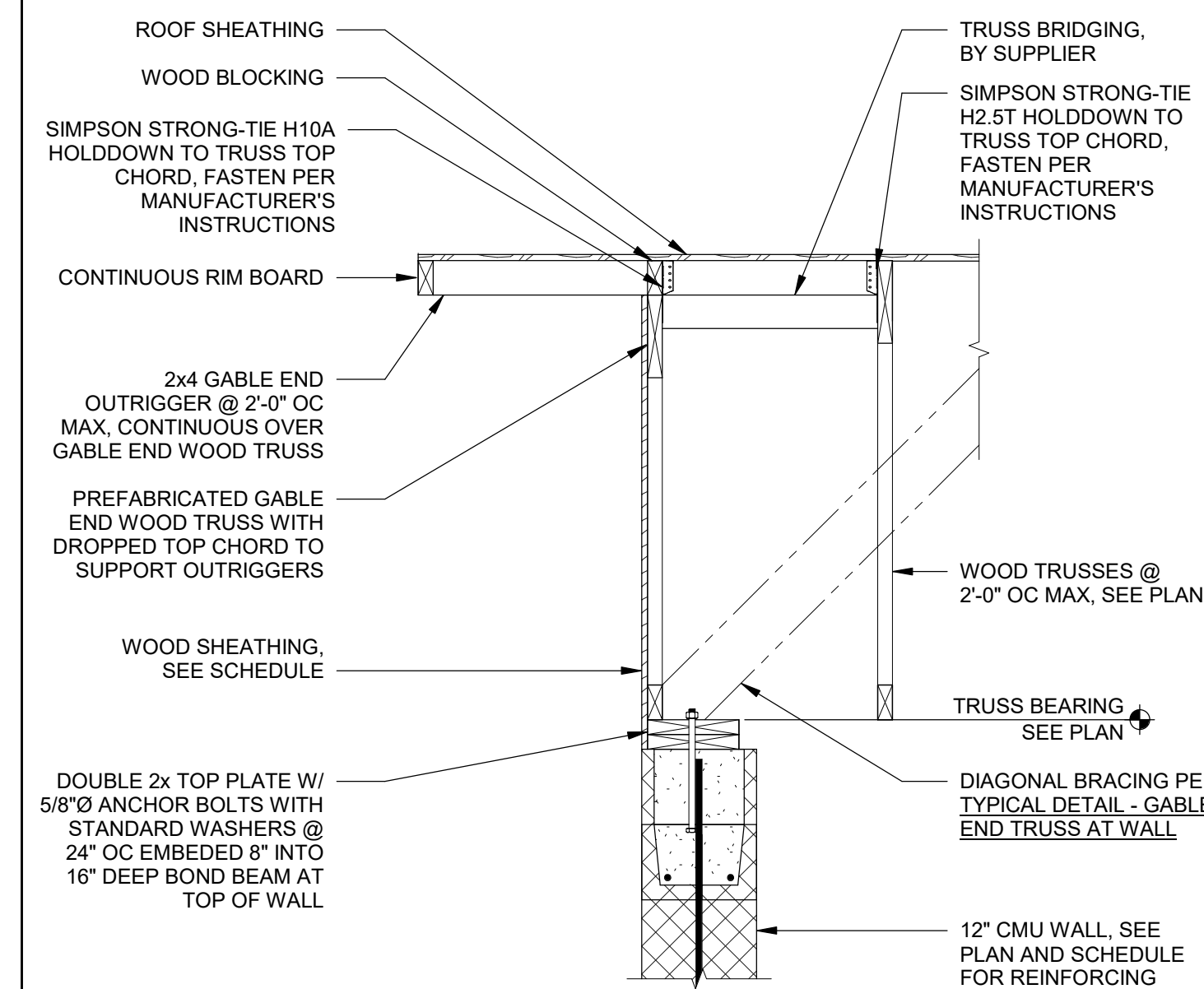
GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17557

RELEASES:		
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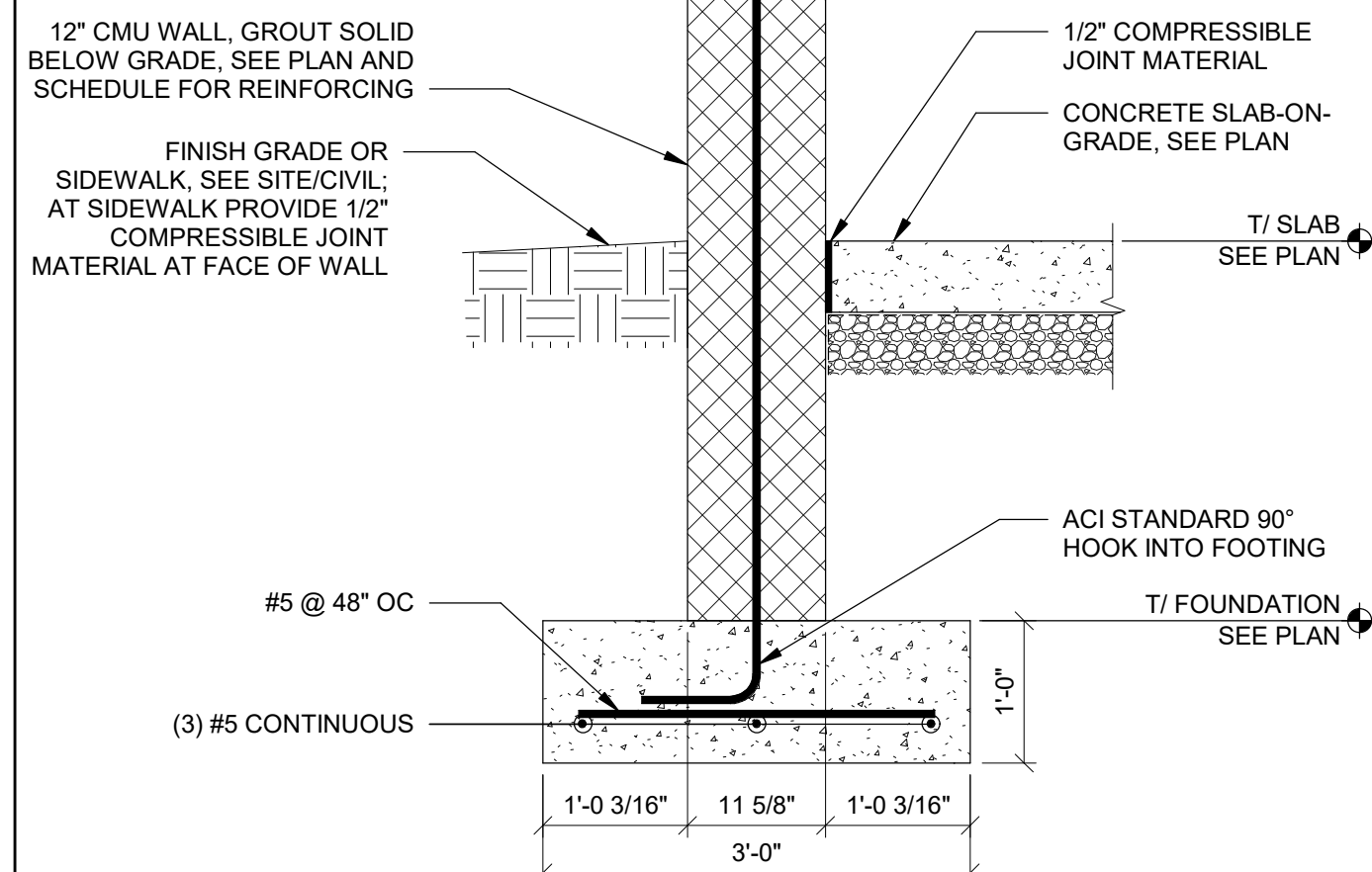
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PROJECT #:	250540
DRAWN BY:	ACM / HSM
PM:	HSM
PIC:	PJB

DRAWING NO.

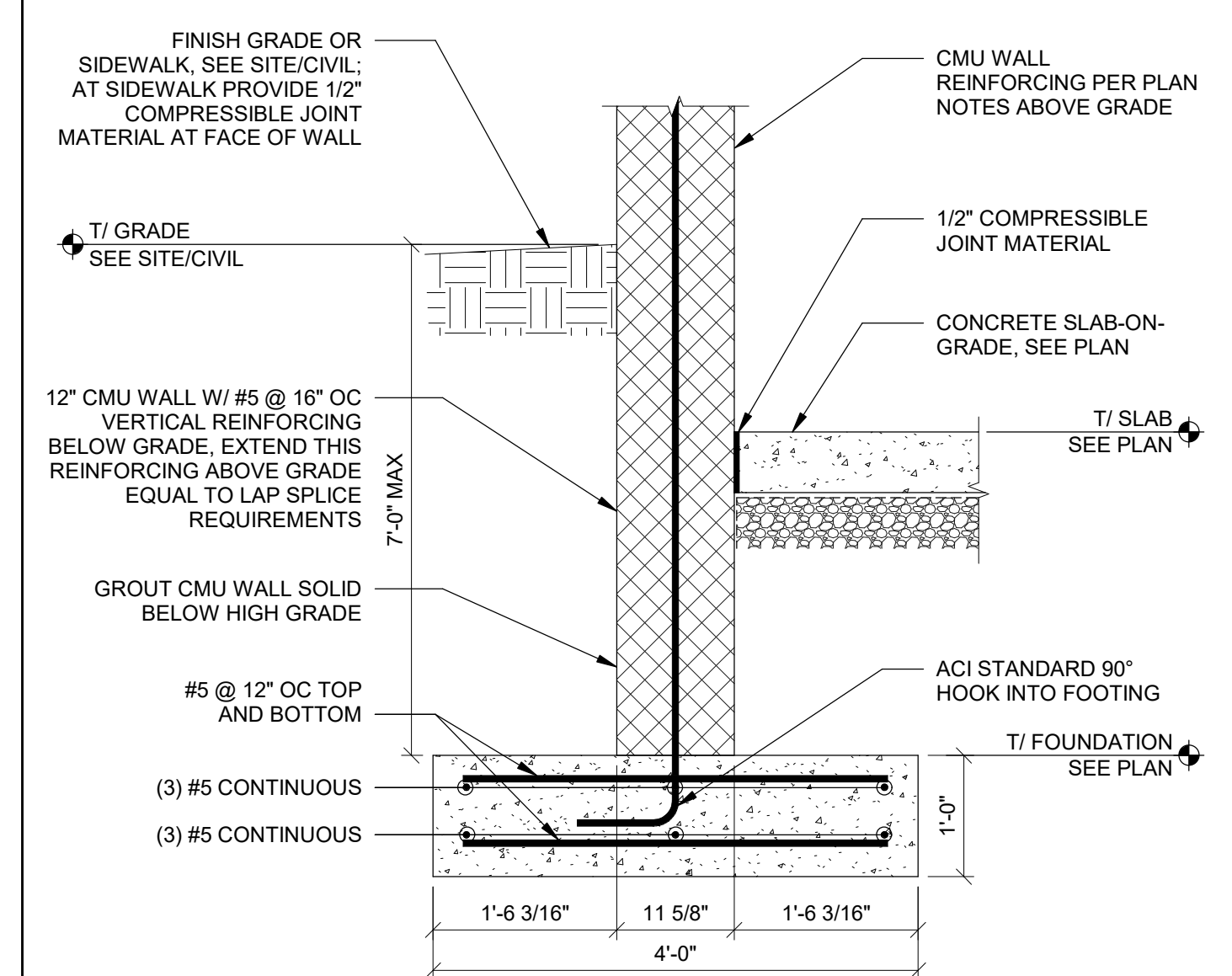
S-301



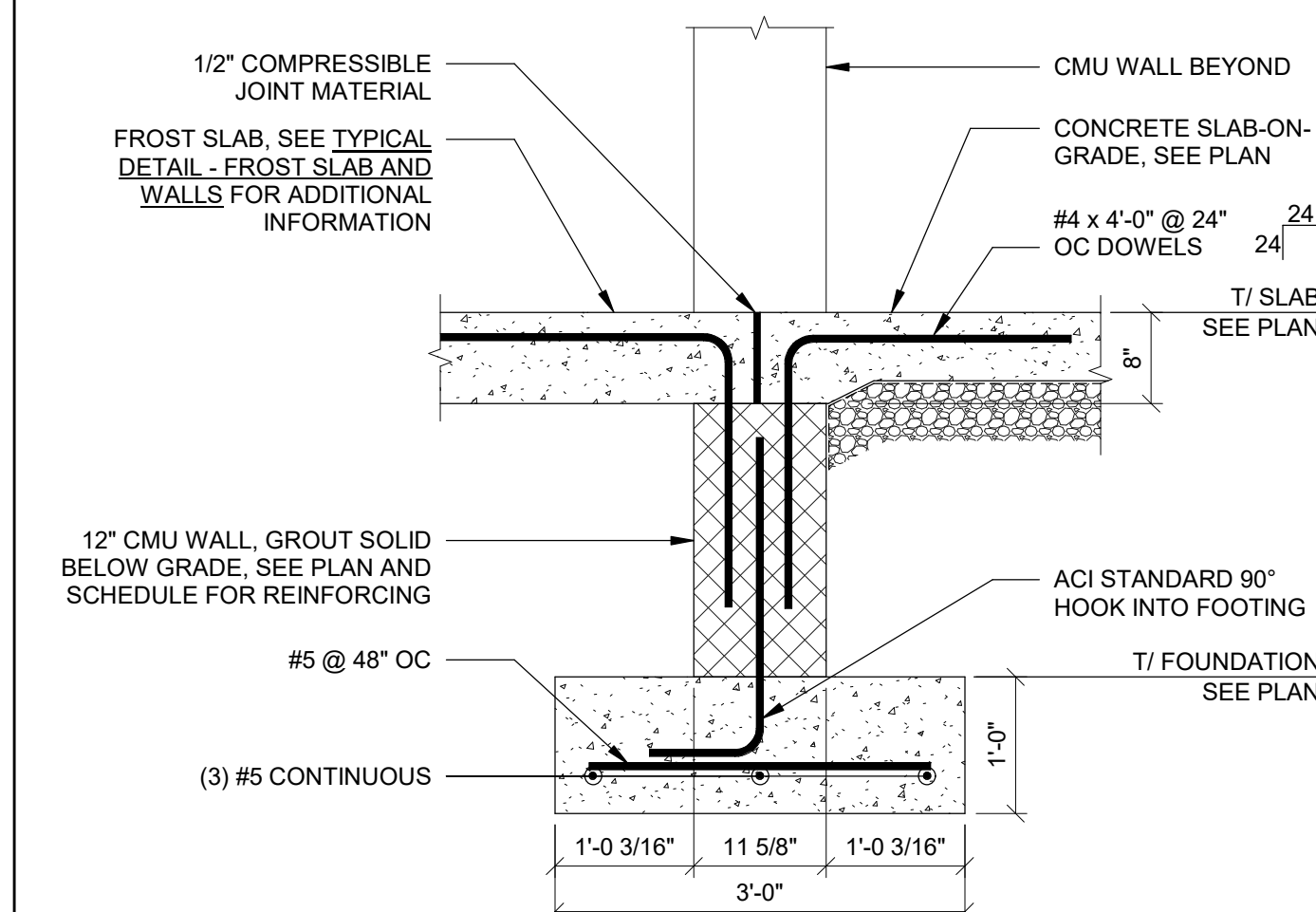
5	SECTION - MAINTENANCE ROOF FRAMING AT GABLE END
S-302	3/4" = 1'-0"



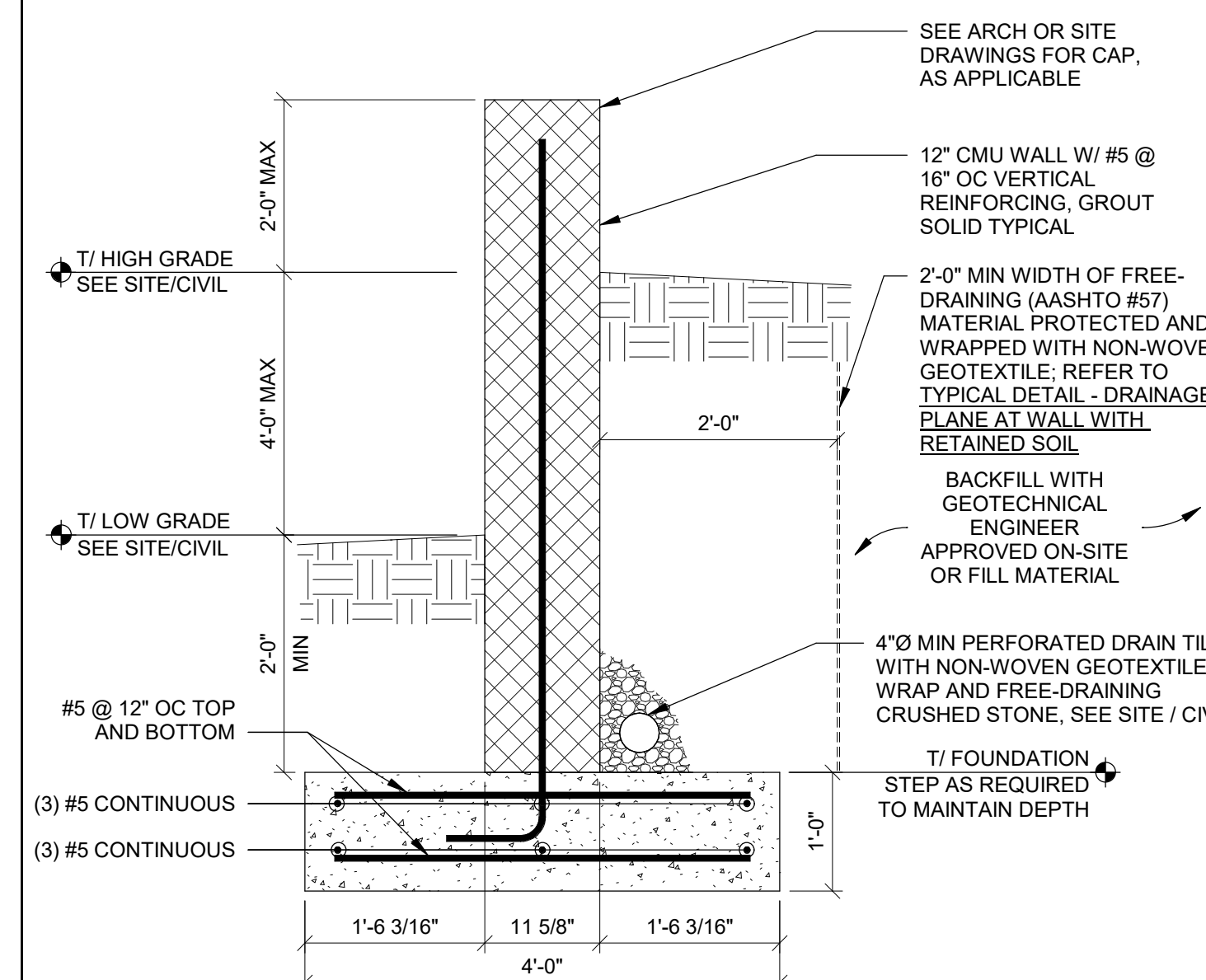
1	SECTION - FOUNDATION WALL AT MAINTENANCE BUILDING
S-302	3/4" = 1'-0"



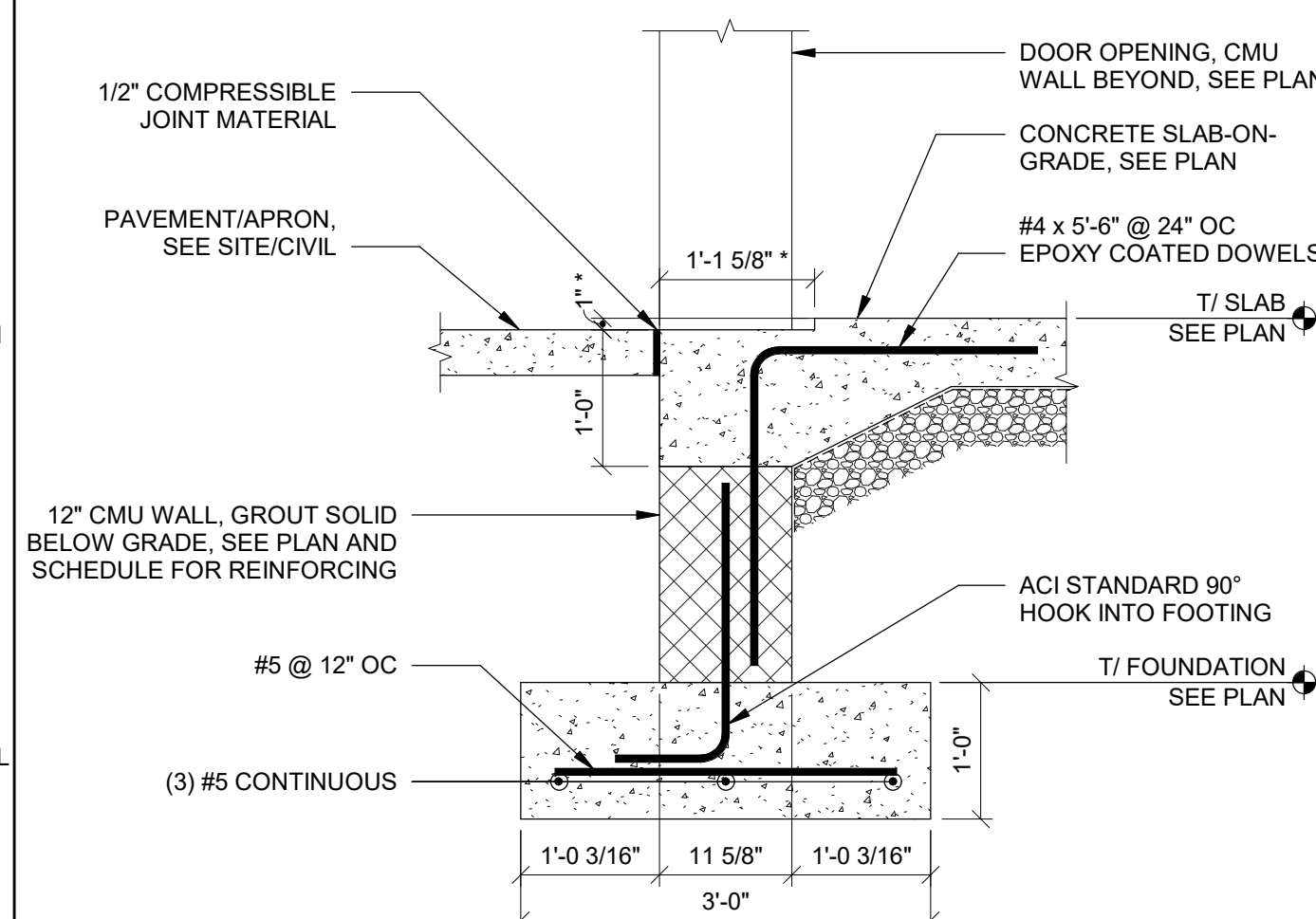
6	SECTION - RETAINING WALL AT MAINTENANCE BUILDING
S-302	3/4" = 1'-0"



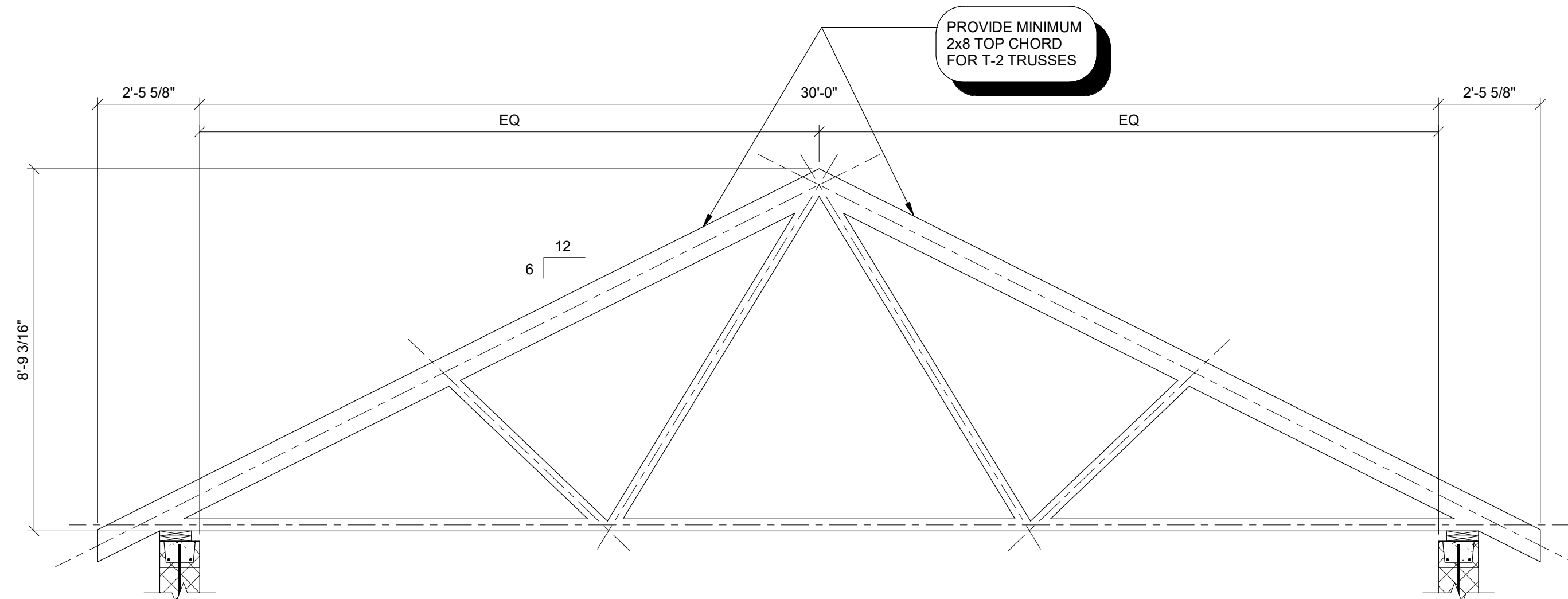
2	SECTION - FOUNDATION WALL AT MAN DOOR OPENING
S-302	3/4" = 1'-0"



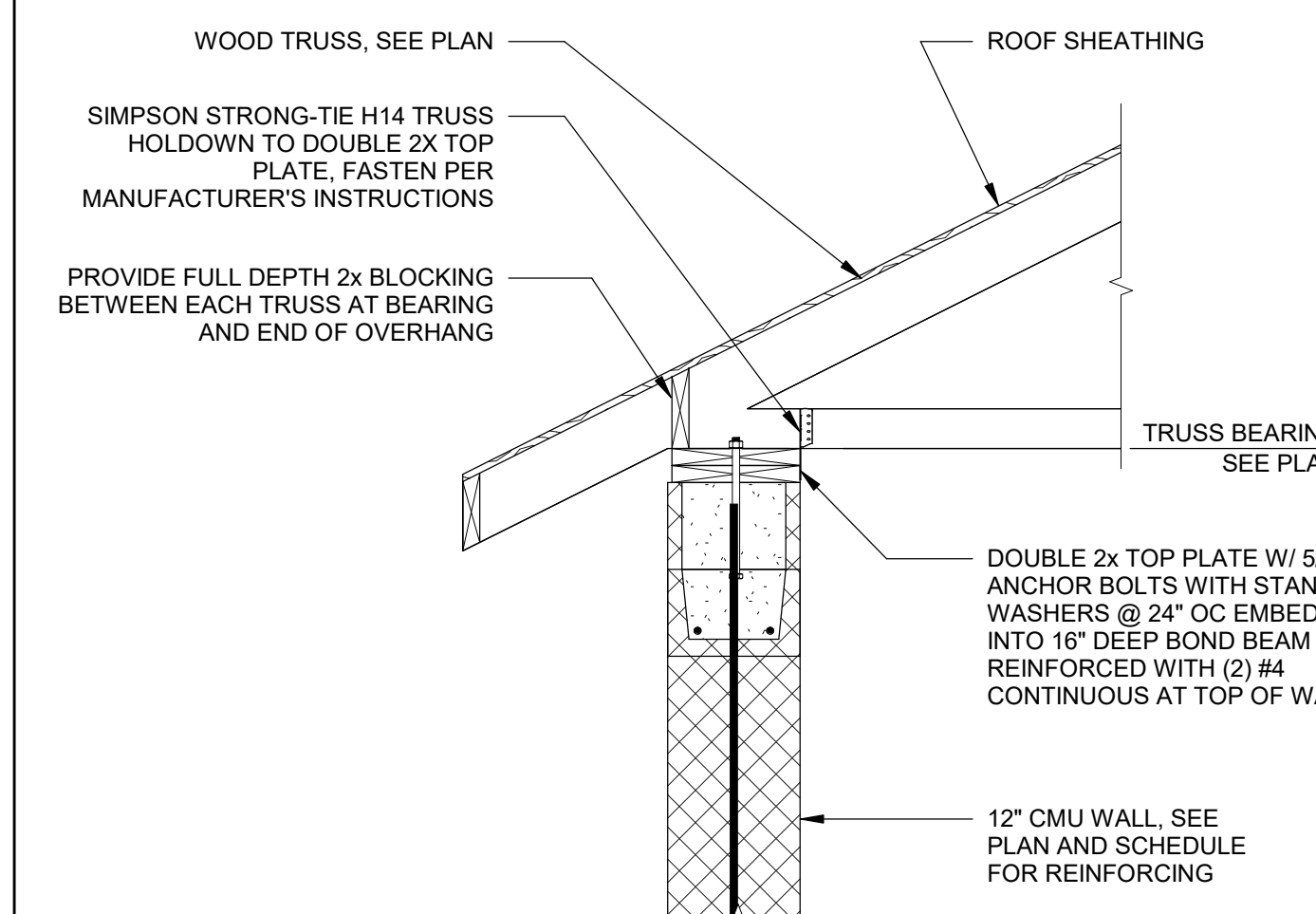
7	SECTION - SITE RETAINING WALL AT MAINTENANCE BUILDING
S-302	3/4" = 1'-0"



3	SECTION - FOUNDATION WALL AT OVERHEAD DOOR OPENING
S-302	3/4" = 1'-0"



8	ELEVATION - MAINTENANCE TRUSS T-2 SCHEMATIC
S-302	3/8" = 1'-0"



4	SECTION - MAINTENANCE ROOF TRUSS BEARING
S-302	3/4" = 1'-0"

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101 N SPRING STREET SUITE 120 BELLEFONTE PA 16823
WWW.DERCKSONDESIGN.COM (717) 628-2054

MAINTENANCE BUILDING SECTIONS

BID DOCUMENTS

GARDEN SPOT ATHLETICS CAMPUS
GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District

RELEASES:		
No.	DATE	DESCRIPTION OF CHANGES
1	08/14/2005	ADD SET

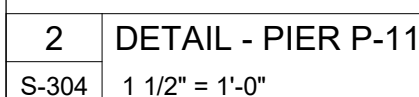
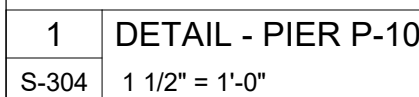
DATE:	8/11
PROJECT:	2
DRAWN:	ACI
PM:	
PIC:	

S-302

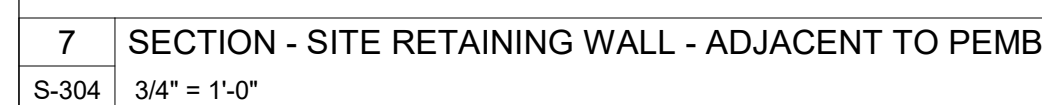


NOTES:

1. **FORCES INDICATED IN TABLE ARE THE PRE-ENGINEERED METAL BUILDING COLUMN REACTIONS THAT ARE PROVIDED AS THE BASIS OF DESIGN FOR PIERES AND FOOTINGS.**
2. **COLUMN BASE CONNECTIONS TO CONCRETE PIERS AND FOUNDATIONS, INCLUDING ANCHOR BOLTS, SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR. THE ANCHOR PLATE, SHALL BE DESIGNED AND PROVIDED BY THE PRE-ENGINEERED METAL BUILDING SUPPLIER.**
3. **CONTRACTOR SHALL VERIFY THAT FINAL PRE-ENGINEERED COLUMN LOADS DO NOT EXCEED LOADS INDICATED IN TABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PIERES AND PAY FOR THE SERVICES OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PENNSYLVANIA TO REVISE THE FOUNDATION DESIGN AS REQUIRED. CONTRACTOR SHALL PAY FOR DESIGN FEES AND ALL OTHERS ARE GIVEN IN KILO-POUNDS (KIPS).**
4. **ALL FORCES ARE GIVEN IN KILO-POUNDS (KIPS).**
5. **CONVENTION FOR SIGN CONVENTION FOR THE COLUMN'S STRONG AXIS AS SHOWN ON PLAN. SIGN CONVENTION FOR FORCES IS AS FOLLOWS: POSITIVE VERTICAL REACTIONS ACT DOWNWARD, NEGATIVE VERTICAL REACTIONS ACT UPWARD, NEGATIVE OR POSITIVE HORIZONTAL REACTIONS ACT LEFT AND AROUND THE COLUMN. POSITIVE HORIZONTAL REACTIONS AT PORTAL FRAMES, HORIZONTAL REACTIONS ACT PARALLEL TO THE EXTERIOR FACE OF BUILDING.**
6. **FORCES INDICATED ARE SERVICE LEVEL AND SHOULD BE APPLIED WITH APPROPRIATE LC LOAD COMBINATIONS.**



4	DETAIL - PEMB REACTION TABLE
S-304	3/4" = 1'-0"



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INDOOR PRACTICE FACILITY SECTIONS

BID DOCUMENTS

GARDEN SPOT ATHLETICS CAMPUS

GARDEN SPOT MIDDLE/HIGH SCHOOL

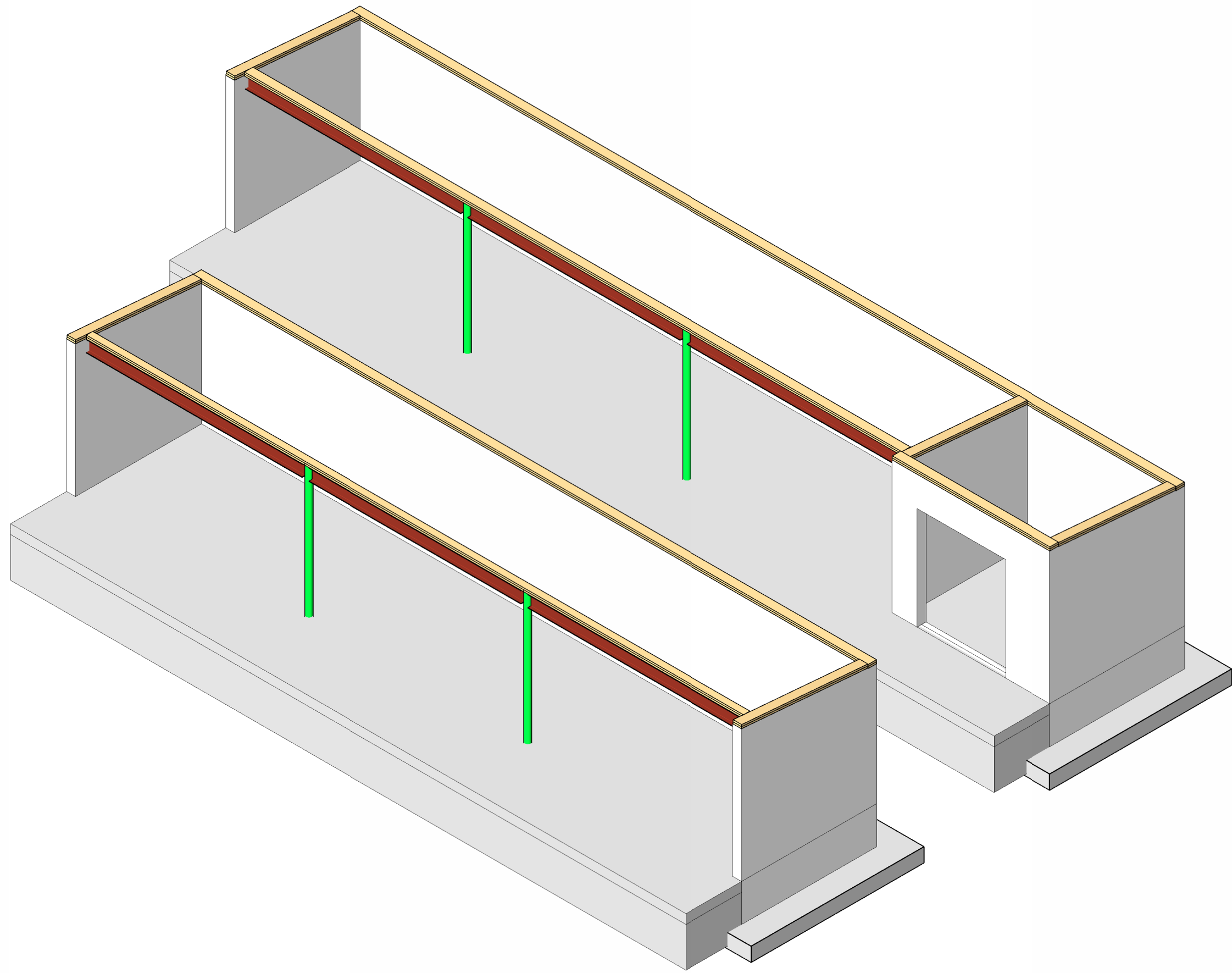
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17557

DATE	DESCRIPTION OF CHANGES
08/14/26	BID SET

8/14/2026
PROJECT #: 250540
DRAWN BY: GLW / HSM
PM: HSM
PIC: PJB

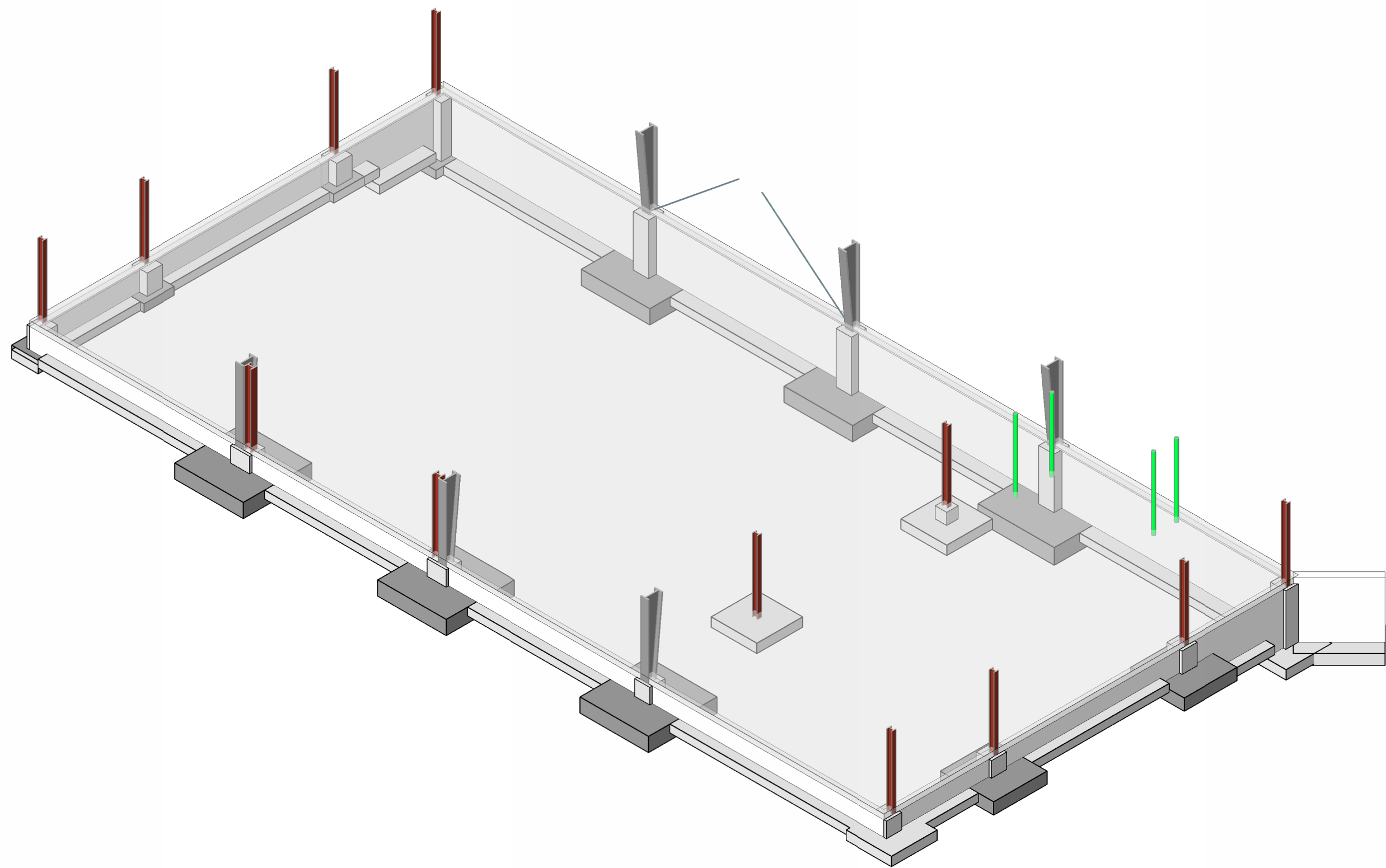
DRAWING NO.

S-304

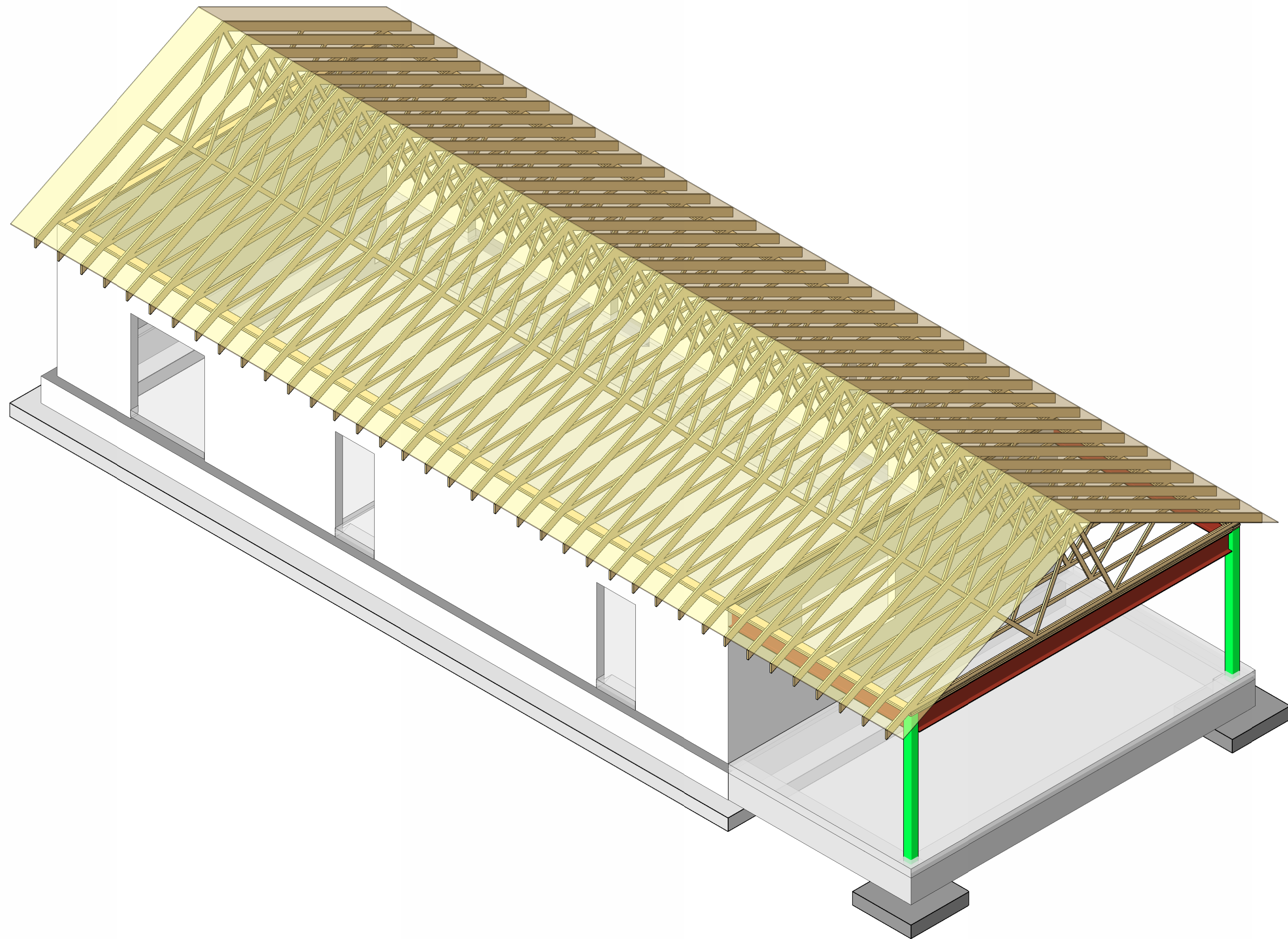


NOTE: ROOF JOISTS NOT SHOWN FOR CLARITY

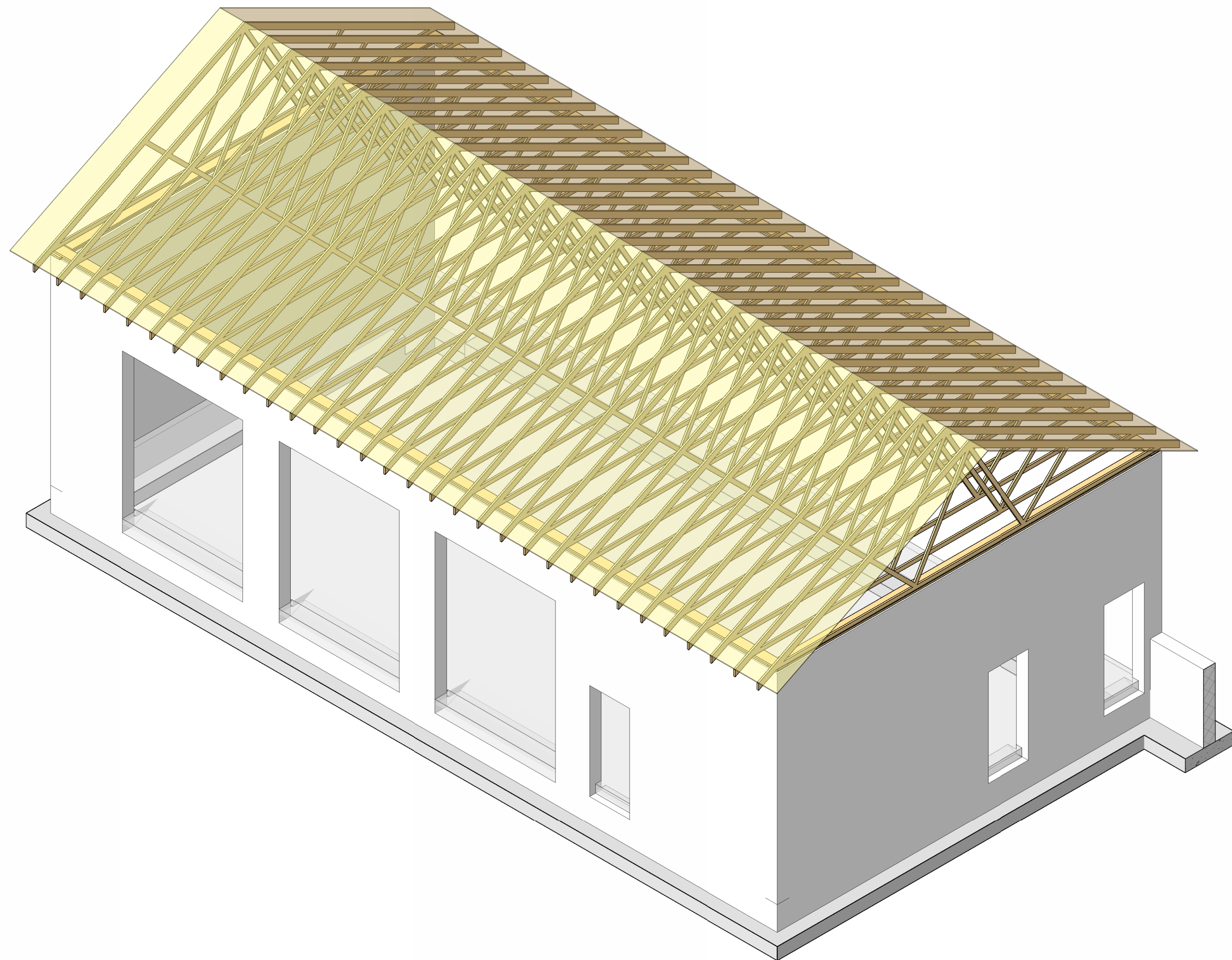
3 ISOMETRIC - DUGOUTS
S-400 NOT TO SCALE - FOR REFERENCE ONLY



4 ISOMETRIC - INDOOR PRACTICE FACILITY (ALTERNATE A-1)
S-400 NOT TO SCALE - FOR REFERENCE ONLY



1 ISOMETRIC - FIELDHOUSE
S-400 NOT TO SCALE - FOR REFERENCE ONLY



2 ISOMETRIC - MAINTENANCE
S-400 NOT TO SCALE - FOR REFERENCE ONLY

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ISOMETRICS (FOR REFERENCE ONLY)
BID DOCUMENTS
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GARDEN SPOT MIDDLE/HIGH SCHOOL
Eastern Lancaster County School District
669 E Main St, New Holland, PA 17357

RELEASES:
No. DATE DESCRIPTION OF
CHANGES
1 08/14/26 BID SET

DATE: 8/14/2026
PROJECT #: 25540
DRAWN BY: ACM / HSM
P.N.: HSM
P.C.: PUB

DRAWING NO.

S-400

