

Form F3 - Building Code Analysis

Date: 2/16/2023
SUBMITTAL: [] Schematic [] Design Development [X] Construction Document

SC CODE EDITION: 2021 ICC CODE EDITION: 2021 ICC A117.1 EDITION: 2017 OSF GUIDE EDITION: 2020

PROJECT DESCRIPTION: [Brief Scope of Work & Include project delivery method (i.e. CMR, etc.)]
Cooler & Freezer enclosure modification

BASIC BUILDING CODE INFORMATION

Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3, Area 4, Area 5. Includes sections for CONSTRUCTION CLASSIFICATION TYPE, OCCUPANCY GROUP, etc.



Form F3 - Building Code Analysis

EXISTING BUILDING CODE INFORMATION [SCBC]

Table with columns: DESIGNATED AREAS OF BUILDING, Area 1, Area 2, Area 3. Includes sections for Method of Compliance, Work Area Compliance, Performance Compliance, etc.



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Table with columns: Change of Occupancy, Existing Occupancy Classification, New Occupancy Classification, etc.

Table with columns: DESIGNATED AREAS OF BUILDING, Area 1, Area 2, Area 3, Area 4, Area 5. Includes 1st FLOOR, 2nd FLOOR, 3rd FLOOR, 4th FLOOR, TOTAL.



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ALLOWABLE BUILDING AREA

Table with columns: DESIGNATED AREAS OF BUILDING, Area 1, Area 2, Area 3, Area 4, Area 5. Includes formulas for allowable building area.



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Table with columns: FIRE SERVICE INFORMATION, ENERGY INFORMATION, INSULATION. Includes Service Line Size, Fire Department Connection, Roof, Walls, Underslab.



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Table with columns: Allowable building area per story in square feet, N1-N5, S1-S5. Includes formulas for area calculations.



Form F3 - Building Code Analysis

Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3. Includes HEIGHT, In Feet, In Stories.



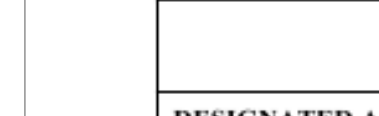
Form F3 - Building Code Analysis

Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3, Area 4, Area 5. Includes SEPARATIONS, ALARM & DETECTION, SUPPRESSION, OTHER FIRE AND LIFE SAFETY FEATURES.



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Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3, Area 4, Area 5. Includes Alternative Automatic Fire Extinguishing, Standpipes Required, etc.



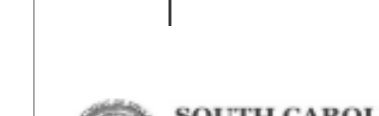
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Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3, Area 4, Area 5. Includes Smoke Control System, Fire Department Connections, etc.



Form F3 - Building Code Analysis

Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3. Includes FIRE RESISTANCE RATING OF BUILDING ELEMENTS.



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Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3. Includes FIRE RESISTANCE RATING OF BUILDING ELEMENTS.



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Table with columns: DESIGNATED AREAS OF BUILDING, Building Code, Area 1, Area 2, Area 3. Includes FIRE RESISTANCE RATING OF BUILDING ELEMENTS.



Form F3 - Building Code Analysis

Table with columns: MECHANICAL INFORMATION, ELECTRICAL INFORMATION, SERVICE TRANSFORMER, etc.



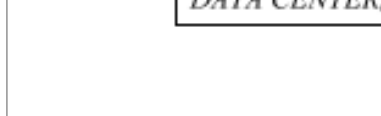
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Table with columns: SOILS & SITE, STRUCTURAL DESIGN INFORMATION, BUILDING, WIND LOADS, etc.



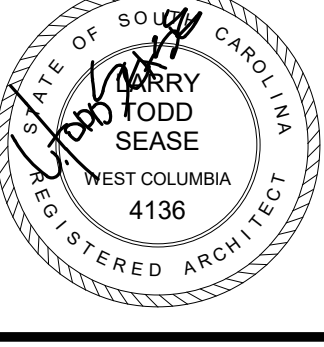
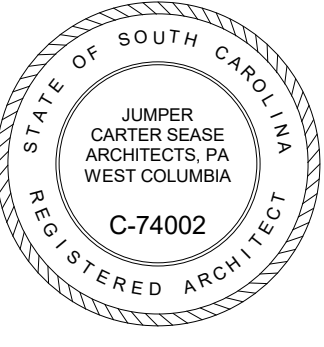
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Table with columns: STRUCTURAL DESIGN INFORMATION, AREA, OCCUPANCY CATEGORY, etc.



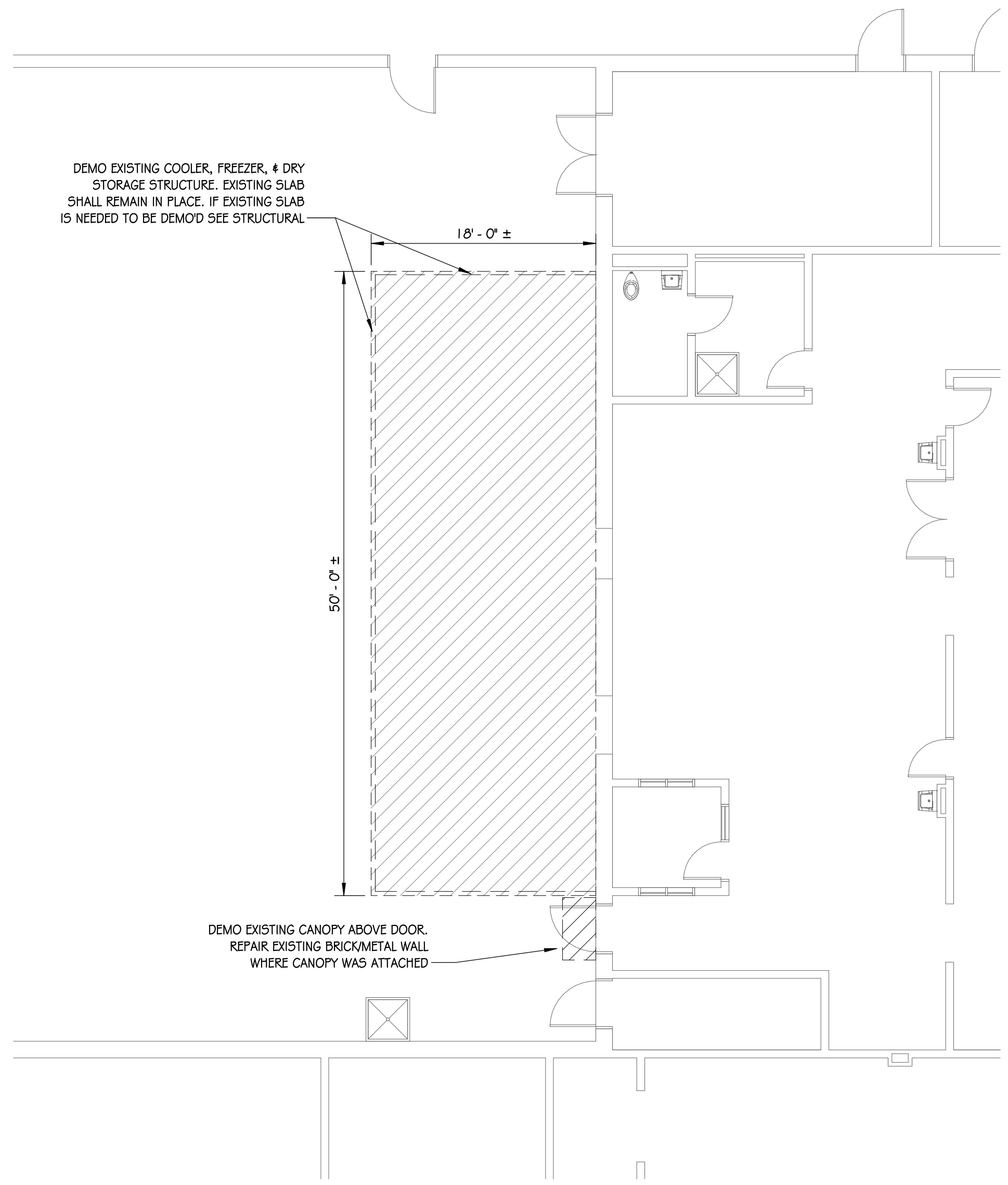
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Table with columns: DESIGN AND CONSTRUCTION RELATED PERMITS AND APPROVALS, Type of Development, SC Law or Reg., etc.

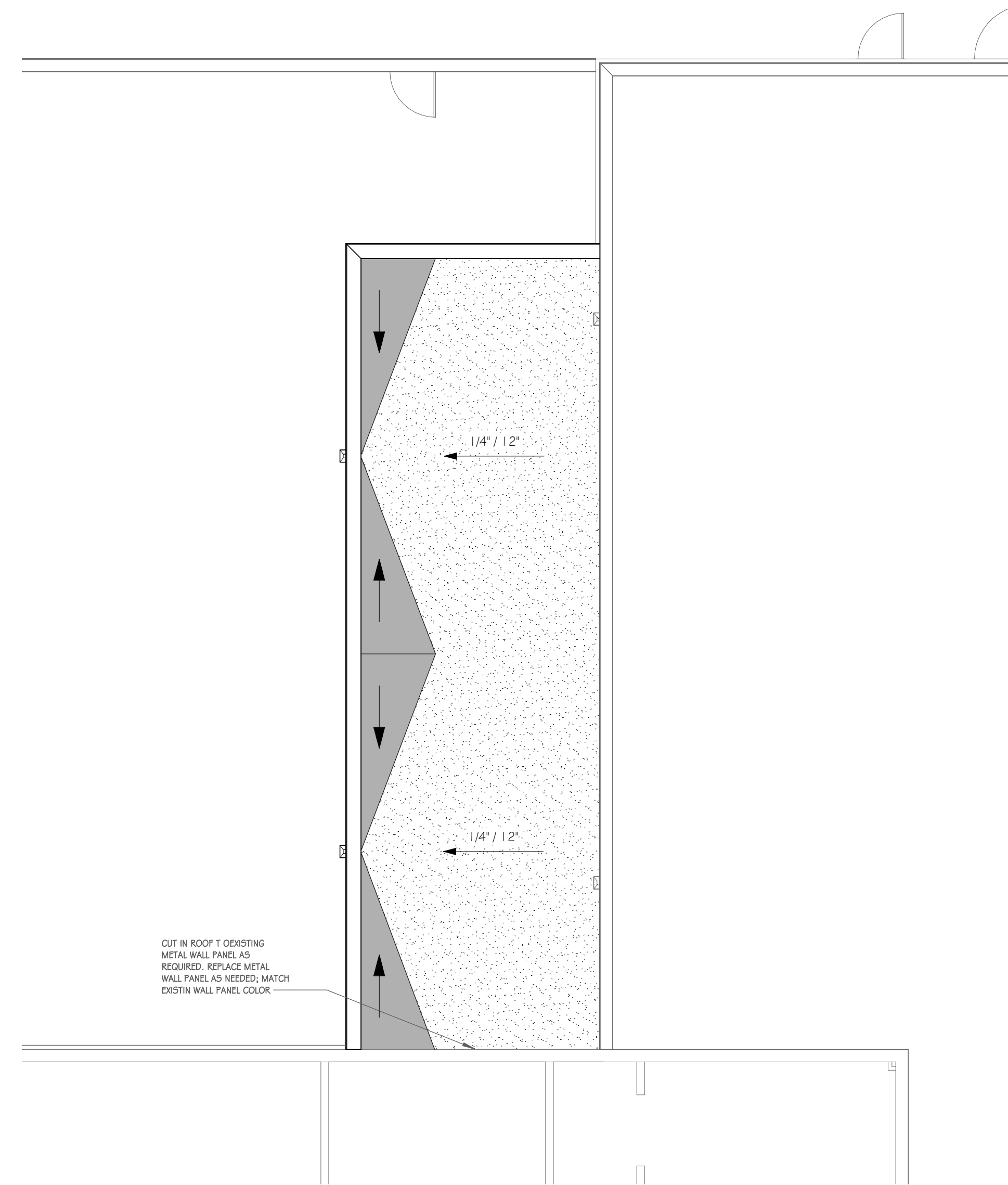


SPRINGFIELD MIDDLE SCHOOL COOLER & FREEZER ENCLOSURE REPLACEMENT FORT MILL SCHOOL DISTRICT 1711 SPRINGFIELD PARKWAY, FORT MILL, SC

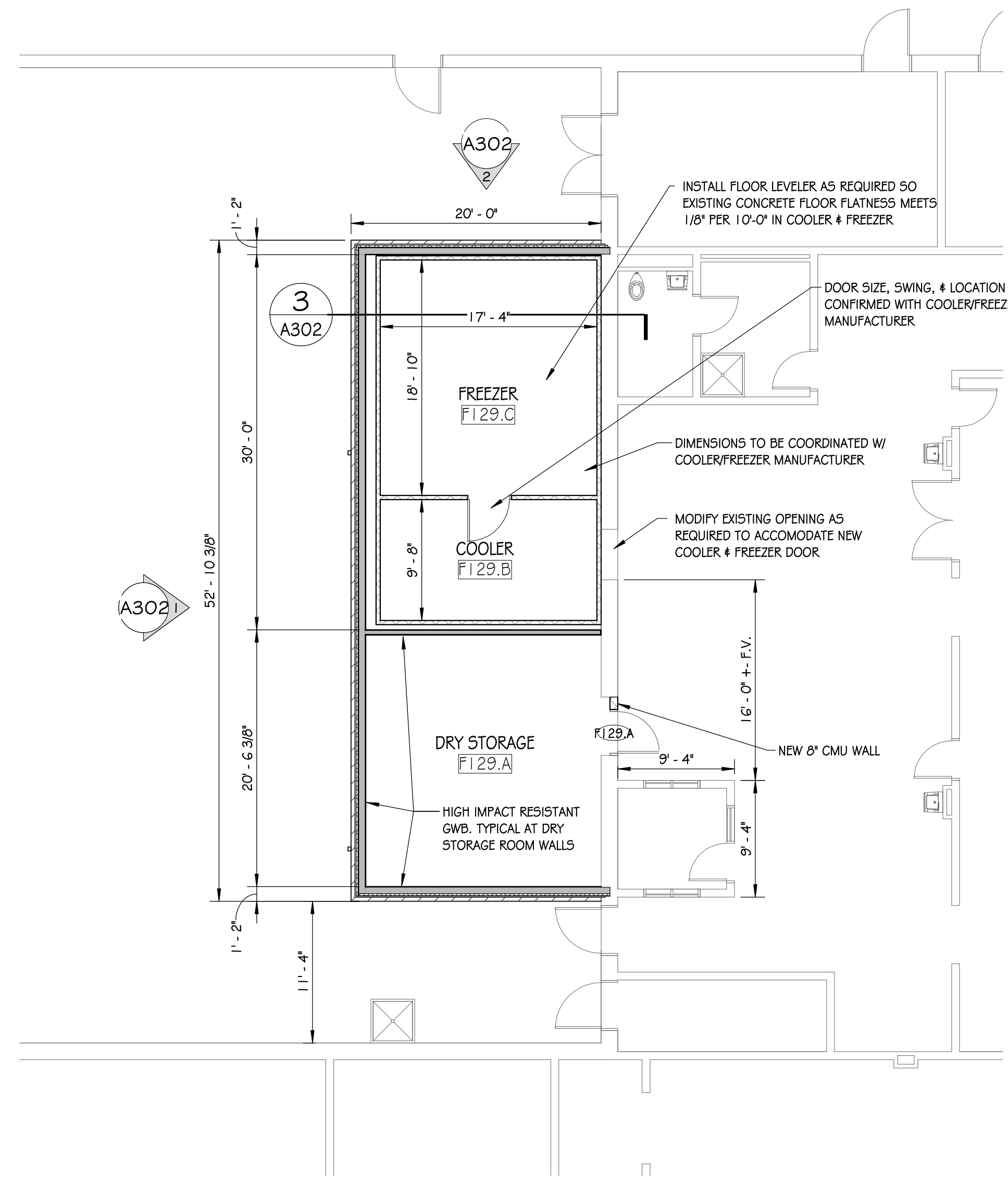
Table with columns: Date, Description, No.



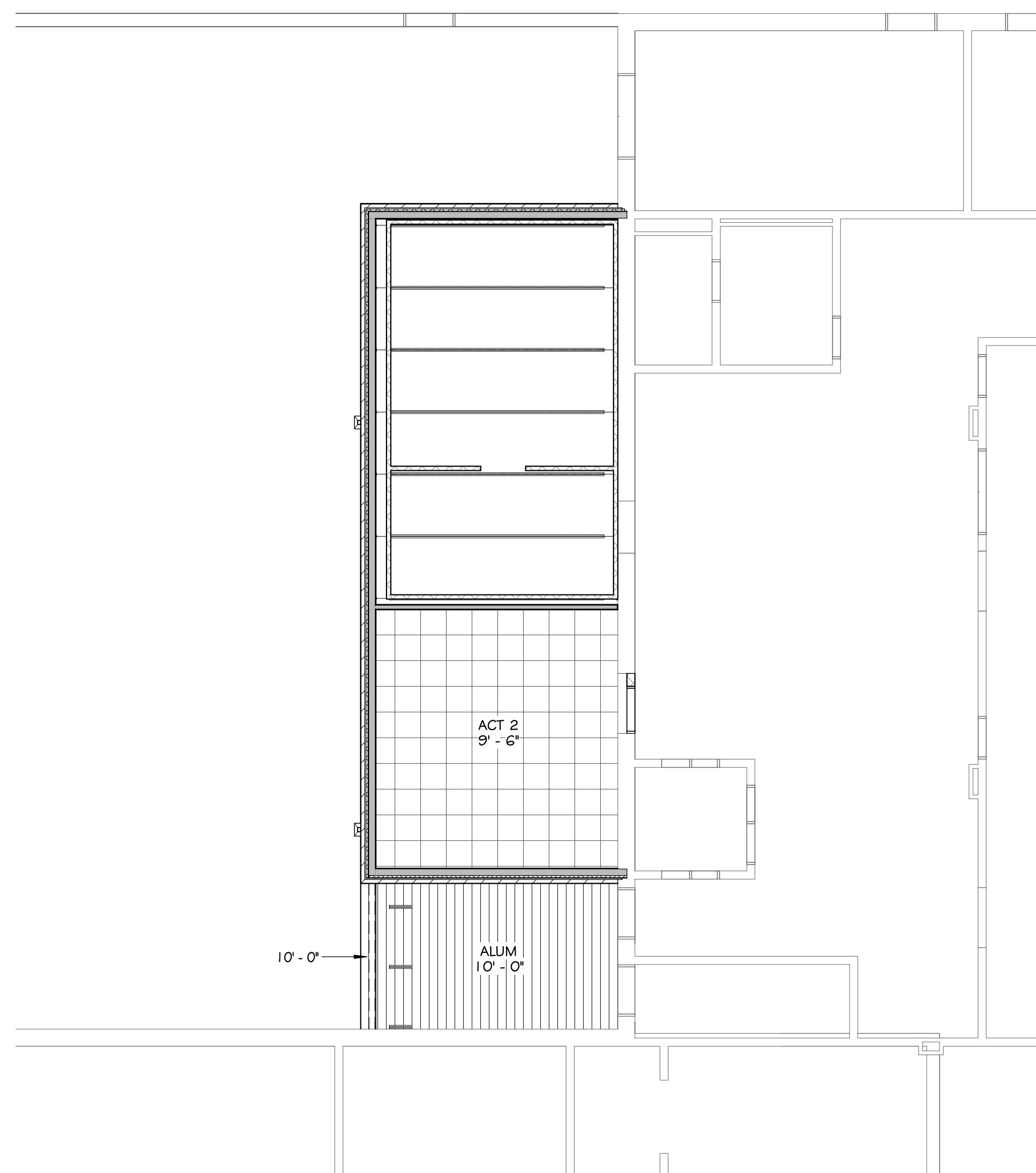
1 DEMO FLOOR PLAN
A30 1/8" = 1'-0"



3 ROOF PLAN
A30 1/8" = 1'-0"



2 FLOOR PLAN
A30 1/8" = 1'-0"



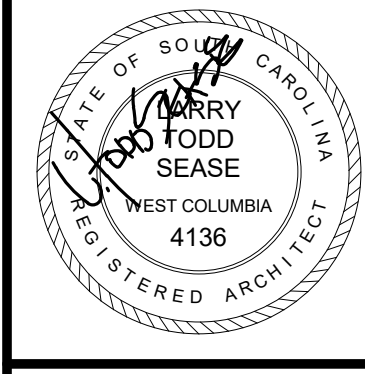
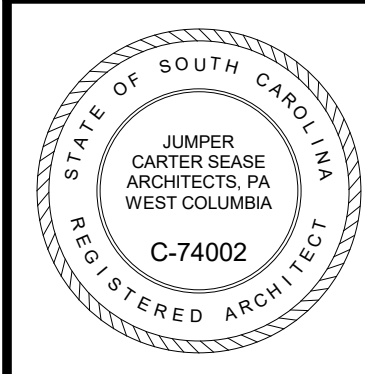
4 CEILING PLAN
A30 1/8" = 1'-0"

WALL LEGEND	
	3-5/8" METAL STUDS @ 16"oc WITH 5/8" HIGH IMPACT RESISTANT GWB EACH SIDE
	1'-2" EXTERIOR WALL WITH 6" METAL STUDS @ 16"oc WITH FACE BRICK AND 5/8" GWB ON INTERIOR SIDE. SEE WALL SECTIONS

- GENERAL NOTES**
- ALL OUTSIDE CORNERS OF INTERIOR MASONRY WALLS SHALL HAVE BULLNOSE RADIUS CMU, UNLESS SCHEDULED TO RECEIVE CERAMIC WALL TILE OR OTHER VENEER FINISH. THE FIRST CMU BLOCK ABOVE FINISH FLOOR IS TO BE SQUARE AND THE CMU BLOCK AT THE FINISH CEILING AND GWB SOFFITS/BULKHEADS ARE TO BE SQUARE. ALL CMU NOT 90° CORNERS MUST ALSO BE SPECIAL SHAPE AS SINGLE BLOCK WITH EXPOSED OUTSIDE CORNER BULLNOSE. SEE DETAIL ON MISC. DTL. SHT.
 - ALL MASONRY WALL INFILLS SHALL BE TOOTHED-IN.
 - C.J. = CONSTRUCTION JOINT AT CMU. SEE TYPICAL DETAILS. SPACE 40'-0" MAX. VERIFY LOCATIONS WITH ELEVATIONS OR ARCHITECT IF NOT SHOWN PRIOR TO INSTALLATION.
 - ALL MECHANICAL, PLUMBING, ELECTRICAL AND FIRE PROTECTION ROUGH-INS AT EXPOSED AREAS ARE TO BE REVIEWED WITH THE ARCHITECT PRIOR TO INSTALL. ALL CONDUITS AND PIPING MUST BE COORDINATED WITH OTHER TRADES AND CONCEALED. RELOCATION OF ROUGH-INS BY ANY TRADE AS DIRECTED BY THE ARCHITECT WILL BE AT NO COST TO OWNER WHEN CONTRACTOR FAILS TO COMPLY WITH THIS REQUIREMENT.
 - CONSTRUCTION WORK IS TO BE PERFORMED DURING THE SUMMER BREAK WHILE THE BUILDING IS UNOCCUPIED BY STUDENTS OR STAFF

**Jumper
Carter
Sease**
ARCHITECTS

412 Meeting Street
West Columbia
South Carolina



SPRINGFIELD MIDDLE SCHOOL COOLER & FREEZER
ENCLOSURE REPLACEMENT
FORT MILL SCHOOL DISTRICT
1711 SPRINGFIELD PARKWAY, FORT MILL, SC

CONSTRUCTION LOG

No	Description	Date

DRAWN BY: HS
CHECKED BY: TS
COMM NO.: 22004
DATE: 2/28/23
SHEET TITLE:
DEMO FLOOR PLAN,
FLOOR PLAN, ROOF
PLAN, & CEILING
PLAN

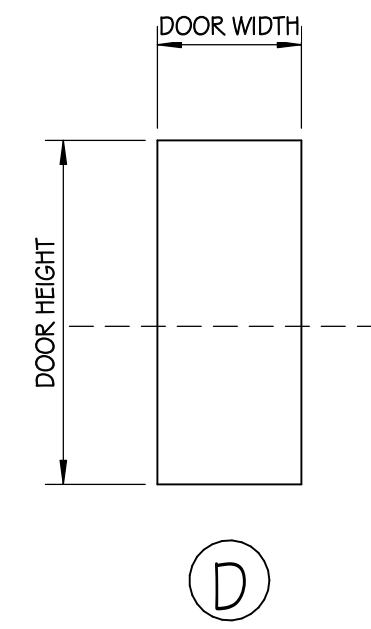
SHEET NO:
A301

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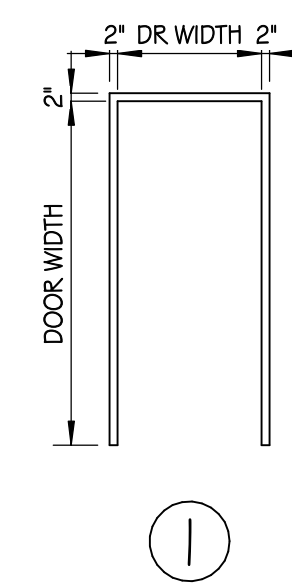
FINISH SCHEDULE ABBREVIATIONS	
ACT	ACOUSTICAL CEILING TILE
CONC	CONCRETE
QFT	QUARRY FLOOR TILE
QTB	QUARRY TILE BASE
PNT	PAINT

GENERAL FINISH NOTES APPLY TO ALL AREAS OR THOSE GENERAL FINISH NOTES: NOT SPECIFICALLY NOTED ON SCHEDULE.

- SEE REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS.
- ALL HOLLOW METAL FRAMES TO BE PAINTED. COLOR TO BE SELECTED BY ARCHITECT.
- EPOXY PAINT TO BE USED AT DRY STORAGE ROOM AND KITCHEN WALLS.
- ACT-2 = VINYL FACED OR MOISTURE RESISTANT TILE
SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- QUARRY TILE IS TO HAVE EPOXY GROUT. COLOR TO BE SELECTED BY ARCHITECT.



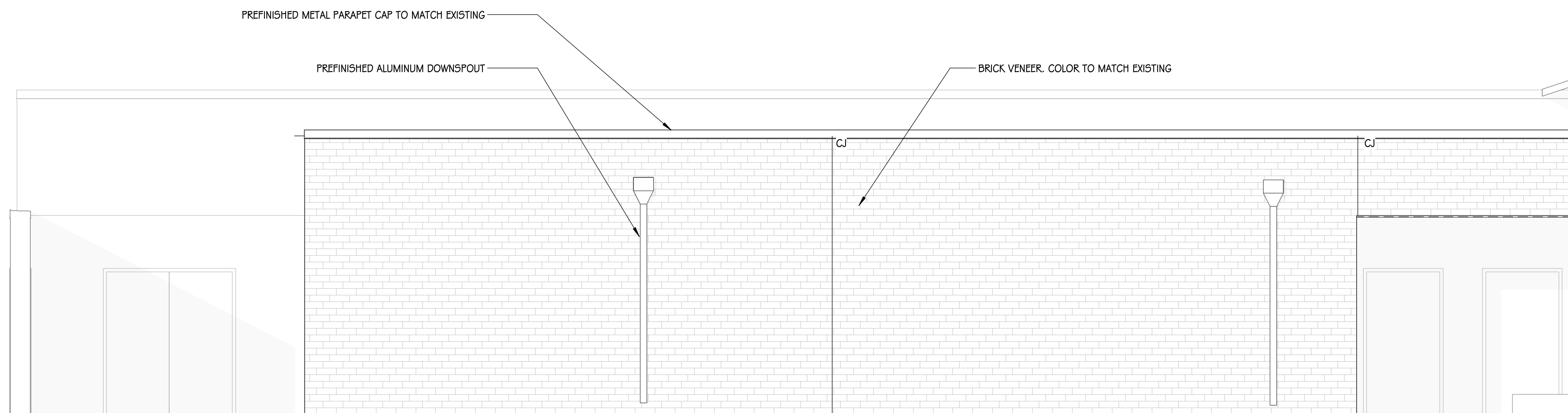
DOOR TYPES
1/4" = 1'-0"



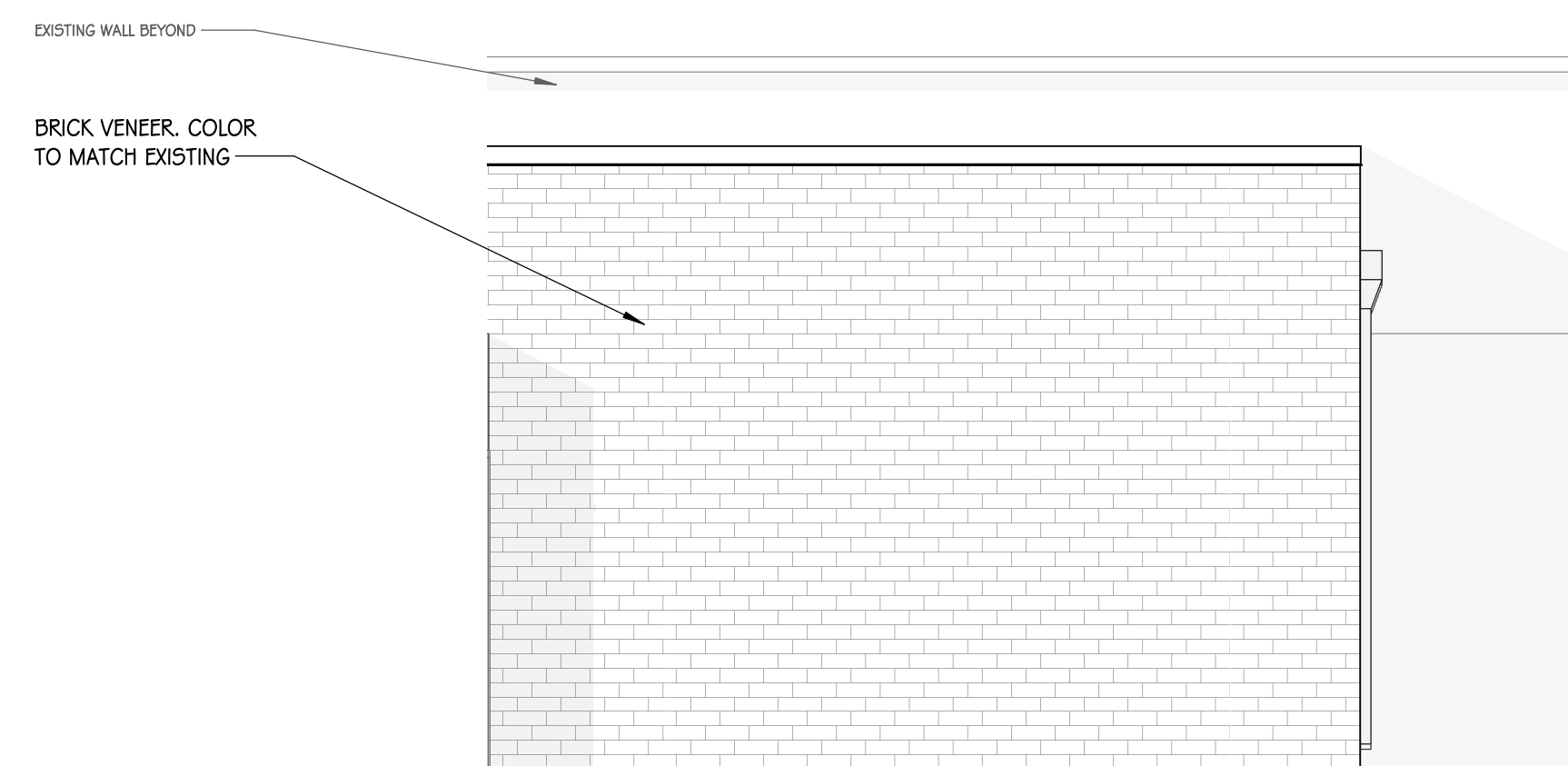
FRAME TYPES
1/4" = 1'-0"

DOOR SCHEDULE															
DOOR #	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR MATERIAL	DOOR FINISH	GLASS SIZE	GLASS TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	SILL	RATING	REMARKS
F129.A	D	3'-4"	7'-2"	HM	PAINT			I	HM	PAINT	H-1	J-1			

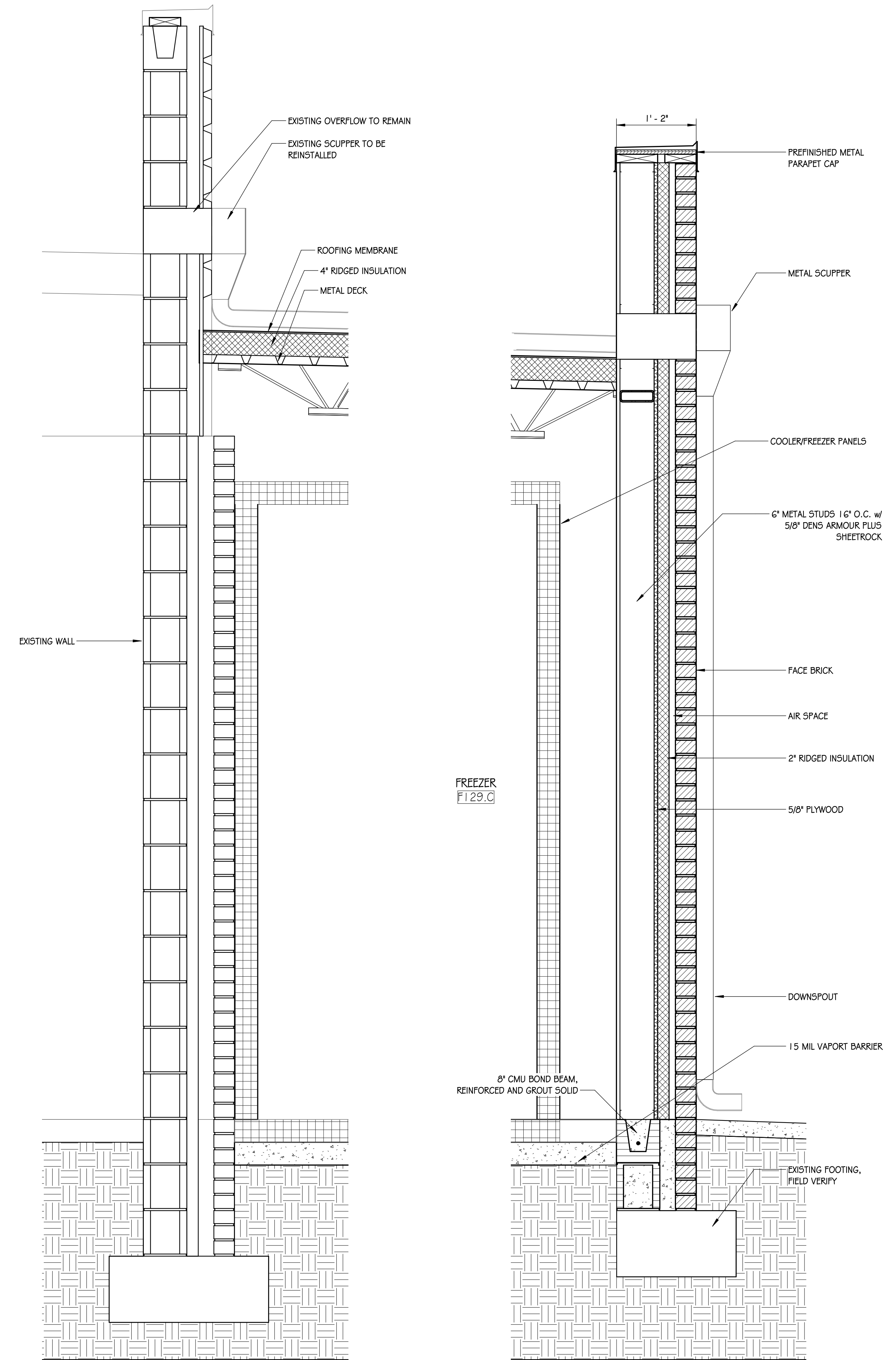
FINISH SCHEDULE								
ROOM #	ROOM NAME	FLOOR FINISH	BASE TYPE	WALL NORTH	WALL SOUTH	WALL EAST	WALL WEST	COMMENTS
F129.A	DRY STORAGE	QT	QTB	PAINT	PAINT	PAINT	PAINT	
F129.B	COOLER	PREFINISHED		PREFINISHED	PREFINISHED	PREFINISHED	PREFINISHED	
F129.C	FREEZER	PREFINISHED		PREFINISHED	PREFINISHED	PREFINISHED	PREFINISHED	



1 FRONT ELEVATION
1/4" = 1'-0"



2 SIDE ELEVATION
1/4" = 1'-0"



3 WALL SECTION - 01
1" = 1'-0"

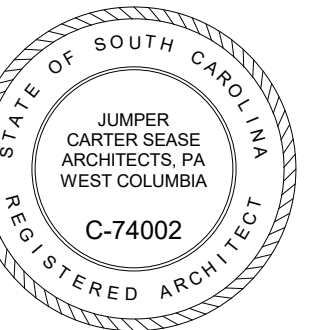
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SPRINGFIELD MIDDLE SCHOOL COOLER & FREEZER ENCLOSURE REPLACEMENT
FORT MILL SCHOOL DISTRICT
1711 SPRINGFIELD PARKWAY, FORT MILL, SC

CONSTRUCTION DOCS

No	Description	Date

DRAWN BY:	HS
CHECKED BY:	TS
COMM NO.:	22004
DATE:	2/28/23
SHEET TITLE:	ELEVATIONS, SECTIONS, DOOR SCHEDULE, & FINISH SCHEDULE

SHEET NO.:

A302

Date	Description

DRAWN BY: **LWK**

CHECKED BY: **KT**

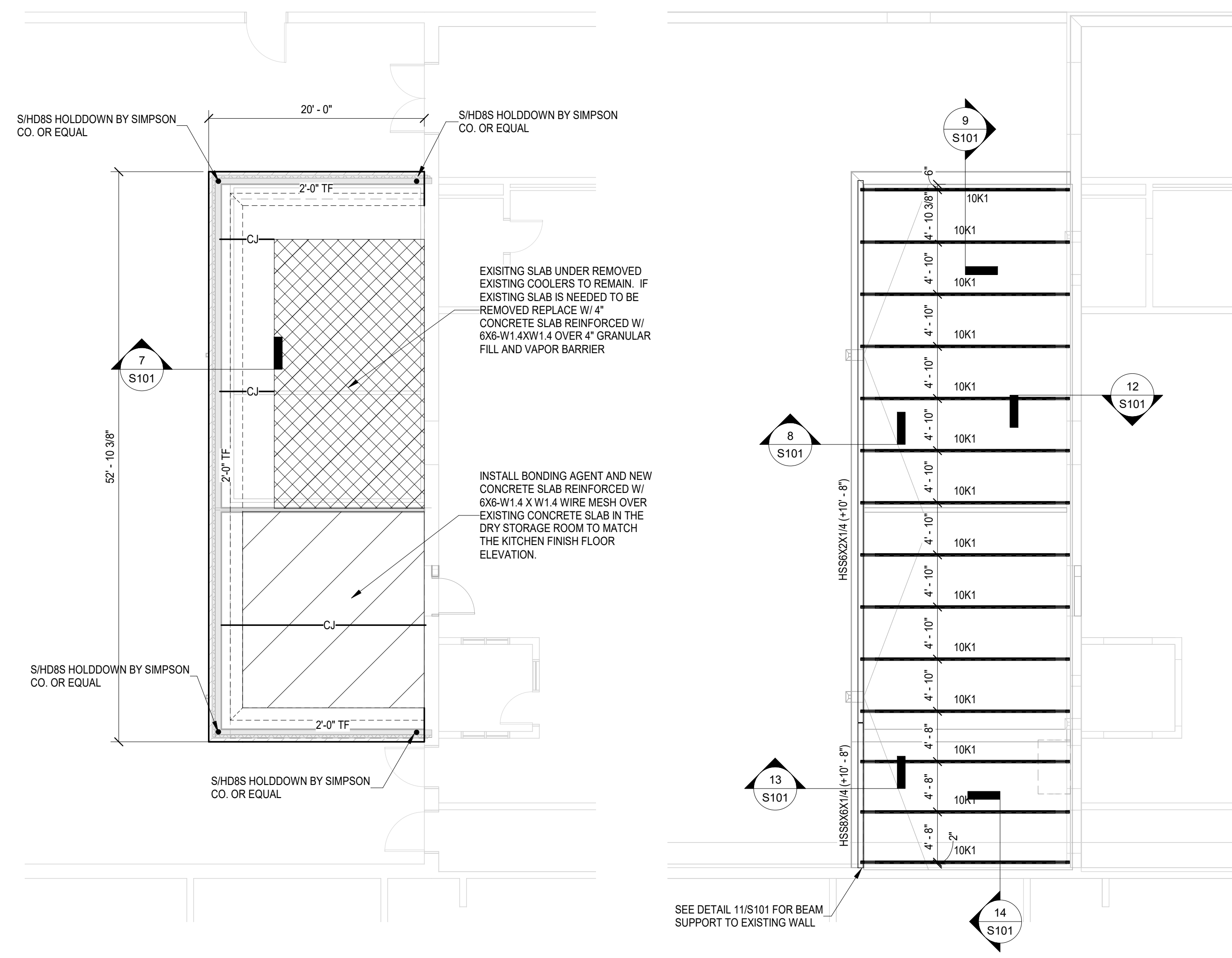
COMM NO: **22004**

DATE: **02/28/23**

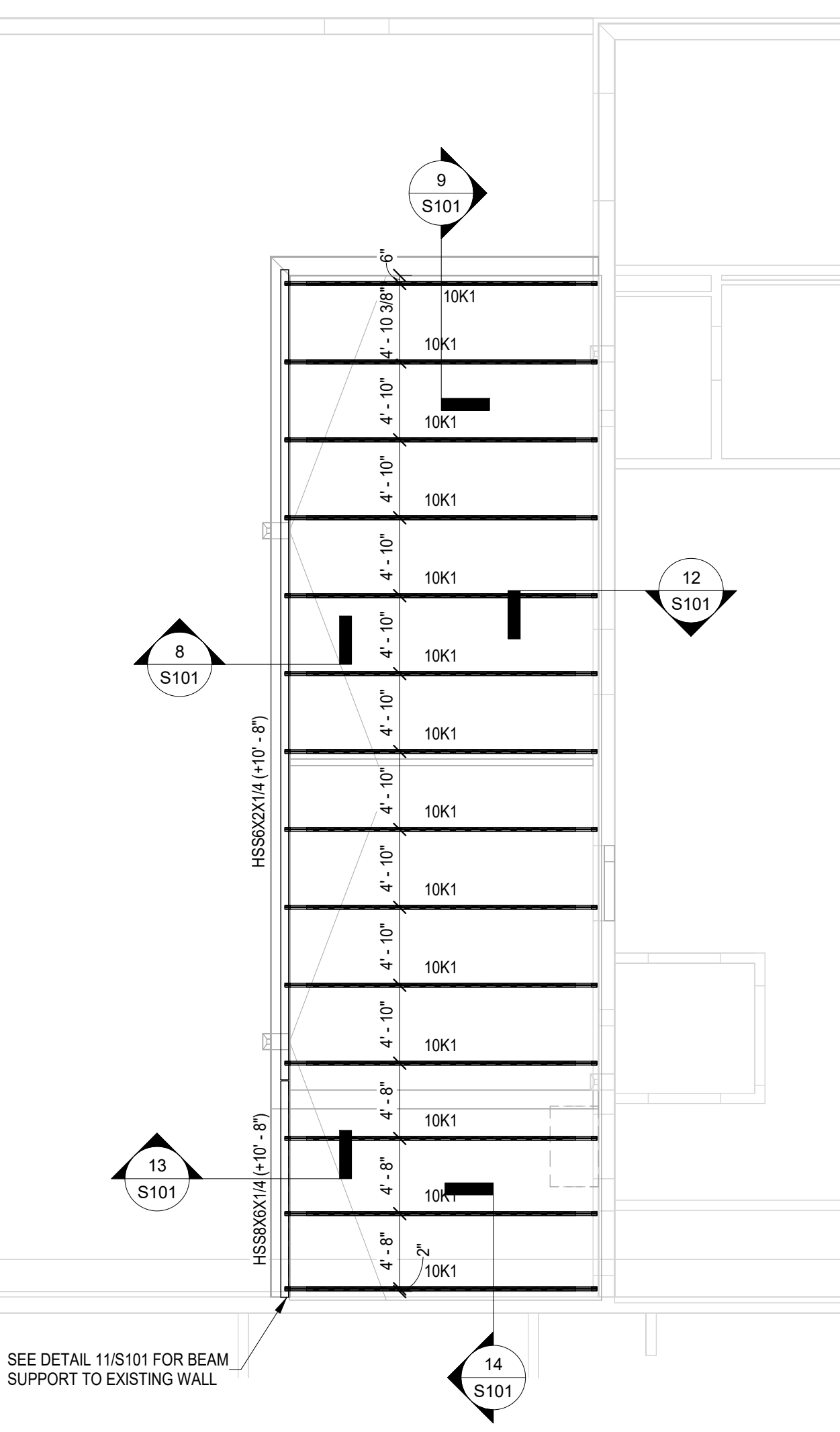
SHEET TITLE: **STRUCTURAL PLANS
AND SECTION**

SHEET NO: **S101**

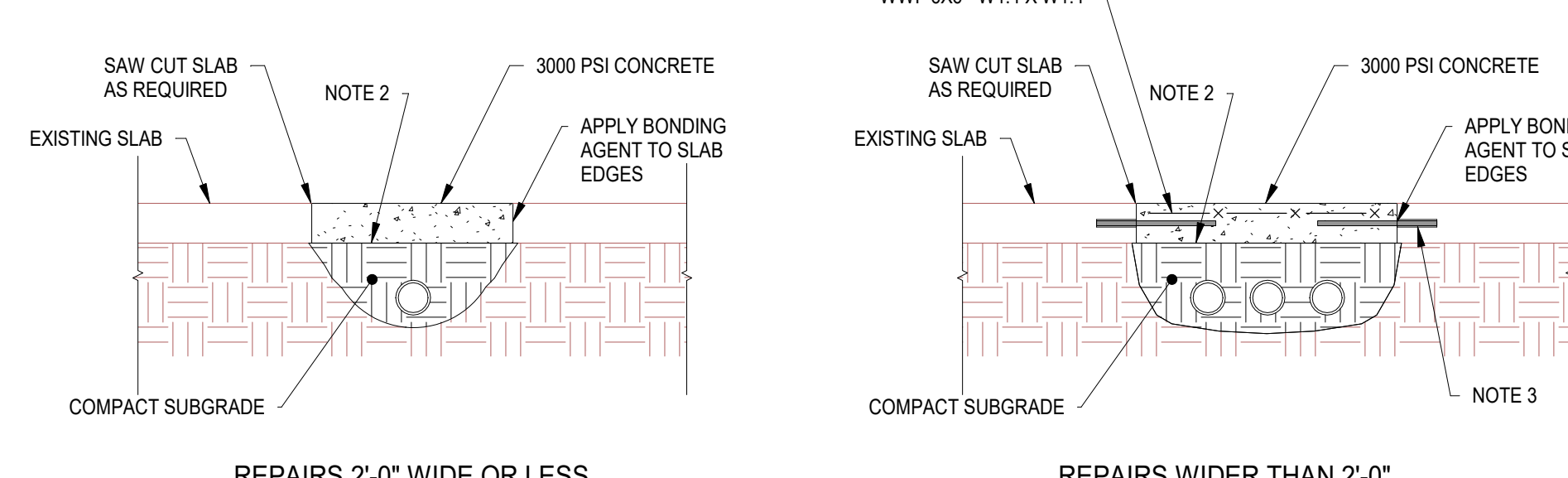
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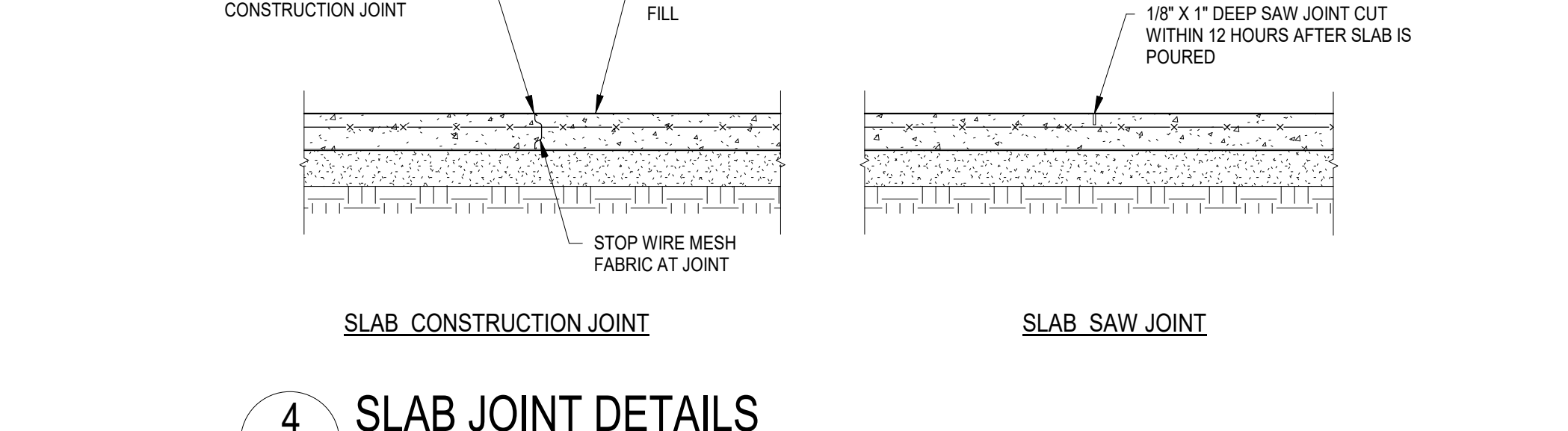
1 FOUNDATION PLAN
S101 1/8" = 1'-0"



2 ROOF FRAMING PLAN
S101 1/8" = 1'-0"



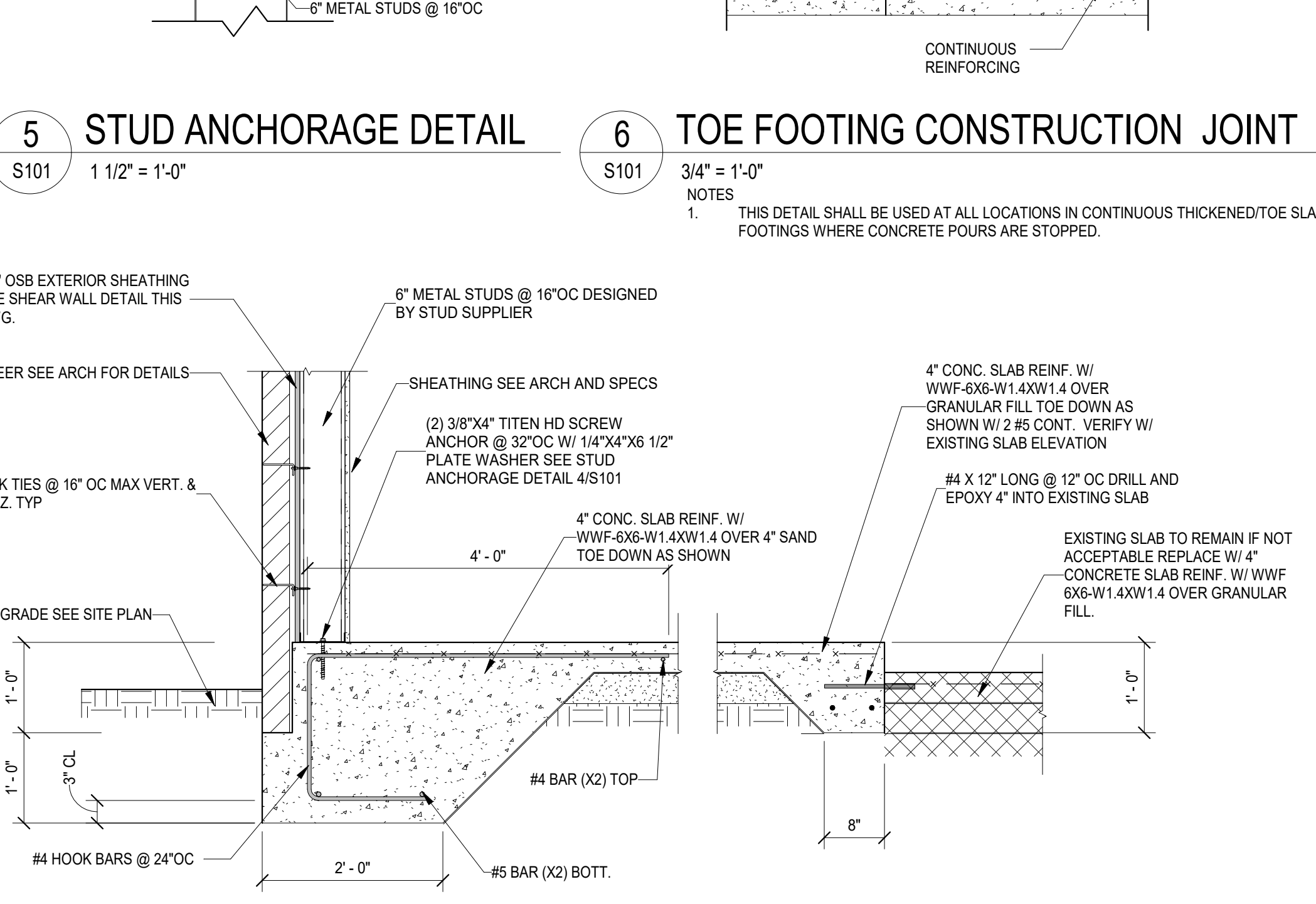
3 SLAB PATCH DETAILS
S101 3/4" = 1'-0"



4 SLAB JOINT DETAILS
S101 3/4" = 1'-0"

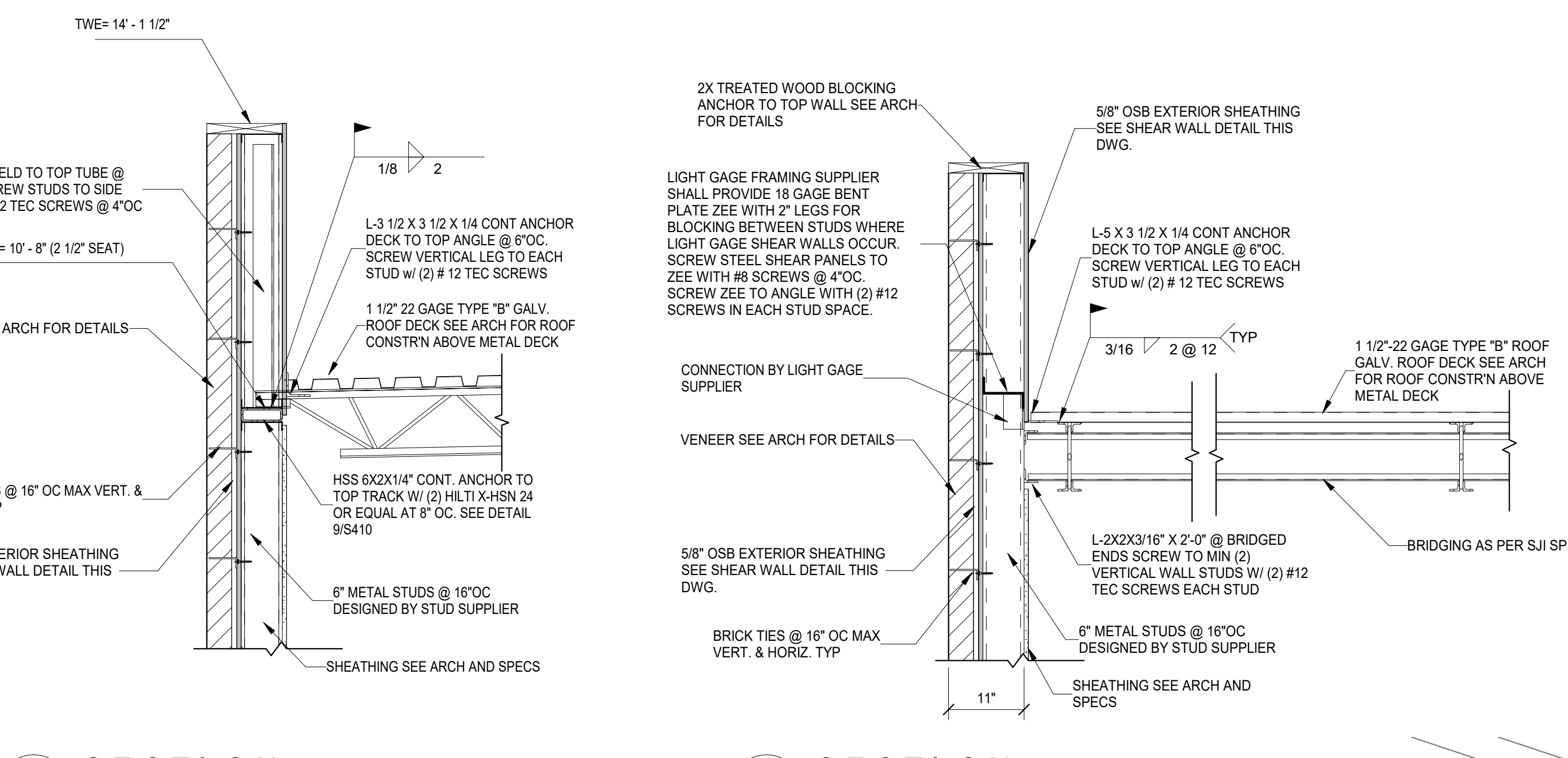
TYPE	MANUFACTURER	PRODUCT	BASE MATERIAL	DIAMETER/SIZE
SCREW ANCHOR	HILTI	KWIK HUS-EZ	GROUTED CONCRETE BLOCK	1/4" TO 3/4"
	POWERS	WEDGE-BOLT w/ WEDGE BIT	GROUTED CONCRETE BLOCK	1/4" TO 3/4"
	SIMPSON	TITEN HD	GROUTED CONCRETE BLOCK	3/8" TO 3/4"
EXPANSION ANCHOR	HILTI	KWIK BOLT	GROUTED CONCRETE BLOCK	1/4" TO 3/4"
	POWERS	POWER-STUD + SD1	GROUTED CONCRETE BLOCK	3/8" TO 5/8"
	SIMPSON	WEDGE ALL	GROUTED CONCRETE BLOCK	3/8" TO 3/4"
ADHESIVE ANCHOR	HILTI	HIT-HY 270	GROUTED CONCRETE BLOCK	ALL THREAD ROD 1/4" TO 3/4"
		HIT-HY 270	HOLLOW CONCRETE BLOCK (REQUIRES SCREEN TUBES)	ALL THREAD ROD 3/4"
		REBAR	#4 TO #6	
	POWERS	T308+	FULLY GROUTED	ALL THREAD ROD 3/4"
			HOLLOW CONCRETE BLOCK (REQUIRES SCREEN TUBES)	REBAR #5, #6
			ALL THREAD ROD 1/2" TO 3/4"	
SIMPSON	SET	FULLY GROUTED	ALL THREAD ROD 5/8" AND 3/4"	
		HOLLOW CONCRETE BLOCK (REQUIRES SCREEN TUBES)	ALL THREAD ROD 3/8" TO 3/4"	
		ALL THREAD ROD 3/8" TO 5/8"		

NOTES:
1. THIS SELECTION TABLE SHALL BE USED WHEN ANCHOR RODS OR REBARS WITH ANCHOR ADHESIVE, EXPANSION ANCHORS OR SCREW ANCHORS ARE CALLED OUT ON THE DRAWINGS. THE ADHESIVES SHOWN SHALL ALSO BE USED WHERE THE TERM EPOXY IS USED ON THE STRUCTURAL DRAWINGS.
2. ADHESIVE ANCHORS HOLES SHALL BE CLEANED PER THE MANUFACTURER RECOMMENDATIONS INCLUDING USING A BRUSH AND 100 PSI MINIMUM OR THE MANUFACTURERS REQUIRED COMPRESSED AIR.
3. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. (MP1)
4. SCREW AND EXPANSION ANCHORS SHALL MEET THE EMBEDMENT DEPTHS AS SPECIFIED IN THE DRAWINGS BUT NOT LESS THAN THE MINIMUM OR 7 TIMES THE ANCHOR DIAMETER.
5. ADHESIVE ANCHORS SHALL MEET THE EMBEDMENT DEPTHS AS SPECIFIED IN THE DRAWINGS. IF NO EMBEDMENT IS SPECIFIED, EMBED 12 TIMES THE ANCHOR DIAMETER.
6. CONTACT THE ENGINEER OF RECORD FOR APPROVAL OF ANY OTHER ANCHOR TYPE OR DIAMETER PRIOR TO INSTALLATION.

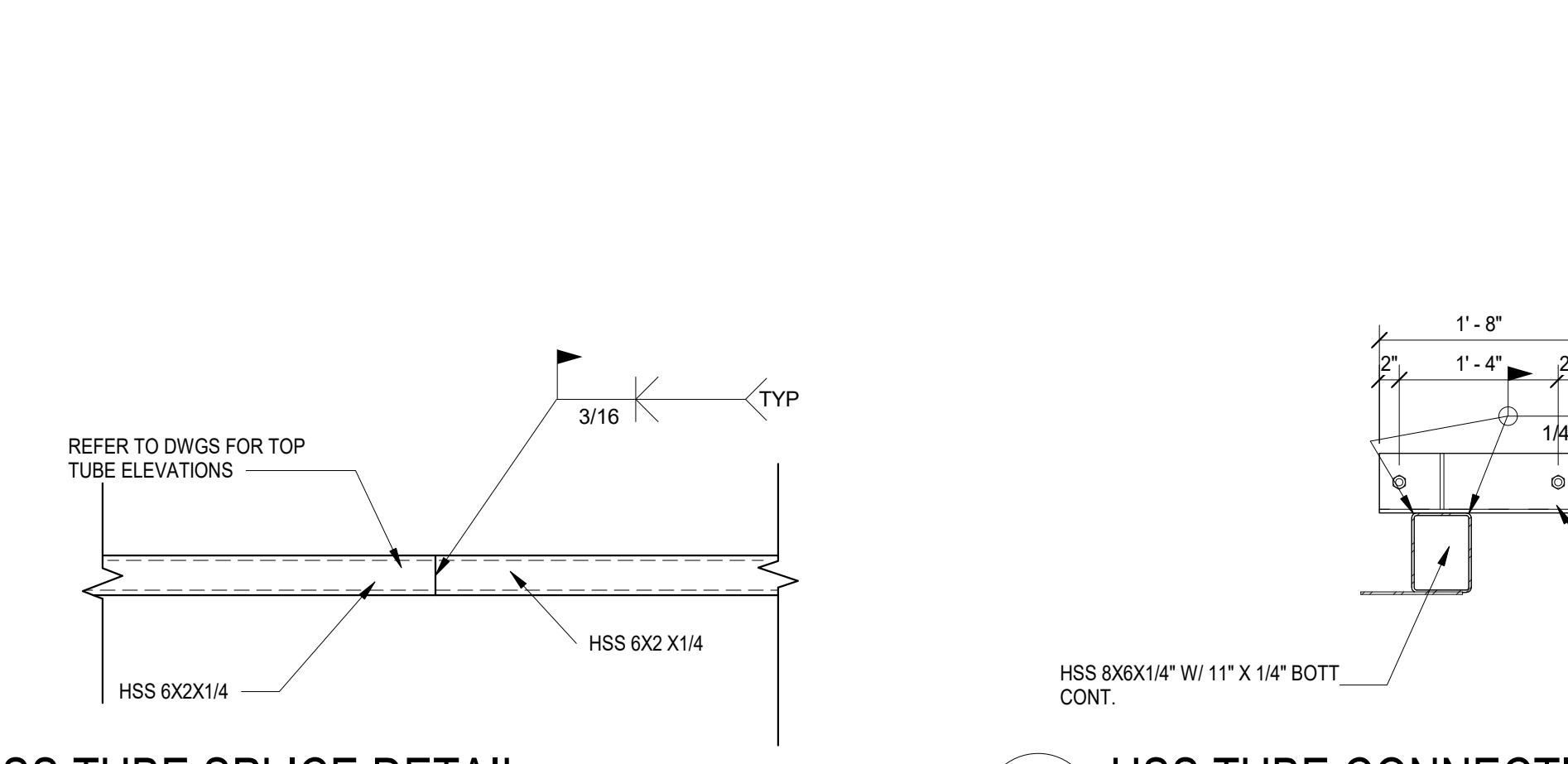


5 STUD ANCHORAGE DETAIL
S101 1 1/2" = 1'-0"

6 TOE FOOTING CONSTRUCTION JOINT
S101 3/4" = 1'-0"

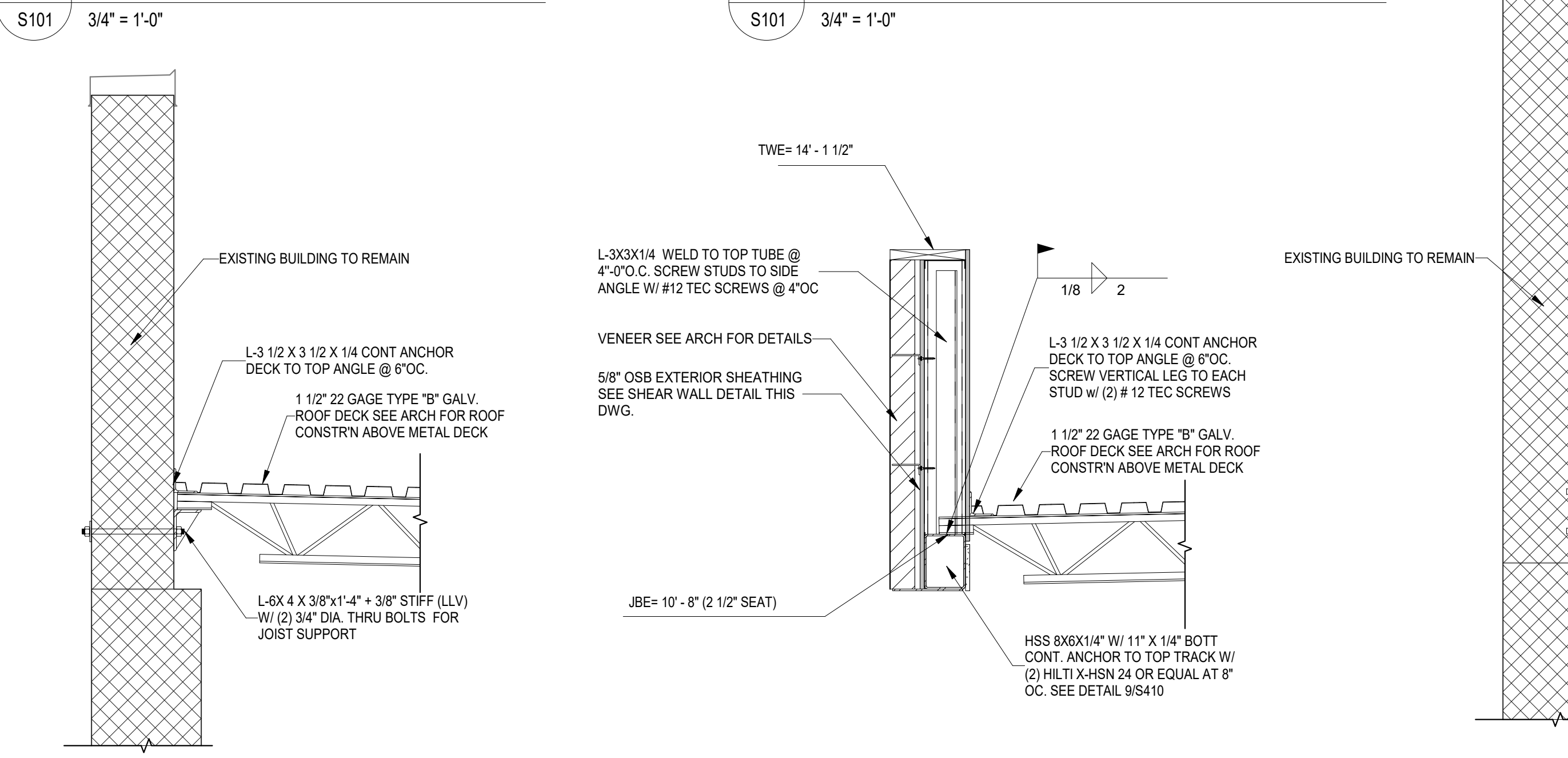


7 SECTION
S101 3/4" = 1'-0"



10 HSS TUBE SPLICE DETAIL
S101 1 1/2" = 1'-0"

11 HSS TUBE CONNECTION TO EXISTING WALL
S101 3/4" = 1'-0"

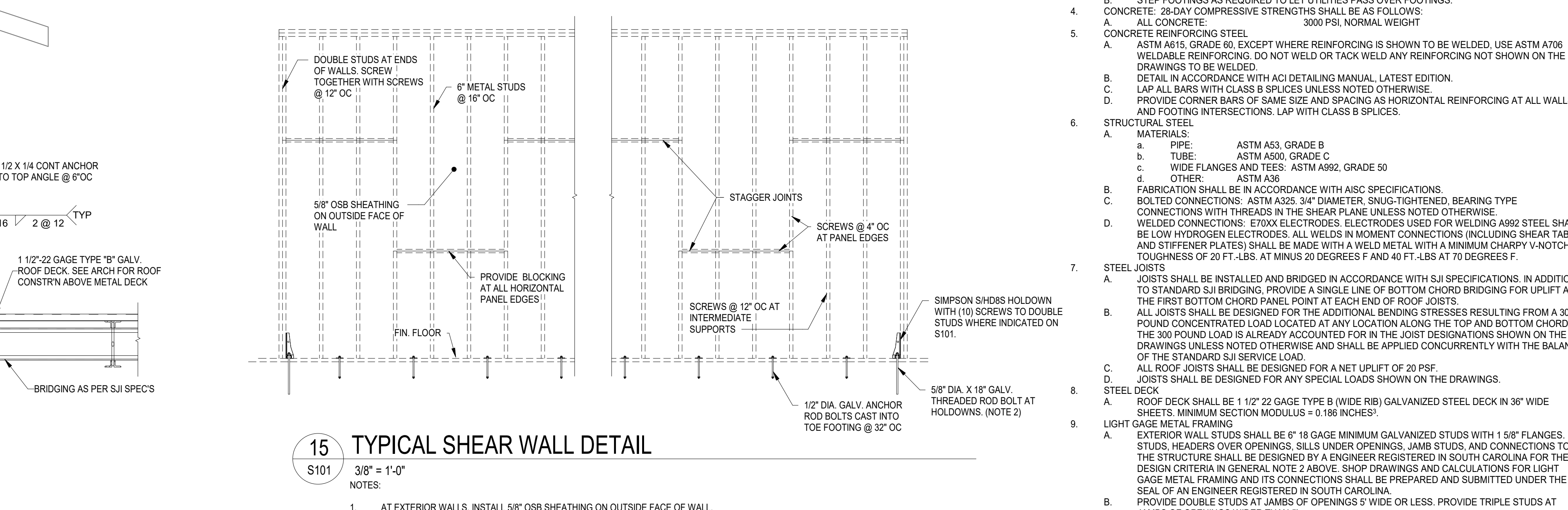


8 SECTION
S101 3/4" = 1'-0"

9 SECTION
S101 3/4" = 1'-0"

12 SECTION
S101 3/4" = 1'-0"

13 SECTION
S101 3/4" = 1'-0"



14 SECTION
S101 3/4" = 1'-0"

15 TYPICAL SHEAR WALL DETAIL
S101 3/8" = 1'-0"

GENERAL NOTES:
1. IN CASE OF DISCREPANCY BETWEEN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS, CONSULT WITH THE ARCHITECT FOR DIMENSIONS AND DETAILS NOT SHOWN. SEE THE ARCHITECTURAL DRAWINGS. VERIFY ALL MECHANICAL OPENINGS AND SUPPORTS WITH THE MECHANICAL EQUIPMENT. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS RELATED TO EXISTING CONSTRUCTION.
2. DESIGN CRITERIA:
A. BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE
B. RISK CATEGORY: III
C. SEISMIC DESIGN DATA:
a. IMPORTANCE FACTOR: 1.25
b. S_s = 0.218 S_i = 0.086
c. SD₁ = 0.233 SD₀ = 0.138
d. SITE CLASS D ASSUMED, SEISMIC DESIGN CATEGORY C
e. DESIGN BASE SHEAR:
f. SEISMIC RESPONSE COEFFICIENT: C_s = 0.045
g. BASIC SEISMIC FORCE RESISTING SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE. R = 8.5
h. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
D. WIND VELOCITY 119 MPH, EXPOSURE C, INTERNAL PRESSURE COEFFICIENT +0.18. SEE DIAGRAM AND CHART AT LEFT FOR COMPONENTS AND CLADDING DESIGN PRESSURES.
E. ROOF LIVE LOAD: 20 PSF
F. GROUND SNOW LOAD: 10 PSF
G. FLOOR LIVE LOADS:
a. COOLERS: 100 PSF
b. OTHER: 100 PSF
3. FOUNDATION DESIGN IS BASED ON THE ASSUMED ALLOWABLE BEARING PRESSURE LISTED BELOW. CONTRACTOR SHALL HIRE AN INDEPENDENT TESTING LABORATORY ACCEPTABLE TO THE ARCHITECT TO VERIFY THE ALLOWABLE BEARING PRESSURE BEFORE FOOTINGS ARE CONSTRUCTED OR REINFORCING IS FABRICATED.
A. ASSUMED ALLOWABLE BEARING PRESSURE = 2500 PSF
B. STEP FOOTINGS AS REQUIRED TO LET UTILITIES PASS OVER FOOTINGS.
4. CONCRETE: 28-DAY COMPRESSIVE STRENGTHS SHALL BE AS FOLLOWS:
A. ALL CONCRETE: 3000 PSI, NORMAL WEIGHT
5. CONCRETE REINFORCING STEEL:
A. ASTM A615, GRADE 60, EXCEPT WHERE REINFORCING IS SHOWN TO BE WELDED. USE ASTM A706 WELDABLE REINFORCING. DO NOT WELD OR TACK WELD ANY REINFORCING NOT SHOWN ON THE DRAWINGS TO BE WELDED.
B. DETAIL IN ACCORDANCE WITH AISC DETAILING MANUAL, LATEST EDITION.
C. LAP ALL BARS WITH CLASS B SPLICES UNLESS NOTED OTHERWISE.
D. PROVIDE CORNER BARS OF SAME SIZE AND SPACING AS HORIZONTAL REINFORCING AT ALL WALLS AND FOOTING INTERSECTIONS. LAP WITH CLASS B SPLICES.
6. STRUCTURAL STEEL:
A. MATERIALS:
a. PIPE: ASTM A53, GRADE B
b. TUBE: ASTM A500, GRADE C
c. WIDE FLANGES AND TEES: ASTM A992, GRADE 50
d. OTHER: ASTM A36
B. FABRICATION SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
C. BOLTED CONNECTIONS: ASTM A325, 3/4" DIAMETER, SNUG-TIGHTENED, BEARING TYPE CONNECTIONS WITH THREADS IN THE SHEAR PLANE UNLESS NOTED OTHERWISE.
D. WELDED CONNECTIONS: E70XX ELECTRODES. ELECTRODES USED FOR WELDING A992 STEEL SHALL BE LOW HYDROGEN ELECTRODES. ALL WELDS IN MOMENT CONNECTIONS (INCLUDING SHEAR TABS AND STIFFENER PLATES) SHALL BE MADE WITH A WELD METAL WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT.-LBS. AT MINUS 20 DEGREES F AND 40 FT.-LBS AT 70 DEGREES F.
7. STEEL JOISTS:
A. JOISTS SHALL BE INSTALLED AND BRIDGED IN ACCORDANCE WITH SJI SPECIFICATIONS. IN ADDITION TO STANDARD SJI BRIDGING, PROVIDE A SINGLE LINE OF BOTTOM CHORD BRIDGING FOR UPLIFT AT THE FIRST BOTTOM CHORD PANEL POINT AT EACH END OF ROOF JOISTS.
B. ALL JOISTS SHALL BE DESIGNED FOR THE ADDITIONAL BENDING STRESSES RESULTING FROM A 300 POUND CONCENTRATED LOAD LOCATED AT ANY LOCATION ALONG THE TOP AND BOTTOM CHORD OF THE 300 POUND LOAD IS ALREADY ACCOUNTED FOR IN THE JOIST DESIGNATIONS SHOWN ON THE DRAWINGS UNLESS NOTED OTHERWISE AND SHALL BE APPLIED CONCURRENTLY WITH THE BALANCE OF THE STANDARD SJI SERVICE LOAD.
C. ALL ROOF JOISTS SHALL BE DESIGNED FOR A NET UPLIFT OF 20 PSF.
D. JOISTS SHALL BE DESIGNED FOR ANY SPECIAL LOADS SHOWN ON THE DRAWINGS.
8. STEEL DECK:
A. ROOF DECK SHALL BE 1 1/2" 22 GAUGE TYPE B (WIDE RIB) GALVANIZED STEEL DECK IN 36" WIDE SHEETS. MINIMUM SECTION MODULUS = 0.186 INCHES.
B. EXTERIOR WALL STUDS SHALL BE #18 GAGE MINIMUM GALVANIZED STUDS WITH 1 5/8" FLANGES. STUDS, HEADERS OVER OPENINGS, SILLS UNDER OPENINGS, JAMB STUDS, AND CONNECTIONS TO THE STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN SOUTH CAROLINA FOR THE DESIGN CRITERIA IN GENERAL NOTE 2 ABOVE. SHOP DRAWINGS AND CALCULATIONS FOR LIGHT GAGE METAL FRAMING AND ITS CONNECTIONS SHALL BE PREPARED AND SUBMITTED UNDER THE SEAL OF AN ENGINEER REGISTERED IN SOUTH CAROLINA.
9. LIGHT GAGE METAL FRAMING:
A. EXTERIOR WALL STUDS SHALL BE #18 GAGE MINIMUM GALVANIZED STUDS WITH 1 5/8" FLANGES. STUDS, HEADERS OVER OPENINGS, SILLS UNDER OPENINGS, JAMB STUDS, AND CONNECTIONS TO THE STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN SOUTH CAROLINA FOR THE DESIGN CRITERIA IN GENERAL NOTE 2 ABOVE. SHOP DRAWINGS AND CALCULATIONS FOR LIGHT GAGE METAL FRAMING AND ITS CONNECTIONS SHALL BE PREPARED AND SUBMITTED UNDER THE SEAL OF AN ENGINEER REGISTERED IN SOUTH CAROLINA.
B. PROVIDE DOUBLE STUDS AT JAMBS OF OPENINGS 5' WIDE OR LESS. PROVIDE TRIPLE STUDS AT JAMBS OF OPENINGS WIDER THAN 5'.
C. TRACKS SHALL BE 16 GAGE METAL. ATTACH TO STEEL WITH 0.145" DIAMETER POWER DRIVEN FASTENERS @ 16" OC. FASTENERS MUST PENETRATE TRACKS A MINIMUM OF 1 1/8".

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE						
TAG	DAIKIN MODEL COND. UNIT / DAHU	COOLING CAP - MBH @ 80/67/95	HTG. CAP. - MBH @ 47°F	AIRFLOW CFM	SEER/HSPF	REMARKS
SHP-1/DAHU-1	RXB09AXVJU/FTXB09AXVJU	8.8	9.4	330	17.0/9.0	1
1. PROVIDE WITH HARD WIRED WALL MOUNTED THERMOSTAT CONTROLLER AND INTERNAL CONDENSATE PUMP WITH FLOAT SWITCH WIRED TO SHUT DOWN UNIT IN ORDER TO PREVENT CONDENSATE OVERFLOW.						

- ### GENERAL NOTES
- VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
 - DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC.
 - ALL PIPING LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
 - ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY THROUGH ROOFS AND PARTITIONS.
 - ALL MECHANICAL ITEMS EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED. COORDINATE WITH ROOFING CONTRACTOR.
 - ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
 - EXTEND ALL DRAIN LINES TO NEAREST ROOF DRAIN OR CUTTER - SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE.
 - PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT PER MANUFACTURER'S INSTRUCTIONS.
 - THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
 - THIS CONTRACTOR SHALL DO ALL CONTROL WIRING. DIVISION 26 WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL WHERE PRACTICAL OR ROUTED EXPOSED IN APPROVED WIRE MOLD.
 - LOCATE ALL SPACE CONTROL INSTRUMENTS 4'-0" ABOVE FINISHED FLOOR TO TOP OF DEVICE IN ACCORDANCE WITH ADA. COORDINATE LOCATIONS TO AVOID ITEMS INCLUDING BUT NOT LIMITED TO CUSTOM FINISHES, FIXED CASEWORK, FURNITURE, AND DOOR SWINGS. IN THE EVENT OF CONFLICTS IN THE FIELD, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE A/E FOR FINAL APPROVAL OF LOCATION.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING HVAC SYSTEMS FROM CONSTRUCTION DEBRIS, DUST AND DIRT FOR THE ENTIRE CONSTRUCTION DURATION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED AS REQUIRED. PROTECTION SHALL INCLUDE PROVIDING AND MAINTAINING MINIMUM MERV-13 FILTER MEDIA OVER ALL RETURN GRILLES AND RETURN DUCT OPENINGS TO PROTECT DUCTS AND EQUIPMENT. CONTRACTOR MUST INSPECT ALL EXISTING UNITS WITH THE OWNER PRIOR TO START OF WORK AND AT THE COMPLETION OF WORK.

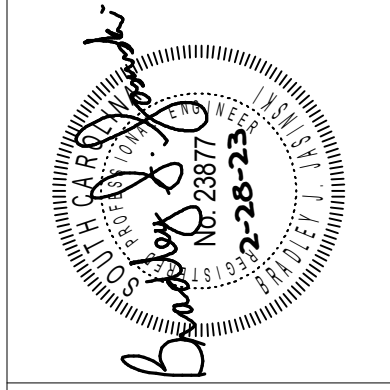
Jumper

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ARCHITECTS

412 Meeting Street
West Columbia
South Carolina



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SPRINGFIELD MIDDLE SCHOOL COOLER & FREEZER ENCLOSURE
FORT MILL SCHOOL DISTRICT
1711 SPRINGFIELD PARKWAY, FORT MILL, SC

Construction Documents

No	Description	Date

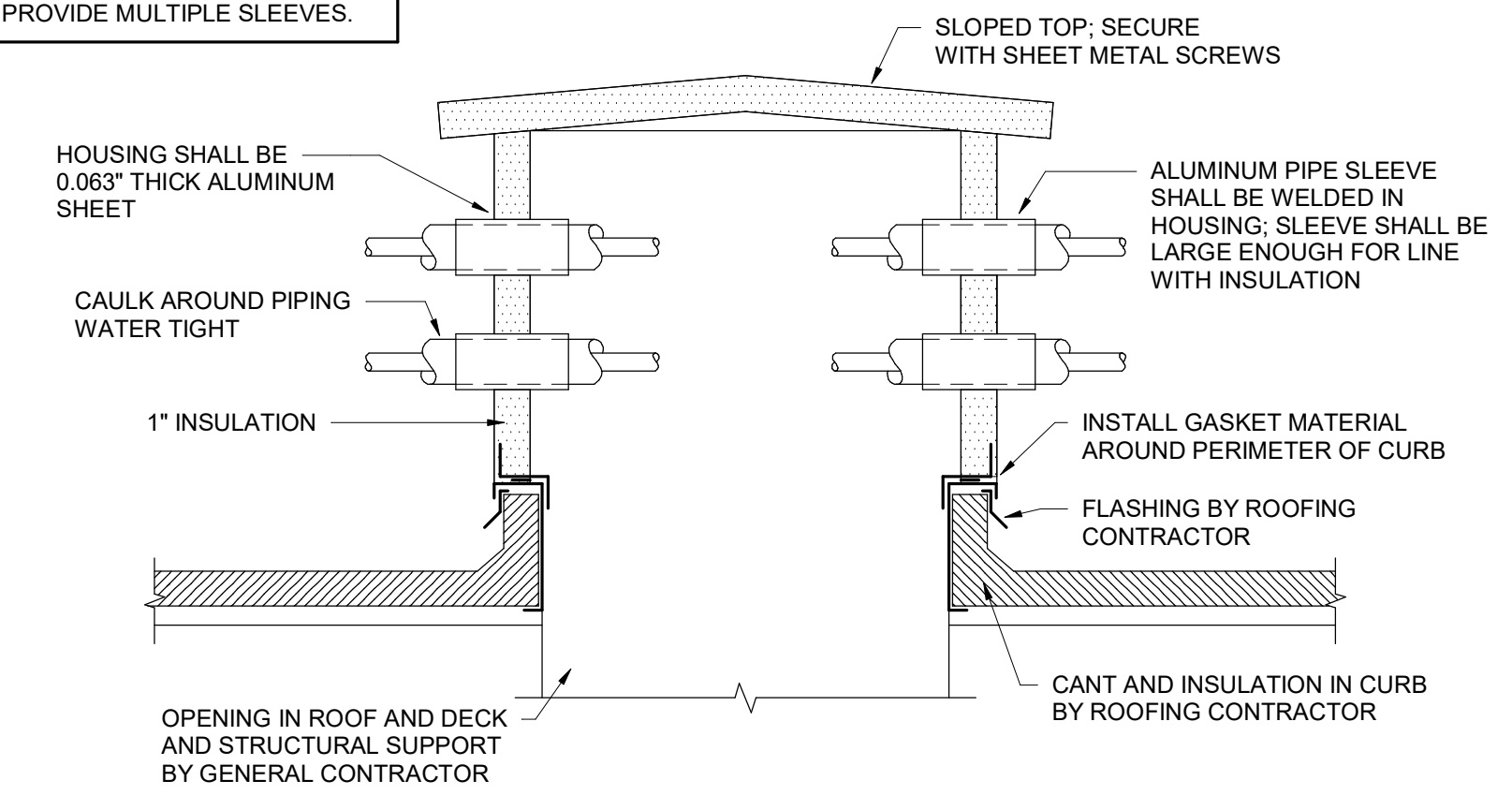
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 CHECKED BY: **BJJ**
 COMM NO: **22004**
 DATE: **02/28/23**
 SHEET TITLE:
FLOOR PLANS, DETAILS, NOTES, SCHEDULE, AND LEGEND

SHEET NO:

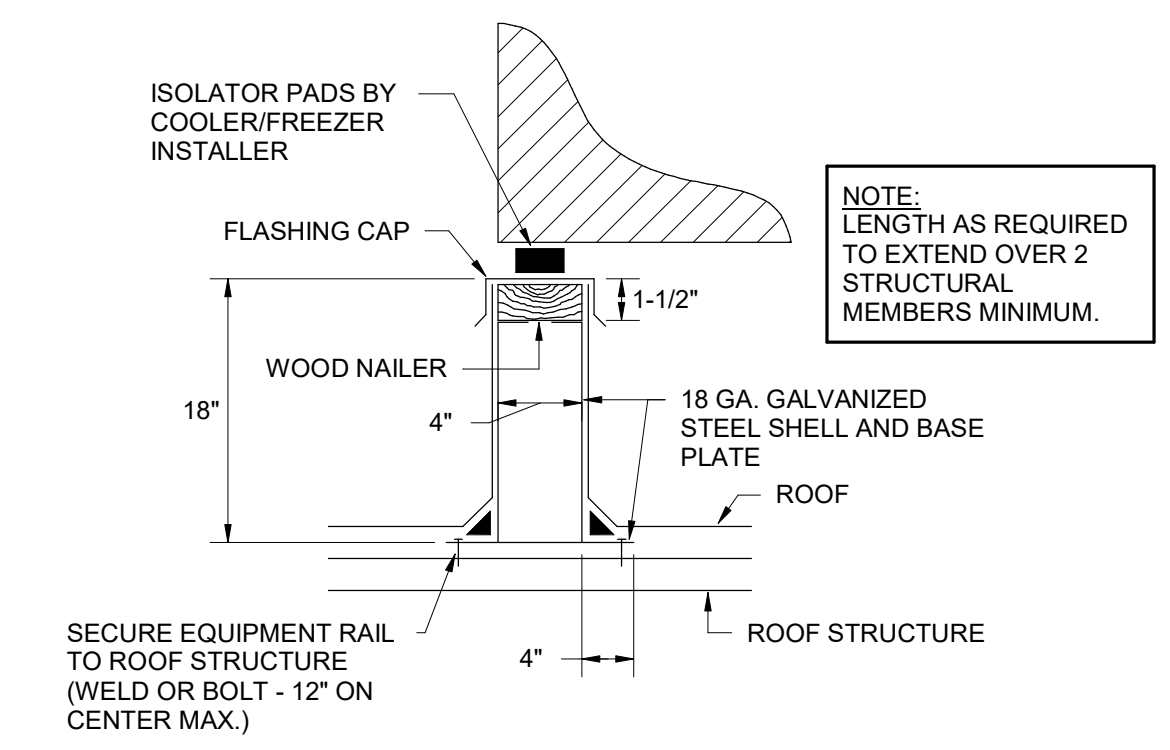
M101

Swygert & Associates
 CONSULTING ENGINEERS
 DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300
 Post Office Box 1166 Post Office Box 1166 Facsimile: (803) 791-6830
 Columbia, S.C. 29211 mail@swygert-associates.com

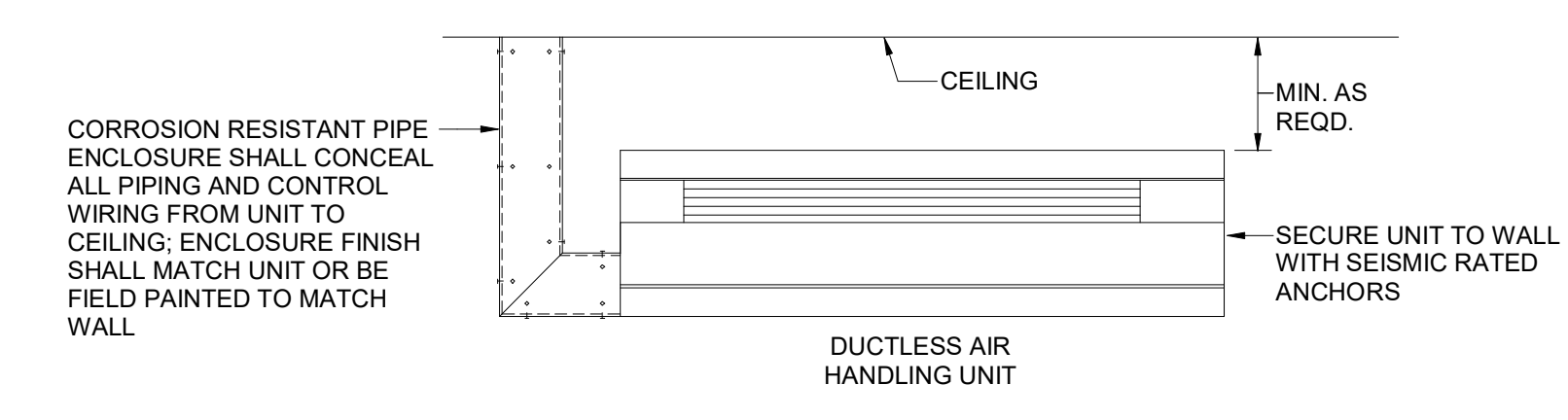
NOTE: SINGLE SLEEVE FOR MULTIPLE ENTRY WILL NOT BE ACCEPTED. PROVIDE MULTIPLE SLEEVES.



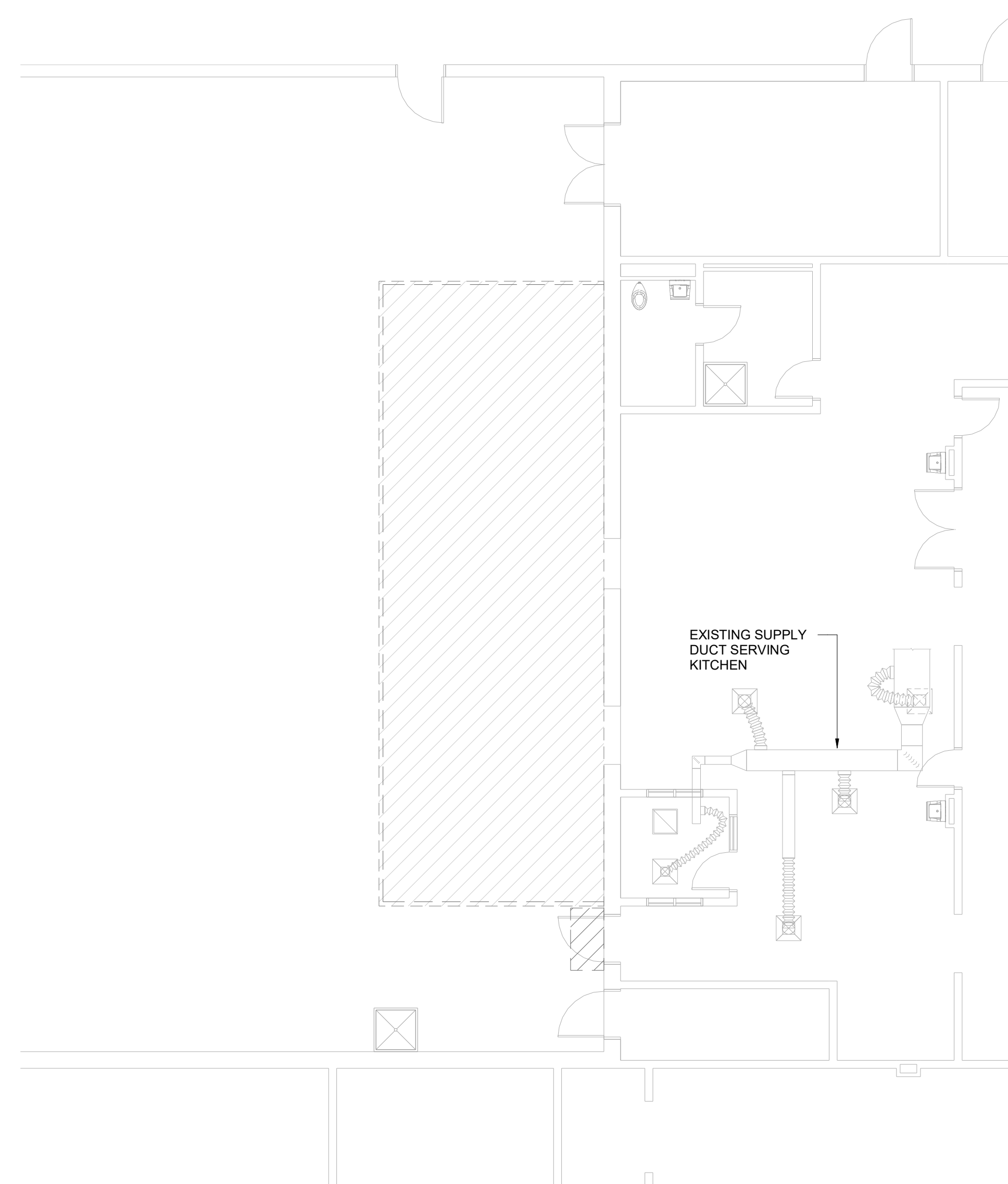
4 ROOF PIPE PENETRATION DETAIL
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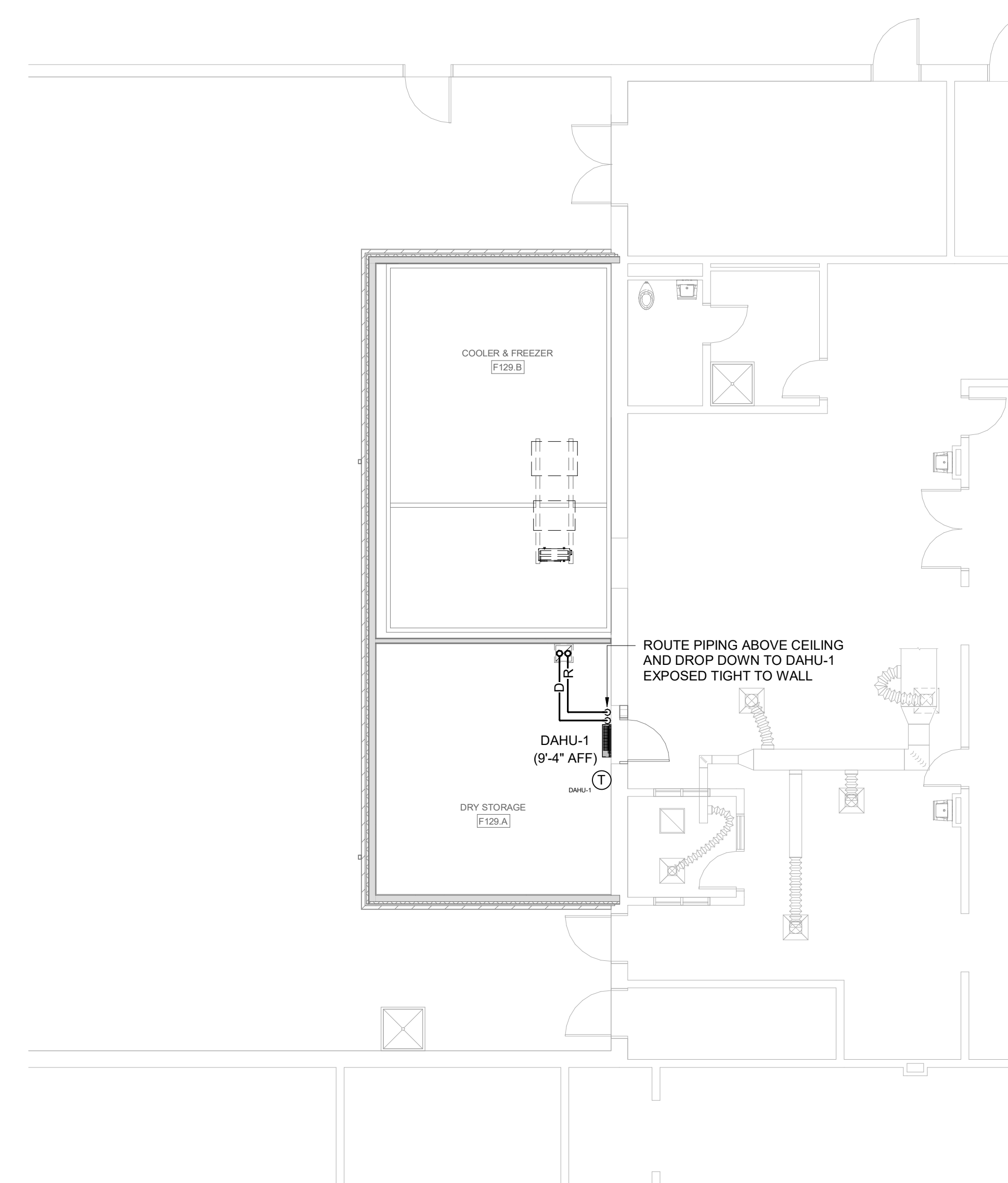
5 EQUIPMENT RAIL DETAIL
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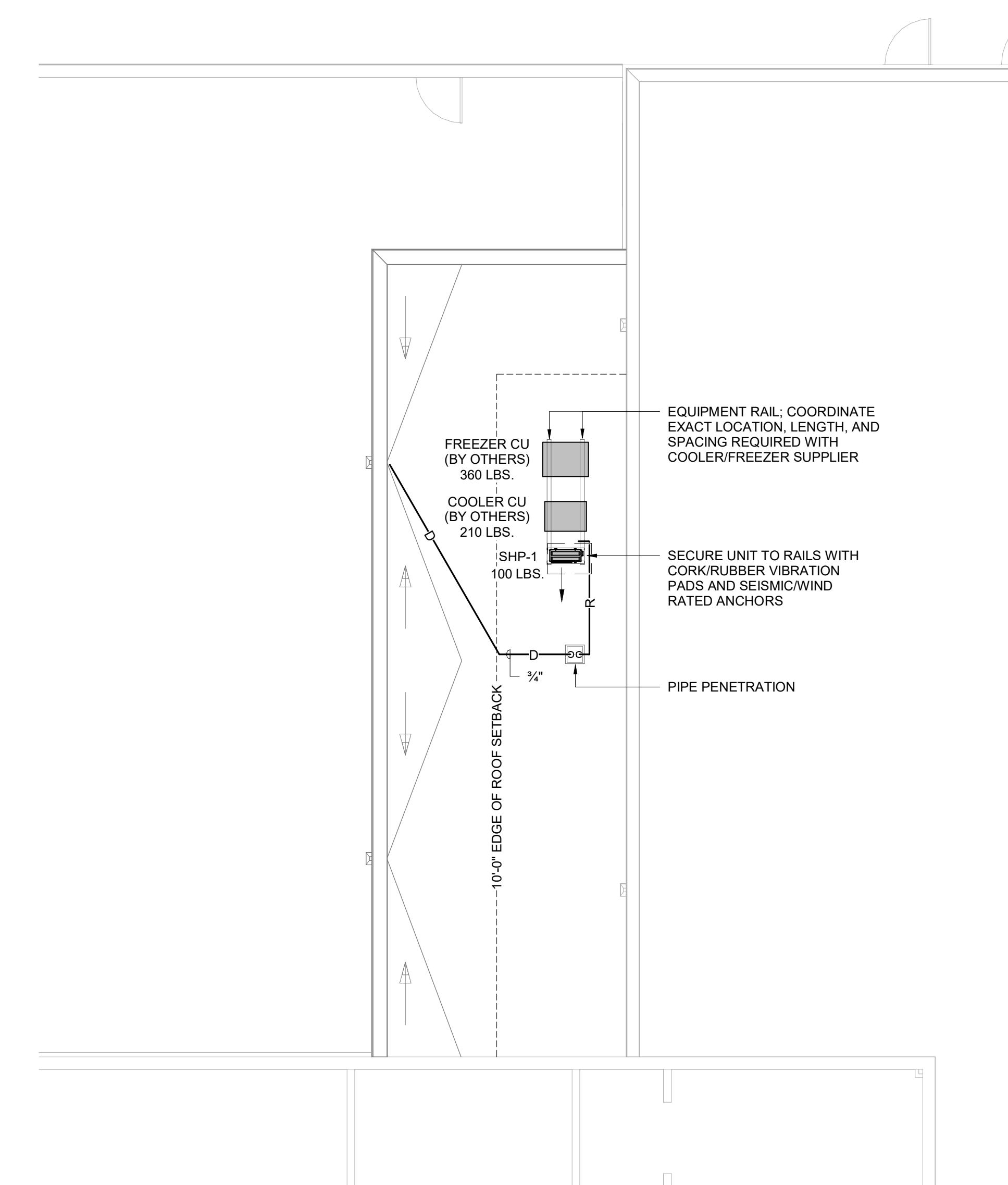
6 DUCTLESS AHU DETAIL
 M101 NO SCALE



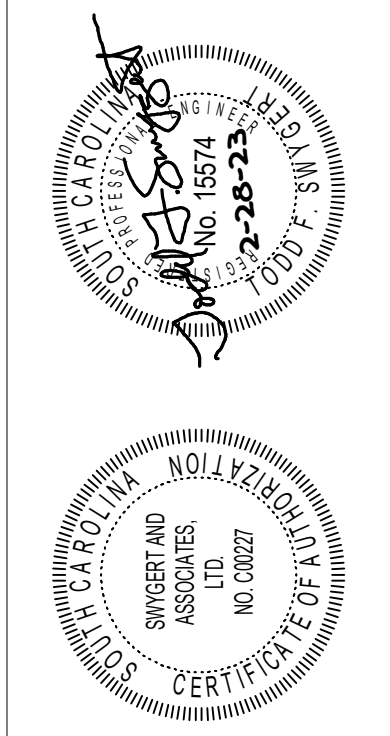
1 DEMOLITION FLOOR PLAN
 M101 1/8" = 1'-0"



2 FLOOR PLAN
 M101 1/8" = 1'-0"



3 ROOF PLAN
 M101 1/8" = 1'-0"



- GENERAL NOTES**
- SUBMIT DRAWINGS INDICATING EXACT LOCATION OF ALL SPRINKLERS FOR ARCHITECT'S REVIEW AND BRING ALL FIELD CONFLICTS AND REQUIRED ADJUSTMENTS TO THE ARCHITECT'S ATTENTION FOR VERIFICATION OF FINAL LOCATION OF ALL SPRINKLERS.
 - SPRINKLER DRAWINGS PROVIDED ARE TO ASSIST THE CONTRACTOR. SUCCESSFUL CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A COMPLETE SYSTEM PER THESE PLANS AND SPECIFICATIONS AND IN COMPLIANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMISSION TO THE OFFICE OF THE STATE FIRE MARSHAL.
 - THE DESIGN TEAM, TO ENSURE COMPATIBILITY WITH THE BUILDING DESIGN INTENT, WILL CAREFULLY REVIEW SPRINKLER PLANS. CORRECTIONS WILL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
 - SPRINKLERS SHALL BE LOCATED A MINIMUM OF 6" AWAY FROM CEILING GRID IN ALL ACOUSTICAL CEILING TILES.
 - SPRINKLER PIPING SHALL BE INSTALLED TO MEET SEISMIC REQUIREMENTS WITH LATERAL SWAY BRACING, LONGITUDINAL SWAY BRACING, AND FOUR-WAY BRACING AS REQUIRED BY NFPA AND THE INTERNATIONAL BUILDING CODES.
 - ALL PIPING 2" AND SMALLER SHALL BE SCHEDULE 40 STEEL PIPING WITH ROLLED GROOVE OR THREADED FITTINGS.
 - ALL FIRE SPRINKLER PIPING SHALL BE HYDRAULICALLY SIZED BUT FLUID VELOCITIES SHALL NOT EXCEED 20 FT/SEC.
 - FLEXIBLE SPRINKLER DROPS SHALL BE BRAIDED HOSE DESIGN INSTALLED PER THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.
 - UPON APPROVAL BY THE STATE FIRE MARSHAL'S OFFICE, THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE THE OFFICE OF SCHOOL FACILITIES WITH A COPY OF THE APPROVED ABOVE GROUND SHOP DRAWINGS.

Fire Sprinkler System Specification Sheet
(Per 40-16-250)

Project Data

Project name: Springfield Middle School Cooler & Freezer Enclosure
 Location in South Carolina: Address (street # & name): 1711 Springfield Parkway City: Fort Mill County: York State Project #: N/A

Water Supply Information

Date test conducted: 02 / 02 / 2023 Static pressure (psig): 68 Residual pressure (psig): 42 Flow (gpm): 1060
 Distances of test gauges relative to the base of the riser: Horizontal (ft): 20' Vertical (elevation difference in ft): 4'
 Source of water supply: Municipal dead-end Municipal circulation Existing fire pump Other: _____ Pipe Size (in.): 4"

Test data by/from: Name: Eric Warner Title: Fire Marshal
 Organization: Fort Mill Fire Department Phone: 803-402-9940

Fire pump: New Existing Rated Pressure (psig): N/A Churn Pressure (psig): N/A
 No Pump Rated Capacity (gpm): N/A Pressure @ 150% flow (psig): N/A
 On-site water storage: Yes No New Existing Tank Other: N/A Capacity (gal): N/A

NFPA Hazard Classification
(Check appropriate boxes when necessary)

Area #	Hazard Class or Code Reference	Description of Hazard Protected (including occupancy use, group, and details of storage arrangement as applicable (including commodity class, rack arrangement/type, ceiling and storage height))
1	Ord. Haz. - Group 1	Storage areas

Design Parameters
(Check appropriate boxes when necessary)

Area #	System Type	Density (gpm ² /Area (ft ²)) or Other	Reference code section	Inside Hose (gpm)	Outside Hose (gpm)
1	Wet	0.15/1500		0	250

Seismic Design Data: S_w=0.258 Site Classification=C Seismic Design Category=B
 Codes and Standards
 Applicable Codes, Standards, & Editions (i.e. 2018 IBC, 2016 NFPA 13, etc.) for the Scope of Work on the Fire Sprinkler System
 2021 International Building Code, 2021 International Fire Code, NFPA 13 - 2019 Edition

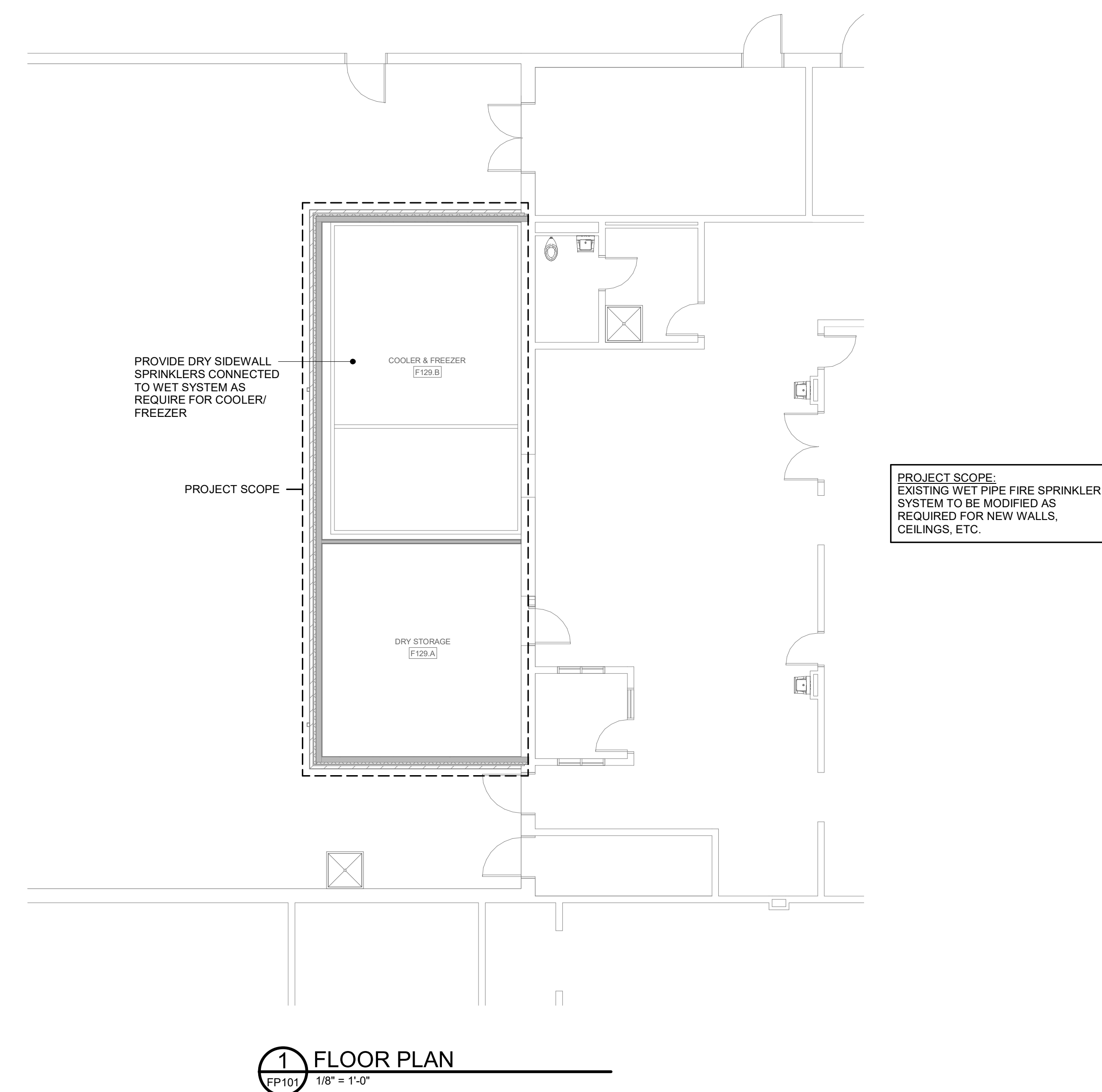
Scope of work (i.e. sprinkler system A.G. from 1'-0" A.F.F., U.G. from top to 5'-0" outside, etc.) and notes (attach continuation page when necessary):
 Modifications to existing system to accommodate new cooler/freezer and storage area.

Specifier's Information

Name: Todd F. Swygert, P.E.
 Engineering services provided through a firm: Yes No
 Firm name: Swygert & Associates, Ltd.
 Address: Post Office Box 11886
 City: Columbia
 State: South Carolina Zip: 29211
 Phone: 803-791-9300 ext 102 Fax: 803-791-0830
 E-mail: Todd@swygert-associates.com

Certificate of Authorization Professional Engineer's Seal

Revision No.: 1 of 1 Signature: *Todd F. Swygert* Date: 3-14-2023
 Form Version: July 1, 2021



1 FLOOR PLAN
FP101 1/8" = 1'-0"

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Construction Documents

No	Description	Date
1	UPDATED FS&SS	03/14/23

DRAWN BY: DEM
 CHECKED BY: TFS
 COMM NO: 22004
 DATE: 02/28/23
 SHEET TITLE: FLOOR PLAN AND NOTES

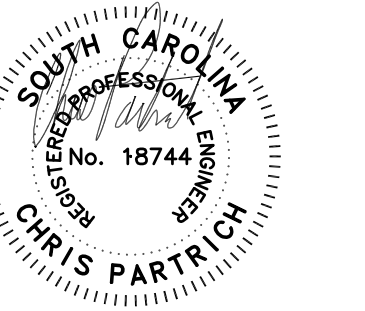
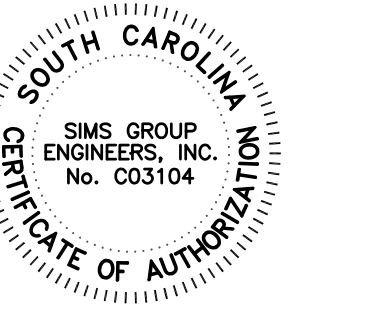
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SPRINGFIELD MIDDLE SCHOOL COOLER & FREEZER ENCLOSURE
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1711 SPRINGFIELD PARKWAY, FORT MILL, SC

CONSTRUCTION DOCUMENTS

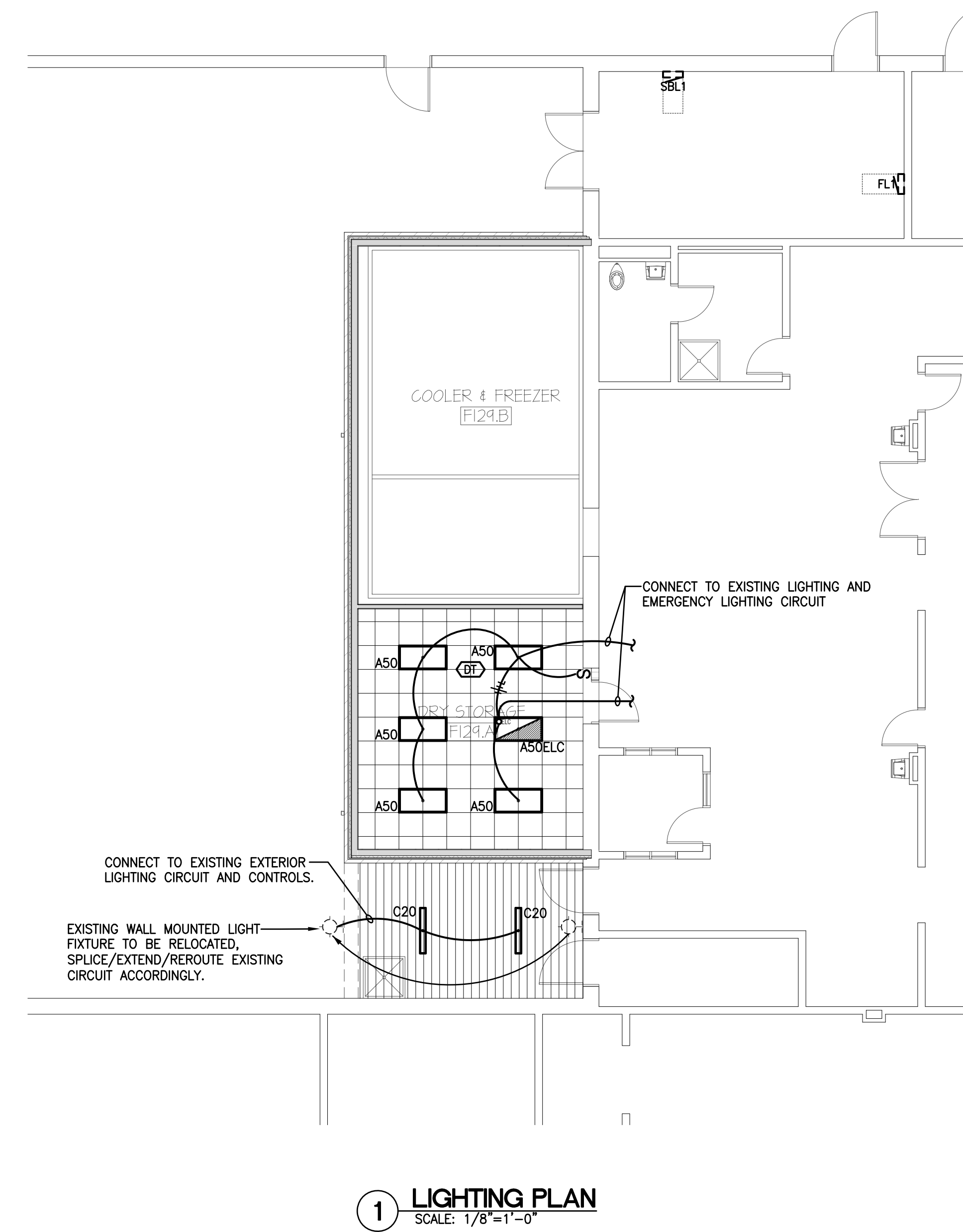
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 CHECKED BY: **CLP**
 COMM NO: **22004**
 DATE: **02/28/23**

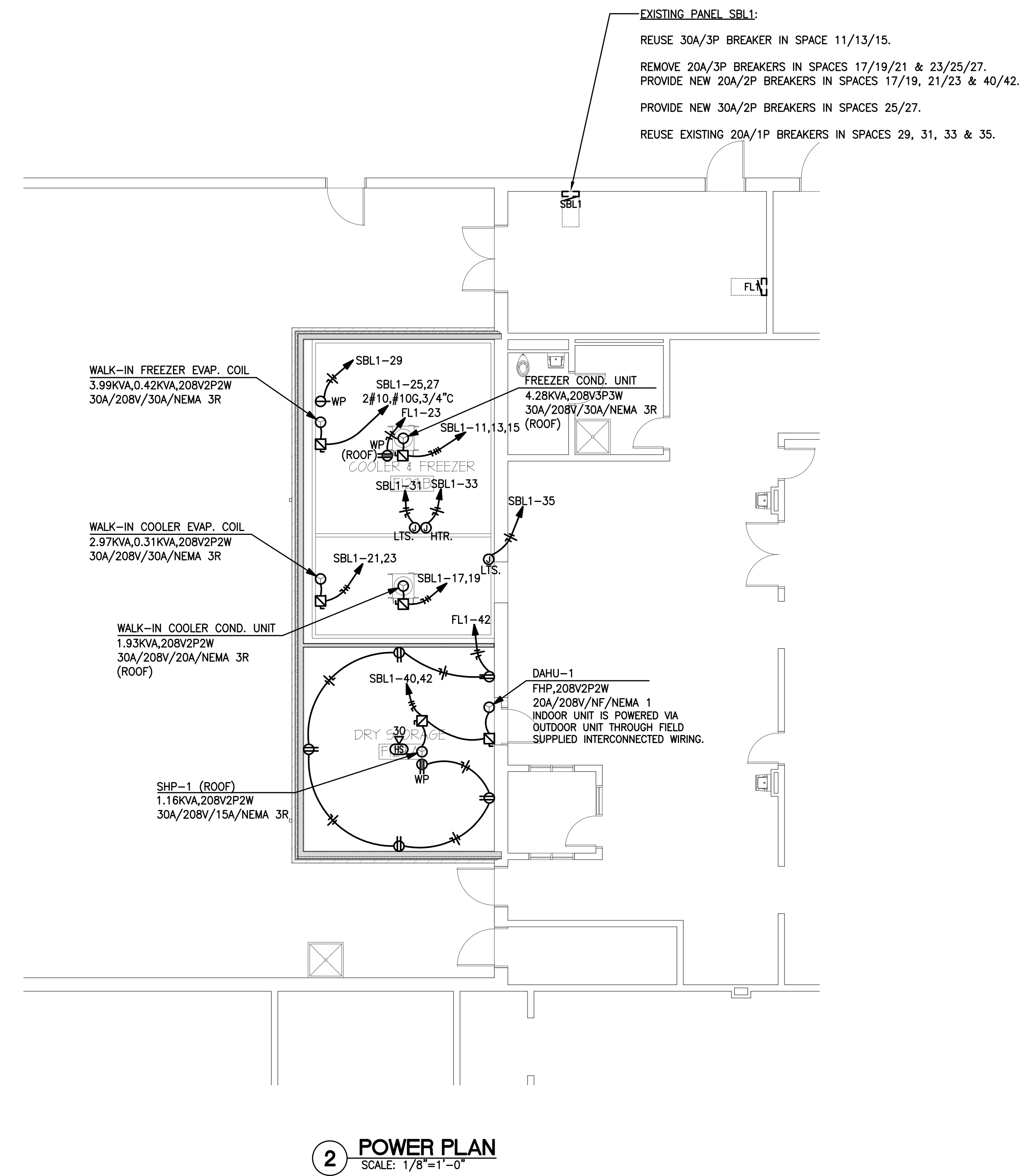
SHEET TITLE: ELECTRICAL PLAN

SHEET NO:

E101



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



2 POWER PLAN
SCALE: 1/8"=1'-0"

CONSTRUCTION DOCUMENTS C23001

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 Irmo, South Carolina 29063
 Phone: (803) 765-1007 Fax: (803) 765-1030
 www.simsgruppusa.com

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