DESIGN CRITERIA

LOCATION: LILLINGTON, NORTH CAROLINA
BUILDING CODE: 2018 NORTH CAROLINA BUILDING CODE
RISK CATEGORY: III
BASIC LATERAL FORCE RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

DESIGN LIVE LOADS

ROOF	20 PSF
CORRIDORS	100 PSF
MECHANICAL	150 PSF

ROOF SNOW LOAD

P_g = 15 PSF
C_e = 0.9
I_s = 1.1
C_t = 1.0
P_f = 10.4 PSF
P_m = 16.5 PSF

RAIN ON SNOW 15 PSF

WIND LOAD

V = 125 MPH (3 SECOND GUST)
EXPOSURE C
DESIGN (DESIGN/ULTIMATE) WIND BASE SHEAR:
V_x = 280k V_y = 193k
INTERNAL PRESSURE COEFFICIENT = ±0.18
COMPONENTS & CLADDING PER ASCE 7
FIGURES 30.5-1

WIND LOADS ON COMPONENTS & CLADDING FOR GIVEN TRIBUTARY AREAS (psf)

	ZONE	10 SQ FT	20 SQ FT	50 SQ FT	100 SQ FT	500 SQ FT
ROOF	1	+16.0/-38.2	+16.0/-37.2	+16.0/-35.9	+16.0/-34.9	+16.0/-34.9
	2	+16.0/-64.1	+16.0/-57.2	+16.0/-48.2	+16.0/-41.4	+16.0/-41.4
	3	+16.0/-96.4	+16.0/-79.9	+16.0/-58.0	+16.0/-41.4	+16.0/-41.4
ROOF OVHNG	2	-55.1	-54.2	-52.9	-51.9	-35.7
	3	-90.8	-71.3	-45.4	-25.9	-25.9
WALL	4	+34.9/-37.9	+33.4/-36.3	+31.3/-34.3	+29.8/-32.7	+26.2/-29.1
	5	+34.9/-46.6	+33.4/-43.5	+31.3/-39.4	+29.8/-36.3	+26.2/-29.1

1. DETERMINE WIND LOADS ON COMPONENTS IN ACCORDANCE WITH THE NCSBC AND ASCE-7 OR WITH THIS TABLE. REFERENCE ASCE 7-10 FIGURE 30.5-1. TRIBUTARY AREA = GREATER OF LxW OR LxL/3.
2. DESIGN FOR ALLOWABLE CAPACITY USING LOADS FROM ASCE-7 OR FROM THIS TABLE.
3. DEFLECTIONS MAY BE CALCULATED BASED ON 70% OF THESE LOADS.
4. POSITIVE PRESSURES ARE DIRECTED TOWARD THE INTERIOR. NEGATIVE LOADS ARE DIRECTED AWAY FROM THE INTERIOR. NEGATIVE ROOF LOADS ARE UPLIFT LOADS.
5. NET UPLIFT IS EQUAL TO THE GROSS UPLIFT LOAD CALCULATED FROM ASCE-7 OR FROM THIS TABLE MINUS 60% OF THE ROOFING ALLOWANCE SUMPERIMPOSED DEAD LOAD SHOWN ON S100

SEISMIC CRITERIA

SEISMIC DESIGN VALUES DETERMINED UTILIZING 2008 USGS HAZARD DATA
SPECTRAL RESPONSE ACCELERATIONS S_s = 0.184g S_1 = 0.086g
SITE CLASS D
SPECTRAL RESPONSE COEFFICIENTS S_{ds} = 0.197g S_{d1} = 0.138g
SEISMIC DESIGN CATEGORY C
DESIGN ULTIMATE SEISMIC BASE SHEAR: V_x = 87k V_y = 87k
IMPORTANCE FACTOR I_e = 1.25
DESIGN SEISMIC RESPONSE COEFFICIENT C_s = 0.099
RESPONSE MODIFICATION FACTOR R = 3.5

SPECIAL INSPECTION REQUIREMENTS

THE FOLLOWING SYSTEMS ARE SUBJECT TO THE SPECIAL INSPECTION REQUIREMENTS OF THE NCSBC, CHAPTER 17.

1. CAST-IN-PLACE CONCRETE
2. MASONRY
3. STRUCTURAL STEEL
4. STEEL JOIST
5. STEEL DECK
6. SOILS
7. SPECIAL INSPECTIONS FOR WIND RESISTANCE

GENERAL NOTES

GENERAL

1. DESIGN, FURNISH, AND INSTALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY SUPPORTS REQUIRED FOR CONSTRUCTING THE STRUCTURE AND TO MAINTAIN THE STABILITY THROUGHOUT ALL PHASES OF CONSTRUCTION UNTIL THE STRUCTURE IS COMPLETED. ALL TEMPORARY SUPPORTS ARE TO BE REMOVED UNLESS NOTED OTHERWISE.
2. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND THE DRAWINGS OF OTHER TRADES.
3. COORDINATE WITH OTHER TRADES THE ACTUAL LOCATIONS AND SIZES OF OPENINGS AND PENETRATIONS REQUIRED BY THEIR WORK.
4. COORDINATE WITH OTHER TRADES THE ACTUAL LOCATIONS AND ELEVATIONS OF BURIED SERVICES PASSING NEAR FOUNDATIONS. UNDERGROUND SERVICES WHICH PASS BENEATH WALL FOOTINGS SHALL HAVE AT LEAST 12" OF CLEARANCE BELOW THE BOTTOM OF THE FOOTING. WHERE THIS IS NOT ACHIEVED, EITHER STEP THE FOOTING DOWN BENEATH THE SERVICE OR INSTALL A STEEL PIPE SLEEVE FOR THE SERVICE TO PASS THROUGH. SLEEVES ARE FURNISHED AND INSTALLED BY THE TRADE INSTALLING THE SERVICE. NO SERVICE IS TO BE INSTALLED BENEATH COLUMN FOOTINGS UNLESS APPROVED BY THE ARCHITECT.
5. COORDINATE WITH OTHER TRADES THE ACTUAL LOCATIONS AND TYPES OF ATTACHMENTS AND ANCHORS THAT ARE REQUIRED BY THE TRADES TO FASTEN THEIR WORK TO THE STRUCTURE.
6. MODIFICATIONS TO STRUCTURAL COMPONENTS AND INSTALLATION OF PENETRATIONS THROUGH STRUCTURAL MEMBERS ARE NOT PERMITTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
7. VERIFY ACTUAL DIMENSIONS, ELEVATIONS, AND CONDITIONS OF EXISTING CONSTRUCTION PRIOR TO PROCEEDING WITH WORK OR ORDERING MATERIALS WHICH COULD BE AFFECTED BY EXISTING CONDITIONS.

FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED ON GEOTECHNICAL ENGINEERING REPORT BY TERRACON CONSULTANTS, INC. DATED MAY 7, 2024.
2. ALL FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL. NET ALLOWABLE BEARING PRESSURE IS 3000 PSF.
3. SITE PREPARATION SHOULD BEGIN WITH THE DEMOLITION OF THE EXISTING PAVEMENT AND STRUCTURES AND DEBRIS REMOVAL WHERE NEW CONSTRUCTION WILL OCCUR. AS PART OF THE DEMOLITION, BURIED CONCRETE FOUNDATIONS ASSOCIATED WITH EXISTING MODULAR STRUCTURES SHOULD ALSO BE REMOVED. EXISTING UTILITIES THAT ARE TO BE ABANDONED SHOULD BE PROPERLY BACKFILLED WITH COMPACTED STRUCTURAL FILL UTILITIES THAT ARE TO REMAIN IN SERVICE SHOULD BE ACCURATELY LOCATED HORIZONTALLY AND VERTICALLY TO MINIMIZE CONFLICT WITH NEW FOUNDATION CONSTRUCTION.

   PRIOR TO PLACING FILL, EXISTING VEGETATION AND ROOT MAT SHOULD BE REMOVED. COMPLETE STRIPPING OF THE TOPSOIL SHOULD BE PERFORMED IN THE PROPOSED BUILDING PAD AREAS.

   THE SUBGRADE SHOULD BE PROOFROLLED WITH AN ADEQUATELY LOADED VEHICLE SUCH AS A FULLY-LOADED TANDEM-AXLE DUMP TRUCK. THE PROOFROLLING SHOULD BE PERFORMED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. AREAS EXCESSIVELY DEFLECTING UNDER THE PROOFROLL SHOULD BE DELINEATED AND SUBSEQUENTLY ADDRESSED BY THE GEOTECHNICAL ENGINEER. EXCESSIVELY WET OR DRY MATERIAL SHOULD EITHER BE REMOVED, OR MOISTURE CONDITIONED AND RECOMPACTED. ANY EXISTING FILL MATERIAL ENCOUNTERED BENEATH THE BUILDING/FOOTING FOOTPRINT SHALL BE REMOVED AND REPLACED.

MATERIAL PROPERTY REQUIREMENTS FOR ON-SITE SOIL FOR USE AS GENERAL FILL AND STRUCTURAL FILL ARE NOTED IN THE TABLE BELOW:

PROPERTY	GENERAL FILL	STRUCTURAL FILL
COMPOSITION	FREE OF DELETERIOUS MATERIAL	FREE OF DELETERIOUS MATERIAL
MAXIMUM PARTICLE SIZE	6 INCHES (OR 2/3 OF THE LIFT THICKNESS)	3 INCHES
FINES CONTENT	NOT LIMITED	NOT LIMITED
PLASTICITY	NOT LIMITED	MAXIMUM LIQUID LIMIT OF 50 MAXIMUM PLASTICITY INDEX OF 30

STRUCTURAL AND GENERAL FILL SHOULD MEET THE FOLLOWING COMPACTION REQUIREMENTS.

ITEM	STRUCTURAL FILL	GENERAL FILL
MAXIMUM LIFT THICKNESS	10 INCHES IN LOOSE THICKNESS WHEN HEAVY, SELF-PROPELLED COMPACTION EQUIPMENT IS USED. 6 INCHES IN LOOSE THICKNESS WHEN HANDGUIDED EQUIPMENT (I.E. JUMPING JACK OR PLATE COMPACTOR) IS USED.	SAME AS STRUCTURAL FILL
MINIMUM COMPACTION REQUIREMENTS	95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698). 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) IN UPPER 1 FOOT OF STRUCTURAL FILL.	92% OF THE MATERIAL'S STANDARD PROTOR MAXIMUM DRY DENSITY (ASTM D698)
WATER CONTENT RANGE	LOW PLASTICITY FINE-GRAINED SOIL (PI<30) : -3% TO +3% OF OPTIMUM. COARSE-GRAINED SOIL: -3% TO +3% OF OPTIMUM	AS REQUIRED TO ACHIEVE MIN. COMPACTION REQUIREMENTS AND STABILITY

IMPORTED FILL MATERIALS: IMPORTED FILL MATERIALS SHOULD MEET THE FOLLOWING MATERIAL PROPERTY REQUIREMENTS. REGARDLESS OF ITS SOURCE, STRUCTURAL FILL SHOULD CONSIST OF APPROVED MATERIALS THAT ARE FREE OF ORGANIC MATTER AND DEBRIS. FROZEN MATERIAL SHOULD NOT BE USED, AND FILL SHOULD NOT BE PLACED ON A FROZEN SUBGRADE.

SOIL TYPE	USCS CLASSIFICATION	ACCEPTABLE PARAMETER (FOR STRUCTURAL FILL)
LOW PLASTICITY, FINE-GRAINED SOIL	CL, CL-ML ML, SM, SC	LIQUID LIMIT LESS THAN 50 PLASTICITY INDEX LESS THAN 30
COARSE-GRAINED SOIL	GW, GP, GM, GC, SW, SP, SM, SC	LESS THAN 50% PASSING NO. 200 SIEVE LIQUID LIMIT LESS THAN 50 PLASTICITY INDEX LESS THAN 30
SELECT GRANURAL FILL	SP, SP-SM, SW, OR SW-SM	LESS THAN 12% PASSING NO. 200 SIEVE PLASTICITY INDEX LESS THAN 10

4. NO FOUNDATIONS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.
5. ALL FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND.
6. ALL FINISHED FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT OR HIS DESIGNATE BEFORE ANY CONCRETE IS PLACED.
7. UNLESS OTHERWISE NOTED, ALL FOOTINGS AND PILASTERS SHALL BE CENTERED UNDER SUPPORTED MEMBERS.
8. DOWELS FROM FOUNDATIONS INTO PIERS, COLUMNS, BUTTRESSES, OR WALLS ABOVE SHALL BE THE SAME SIZE AND NUMBER AS VERTICAL REINFORCEMENT IN PIERS, COLUMNS, BUTTRESSES, OR WALLS ABOVE, EXCEPT AS OTHERWISE SHOWN ON THE DRAWINGS.
9. CAREFULLY FOLLOW THE REQUIREMENTS OF THE SPECIFICATIONS FOR BACKFILL UNDER OR ADJACENT TO ANY PORTION OF THE BUILDING.
10. WHERE FOUNDATION ELEMENTS ARE TO HAVE FILL ON BOTH SIDES, EACH SIDE SHALL BE FILLED SIMULTANEOUSLY, MAINTAINING A COMMON ELEVATION.
11. COORDINATE UNDERFLOOR DRAIN REQUIREMENTS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
12. CONTRACTOR SHALL PROVIDE CONTINUOUS CONTROL OF SURFACE AND UNDERGROUND WATER AS REQUIRED DURING CONSTRUCTION SUCH THAT THE WORK IS DONE IN THE DRY.

CAST-IN-PLACE

1. MATERIALS
   - A. PORTLAND CEMENT: ASTM C150, TYPE I.
   - B. FLY ASH: ASTM A618, CLASS C OR F.
   - C. NORMAL-WEIGHT AGGREGATE: ASTM ASTM C33, CLASS 3M.
   - D. REINFORCING STEEL: ASTM A615 GRADE 60.
   - E. REINFORCING STEEL, WELDABLE: ASTM A706.
   - F. WELDED WIRE FABRIC: ASTM A185, FLAT SHEETS.
   - G. UNDER-SLAB DRAINAGEFILL: 4" WASHED CRUSHED STONE, MAXIMUM AGGREGATE SIZE OF 3/4".
   - H. VAPOR BARRIER: ASTM E1745, CLASS B; FIVE-PLY, NYLON OR POLYESTER CHORD, 15 MILS THICKNESS.
   - I. WATERSTOP: SELF EXPANDING.
2. CONCRETE MIXES
   - A. FOOTINGS: 3000 PSI NW
   - B. SLABS-ON-GRADE: 3000 PSI NW.
   - C. SLABS-ON-GRADE EXPOSED TO WEATHER: 4500 PSI NW, AIR-ENTRAINED.
3. PERFORM CONCRETE WORK IN ACCORDANCE WITH ACI 318 AND ACI 301.
4. PROVIDE CONCRETE COVER AS FOLLOWS:
   - A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3".
   - B. CONCRETE EXPOSED TO EARTH OR WEATHER:
     - a. #5 OR SMALLER: 1 1/2".
     - b. #6 OR LARGER: 2".
   - C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
     - a. SLABS, WALLS, JOIST: 3/4"
     - b. BEAMS, COLUMNS: 1 1/2" TO PRIMARY REINFORCEMENT, TIES, STIRRUPS, OR SPIRALS.
5. PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE. SPLICE ONLY AS SHOWN OR APPROVED. MINIMUM LAP LENGTHS, EXPRESSED IN NUMBER OF BAR DIAMETERS, SHALL BE AS FOLLOWS:

BAR SIZE	NORMAL WT. CONCRETE STRENGTH, fc (psi)		
	3000	4000	5000
#6 OR SMALLER	57 DIA.	49 DIA.	44 DIA.
#7 OR LARGER	71 DIA.	62 DIA.	55 DIA.

MULTIPLY THE ABOVE LENGTHS BY 1.3 FOR TOP BARS AND BY 1.3 FOR LIGHTWEIGHT CONCRETE. WHERE BARS OF UNEQUAL DIAMETER ARE LAPPED, USE THE LAP LENGTH OF THE SMALLER BAR. THE ABOVE LENGTHS ARE CLASS "B" TENSION LAP SPLICES BASED ON GRADE 60 BARS WITH A COVER OF AT LEAST 1 BAR DIA. AND SPACING AT LEAST 3 BAR DIA. LAP LENGTHS SHALL BE INCREASED IN ACCORDANCE WITH ACI 318 IF COVER IS LESS THAN 1 BAR DIA. OR SPACING IS LESS THAN 3 BAR DIA.

6. ACCURATELY INSTALL AND PROPERLY SECURE ANCHORS, BEARING PLATES, SLEEVES, AND OTHER EMBEDDED ITEMS.
7. ACCURATELY LOCATE AND BLOCK OUT OPENINGS AND PENETRATIONS.
8. COORDINATE WITH OTHER TRADES FOR ANCHORS, EMBEDDED ITEMS, SLEEVES, AND PENETRATIONS REQUIRED AND/OR FURNISHED BY THE OTHER TRADES.
9. PROVIDE CONTRACTION JOINTS IN SLABS-ON-GRADE WHERE INDICATED ON THE PLANS. PROVIDE A JOINT DEPTH EQUAL TO AT LEAST 25% OF THE SLAB THICKNESS.
10. INSTALL AND SEAL VAPOR BARRIER IN ACCORDANCE WITH ASTM E1643 AND MANUFACTURER'S INSTRUCTIONS. LAP JOINTS 6" AND SEAL WITH MANUFACTURER'S RECOMMENDED TAPE.
11. FLOOR FINISHES:
    - A. FLOAT FINISH: SURFACES TO RECEIVE A TROWEL FINISH, TO BE COVERED WITH FLUID-APPLIED OR SHEET WATERPROOFING, OR TO BE COVERED WITH BUILT-UP OR MEMBRANE ROOFING.
    - B. TROWEL FINISH: SURFACES EXPOSED TO VIEW OR COVERED WITH RESILIENT FLOORING, CARPET, WOOD FLOORING, PAINT, SEALER, OR OTHER THIN FILM FINISH.
    - C. TROWEL AND FINE-BROOM FINISH: SURFACES TO BE COVERED WITH QUARRY OR CERAMIC TILE INSTALLED BY THE THIN-SET OR THICK-SET METHOD.
    - D. BROOM FINISH: EXTERIOR CONCRETE PLATFORMS, STEPS, AND RAMPS
12. FLOOR FINISH TOLERANCE:
    - A. SLABS TO RECEIVE TROWEL OR TROWEL AND FINE-BROOM FINISH:
      - a. SPECIFIED OVERALL VALUES: FF=25 / FL=20.
      - b. MINIMUM LOCAL VALUES: FF=17 / FL=15..
13. FINISH SLABS FLAT AND LEVEL.
14. NO CONDUIT OR PIPE MAY BE RUN WITHIN STRUCTURAL CONCRETE MEMBERS EXCEPT WHERE INDICATED.

STRUCTURAL MASONRY

1. SCOPE: THESE NOTES APPLY TO LOAD BEARING MASONRY OR MASONRY THAT IS PART OF THE LATERAL LOAD RESISTING SYSTEM. SEE ARCHITECTURAL FOR OTHER MASONRY.
2. ALL MASONRY WORK SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI530-13) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI530.1-13)
3. MATERIALS
   - A. CONCRETE MASONRY UNITS: ASTM C90, 2000 PSI MIN. UNIT STRENGTH.
   - B. MORTAR: ASTM C270, PROPORTION SPECIFICATION, TYPE S.
   - C. GROUT: ASTM C476; SLUMP = 8" TO 11". COMPRESSIVE STRENGTH f'c = 3000 PSI
   - D. MASONRY f'm = 2000 PSI.
   - E. REINFORCING STEEL: ASTM A615, GRADE 60. Fs = 32,000 PSI
4. LAP REINFORCING AS FOLLOWS, UNLESS NOTED OTHERWISE.

#3	1'-6"	#7	5'-6"
#4	2'-0"	#8	8'-6"
#5	2'-6"	#9	10'-9"
#6	4'-0"	#10	14'-0"

5. INSTALL REINFORCING IN THE CENTER OF CELLS UNLESS INDICATED OTHERWISE.
6. ADEQUATELY SECURE REINFORCING TO PREVENT MOVEMENT PRIOR TO GROUT FILL.
7. GROUT ALL CELLS OF MASONRY UNITS INSTALLED BELOW FINAL GRADE.
8. ABOVE GRADE, GROUT ONLY REINFORCED CELLS UNLESS INDICATED OTHERWISE.

STRUCTURAL STEEL

1. MATERIALS
   - A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A992
   - B. OTHER STRUCTURAL STEEL ROLLED SHAPES: ASTM A36
   - C. RECTANGULAR OR ROUND HSS: ASTM A500, GR B
   - D. STEEL PLATE: ASTM A36
   - E. HIGH STRENGTH BOLTS: ASTM A325
   - F. ANCHOR RODS: ASTM F1554, GRADE 36
   - G. WELD ELECTRODE: IN ACCORDANCE WITH AWS D1.1
2. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH THE AISC SPECIFICATION. PERFORM SHOP AND FIELD WELDING IN ACCORDANCE WITH AWS D1.1 WITH CURRENTLY CERTIFIED WELDERS.
3. UNLESS NOTED OTHERWISE, ALL BOLTED CONNECTIONS ARE MADE WITH 3/4" HIGH STRENGTH BOLTS INSTALLED SNUG TIGHT.
4. DESIGN OF BEAM CONNECTIONS ARE DELEGATED TO THE STEEL FABRICATOR. SHOP STANDARD SIMPLE SHEAR CONNECTIONS WILL BE PERMITTED. SERVICE LEVEL (UNFACTORED) BEAM REACTIONS ARE SHOWN ON THE FRAMING PLAN. WHERE NOT SHOWN DESIGN FOR MINIMUM END REACTION OF 10 KIPS FOR A SHEAR CONNECTION AND 10 KIP-FT FOR A MOMENT CONNECTION. THE EOR WILL REVIEW AND APPROVE THE PROPOSED CONNECTION.
5. STEEL PREPARATION AND FINISH:
   - A. INTERIOR FRAMING: SSPC SP3 POWER TOOL CLEANING; PAINT 23 LATEX PRIMER FOR STEEL SURFACES.
   - B. BRICK RELIEF ANGLES AND LINTELS: SSPC SP6 COMMERCIAL BLAST CLEANING; HOT DIPPED GALVANIZED.
6. FOR BEAMS NOT MEETING THE MINIMUM SIZE REQUIREMENT OF THE UL ASSEMBLY, THE CONTRACTOR SHALL PROVIDE FOR APPROVAL W/D CALCULATIONS AS REQUIRED IN SECTION 721.5.2.2 OF THE NC STATE BUILDING CODE.

STEEL DECK

1. 3" DEEP ROOF DECK ATTACHMENT TO STRUCTURAL STEEL
   - A. FASTEN ROOF DECK PANELS TO STEEL SUPPORTING MEMBERS WITH 5/8" NOMINAL DIAMETER PUDDLE WELDS OR WELDS WITH AN EQUAL PERIMETER, OR SEAM WELDS NOT LESS THAN 1 1/2" LONG.
   - B. WELD EDGES AND INTERIOR RIBS OF DECK UNITS TO EACH SUPPORTING MEMBER WITH A MINIMUM OF THREE WELDS PER DECK UNIT.
   - C. WELD SPACING: SEE ROOF DECK ATTACHMENT PLAN ON S-040.
   - D. FASTEN SIDE LAPS WITH #10 SELF-DRILLING SCREWS. SEE ROOF DECK ATTACHMENT PLAN ON S-040. DECK SPANS 36" OR LESS DO NOT REQUIRE SIDE LAP FASTENERS.
   - E. END BEARING: 3" MINIMUM.
   - F. END JOISTS: LAPPED
   - G. DO NOT HANG ANYTHING FROM THE ROOF DECK.
   - H. PER AWS D1.3, A WELDING PROCEDURE SPECIFICATION (WPS) AND A PROCEDURE QUALIFICATION RECORD (PQR) FOR WELDING SHEET METAL MUST BE SUBMITTED TO THE EOR FOR REVIEW AND APPROVAL PRIOR TO ANY DECK WELDING.
2. 1 1/2" DEEP ROOF DECK ATTACHMENT TO STRUCTURAL STEEL
   - A. FASTEN ROOF DECK PANELS TO STEEL SUPPORTING MEMBERS WITH 5/8" NOMINAL DIAMETER PUDDLE WELDS OR WELDS WITH AN EQUAL PERIMETER, OR SEAM WELDS NOT LESS THAN 1 1/2" LONG.
   - B. WELD EDGES AND INTERIOR RIBS OF DECK UNITS TO EACH SUPPORTING MEMBER WITH A MINIMUM OF THREE WELDS PER DECK UNIT.
   - C. WELD SPACING: SEE ROOF DECK ATTACHMENT PLAN ON S-040.
   - D. FASTEN SIDE LAPS WITH #10 SELF-DRILLING SCREWS. SEE ROOF DECK ATTACHMENT PLAN ON S-040. DECK SPANS 36" OR LESS DO NOT REQUIRE SIDE LAP FASTENERS.
   - E. END BEARING: 1 1/2" MINIMUM.
   - F. END JOINTS: LAPPED
   - G. DO NOT HANG ANYTHING FROM THE ROOF DECK.
   - H. PER AWS D1.3, A WELDING PROCEDURE SPECIFICATION (WPS) AND A PROCEDURE QUALIFICATION RECORD (PQR) FOR WELDING SHEET METAL MUST BE SUBMITTED TO THE EOR FOR REVIEW AND APPROVAL PRIOR TO ANY DECK WELDING.

STEEL JOISTS

1. MATERIALS
   - A. STEEL JOISTS: SJI SPECIFICATIONS, K SERIES.
   - B. LONG SPAN STEEL JOISTS: IN ACCORDANCE WITH SJI SPECIFICATIONS.
   - C. BRIDGING AND ACCESSORIES: IN ACCORDANCE WITH SJI SPECIFICATIONS.
   - D. HIGH-STRENGTH BOLTS: ATSM A325
   - E. CARBON STEEL BOLTS: ASTM A307, GRADE A
   - F. WELD ELECTRODE: IN ACCORDANCE WITH AWS D1.1
2. FABRICATE AND ERECT JOISTS IN ACCORDANCE WITH THE SJI SPECIFICATIONS.
3. PERFORM SHOP AND FIELD WELDING WITH CERTIFIED WELDERS IN ACCORDANCE WITH AWS D1.1
4. INSTALL 3/4 INCH DIAMETER HIGH STRENGTH BOLTS, SNUG TIGHT, IN BOLTED JOIST-TO-STRUCTURAL STEEL, JOIST-TO-JOIST GIRDER, AND JOIST SPLICE CONNECTIONS.
5. INSTALL CARBON STEEL BOLTS IN BOLTED CONNECTIONS FOR BRIDGING AND JOIST ACCESSORIES.
6. INSTALL BRIDGING AND UPLIFT BRIDGING AS REQUIRED BY THE SJI SPECIFICATIONS.

CONCRETE AND MASONRY ANCHORS

1. EXPANSION ANCHORS: WEDGE TYPE, CARBON STEEL, ZINC PLATED OR SIMILARLY TREATED FOR CORROSION RESISTANCE. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
2. EXPANSION ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES ACI 193 FOR USE IN CONCRETE APPLICATIONS, OR ICC-ES ACO1 FOR USE IN MASONRY APPLICATIONS.
3. ADHESIVE ANCHORS: CARBON STEEL, A36 MATERIAL OR EQUIVALENT, WITH A TWO-PART, PREPACKAGED AND PREMEASURED ADHESIVE READY FOR INJECTION INTO THE ANCHOR HOLE. INSTALL ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
4. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR USE IN CONCRETE APPLICATION, OR ICC-ES AC58 FOR USE IN MASONRY APPLICATIONS.

POST-INSTALLED ANCHORS

UNLESS OTHERWISE INDICATED ON PLANS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES, OR APPROVED EQUAL:

	ADHESIVE ANCHOR	MECHANICAL ANCHOR
SOLID CONCRETE	HILTI HY 200 SAFE SET HILTI RE 500 SD DEWALT/POWERS AC200+ DEWALT/POWERS PURE110+	HILTI KWIK HUS EZ HILTI KWIK BOLT TZ DEWALT/POWERS POWER-STUD+SD2 DEWALT/POWERS SCREW-BOLT+
GROUTED MASONRY	HILTI HY 270 DEWALT/POWERS AC100+GOLD	HILTI KWIK BOLT 3 DEWALT/POWERS POWER-STUD+SD1
HOLLOW MASONRY OR BRICK	HILTI HY 270 WITH APPROPRIATE SCREEN TUBE DEWALT/POWERS AC100+GOLD	HILTI HLC SLEEVE ANCHOR DEWALT/POWERS LOK-BOLT AS

1. SUBSTITUTION REQUESTS FOR ALTERNATIVE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE.
2. INSTALL ANCHORS PER THE MANUFACTURED INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGE.
3. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-11 D.9.2.2). PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.
4. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS (ACI 318-11 D.2.2).
5. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR USE IN CONCRETE APPLICATION, OR ICC-ES AC58 FOR USE IN MASONRY APPLICATIONS.

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CONSTRUCTION DRAWINGS

HARNETT COUNTY SCHOOLS

LILLINGTON-SHAWTOWN ELEMENTARY ADDITION

855 Old US Highway 421
Lillington, NC 27546

ENERGY STAR PARTNER

No.	Date	Description

ISSUE DATE: 07-26-2024
PROJECT #: 02110.300
DRAWN BY: D. DRAFTER
CHECKED BY: S. ENG

GENERAL NOTES

S-001

SCHEDULE OF SPECIAL INSPECTION SERVICES

PROJECT

MATERIAL / ACTIVITY	SERVICE	APPLICABLE TO THIS PROJECT Y/N	EXTENT	AGENT*	DATE COMPLETED
1704.2 Inspection of Fabricators					
Verify fabrication/quality control procedures.	In-plant review (3)	Y	Periodic	1	.
1705.1.1 Special Cases (work unusual in nature, including but not limited to alternative materials and systems, unusual design applications, materials and systems with special manufacturer's requirements	Submittal review, shop (3) and/or field inspection	N		.	.
1705.2 Steel Construction					
1. Fabricator and erector documents (Verify reports and certificates as listed in AISC 360, chapter N, paragraph 3.2 for compliance with construction documents)	Submittal Review	Y	Each submittal	1	.
2. Material verification of structural steel	Shop (3) and field inspection	Y	Periodic	1	.
3. Embedments (Verify diameter, grade, type, length, embedment. See 1705.3 for anchors)	Field inspection	Y	Periodic	1	.
4. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction documents	Field inspection	Y	Periodic	1	.
5. Structural steel welding:					
a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-1)	Shop (3) and field inspection	Y	Observe or perform as noted (4)	1	.
b. Inspection tasks During Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-2)	Shop (3) and field inspection	Y	Observe (4)	1	.
c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-3)	Shop (3) and field inspection	Y	Observe or perform as noted (4)	1	.
d. Nondestructive testing (NDT) of welded joints: see Commentary					
1) Complete penetration groove welds 5/16" or greater in risk category III or IV	Shop (3) or field Ultrasonic testing - 100%	N	Periodic	.	.
2) Complete penetration groove welds 5/16" or greater in risk category II	Shop (3) or field Ultrasonic testing - 10% of welds mimimum	N	Periodic	.	.
3) Thermally cut surfaces of access holes when material t > 2"	Shop (3) or field magnetic Partical or Penetrant testing	N	Periodic	.	.
4) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A-3.1	Shop (3) or field radiographic or Ultrasonic testing	N	Periodic	.	.
5) Fabricator's NDT reports when fabricator performs NDT	Verify reports	N	Each Submittal (5)	.	.
6. Structural steel bolting:	Shop (3) and field inspection				
a. Inspection tasks Prior to Bolting (Observe, or perform for each bolted connection, in accordance with QA tasks listed in AISC 360, Table N5.6-1)		Y	Observe or perform as noted (4)	1	.
b. Inspection tasks During Bolting (Observe the QA tasks listed in AISC 360, Table N5.6-2)		Y	Observe (4)	1	.
1) Pre-tensioned and slip-critical joints		N			
a) Turn-of-nut with matching markings		N	Periodic	1	.
b) Direct tension indicator		N	Periodic	.	.
c) Twist-off type tension control bolt		N	Periodic	.	.
d) Turn-of-nut without matching markings		N	Continuous	.	.
e) Calibrated wrench		N	Continuous	.	.
2) Snug-tight joints		Y	Periodic	1	.
c. Inspection tasks After Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-3)		Y	Perform (4)	1	.
7. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360, Table N6.1	Shop (3) and field inspection and testing	N	Observe or perform as noted (4)	.	.
1705.2.2 Steel Construction Other Than Structural Steel					
1. Material verification of cold-formed steel deck:					
a. Identification markings	Field inspection	Y	Periodic	1	.
b. Manufacturer's certified test reports	Submittal review	Y	Each Submittal	1	.
2. Connection of cold-formed steel deck to supporting structure:	Shop (3) and Field inspection				.
a. Welding		N	Periodic	.	.
b. Other fasteners (in accordance with AISC 360, Section N6)					.
1) Verify fasteners are in conformance with approved submittal		Y	Periodic	1	.
2) Verify fasteners installation is in conformance with approved submittal and manufacturer's recommendations		Y	Periodic	1	.
3. Reinforcing steel	Shop (3) and field inspection				
a. Verification of weldability of steel other than ASTM A706		N	Periodic	.	.
b. Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, boundary elements of special concrete structural walls and shear reinforcement		N	Continuous	.	.
c. Shear reinforcement		N	Continuous	.	.
d. Other reinforcing steel		N	Periodic	.	.
1705.3 Concrete Construction					
1. Inspection of reinforcing steel installment (see 1705.2.2 for welding)	Shop (3) and field inspection	Y	Periodic	1	.
2. Inspection of prestressing steel installation	Shop (3) and field inspection	N	Periodic	.	.
3. Inspection of anchors cast in concrete where allowable loads have been increased per section 1908.5 or where strength design is used	Shop (3) and field inspection	N	Periodic	.	.

SCHEDULE OF SPECIAL INSPECTION SERVICES

PROJECT

MATERIAL / ACTIVITY	SERVICE	APPLICABLE TO THIS PROJECT Y/N	EXTENT	AGENT*	DATE COMPLETED
4. Inspection of anchors and reinforcing steel post-installed in hardened concrete: Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances,concrete embedment and tightening torque	Field inspection	Y	Periodic or as required by the research report issued by an approved source	1	.
5. Verify use of approved design mix	Shop (3) and field inspection	Y	Periodic	1	.
6. Fresh concrete sampling, perform slump and air content tests and determine temperature of concrete	Shop (3) and field inspection	Y	Continuous	1	.
7. Inspection for concrete and shotcrete placement for proper application techniques	Shop (3) and field inspection	N	Continuous		.
8. Inspection for maintenance of specified curing temperature and techniques	Shop (3) and field inspection	Y	Periodic	1	.
9. Inspection of prestressed concrete:	Shop (3) and field inspection	N			.
a. Application of prestressing force		N	Continuous		.
b. Grouting of bonded prestressing tendons in seismic-force-resisting system		N	Continuous		.
10. Erection of precast concrete members					
a. Inspect in accordance with construction documents	Field inspection	Y	In Accordance with Construction Documents	.	.
b. Perform inspections of welding and bolting in accordance with Section 1705.2	Field inspection	Y	In Accordance with Section 1705.2	.	.
11. Verification of in-situ concrete strength, prior to stressing of tendons in post tensioned concrete and prior to removal of shores and forms from beams and structural slabs	Review field testing and laboratory reports	N	Periodic		.
12. Inspection of formwork for shape, lines, location and dimensions	Field inspection	Y	Periodic	1	.
13. Concrete strength testing and verification of compliance with construction documents	Field testing and review of laboratory reports	Y	Periodic	1	.
1705.4 Masonry Construction					
(A) Level A, B and C Quality Assurance:					
1. Verify compliance with approved submittals	Field inspection	Y	Periodic	1	.
(B) Level B Quality Assurance:					
1. Verification of f'm and f'_{AAC} prior to construction	Testing by unit strength method or prism test method	Y	Periodic	1	.
(C) Level C Quality Assurance:					
1. Verification of f'm and fAAC prior to construction and for every 5,000 SF during construction	Testing by unit strength method or prism test method	N	Periodic	.	.
2. Verification of proportions of materials in premixed or preblended mortar, prestressing grout, and grout other than self-consolidating grout, as delivered to the project site	Field inspection	N	Continuous	.	.
3. Verify placement of masonry units	Field inspection	N	Periodic	-	.
(D) Levels B and C Quality Assurance:					
1. Verification of Slump Flow and Visual Stability Index (VSI) of self-consoldiating grout as delivered to the project	Field testing	N	Continuous	.	.
2. Verify compliance with approved submittals	Field inspection	Y	Periodic	1	.
3. Verify proportions of site-mixed mortar, grout and prestressing grout for bonded tendons	Field inspection	Y	Periodic	1	.
4. Verify grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages	Field inspection	Y	Periodic	1	.
5. Verify construction of mortar joints	Field inspection	Y	Periodic	1	.
6. Verify placement of reinforcement, connectors, and prestressing tendons and anchorages	Field inspection	Y	Level B - Periodic	1	.
		N	Level C - Continuous	.	.
7. Verify grout space prior to grouting	Field inspection	Y	Level B - Periodic	1	.
		N	Level C - Continuous	.	.
8. Verify placement of grout and prestressing grout for bonded tendons	Field inspection	Y	Continuous	1	.
9. Verify size and location of structural masonry elements	Field inspection	Y	Periodic	1	.
10. Verify type, size, and location of anchors, including details of anchorage of masonry to structural members, frames, or other construction	Field inspection	Y	Level B - Periodic	1	.
		N	Level C - Continuous	.	.
11. Verify welding of reinforcement (see 1705.2.2)	Field inspection		Continuous	.	.
12. Verify preparation, construction, and protestion of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F)	Field inspection	Y	Periodic	1	.
13. Verify application and measurement of prestressing force	Field inspection	N	Continuous	.	.
14. Verify placement of AAC masonry units and construction of thin-bed mortar joints (first 5000 SF of AAC masonry)	Field inspection	N	Continuous	.	.
15. Verify placement of AAC masonry units and construction of thin-bed mortar joints (after the first 5000 SF of AAC masonry)	Field inspection	N	Level B - Periodic	.	.
		N	Level C - Continuous	.	.
16. Verify properties of thin-bed mortar for AAC masonry (first 5000 SF of AAC masonry)	Field inspection	N	Continuous	.	.
17. Verify properties of thin-bed mortar for AAC masonry (after the first 5000 SF of AAC masonry)	Field inspection	N	Level B - Periodic	.	.
		N	Level C - Continuous	.	.
18. Prepare grout and mortar specimens	Field testing	Y	Level B - Periodic	1	.
		N	Level C - Continuous	.	.
19. Observe preparation of prisms	Field inspection	Y	Level B - Periodic	1	.
		N	Level C - Continuous	.	.
1705.5 Wood Construction					
1. Inspection of the fabrication process of wood structural elements and assemblies in accordance with Section 1704.2.5	In-plat review (3)	N	Periodic	.	.
2. For high-load diaphragms, verify grade and thickness of structural panel sheathing agree with approved building plans	Field inspection	N	Periodic	.	.

SCHEDULE OF SPECIAL INSPECTION SERVICES

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3. For high-load diaphragms, verify nominal size of framing members at adjoining panel edges, nail or staple diameter and length, number of fastener lines, and that spacing between fasteners in each line and at edge margins agree with approved building plans	Field inspection	N	Periodic	.	.
4. Metal-plate-connected wood trusses spanning 60 feet or greater: verify temporary and permanent restraint/bracing are installed in accordance with the approved truss submittal package	Field inspection	N	Periodic	.	.
1705.6 Soils					
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Field inspection	Y	Periodic	1	.
2. Verify excavations are extended to proper depth and have reached proper material.	Field inspection	Y	Periodic	1	.
3. Perform classification and testing of controlled fit materials.	Field inspection	Y	Periodic	1	.
4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of controlled fill	Field inspection	Y	Continuous	1	.
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly	Field inspection	Y	Periodic	1	.
1705.7 Driven Deep Foundations					
1. Verify element materials, sizes and lengths comply with requirements	Field inspection	N	Continuous	.	.
2. Determine capacities of test elements and conduct additional load test, as required	Field inspection	N	Continuous		
3. Observe driving operations and maintain complete and accurate records for each element	Field inspection	N	Continuous		
4. Verify placement locations and plumbness, confirm type and size of hammer ,record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	Field inspection	N	Continuous	.	.
5. For steel elements, perform additional inspections per Section 1705.2	See Section 1705.2	N	See Section 1705.2	.	.
6. For concrete elements and concrete-filled elements, perform additional inspections per Section 1705.3	See Section 1705.3	N	See Section 1705.3	.	.
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge	Field inspection	N	In Accordance with Construction Documents	.	.
8. Perform additional inspections and tests in accordance with the construction documents	Field inspection and testing	N	In Accordance with Construction Documents	.	
1705.8 Cast-in-Place Deep Foundations					
1. Observe drilling operations and maintain complete and accurate records for each element	Field inspection	N	Continuous	.	.
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes	Field inspection	N	Continuous	.	.
3. For concrete elements, perform additional inspections in accordance with Section 1705.3	See Section 1705.3	N	See Section 1705.3	.	.
4. Perform additional inspections and tests in accordance with the construction documents	Field inspection and testing	N	In Accordance with Construction Documents	.	
1705.9 Helical Pile Foundations					
1. Verify installation equipment, pile dimensions, tip elevations, final depth, final installation torque and other data is required	Field inspection and testing	N	Continuous	-	.
2. Perform additional inspections and tests in accordance with the construction documents		N	In Accordance with Construction Documents	-	.
1705.10.1 Structural Wood Special Inspections For Wind Resistance					
1. Inspection of field gluing operations of elements of the main windforce-resisting system	Field inspection	N	Continuous	.	.
2. Inspection of nailing, bolting, anchoring and other fastening of components within the main windforce-resisting system	Shop (3) and field inspection	N	Periodic	.	.
1705.10.2 Cold-formed Steel Special Inspections For Wind Resistance					
1. Inspection during welding operations of elements of the main windforce-resisting system	Shop (3) and field inspection	N	Periodic	.	.
2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the main windforce-resisting system	Shop (3) and field inspection	N	Periodic	.	.
1705.10.3 Wind-resisting Components					
1. Roof cladding	Shop (3) and field inspection	N	Periodic	.	.
2. Wall cladding	Shop (3) and field inspection	N	Periodic	.	.
1705.11.1 Structural Steel Special Inspections for Seismic Resistance					
Inspection of structural steel in accordance with AISC 341	Shop (3) and field inspection	N	In Accordance with ASCE 341	.	.
1705.11.2 Structural Wood Special Inspections for Seismic Resistance					
1. Inspection of field gluing operations of elements of the seismic-force resisting system	Field inspection	N	Continuous	.	.
2. Inspection of nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic	.	.
1705.11.3 Cold-formed Steel Light-Frame Construction Special Inspections for Seismic Resistance					
1. Inspection during welding operations of elements of the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic	.	.
2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic	.	.
1705.11.4 Designated Seismic Systems Verification					
Inspect and verify that the component label, anchorage or mounting conforms to the certificate of compliance in accordance with Section 1705.12.3	Field inspection	N	Periodic	.	.

SCHEDULE OF SPECIAL INSPECTION SERVICES

PROJECT

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1705.11.5 Architectural Components Special Inspections for Seismic Resistance					
1. Inspection during the erection and fastening of exterior cladding and interior and exterior veneer	Field inspection	N	Periodic	.	.
2. Inspection during the erection and fastening of interior and exterior nonbearing walls	Field inspection	N	Periodic	.	.
3. Inspection during anchorage of access floors	Field inspection	N	Periodic	.	.
1705.11.6 Mechanical and Electrical Components Special Inspections for Seismic Resistance					
1. Inspection during anchorage of electrical equipment for emergency or standby power systems	Field inspection	Y	Periodic	1	.
2. Inspection during the anchorage of other electrical equipment	Field inspection	N	Periodic	.	.
3. Inspection during installation and anchorage of piping systems designed to carry hazardous materials, and their associated mechanical units	Field inspection	Y	Periodic	1	.
4. Inspection during the installation and anchorage of HVAC ductwork that will contain hazardous materials	Field inspection	N	Periodic	.	.
5. Inspection during the installation and anchorage of vibration isolation systems	Field inspection	N	Periodic	.	.
1705.11.7 Storage Racks Special Inspection for Seismic Resistance					
Inspection during the anchorage of storage racks 8 feet or greater in height	Field inspection	N	Periodic	.	.
1705.11.8 Seismic Isolation Systems					
Inspection during the fabrication and installation of isolator units and energy dissipation devices used as part of the seismic isolation system	Shop and field inspection	N	Periodic	.	.
1705.12.1 Concrete Reinforcement Testing and Qualification for Seismic Resistance					
1. Review certified mill test reports for each shipment of reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls	Review certified mill test reports	N	Each Shipment	.	.
2. Verify reinforcement weldability of ASTM A615 reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moments frames, special structural walls, and coupling beams connecting special structural walls	Review test reports	N	Each Shipment	.	.
1705.12.2 Structural Steel Testing and Qualification for Seismic Resistance					
Test in accordance with the quality assurance requirements of AISC 341	Shop (3) and field testing	N	Per AISC 341	.	.
1705.12.3 Seismic Certification of Nonstructural Components					
Review certificate of compliance for designed seismic system components	Certificate of compliance review	N	Each Submittal	.	.
1705.12.4 Seismic Isolation Systems					
Test seismic isolation systems in accordance with ASCE 7, Section 17.8	Prototype testing	N	Per ASCE 7	.	.
1705.13 Sprayed Fire-resistant Materials					
1. Verify surface condition preparation of structural members	Field inspection	N	Periodic	.	.
2. Verify application of sprayed fire-resistant materials	Field inspection	N	Periodic	.	.
3.Verify average thickness of sprayed fire-resistant materials applied to structural members	Field inspection	N	Periodic	.	.
4. Verify density of sprayed fire-resistant material complies with approved fire-resistant design	Field inspection and testing	N	Per IBC Section 1705.13.5	.	.
5. Verify the cohesive/adhesive bond strength of the cured sprayed fire-resistant material	Field inspection and testing	N	Per IBC Section 1705.13.6	.	.
1705.14 Mastic and Intumescent Fire-resistant Coatings					
Inspect mastic and intumescent fire-resistant coatings applied to structural elements and decks	Field inspection	N	Periodic	.	.
1705.15 Exterior Insulation and Finish Systems (EIFS)					
1.Verify materials, details and installations are per the approved construction documents	Field inspection	N	Periodic	.	.
2. Inspection of water-resistive barrier over sheathing substrate	Field inspection	N	Periodic	.	.
1705.16 Fire-resistant Penetrations and Joints					
1. Inspect penetration firestop	Field testing	N	Per ASTM E2174	.	.
2. Inspect fire-resistant joint systems	Field testing	N	Per ASTM E2393	.	.
1705.17 Smoke Control Systems					
1. Leakage testing and recording of device locations prior to concealment	Field testing	N	Periodic	.	.
2. Prior to occupancy and after sufficient completion, pressure difference testing, flow measurements, and detection and control vertification	Field testing	N	Periodic	.	.

* INSPECTION AGENTS	FIRM	ADDRESS	TELEPHONE NO.
1. To be determined			
2. .	.	.	.
3.			
4.			

Notes:
1. *The inspection and testing agent(s) shall be engaged by the Owner or the Owner's Agent, and not by the Contractor orsubcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The qualifications of the Special Inspector(s) and/or testing agencies may be subject to the approval of the Building Official and/or the Design Professional.*
2. *The list of Special Inspectors may be submitted as a separate document, if noted so above.*
3. *Special Inspections as required by Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.2*
4. *Observe on a random basis, operations need not be delayed pending these inspections. Perform these tasks on each welded joint, bolted connection, or steel element.*
5. *NDT of welds competed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 360, N7*

Encircle "Yes" or "No" as appropriate and date this document below:
Are Requirements for Seismic Resistance included in the Statement of Special Inspections? Yes (No)
Are Requirements for Wind Resistance included in the Statement of Special Inspections? Yes (No)

DATE: mm-dd-2019

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14526 ROBERT E. LASATER, JR. 7-26-24

CONSTRUCTION DRAWINGS

HARNETT COUNTY SCHOOLS
LILLINGTON-SHAWTOWN ELEMENTARY ADDITION

855 Old US Highway 421
Lillington, NC 27546

ENERGY STAR PARTNER

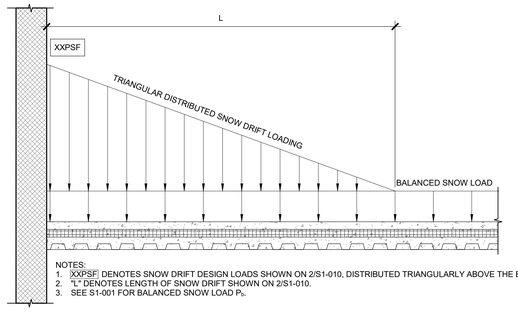
No.	Date	Description

ISSUE DATE: 07-26-2024

PROJECT #: 02110.300
DRAWN BY: Author
CHECKED BY: Checker

SPECIAL INSPECTIONS

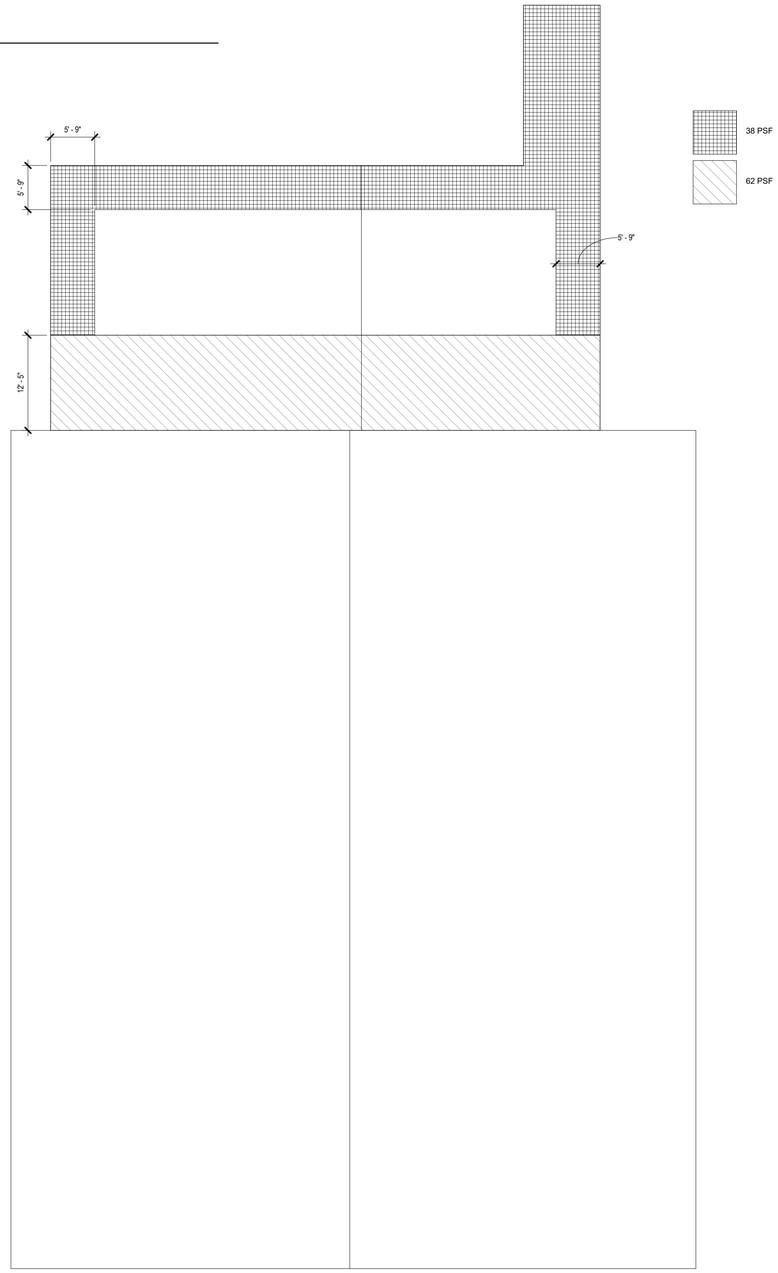
S-010



NOTES:
1. XXPSF DENOTES SNOW DRIFT DESIGN LOADS SHOWN ON 2/S1-010, DISTRIBUTED TRIANGULARLY ABOVE THE BALANCED SNOW LOAD.
2. "L" DENOTES LENGTH OF SNOW DRIFT SHOWN ON 2/S1-010.
3. SEE S1-001 FOR BALANCED SNOW LOAD P_b.

3 S-030 SECTION THRU SNOW DRIFT LOADING

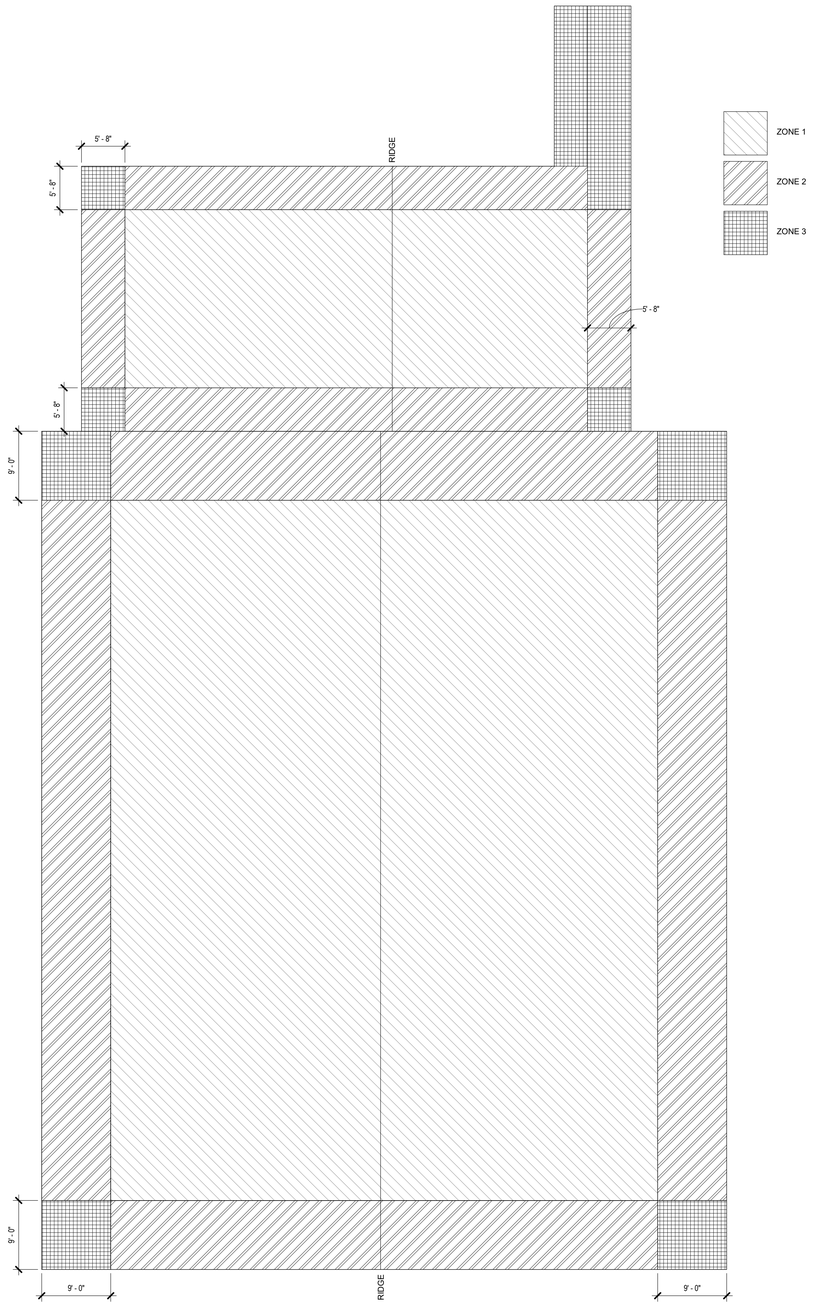
SCALE: 3/4" = 1'-0"



NOTES:
1. ROOF SNOW DRIFT DESIGN LOADS INDICATED ON THIS SHEET ARE TRIANGULARLY DISTRIBUTED ABOVE THE BALANCED SNOW LOAD. DESIGN SNOW DRIFT LOADS SHALL BE USED FOR STEEL JOIST AS INDICATED ON SHEET S-001.
2. SEE SHEET S-001 FOR BALANCED SNOW LOAD P_b.

2 S-030 AREA SNOW DRIFT DESIGN LOADS

SCALE: 1/8" = 1'-0"



NOTE: SEE SHEET S-001 FOR C & C WIND LOADS FOR EACH ZONE

1 S-030 ROOF WIND PRESSURE ZONE

SCALE: 1/8" = 1'-0"

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CONSTRUCTION DRAWINGS

HARNETT COUNTY SCHOOLS

LILLINGTON-SHAWTOWN ELEMENTARY ADDITION

855 Old US Highway 421
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ROOF LOADING DIAGRAM

S-030

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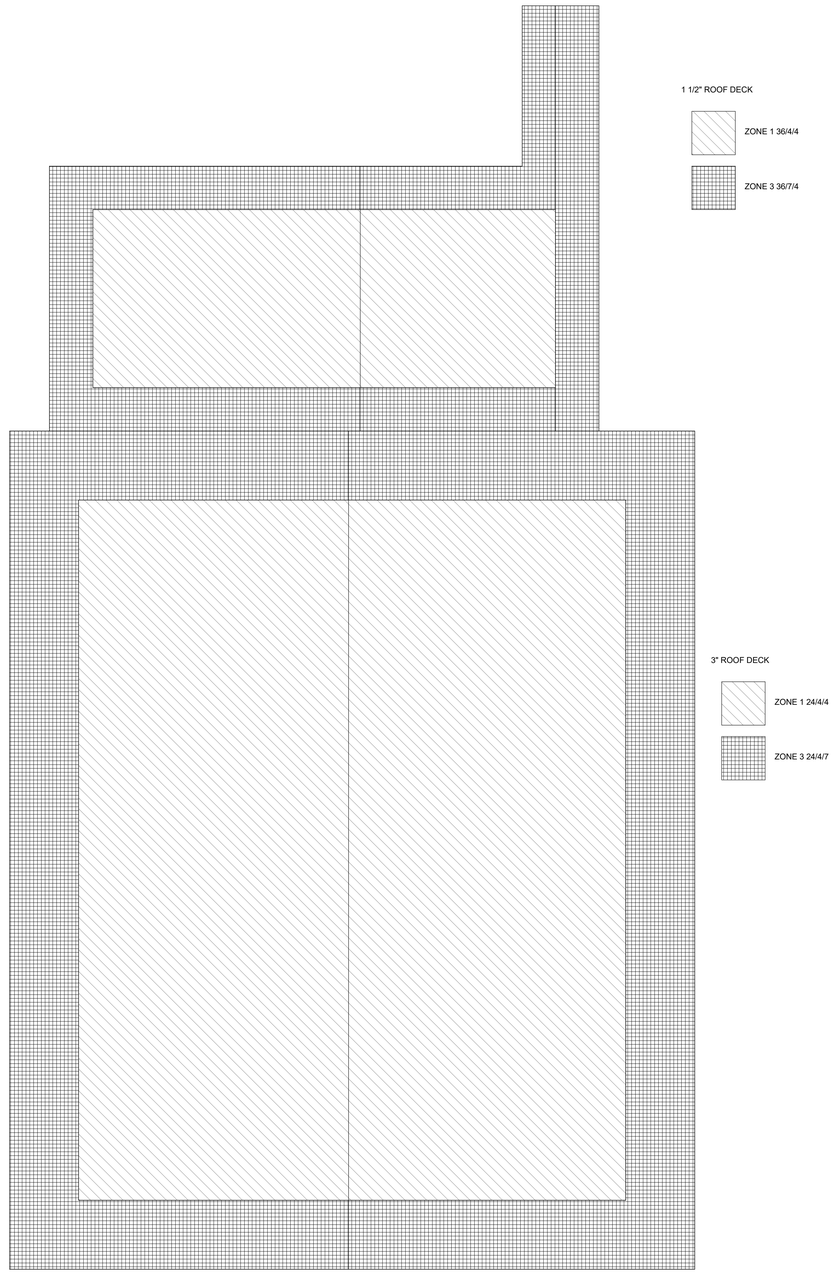
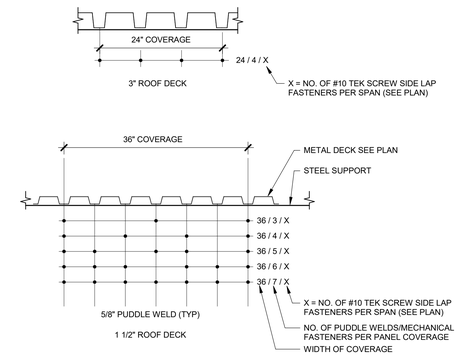
7/25/2024 3:46:39 PM





CONNECTION PATTERNS - FOR LOCATION SEE ROOF DECK ATTACHMENT LAYOUT

2 / S-040 **ROOF DECK CONNECTION PATTERN**
SCALE: 1" = 1'-0"

1 / S-040 **ROOF DECK ATTACHMENT LAYOUT**
SCALE: 1/8" = 1'-0"

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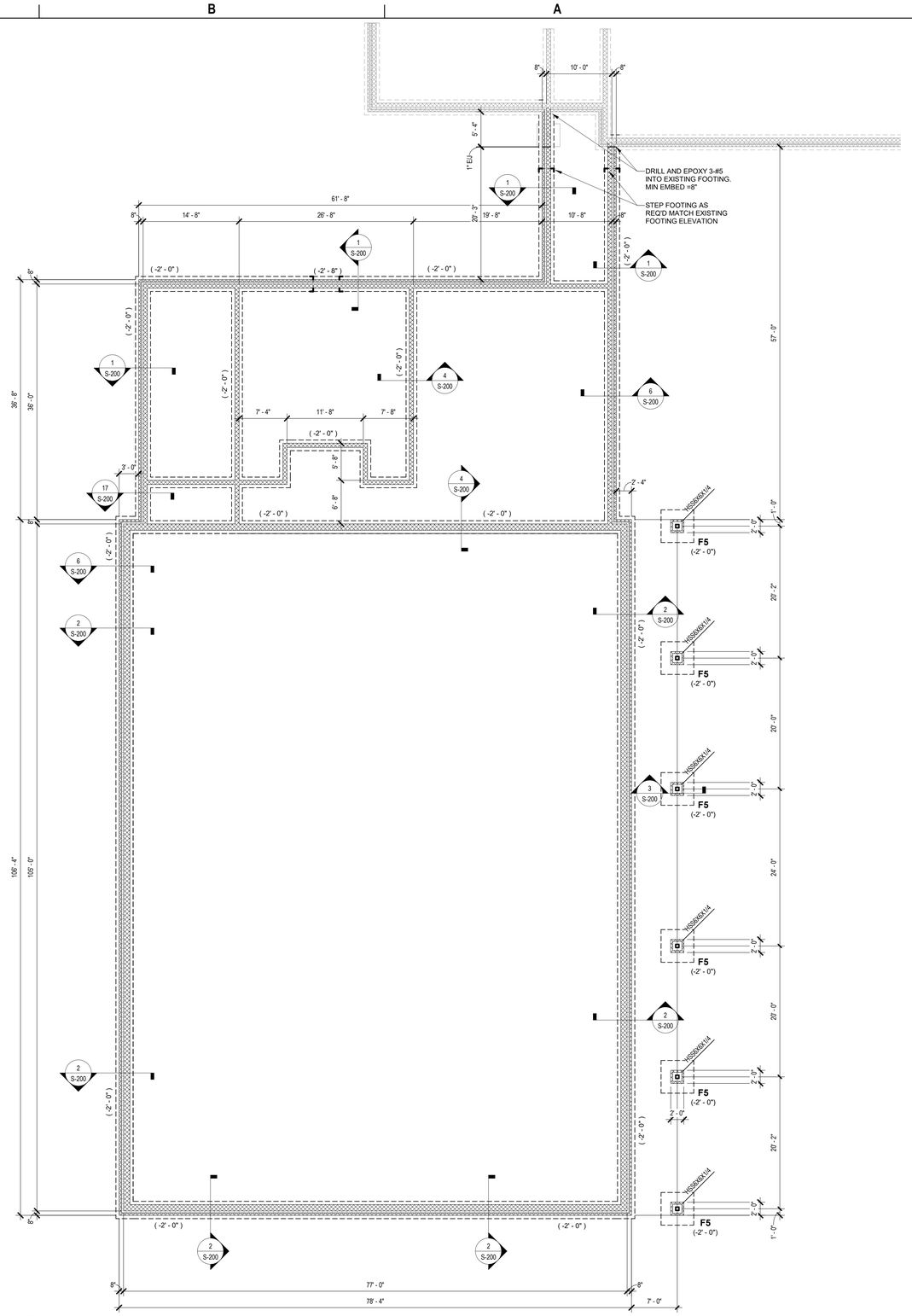
ROOF ATTACHMENT DIAGRAM

S-040



1 S-100 FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. NUMBER IN PARENTHESIS DENOTES TOP OF FOOTING BELOW FIN. FLOOR ELEVATION = 0'-0" (REF. 318.54' MSL) (MATCH EXISTING).
2. **F5.0** DENOTES COLUMN FOOTING. SEE 3/S-200 FOR DETAIL.
3. SEE 5/S-300 FOR CMU WALL REINFORCING REQUIREMENTS.
4. SEE S-101 FOR VERT. WALL REINFORCING SIZE AND SPACING. PROVIDE #5@48" VERTICAL REINFORCING IN INTERIOR CMU WALLS U.O.N.
5. ⌐ ¬ DENOTES STEPPED FOOTING, SEE DETAIL 10/S-200. G.C. COORDINATE STEP LOCATION AND DEPTH W/ PLUMBING CONTRACTOR PRIOR TO FOOTING EXCAVATION.
6. IN ADDITION TO REINFORCING SHOWN ON THE DRAWINGS, PROVIDE #6 VERT. BAR IN JAMBS OF ALL DOORS AND WINDOWS. PROVIDE #6 VERT. BAR EA. SIDE OF EXPANSION JOINTS AND CONTROL JOINTS. SEE DETAIL 4/S-300.
7. **WCJ** DENOTES WALL CONTROL JOINT IN EXTERIOR/LOAD BEARING CMU. SEE S-101 FOR PLAN LOCATIONS. SEE ARCH'L FOR JOINT LOCATIONS IN EXTERIOR BRICK AND INTERIOR NON-LOAD BEARING CMU.
8. REFER TO ARCH'L DRAWINGS FOR INTERIOR WALL DIMENSIONS NOT SHOWN ON STRUCTURAL.
9. PROVIDE BOND BEAMS IN MASONRY WALLS @ 9'-4" MAX AND TOP COURSE OF ALL WALLS.
10. PROVIDE CORNER BARS IN BOND BEAMS AT WALL CORNERS AND INTERSECTIONS. LAP 2'-0".
11. FIELD VERIFY EXISTING CONDITIONS PRIOR TO FOOTING EXCAVATION.

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CONSTRUCTION DRAWINGS

HARNETT COUNTY SCHOOLS
LILLINGTON-SHAWTOWN ELEMENTARY ADDITION

855 Old US Highway 421
Lillington, NC 27546

ENERGY STAR PARTNER

No.	Date	Description

ISSUE DATE: 07-26-2024
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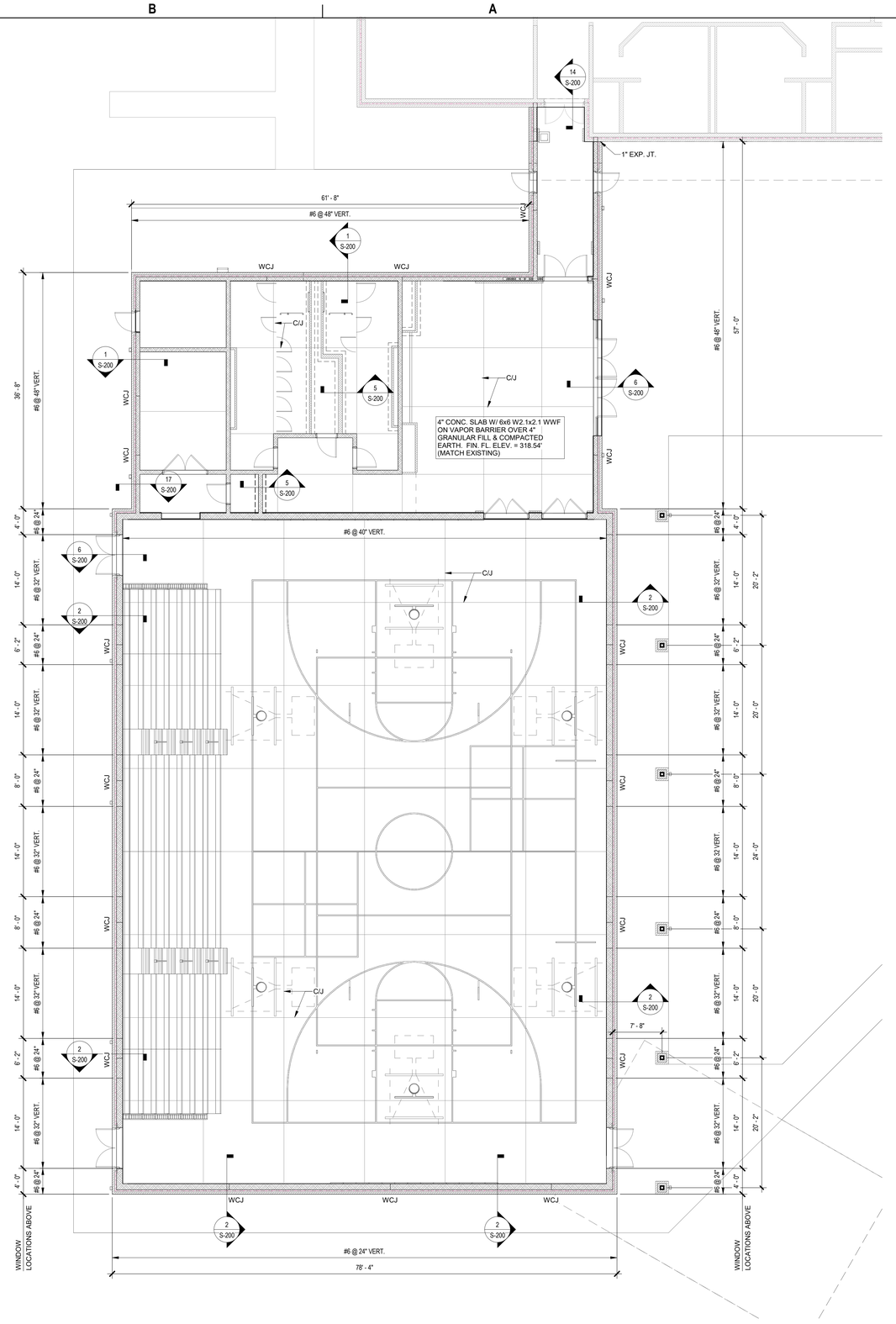
FOUNDATION PLAN

S-100



01_SLAB PLAN

1 / S-101

SCALE: 1/8" = 1'-0"

SLAB PLAN NOTES:

1. FINISH FLOOR ELEVATION = 0'-0" (318.54' MSL) (MATCH EXISTING).
2. **C/J** DENOTES SLAB CONTROL / CONSTRUCTION JOINT. SEE DETAIL 11 / S-200.
3. SEE DETAIL 12 / S-200 FOR SLAB REINFORCING AT RE-ENTRANT CORNERS.
4. SEE DETAIL 8 / S-200 FOR SLAB DEPRESSION DETAIL.
5. REFER TO ARCHITECTURAL FLOOR PLAN FOR LOCATION OF FLOOR DRAINS.
6. **WCJ** DENOTES WALL CONTROL JOINT. SEE DETAIL 4/S300. SEE ARCHITECTURAL FOR JOINT LOCATIONS IN INTERIOR CMU WALLS.

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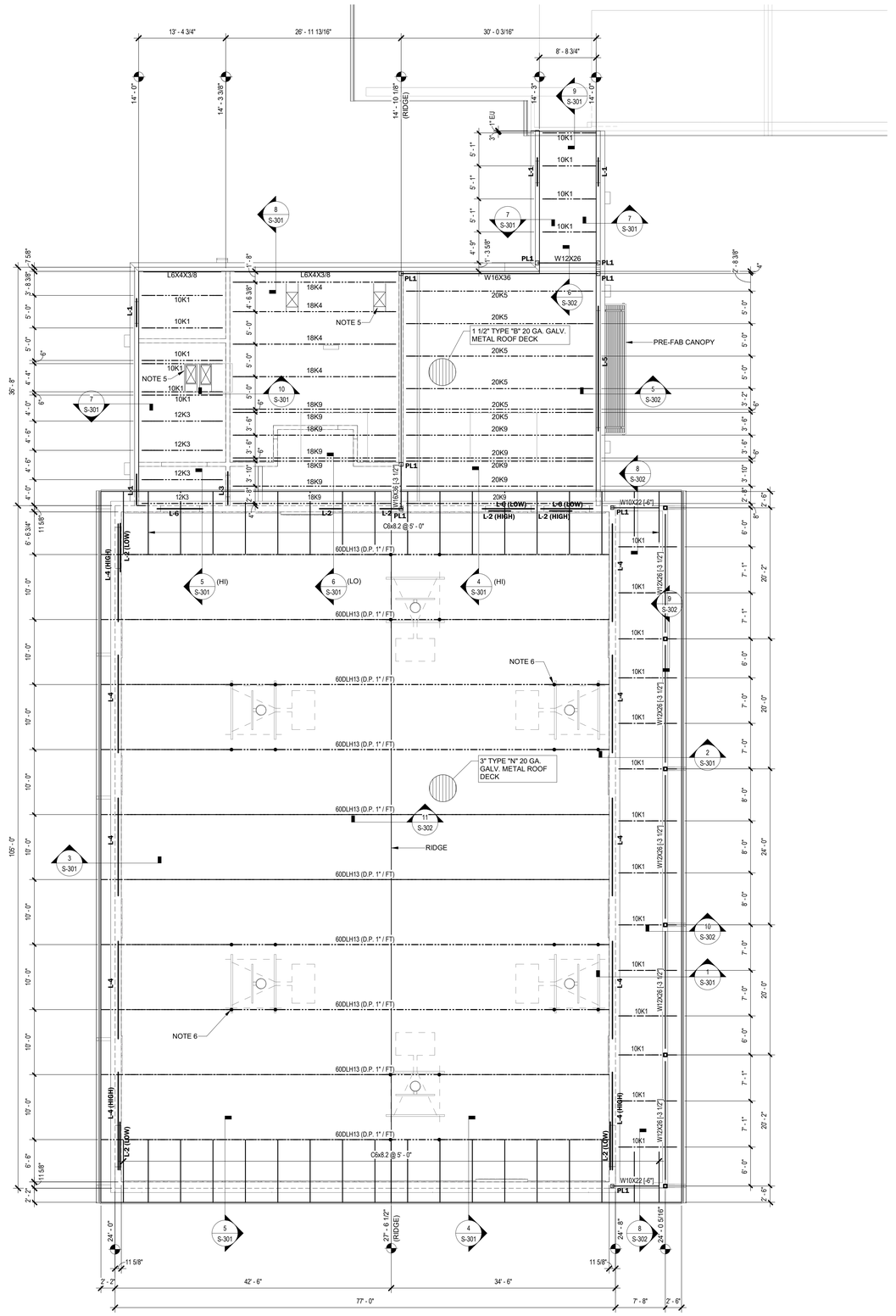
SLAB PLAN

S-101



1 S-102 ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. ——•—— DENOTES DECK BEARING ELEVATION (DBE) U.N.O. ABOVE FIN. FLOOR ELEV. = 0'-0" (318.54' MSL).
2. **L-1** DENOTES LOAD BEARING/EXTERIOR LINTEL. SEE SCHEDULE ON S300.
3. INTERIOR NON-LOAD BEARING WALLS NOT EXTENDING TO DECK SHALL BE BRACED BY INTERSECTING WALLS OR ANGLE BRACING TO JOIST AT MAX SPACING OF 20'. COORDINATE W/ ARCH'L FOR WALLS EXTENDING TO DECK.
4. USE WIND LOAD TABLE ON S010, WIND ZONES ON S010, AND A ROOF DL = 8 PSF TO DETERMINE NET JOIST UPLIFT. PROVIDE ADD'L BRIDGING AS REQ'D.
5. SEE DETAILS 1 AND 2/S-302 FOR ROOF OPENING DETAILS.
6. DESIGN JOIST FOR 200#/ POINT LOADS FROM BASKETBALL GOALS IN ADDITION TO DL + LL = 50PSF. G.C. COORDINATE GOAL SUPPORT LOCATIONS WITH JOIST SUPPLIER.

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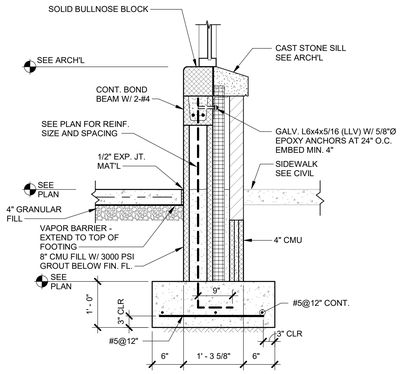
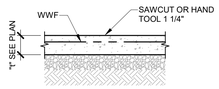
ROOF FRAMING PLAN

S-102

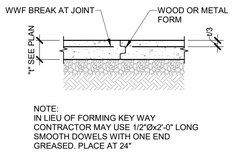


17 S-200 EXTERIOR WALL FOOTING DETAIL@ WINDOW
SCALE: 3/4" = 1'-0"



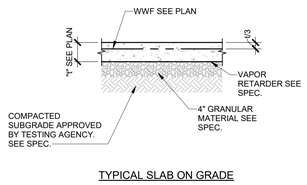
NOTE:
IN LIEU OF SAWCUT OR HAND TOOL
CONTRACTOR MAY USE FULL-DEPTH
PREFORMED JOINT.

CONTROL JOINT



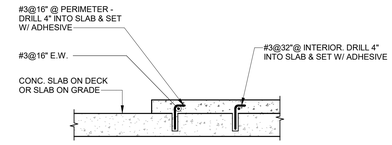
NOTE:
IN LIEU OF FORMING KEY WAY
CONTRACTOR MAY USE 1/2"Ø x 2'-0" LONG
SMOOTH DOWELS WITH ONE END
GREASED. PLACE AT 24"

CONSTRUCTION JOINT

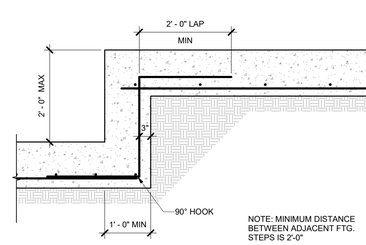


TYPICAL SLAB ON GRADE

11 S-200 TYPICAL SLAB ON GRADE DETAILS
SCALE: 3/4" = 1'-0"

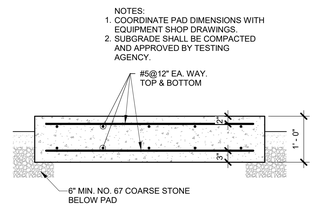


16 S-200 TYPICAL EQUIP. PAD DETAIL
SCALE: 3/4" = 1'-0"

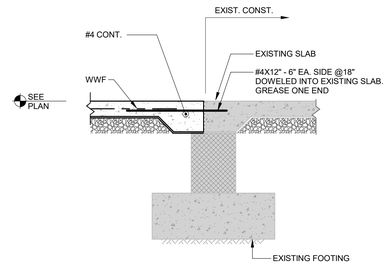


NOTE: MINIMUM DISTANCE
BETWEEN ADJACENT FTG.
STEPS IS 2'-0"

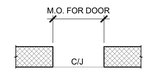
10 S-200 STEPPED FOOTING DETAIL
SCALE: 3/4" = 1'-0"



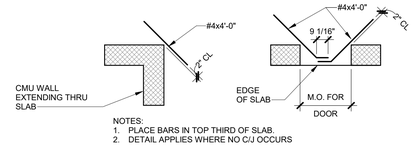
15 S-200 EXTERIOR EQUIPMENT PAD
SCALE: 3/4" = 1'-0"



14 S-200 SECTION THRU EXISTING CORRIDOR
SCALE: 3/4" = 1'-0"

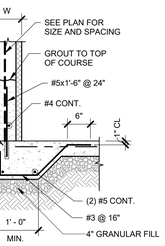


13 S-200 CONTROL JOINT DETAILS
SCALE: 1/4" = 1'-0"

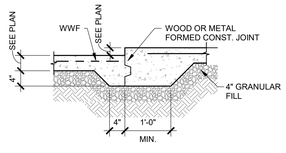


NOTES:
1. PLACE BARS IN TOP THIRD OF SLAB.
2. DETAIL APPLIES WHERE NO C/J OCCURS

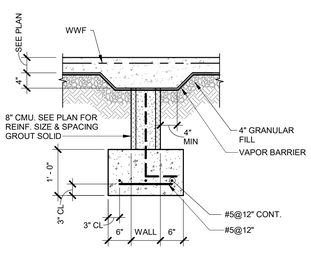
12 S-200 SLAB PLAN @ RE-ENTRANT CORNER
SCALE: 1/4" = 1'-0"



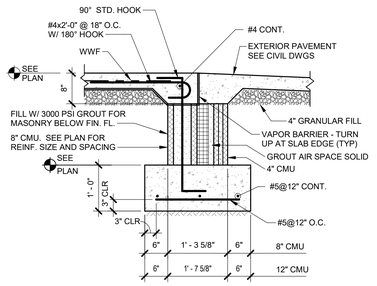
9 S-200 DEPRESSED SLAB @ THICKENED SLAB
SCALE: 3/4" = 1'-0"



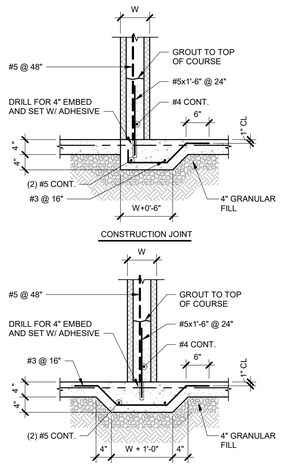
8 S-200 TYPICAL DEPRESSED SLAB
SCALE: 3/4" = 1'-0"



7 S-200 TYPICAL DOOR OPENING AT INTERIOR SLAB
SCALE: 3/4" = 1'-0"

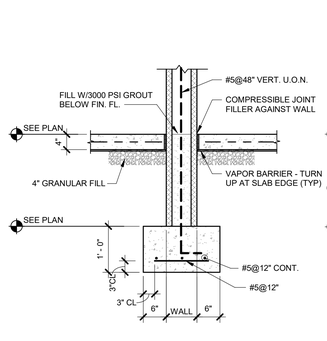


6 S-200 TYPICAL EXTERIOR DOOR OPENING
SCALE: 3/4" = 1'-0"

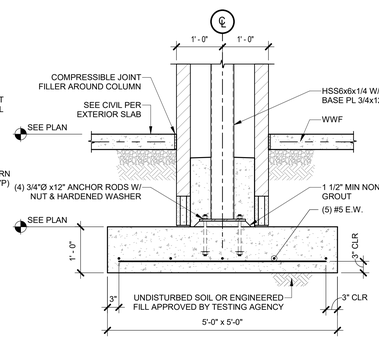


CONSTRUCTION JOINT

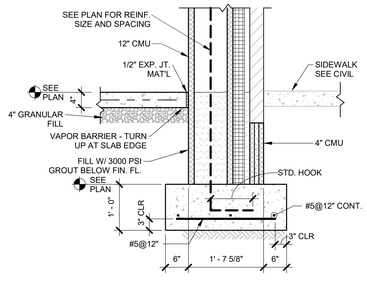
5 S-200 THICKENED SLAB
SCALE: 3/4" = 1'-0"



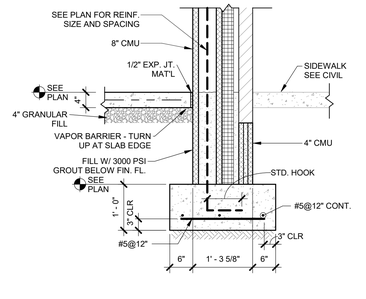
4 S-200 INTERIOR WALL FOOTING DETAIL
SCALE: 3/4" = 1'-0"



3 S-200 COLUMN FOOTING DETAIL
SCALE: 3/4" = 1'-0"



2 S-200 WALL FOOTING DETAIL
SCALE: 3/4" = 1'-0"



1 S-200 WALL FOOTING DETAIL
SCALE: 3/4" = 1'-0"

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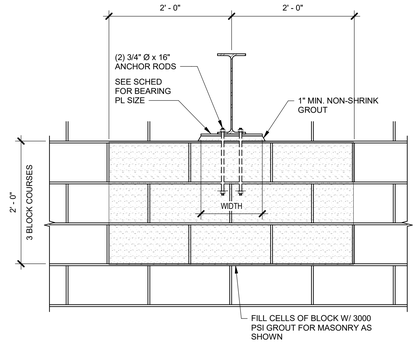
FOUNDATION SECTIONS

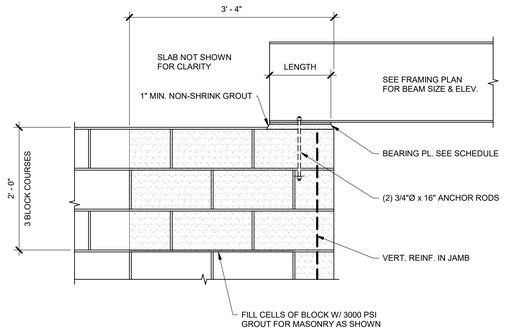
S-200

BEARING PLATE SCHEDULE

MARK	LENGTH	WIDTH	THICKNESS	REMARKS
PL1	7"	7"	1/2"	



11 S-300 **BEAM BEARING DETAIL**
SCALE: 1" = 1'-0"



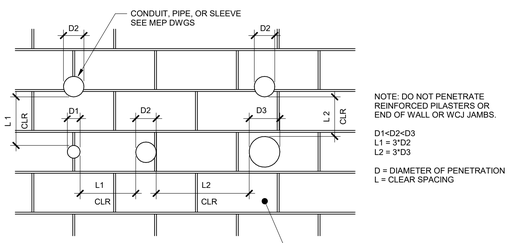
10 S-300 **BEAM BEARING DETAIL**
SCALE: 1" = 1'-0"

LOAD BEARING / EXTERIOR LINTEL SCHEDULE

MARK	WALL TYPE	LINTEL	SIZE	REINF.	SECTION	BEARING END	REMARKS
L-1	8" CMU 4" BRICK	U-BLOCK STEEL	8x16 PL 3/8x7 1/4" (HORIZ.) PL 3/8x6" (VERT.)	(2)#5	1' - 3 5/8"	8"	HOT DIPPED GALV. SEE 6/S300
L-2	12" CMU 4" BRICK	U-BLOCK STEEL	12x24 PL 3/8x7 1/4" (HORIZ.) PL 3/8x7" (VERT.)	(2)#5	1' - 7 5/8"	8"	HOT DIPPED GALV. SEE 6/S300
L-3	8" CMU	U-BLOCK	8x16	(2)#5	8"	8"	
L-4	12" CMU 4" BRICK	U-BLOCK	W16x36 PL 3/8x19 BOT	-		8"	HOT DIPPED GALV. 1/2"ø x 4" HSA@16" BEARING PL 1/2x11x11 1/4" STIFF PL @ 4'-0"
L-5	8" CMU 4" BRICK	U-BLOCK STEEL	W16x36 PL 3/8x15 BOT	-		-	HOT DIPPED GALV. 1/2" X 4" HSA @ 16" BEARING PL 1/2x11x11 x 1/4" STIFF PL @ 4'-0"
L-6	12" CMU	U-BLOCK STEEL	12x16	(2)#5	11 5/8"	8"	
OPNG LESS THAN 30" WIDE	8" CMU	U-BLOCK	8x8	(2)#5	8"	8"	
OPNG 30" TO 42" WIDE	8" CMU	U-BLOCK	8x16	(2)#5	8"	16"	

NON-LOAD BEARING / INTERIOR LINTEL SCHEDULE

WALL TYPE	OPENING WIDTH	LINTEL TYPE	LINTEL SIZE	REINF.	BEARING EA. END	REMARKS
8" CMU	< 4'-0"	U-BLOCK	8x8	(2) #4	8"	
8" CMU	4' THRU 6'	U-BLOCK	8x8	(2) #5	8"	
8" CMU	6'-4" THRU 8'-0"	U-BLOCK	8x16	(2) #5	8"	
8" CMU	10'-0" THRU 12'-0"	U-BLOCK	8x16	(2) #6	8"	
8" CMU	13'-0"	U-BLOCK	8x24	(2) #6 TOP (2) #6 BOT	8"	



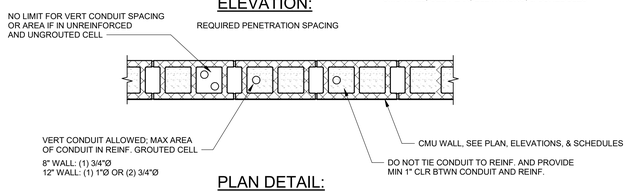
NOTE: DO NOT PENETRATE REINFORCED PILASTERS OR END OF WALL OR WCJ JAMBS.

D1<D2<D3
L1 = 3"D2
L2 = 3"D3

D = DIAMETER OF PENETRATION
L = CLEAR SPACING

ELEVATION:

REQUIRED PENETRATION SPACING

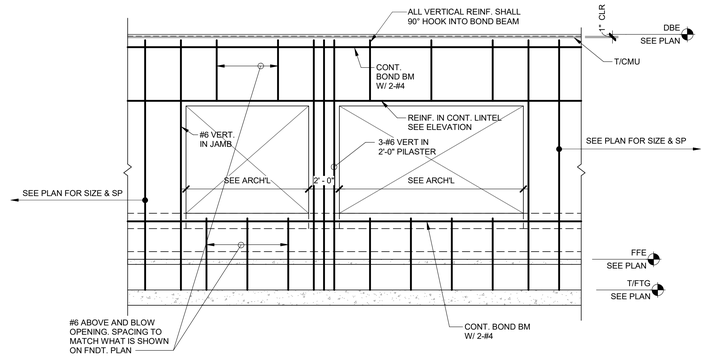


PLAN DETAIL:

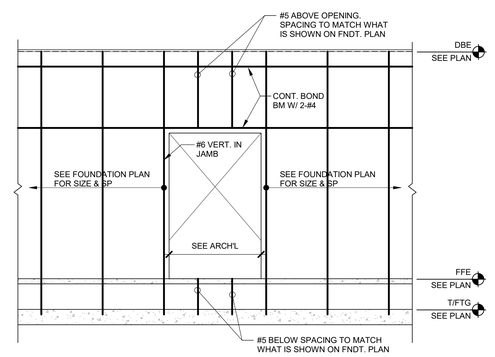
EMBEDDED UTILITIES

NOTES:
1. REFER TO MEP DRAWINGS FOR ALL TELECOM, CONDUIT, AND PIPES 8"Ø AND SMALLER. CONTRACTOR TO FOLLOW DETAIL SPACING REQUIREMENTS FOR LAYOUT. IF SPACING CANNOT BE MAINTAINED, PENETRATIONS MUST BE GROUPED BELOW CMU LINTEL. NOTIFY THE EOR FOR LINTEL REQUIREMENTS.
2. CONDUITS SHALL NOT PENETRATE BOND BEAMS NOR LINTELS.
3. PIPES WITH LIQUID, GAS, OR VAPORS HIGHER THAT 150" ARE NOT PERMITTED VERTICALLY WITHIN WALLS.
4. PIPES WITH PRESSURE IN EXCESS OF 55 PSI ARE NOT PERMITTED VERTICALLY WITHIN WALLS.
5. PIPES WITH WATER OR LIQUID SUBJECT TO FREEZING ARE NOT PERMITTED VERTICALLY WITHIN WALLS.

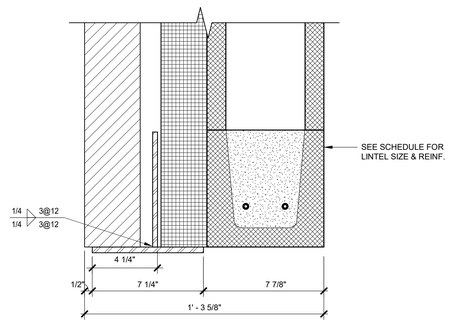
9 S-300 **CMU WALL UTILITY PENETRATION AND EMBEDMENT TYPICAL DETAIL**
SCALE: 1" = 1'-0"



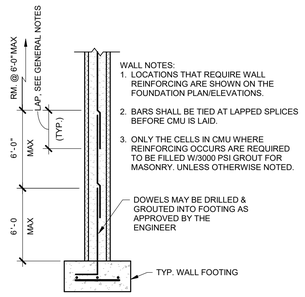
8 S-300 **TYP. EXTERIOR 8" CMU WALL ELEVATION @ OPENING**
SCALE: 1/4" = 1'-0"



7 S-300 **TYP. WALL ELEVATION - AT INT. OPENING**
SCALE: 1/4" = 1'-0"

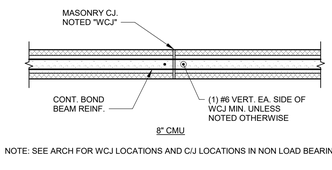


6 S-300 **LINTEL DETAIL**
SCALE: 3" = 1'-0"



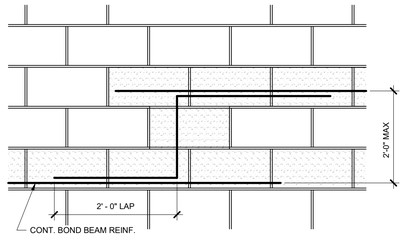
WALL NOTES:
1. LOCATIONS THAT REQUIRE WALL REINFORCING ARE SHOWN ON THE FOUNDATION PLAN/ELEVATIONS.
2. BARS SHALL BE TIED AT LAPPED SPLICES BEFORE CMU IS LAID.
3. ONLY THE CELLS IN CMU WHERE REINFORCING OCCURS ARE REQUIRED TO BE FILLED W/3000 PSI GROUT FOR MASONRY. UNLESS OTHERWISE NOTED.

5 S-300 **CMU WALL REINF. DETAIL**
SCALE: NTS

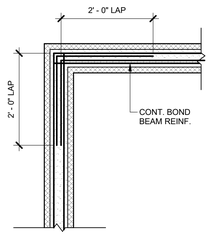


NOTE: SEE ARCH FOR WCJ LOCATIONS AND C/J LOCATIONS IN NON LOAD BEARING WALLS.

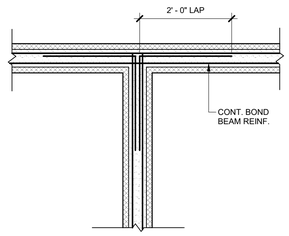
4 S-300 **TYP. CONTROL JOINT DETAIL**
SCALE: 3/4" = 1'-0"



3 S-300 **TYP. STEP IN BOND BEAM**
SCALE: 1" = 1'-0"



2 S-300 **TYP. BOND BEAM CORNER**
SCALE: 3/4" = 1'-0"



1 S-300 **TYP. BOND BEAM INTERSECTION**
SCALE: 3/4" = 1'-0"

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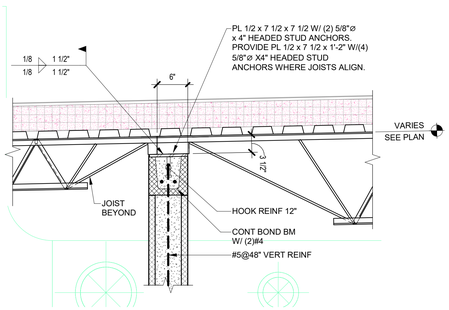
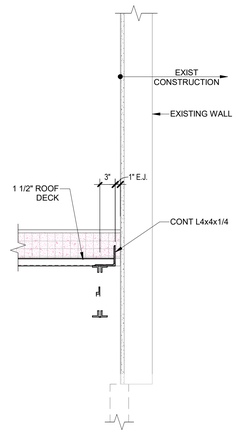
TYPICAL CMU WALLS

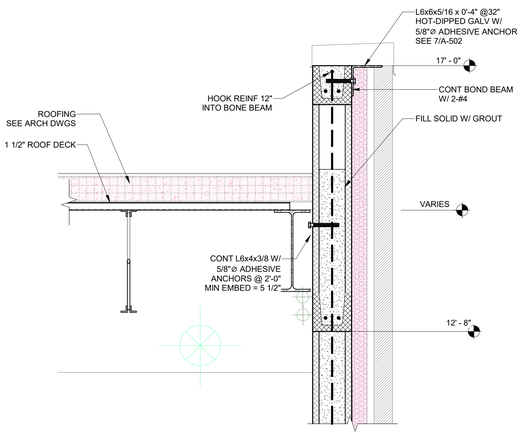
S-300



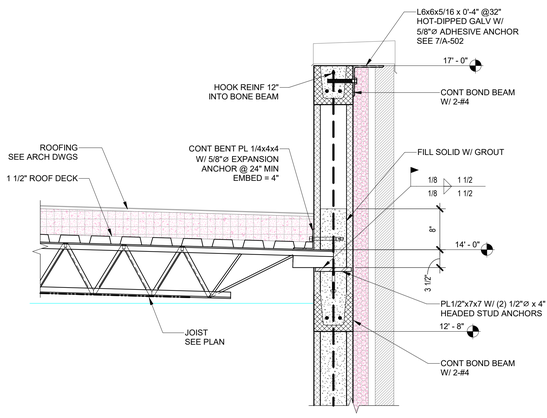
10 S-301 **JOIST BEARING DETAIL AT ROOF**
SCALE: 1" = 1'-0"



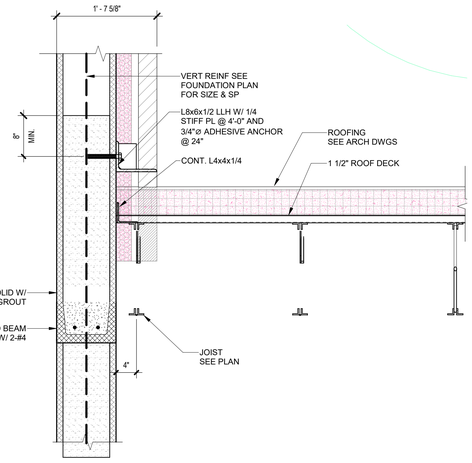
9 S-301 **SECTION THRU ROOF**
SCALE: 1" = 1'-0"



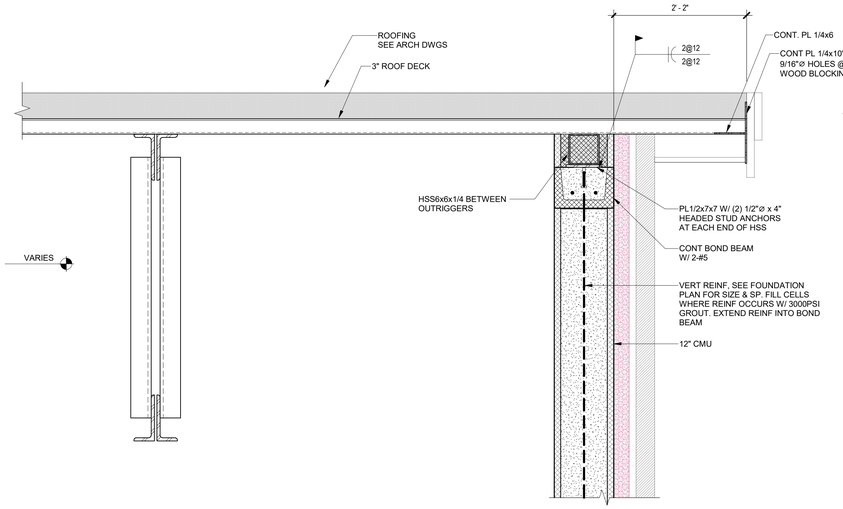
8 S-301 **SECTION THRU ROOF**
SCALE: 1" = 1'-0"



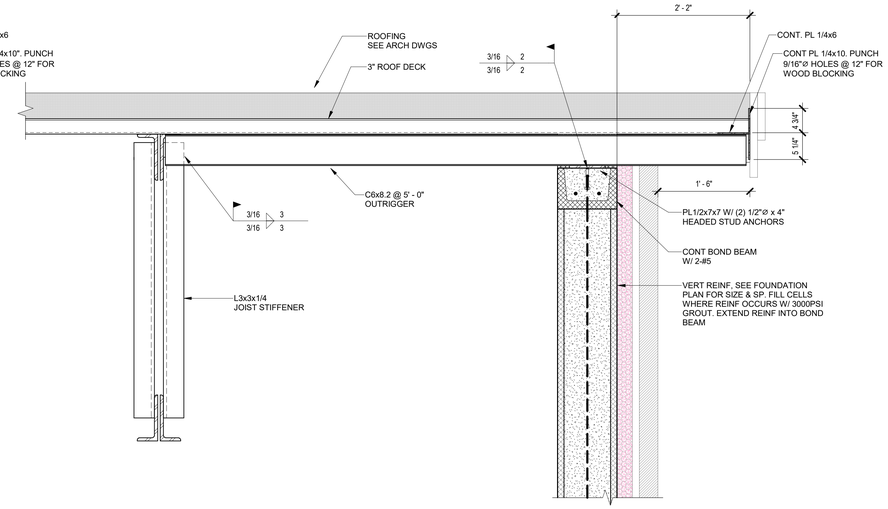
7 S-301 **SECTION THRU ROOF**
SCALE: 1" = 1'-0"



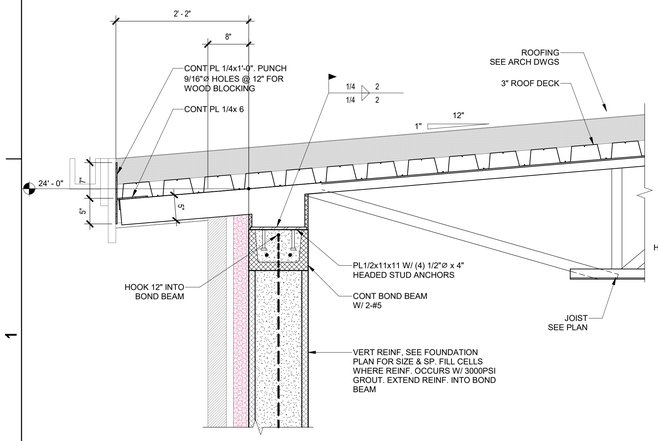
6 S-301 **SECTION THRU LOW ROOF**
SCALE: 1" = 1'-0"



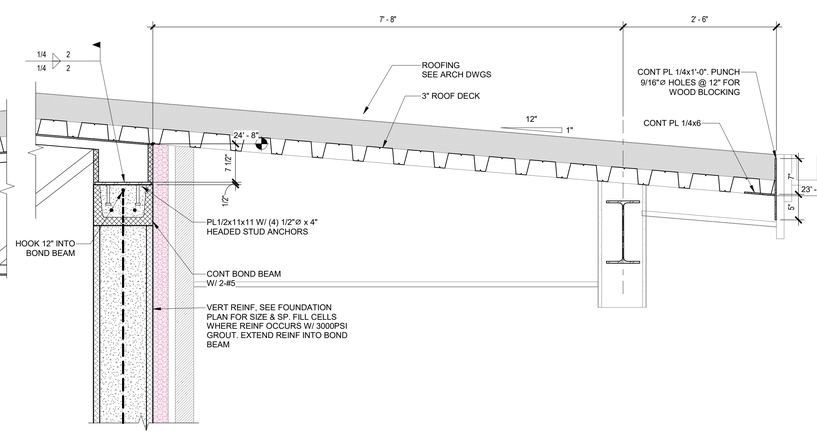
5 S-301 **SECTION BETWEEN OUTRIGGERS @ GYM**
SCALE: 1" = 1'-0"



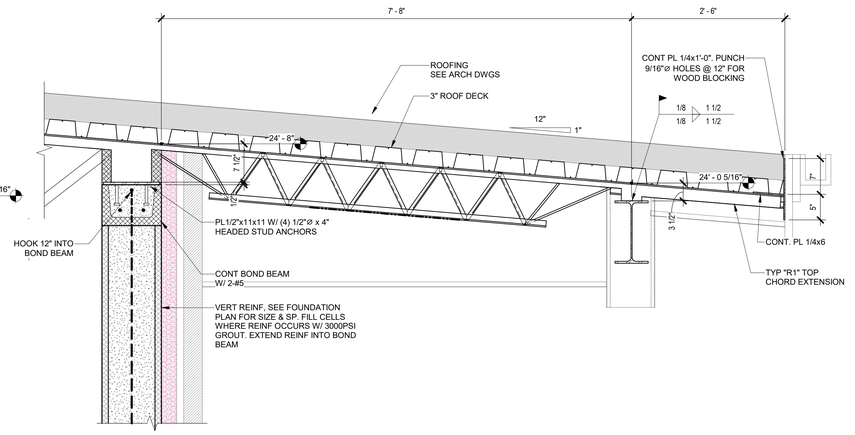
4 S-301 **SECTION THRU OUTRIGGER @ GYM**
SCALE: 1" = 1'-0"



3 S-301 **SECTION THRU GYM ROOF**
SCALE: 1" = 1'-0"



2 S-301 **SECTION THRU GYM ROOF**
SCALE: 1" = 1'-0"



1 S-301 **SECTION THRU GYM ROOF**
SCALE: 1" = 1'-0"

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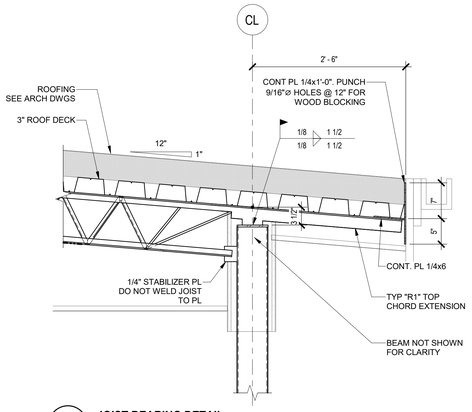
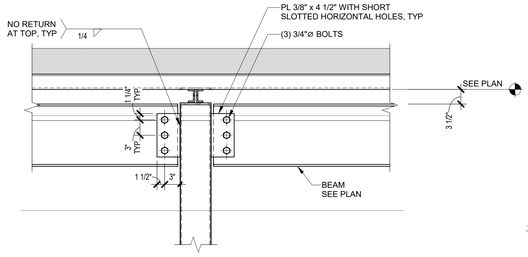
ROOF FRAMING DETAILS

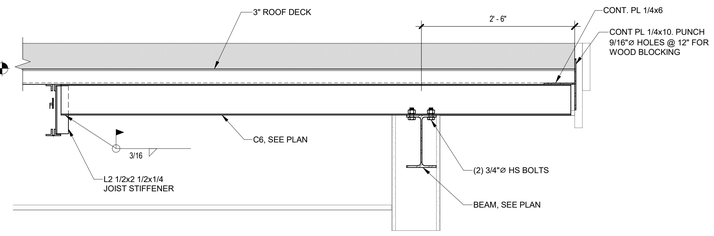
S-301



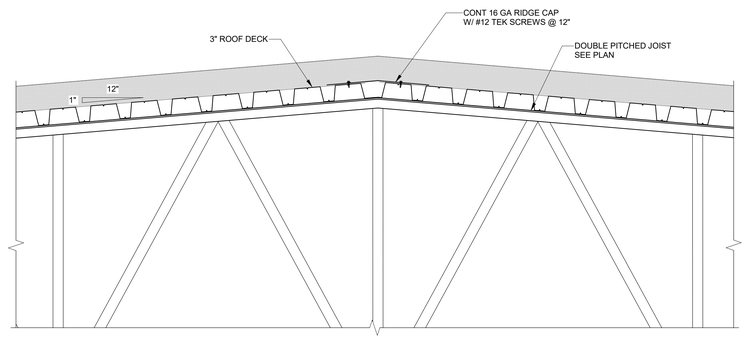
10 S-302 **JOIST BEARING DETAIL**
SCALE: 1" = 1'-0"



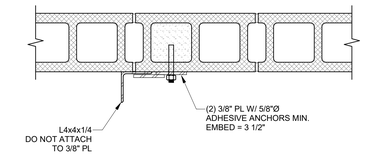
9 S-302 **SECTION AT TYPICAL BEAM TO COLUMN CONNECTION**
SCALE: 1" = 1'-0"



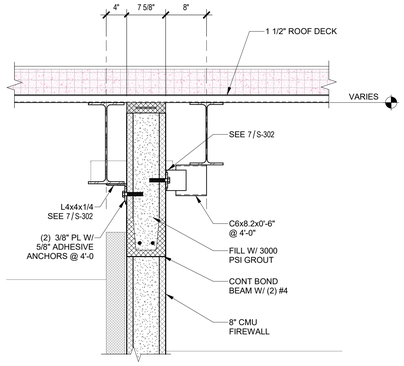
8 S-302 **SECTION THRU ROOF**
SCALE: 1" = 1'-0"



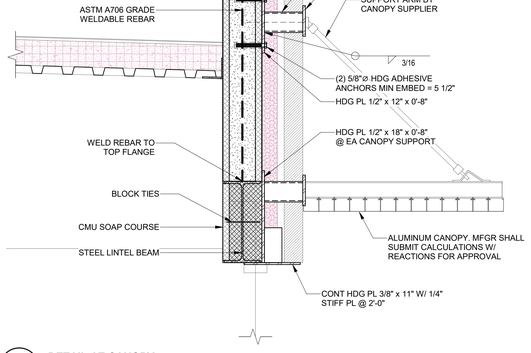
11 S-302 **SECTION THRU RIDGE**
SCALE: 1" = 1'-0"



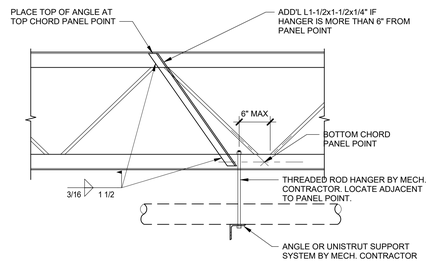
7 S-302 **Z-CLIP DETAIL**
SCALE: 1 1/2" = 1'-0"



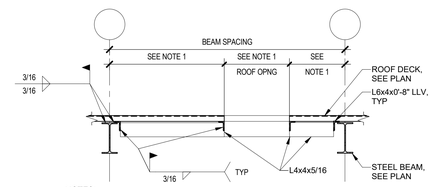
6 S-302 **SECTION THRU FIREWALL**
SCALE: 1" = 1'-0"



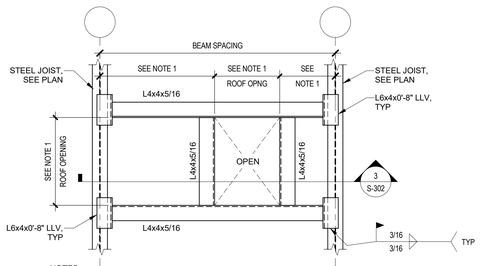
5 S-302 **DETAIL AT CANOPY**
SCALE: 1" = 1'-0"



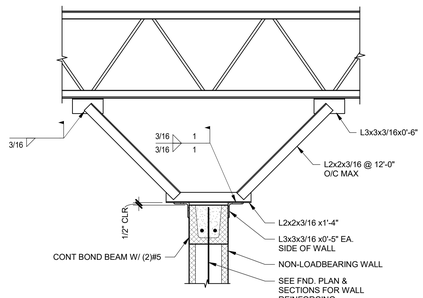
4 S-302 **TYP. JOIST REINFORCING**
SCALE: 1" = 1'-0"



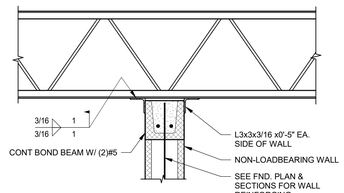
3 S-302 **SECTION AT TYPICAL FRAMED ROOF OPENING**
SCALE: 3/4" = 1'-0"



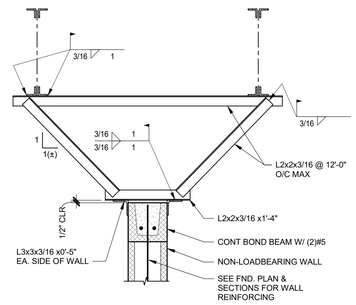
2 S-302 **PLAN DETAIL AT TYPICAL FRAMED ROOF OPENING**
SCALE: 3/4" = 1'-0"



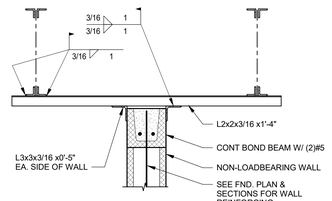
WALL PERPENDICULAR TO FRAMING - OPTION 1



WALL PERPENDICULAR TO FRAMING - OPTION 2



WALL PARALLEL TO FRAMING - OPTION 1



WALL PARALLEL TO FRAMING - OPTION 2

NOTES:
1. CONTRACTOR COORDINATE BRACING OPTIONS BASED ON DIRECTION AND HEIGHT OF WALL RELATIVE TO JOIST FRAMING.

1 S-302 **NON-LOAD BEARING CMU WALL BRACING DETAIL BELOW DECK**
SCALE: 1" = 1'-0"

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