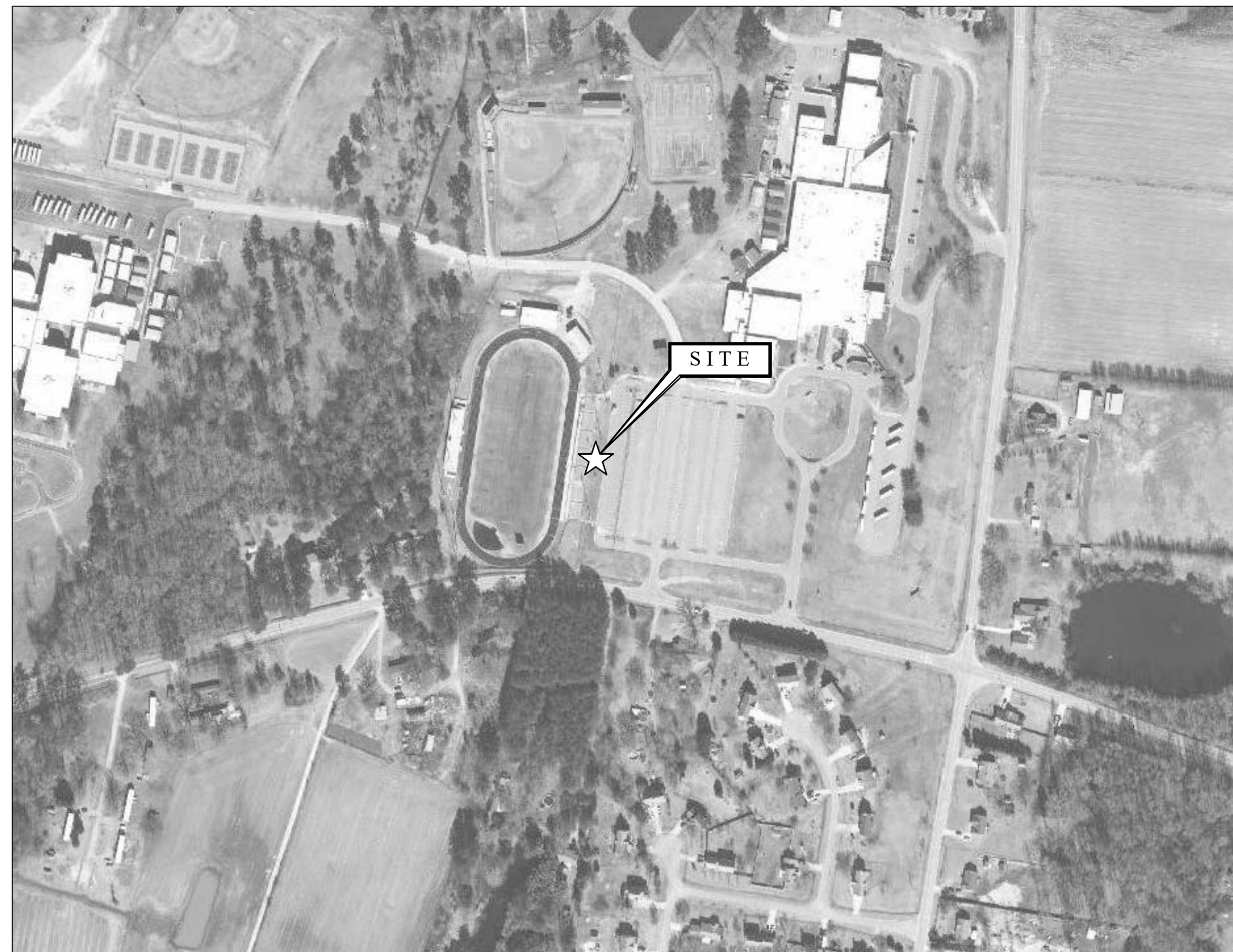
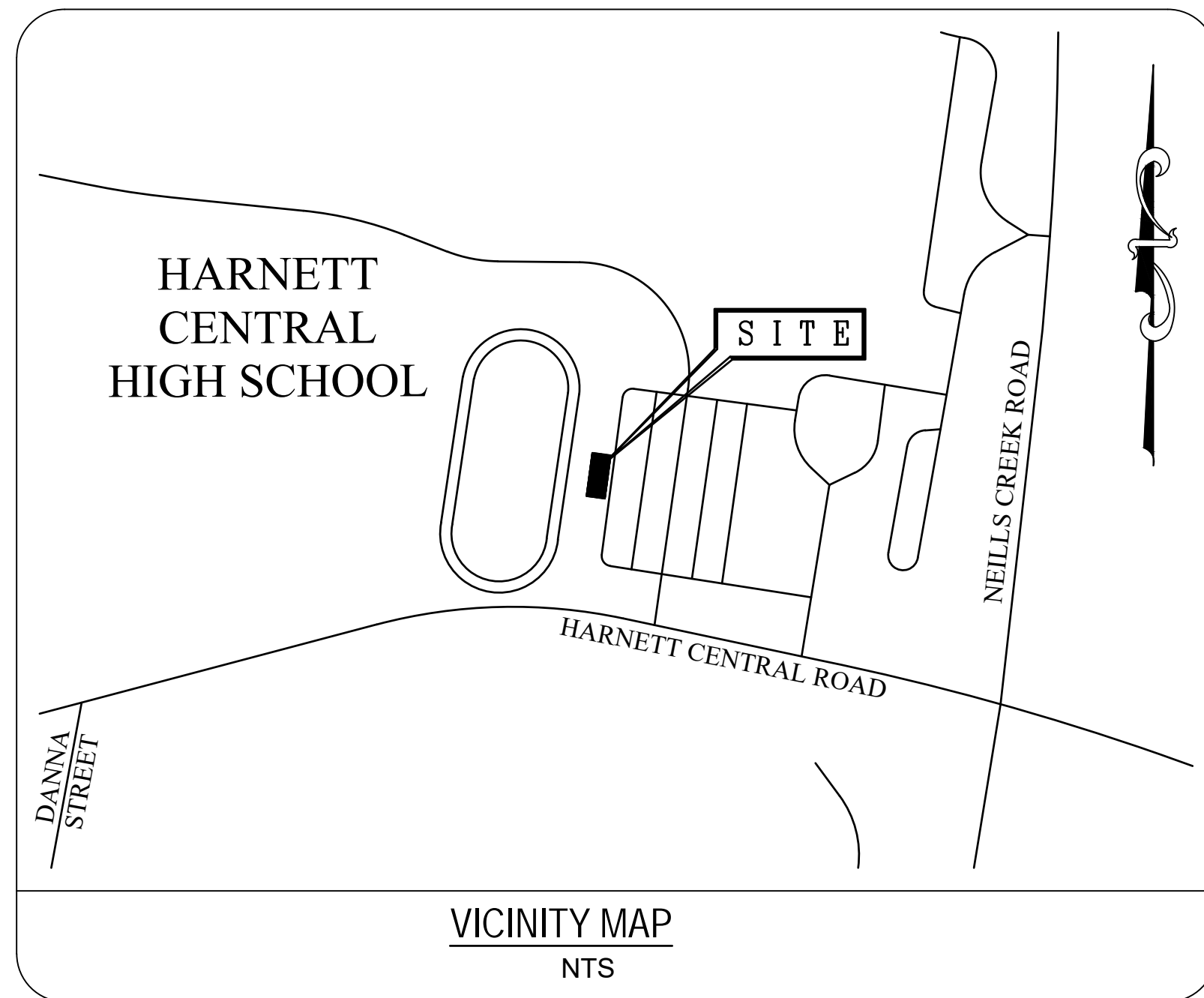
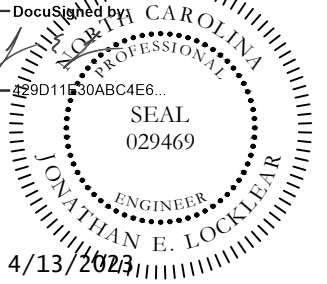
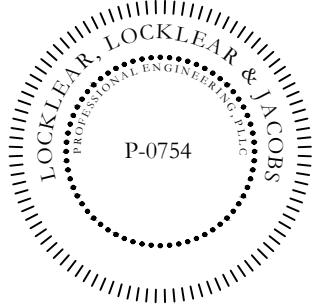


# HARNETT CENTRAL PRESS BOX

## 2911 HARNETT CENTRAL RD, ANGIER, NC 27501



P.O. BOX 3119  
PEMBROKE, NC 28372  
TELEPHONE: (910) 774-9306  
FAX: (866) 649-7235



DRAWING INDEX			
SHEET #	SHEET TITLE	REVISION NUMBER	REVISION DATE
G-001	COVER SHEET	--	--
G-002	APPENDIX B	1	4/13/2023
G-003	GENERAL NOTES AND ABBREVIATIONS	--	--
G-101	FLOOR PLANS	--	--
G-111	OVERALL ROOF PLAN	--	--
G-201	EXTERIOR ELEVATIONS	1	4/13/2023
G-301	BUILDING SECTIONS AND DETAILS	1	4/13/2023
G-401	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS	--	--
G-501	CASEWORK DETAILS	--	--
G-502	GENERAL DETAILS	1	4/13/2023
G-503	GENERAL DETAILS	--	--
G-601	ROOM FINISH SCHEDULE	--	--
S-001	STRUCTURAL NOTES AND ABBREVIATIONS	--	--
S-101	FOUNDATION PLAN	--	--
S-102	FRAMING PLAN	1	4/13/2023
S-501	STRUCTURAL DETAILS	--	--
S-502	STRUCTURAL DETAILS	1	4/13/2023
P-001	PLUMBING NOTES AND SCHEDULES	--	--
P-101	PLUMBING PLAN	--	--
P-301	PLUMBING DETAILS	--	--
M-001	MECHANICAL NOTES LEGEND AND ABBREVS	1	4/13/2023
M-101	MECHANICAL PLAN	1	4/13/2023
M-102	MECHANICAL CONDENSATE PLAN	--	--
M-301	MECHANICAL DETAILS	--	--
E-001	ELECTRICAL NOTES LEGENDS AND ABBREVS	--	--
E-101	ELECTRICAL POWER PLAN	--	--
E-201	ELECTRICAL LIGHTING PLAN	1	4/13/2023
E-301	ELECTRICAL DETAILS	1	4/13/2023

**CLIENT**

HARNETT COUNTY SCHOOL  
1008 S 11th ST,  
LILLINGTON, NC 27546  
(910) 893-8151  
CONTACT: STEVE MATHEWS



PREPARED BY:

**LOCKLEAR, LOCKLEAR & JACOBS**  
CIVIL | STRUCTURAL | MEP | ENVIRONMENTAL ENGINEERS  
114 WEST 3RD. STREET - PEMBROKE, NORTH CAROLINA 28372  
(910) 774-9306 WWW.LLANDJ.COM  
License No. P-0754

**OWNER & BUILDER'S NOTES:**

- PLANS SHALL NOT BE USED FOR CONSTRUCTION UNTIL STAMPED AND SIGNED BY AN ENGINEER AND APPROVED BY THE LOCAL INSPECTION DEPARTMENT. THE CONTRACTOR IS EXPECTED TO FOLLOW THESE PLANS, APPLICABLE BUILDING CODES AND LOCAL ORDINANCES. CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH PLANS BEFORE STARTING WORK. WHILE PLANS ARE DRAWN TO SHOW THE PROPOSED WORK AS ACCURATELY AS POSSIBLE, SCHEMATIC DETAILS MAY BE USED IN SOME CASES FOR CLARITY. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR DETAILED WORK.
- WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. THE ENGINEER SHALL BE CONSULTED FOR CLARIFICATION IF SITE CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS / NOTES.
- LL&J ASSUMES NO RESPONSIBILITY FOR SCHEDULING, FABRICATION, CONSTRUCTION TECHNIQUES OR MATERIALS, OR QUANTITIES USED IN THE WORK. LL&J ASSUMES NO RESPONSIBILITY FOR FIELD CHANGES, SITE VARIANCES OR DISCREPANCIES NOT BROUGHT TO ENGINEER'S ATTENTION FOR CLARIFICATION.

HARNETT CENTRAL PRESS BOX  
HARNETT COUNTY SCHOOLS  
2911 HARNETT CENTRAL RD, ANGIER, NC 27501

PROJECT INFORMATION:  
DATE: 1/10/2023  
DRAWN BY: RDH  
CHECKED BY: JEL  
SHEET TITLE  
COVER SHEET  
SHEET NUMBER  
G-001  
PROJECT# 21-11110

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2018 APPENDIX B - BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: HARNETT CENTRAL PRESS BOX
Address: 2911 HARNETT CENTRAL RD ANGLIER, NC Zip Code: 27501
Proposed Use: PRESS BOX
Owner/Authorized Agent: STEVE MATHEWS Phone # (910) 893-8151 E-Mail: smatthews@harnett.k12.nc.us

Table with 5 columns: DESIGNER, FIRM, NAME, LICENSE #, TELEPHONE #, E-Mail. Lists Robby Locklear, P.E. and Jonathan Locklear, P.E. from LOCKLEAR, LOCKLEAR & JACOBS, PLLC.

2018 EDITION OF NC CODE FOR: New Construction
EXISTING: Reconstruction, Alteration, Repair, Renovation
CONSTRUCTED: (Date), ORIGINAL USE(S): (Chapter 3)
RENOVATED: (Date), CURRENT USE(S): (Chapter 3), PROPOSED USE(S): (Chapter 3)

BASIC BUILDING DATA

Construction Type: I-A, II-A, III-A, IV, V-A, V-B
Sprinklers: No, Partial, Yes
Standpipes: No, Yes
Fire District: No, Yes
Building Height: 19'-4"
Gross Building Area: 546 sq. ft.
TOTAL BUILDING AREA: 546 sq. ft. TOTAL FIRE AREA: 0 sq. ft.

ALLOWABLE AREA

Occupancy: Assembly A-1, A-2, A-3, A-4, A-5, Business, Educational
Factory F-1 Moderate, F-2 Low
Hazardous H-1 Detonate, H-2 Deflagrate, H-3 Combust, H-4 Health, H-5 HPM
Institutional I-1, I-2, I-3, I-4, Mercantile
I-3 Use Condition 1, 2, 3, 4, 5
Storage S-1 Moderate, S-2 Low, High-piled, Utility and Miscellaneous

Incidental Uses (Table 509):
Furnace room where any piece of equipment is over 400,000 BTU per hour input
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
Refrigerant machine room
Hydrogen cutoff rooms, not classified as Group H
Incinerator rooms
Paint shops, not classified as Group H, located in occupancies other than Group F
Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
Laundry rooms over 100 square feet
Group I-3 cells equipped with a padded surfaces
Group I-2 waste and linen collection rooms
Waste and linen collection rooms over 100 square feet
Stationary storage of battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
Rooms containing fire pumps
Group I-2 storage rooms over 100 square feet
Group I-2 commercial kitchens
Group I-2 laundries equal to or less than 100 square feet
Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427
Special Provisions: 509.2, 509.3, 509.4, 509.5, 509.6, 509.7, 509.8, 509.9
Mixed Occupancy: No, Yes Separation: 0 Hr. Exception: SEE BELOW
Incidental Use Separation (509.4)
This separation is not exempt as Non-Separated Use (see exceptions)
Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and the area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the building.

Mixed Occupancy: cont.
Separated Use: (508.4) - See below for calculations.
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.
Actual Area: A + B + C + D = 0.00 <= 1.00
Allowable Area: A B C D

Table with 7 columns: STORY NO., DESCRIPTION AND USE, AREA PER STORY (ACTUAL), TABLE 503.3 AREA, AREA FOR OPEN SPACE INCREASE 1, AREA FOR SPRINKLER INCREASE 2, ALLOWABLE AREA OR UNLIMITED 3, MAXIMUM BUILDING AREA 4. Rows for RESTROOMS, CONCESSION, and PRESSBOX.

- 1. Frontage area increases from Section 506.3 area computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)
b. Total Building Perimeter = (F)
c. Ratio (F/P) = (F/P)
d. W = Minimum Width of public way = (W)
e. Percent of frontage increase I\_s = 100(F/P-0.25)W/30 = (%)
2. The sprinkler increase per Section 506.2 is as follows:
a. Multi-story building I\_s = 200%
b. Single story building I\_s = 300%
3. Unlimited area applicable under conditions of Section 507:
4. Maximum Building Area = total number of stories in the building x E (506.2).
5. The maximum area of parking garages must comply with 406.3.4.

ALLOWABLE HEIGHT

Table with 4 columns: CONSTRUCTION TYPE, ALLOWABLE (TABLE 504.3), WITH SPRINKLERS, SHOWN ON PLANS, CODE REFERENCE. Rows for V-B, 40, 60, 19'-4", 2, TABLE 504.3.

FIRE PROTECTION REQUIREMENTS

Table with 7 columns: BUILDING ELEMENT, FIRE SEPARATION DISTANCE (FEET), RATING (REQ'D, PROVIDED), DETAIL # AND SHEET #, DESIGN # FOR RATED ASSEMBLY, DESIGN # FOR RATED PEN., DESIGN # FOR RATED JOINTS. Rows for Structural Frames, Bearing Walls, Exterior, Interior, Nonbearing walls and partitions, Interior Walls & Partitions, Floor construction, Roof construction, Shafts - Exit, Shafts - Other, Corridor Separation, Occupancy Separation, Party/Fire Wall Sep., Smoke Barrier Sep., Tenant Separation, Incidental Use Separation.

\* Indicate section number permitting reduction
LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: No, Yes
Exit Signs: No, Yes
Fire Alarm: No, Yes
Smoke Detection Systems: No, Yes, Partial
Panic Hardware: No, Yes

SITE PLAN NOTE

NEITHER A SURVEY OR SITE PLAN WAS PROVIDED BY THE OWNER AT TIME OF COMPLETION OF THESE PLANS. OWNER MUST VERIFY INFORMATION ON THIS SHEET IS CORRECT. LL&J, PLLC HAS DONE IT BEST TO VERIFY AND COMPLETE THIS SHEET IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODES WITHOUT THE USE OF SAID INFORMATION.

LIFE SAFETY PLAN REQUIREMENTS

- LIFE SAFETY PLAN SHEET #:
FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)
ASSUMED AND REAL PROPERTY LINE LOCATIONS
EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
EXISTING STRUCTURES WITHIN 30' OF THE PROPOSED BUILDING
OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.1)
OCCUPANT LOADS FOR EACH AREA
EXIT ACCESS TRAVEL DISTANCES (1016)
COMMON PATH OF TRAVEL DISTANCE (1014.3 & 1028.8)
DEAD END LENGTHS (1018.4)
CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT CAN ACCOMMODATE
BASED ON EGRESS WIDTH (1005.1)
ACTUAL OCCUPANT LOAD FOR EACH DOOR
A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10)
LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1008.1.9.7)
LOCATION OF DOORS WITH WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8)
LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES
LOCATION OF EMERGENCY ESCAPE WINDOWS (1029)
THE SQUARE FOOTAGE OF EACH FIRE AREA (902)
THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.4)
NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ABOVE ITEMS

ACCESSIBLE DWELLING UNITS (Section 1107)

Table with 7 columns: TOTAL UNITS, ACCESSIBLE UNITS REQUIRED, ACCESSIBLE UNITS PROVIDED, TYPE A UNITS REQUIRED, TYPE A UNITS PROVIDED, TYPE B UNITS REQUIRED, TYPE B UNITS PROVIDED, TOTAL ACCESSIBLE UNITS PROVIDED.

ACCESSIBLE PARKING (SECTION 1106)

Table with 4 columns: LOT OR PARKING AREA, TOTAL # OF PARKING SPACES, # OF ACCESSIBLE SPACES PROVIDED (REGULAR WITH 5' ACCESS AISLE, VAN SPACES), TOTAL # ACCESSIBLE PROVIDED. Rows for NEW, EXISTING, TOTAL.

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Live Loads:
Roof: 20 psf
Mezzanine: 100 psf
Floor: 100 psf
Ground Snow Load: 15 psf
Wind Load: Basic Wind Speed 120 mph (ASCE-7)
Exposure Category B
Wind Base Shears (for MWFRS) V\_x = 3,500 lbs V\_y = 7,700 lbs
SEISMIC DESIGN CATEGORY B
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) I, II, III, IV
Spectral Response Acceleration S\_s 13.0 %g S\_1 6.4 %g
Site Classification (Table 1613.5.2) A, B, C, D, E, F
Data Source: Field Test, Presumptive, Historical Data
Basic structural system (check one):
Bearing Wall, Dual w/Special Moment Frame, Building Frame, Dual w/Intermediate R/C or Special Steel, Moment Frame, Inverted Pendulum
Seismic base shear: V\_x = 1,800 lbs V\_y = 2,900 lbs
Analysis Procedure: Simplified, Equivalent Lateral Force, Dynamic
Architectural, Mechanical, Components anchored? No, Yes
LATERAL DESIGN CONTROL: Earthquake, Wind
SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) psf
Presumptive Bearing Capacity 2000 psf
Pile size, type, and capacity

- SPECIAL INSPECTIONS REQUIRED: No, Yes: See below
Fabricators (1704.2)
Steel Construction (1704.3)
Construction (1704.4)
Masonry Construction (1704.5)
Wood Construction (1704.6)
Verification of Soils (1704.7)
Driven Deep Foundations (1704.8)
Cast-in Place Deep Foundations (1704.9)
Helical Pile Foundations (1704.10)
Vertical Masonry Foundation Elements (1704.11)
Sprayed Fire-resistant Materials (1704.12)
Mastic and Intumescent Fire-resistant Coatings (1704.13)
Exterior Insulation and Finish Systems - EIFS (1704.14)
Special Cases (1704.15)
Smoke Control (1704.16)
Wind Requirements (1706)
Seismic Resistance (1707)

Table with 7 columns: USE, WATERCLOSETS, URINALS, LAVATORIES, SHOWERS / TUBS, DRINKING FOUNTAINS. Rows for REQUIRED, PROVIDED, EXISTING.

SPECIAL APPROVALS (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC ETC, DESCRIBE BELOW)

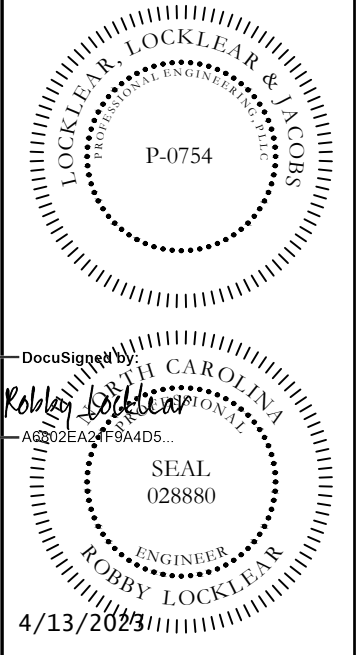
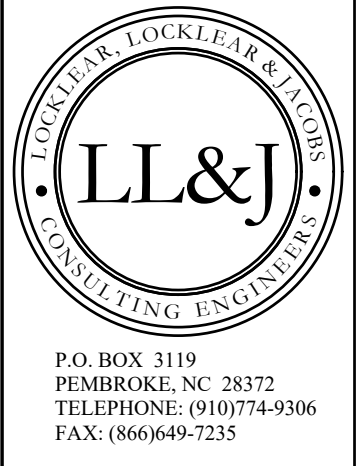
ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Climate Zone 3, 4, 5
Method of Compliance: Prescriptive (Energy Code), Performance (Energy Code)
Prescriptive (ASHRAE 90.1), Performance (ASHRAE 90.1)
Roof/ceiling Assembly (each assembly):
Description of assembly: FILLED CAVITY FIBERGLASS INSULATION
U-Value of total assembly: 0.033
R-Value of insulation: R-42
Skylights in each assembly:
U-Value of skylight:
total square footage of skylights in each assembly:
Exterior Walls (each assembly):
Description of assembly: WOOD FRAMED WALL FIBERGLASS BLANKET
U-Value of total assembly:
R-Value of insulation: R-21
Openings (windows or doors with glazing):
U-Value of assembly:
SHGC coefficient: 0.25 MAX
projection factor:
low e required, if applicable:
Door R-Values: 1.45, 1.3 FOR ENTRANCE DOOR

Walls below grade (each assembly):
Description of assembly: NA
U-Value of total assembly:
R-Value of insulation:
Floors over unconditioned space (each assembly):
Description of assembly: NA
U-Value of total assembly:
R-Value of insulation:
Floors slab on grade:
Description of assembly: SLAB ON GRADE
U-Value of total assembly:
R-Value of insulation: NOT REQUIRED
Horizontal/Vertical requirement:
Slab heated: NO

MECHANICAL SUMMARY
MECH. SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Thermal Zone
winter dry bulb: 27° F
summer dry bulb: 95° F
Interior design conditions
winter dry bulb: 70° F
summer dry bulb: 75° F
relative humidity: 50%
Building heating load: 15,000 BTU/HR
Building cooling load: 2.6 TON
Mechanical Spacing Conditioning System
Unitary
description of unit: HEATPUMP
heating efficiency: SEE EQUIPMENT SCHEDULES
cooling efficiency: SEE EQUIPMENT SCHEDULES
size category of unit:
Boiler
Size category. If oversized, state reason: N/A
Chiller
Size category. If oversized, state reason: N/A
List equipment efficiencies:

ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT
Method Of Compliance
Energy Code: Prescriptive, Performance
ASHRAE 90.1: Prescriptive, Performance
Lighting schedule: (each fixture type)
Lamp type required in fixture: LED
Number of lamps in fixture: LED
Ballast type used in the fixture: N/A
Number of ballasts in fixture: N/A
Total wattage per fixture: SEE LIGHTING SCHEDULE
Total interior wattage specified vs allowed: 366 VS 537
(whole building or space by space)
Total exterior wattage specified vs allowed: N/A
Additional Prescriptive Compliance
506.2.1 More Efficient Mechanical Equipment
506.2.2 Reduced Lighting Power Density
506.2.3 Energy Recovery Ventilation System
506.2.4 Higher Efficiency Service Water Heating
506.2.5 On-Site Supply of Renewable Energy
506.2.6 Automatic Daylighting Control Systems

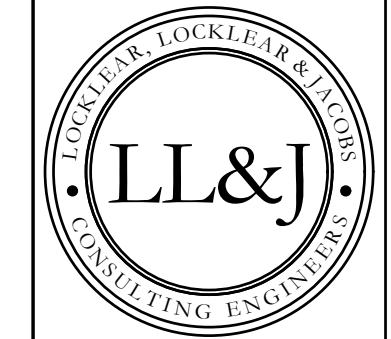


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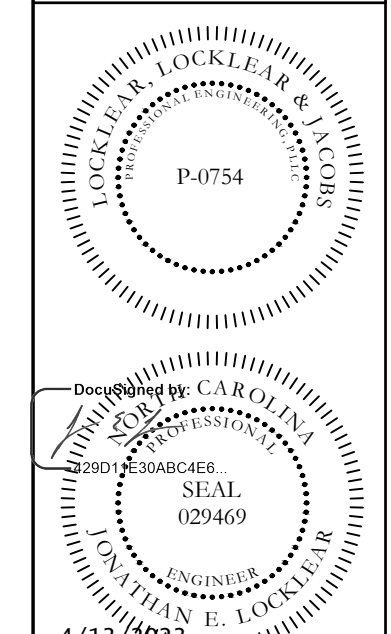
Table with 2 columns: REVISION, DATE - DESCRIPTION. Includes revision 1 for CLIMATE ZONE AND ASSOCIATED VALUES UPDATED.

DATE: 1/10/2023
DRAWN BY: RDH
CHECKED BY: JEL
SHEET TITLE: APPENDIX B
SHEET NUMBER: G-002
PROJECT# 21-11110

Printed: Thu 13-Apr-2023 01:18PM



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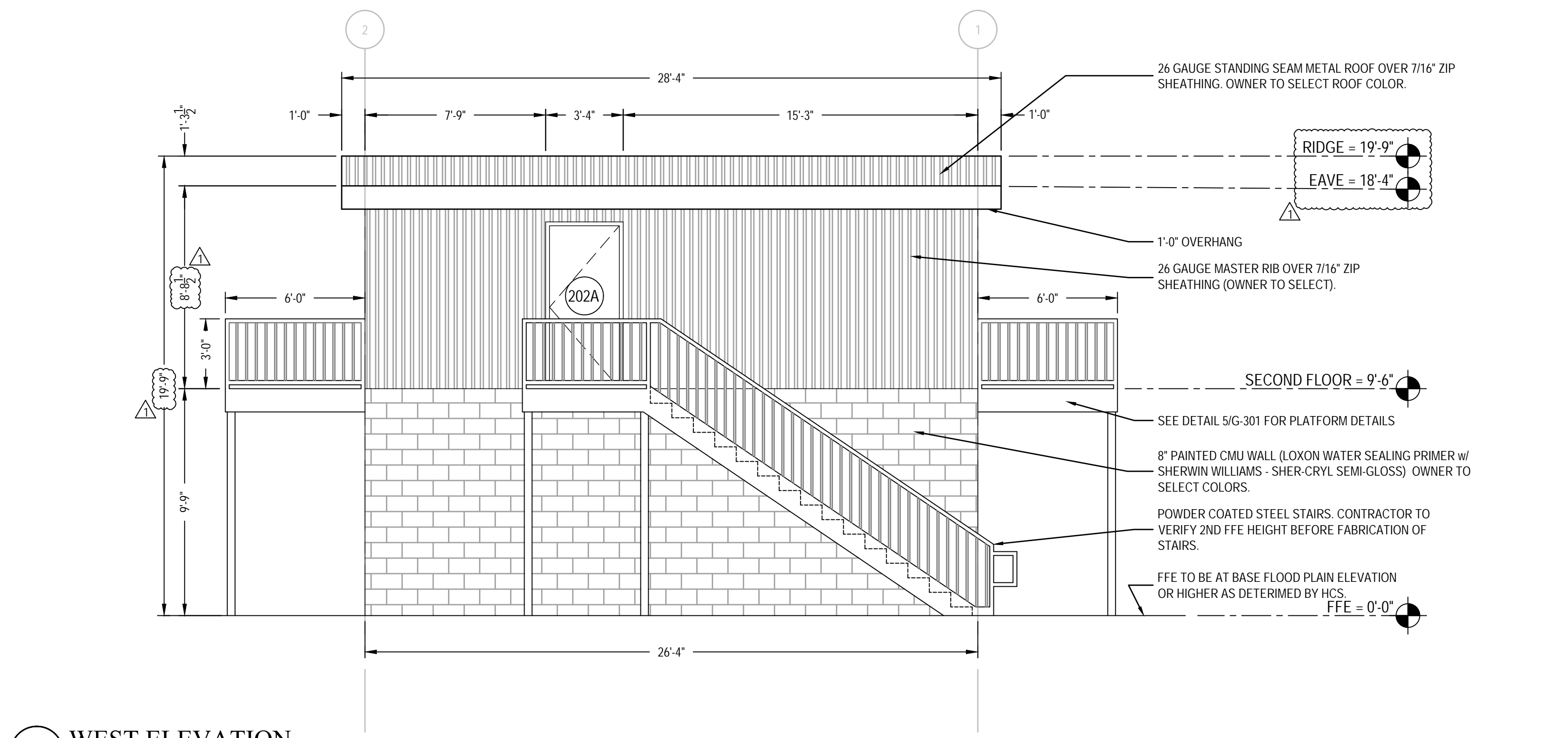
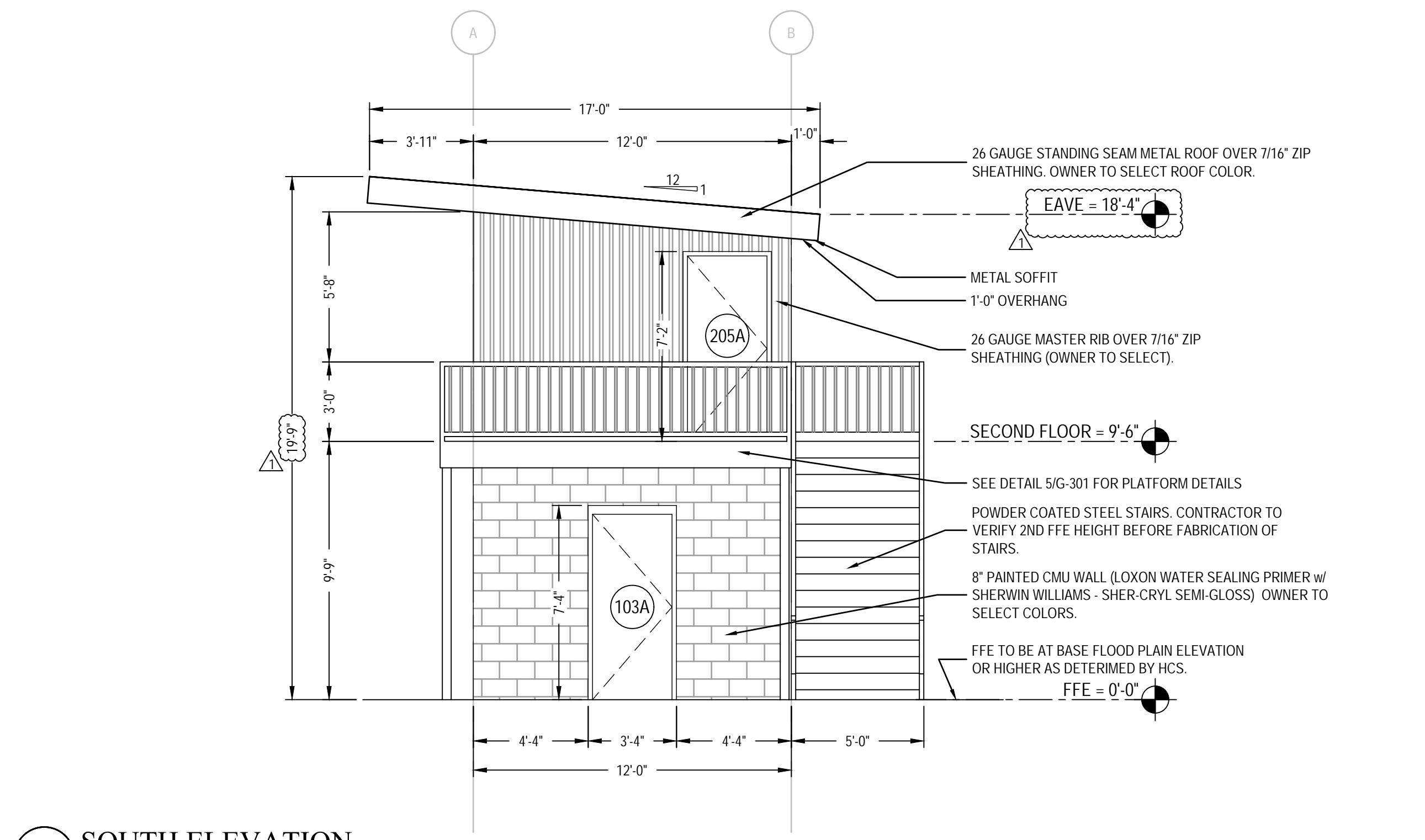
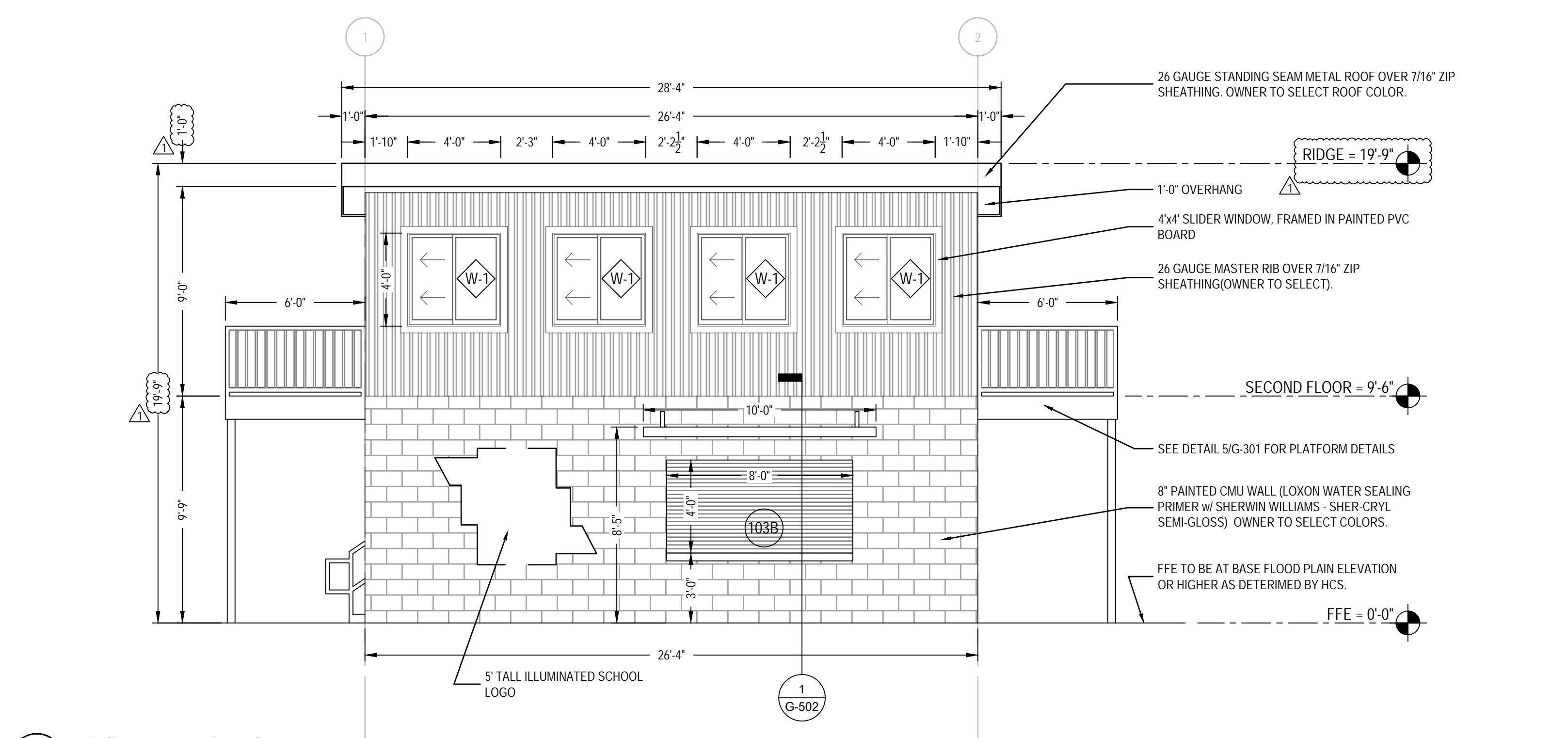
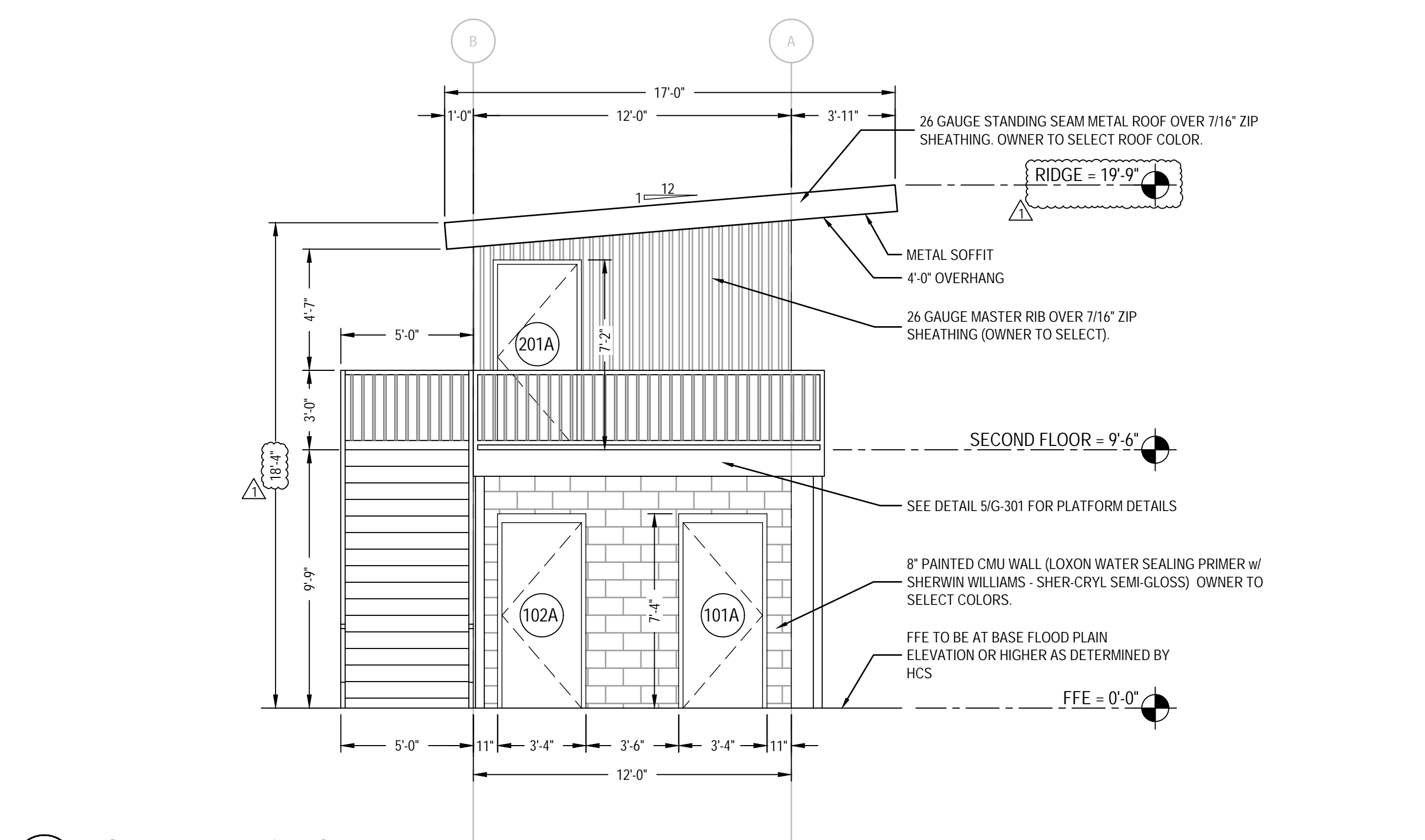
PROJECT INFORMATION:

REV#	DATE	DESCRIPTION
1	4/12/2023	ROOF THICKNESS CHANGED AND ELEVATIONS UPDATED.
2		
3		
4		
5		

DATE: 1/10/2023  
DRAWN BY: RDH  
CHECKED BY: JEL

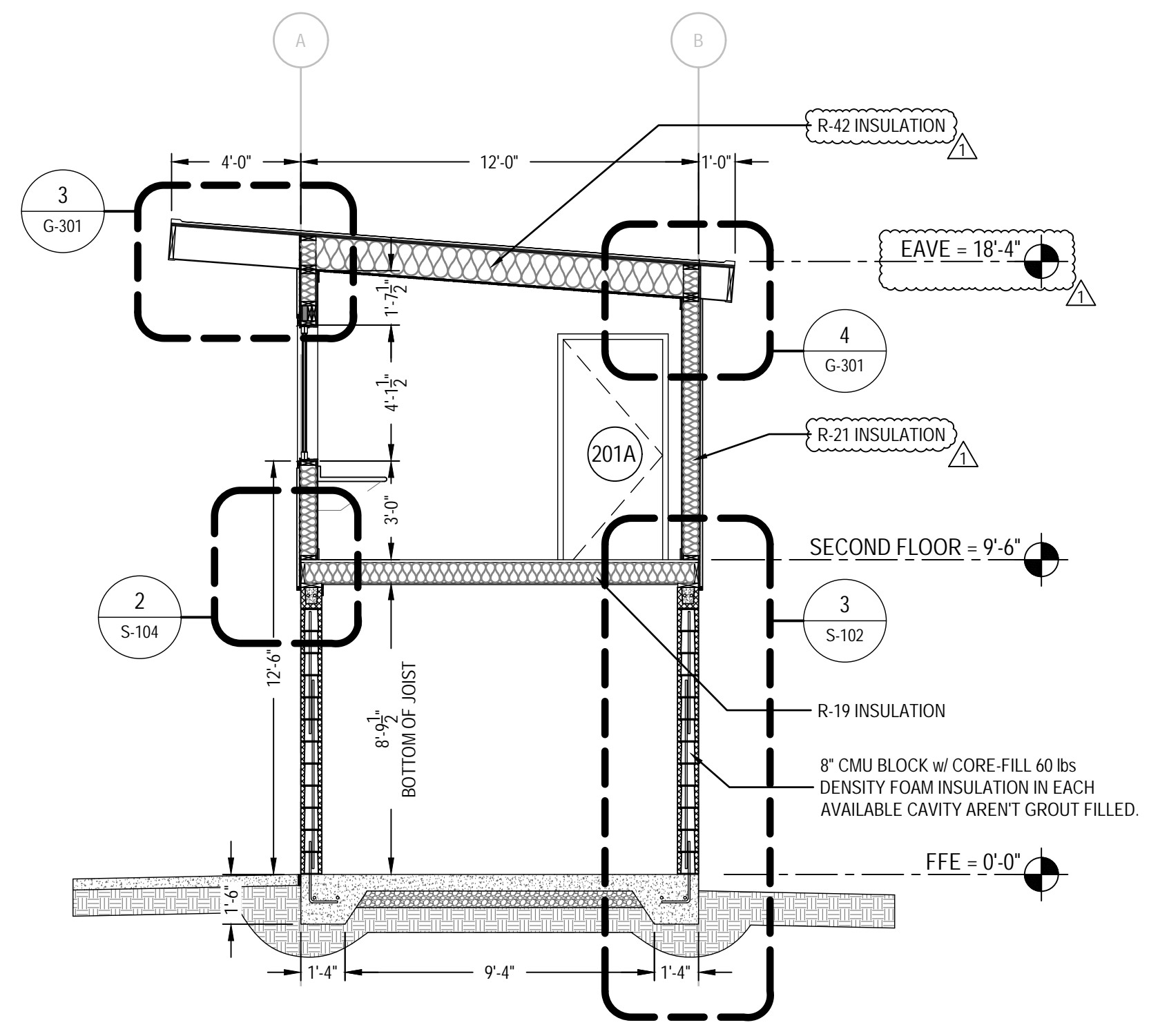
SHEET TITLE:  
**EXTERIOR ELEVATIONS**  
SHEET NUMBER:  
**G-201**  
PROJECT# 21-1110

FINAL RELEASED FOR CONSTRUCTION

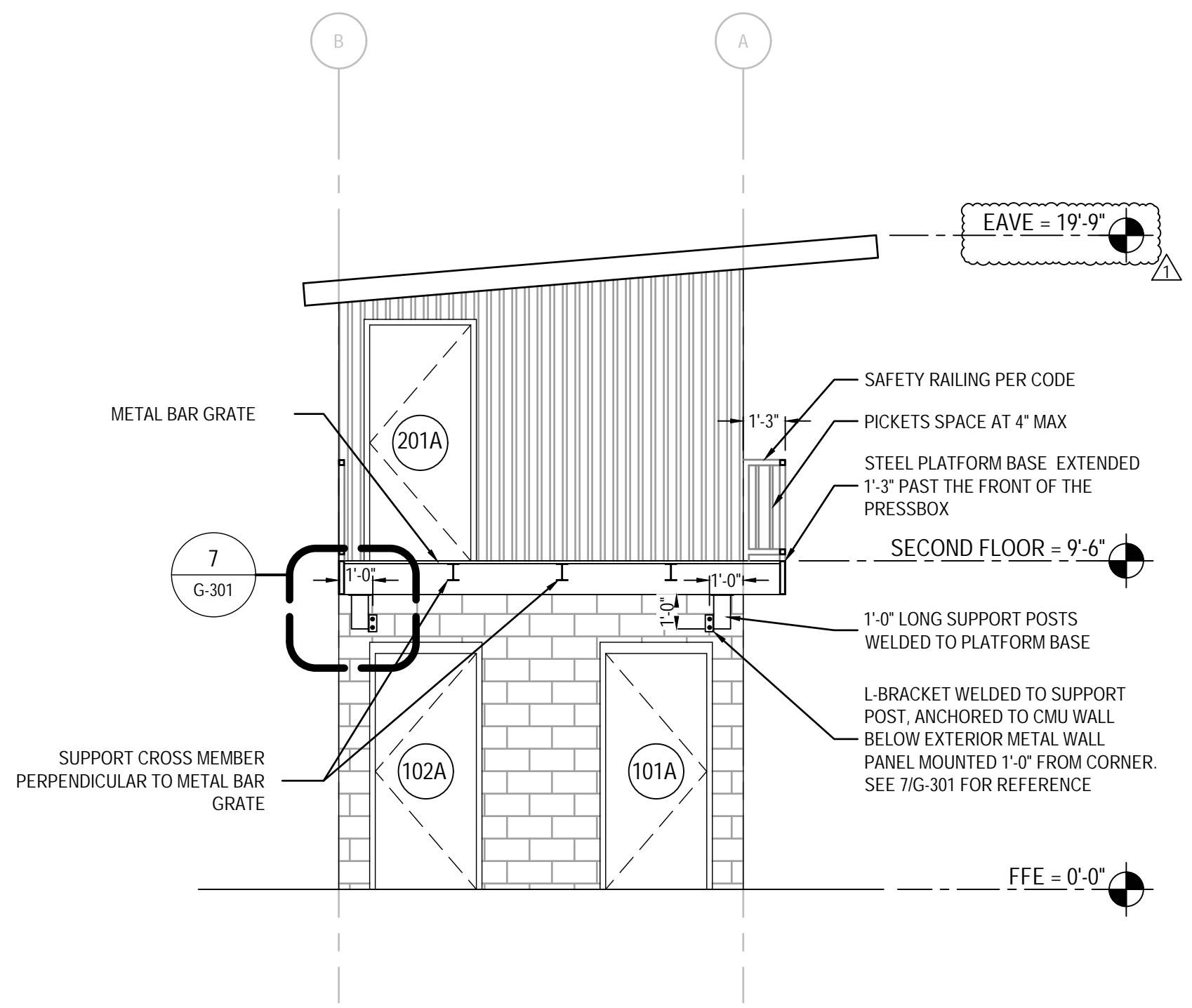


C:\Users\CARLOS\AppData\Local\Temp\Pub\Pub\1110\_Harnett\_Central\_Press\_Box.dwg, G-201 EXTERIOR ELEVATIONS, Carlos-Ll&J

Printed: Thu 13-Apr-2023 - 01:18PM

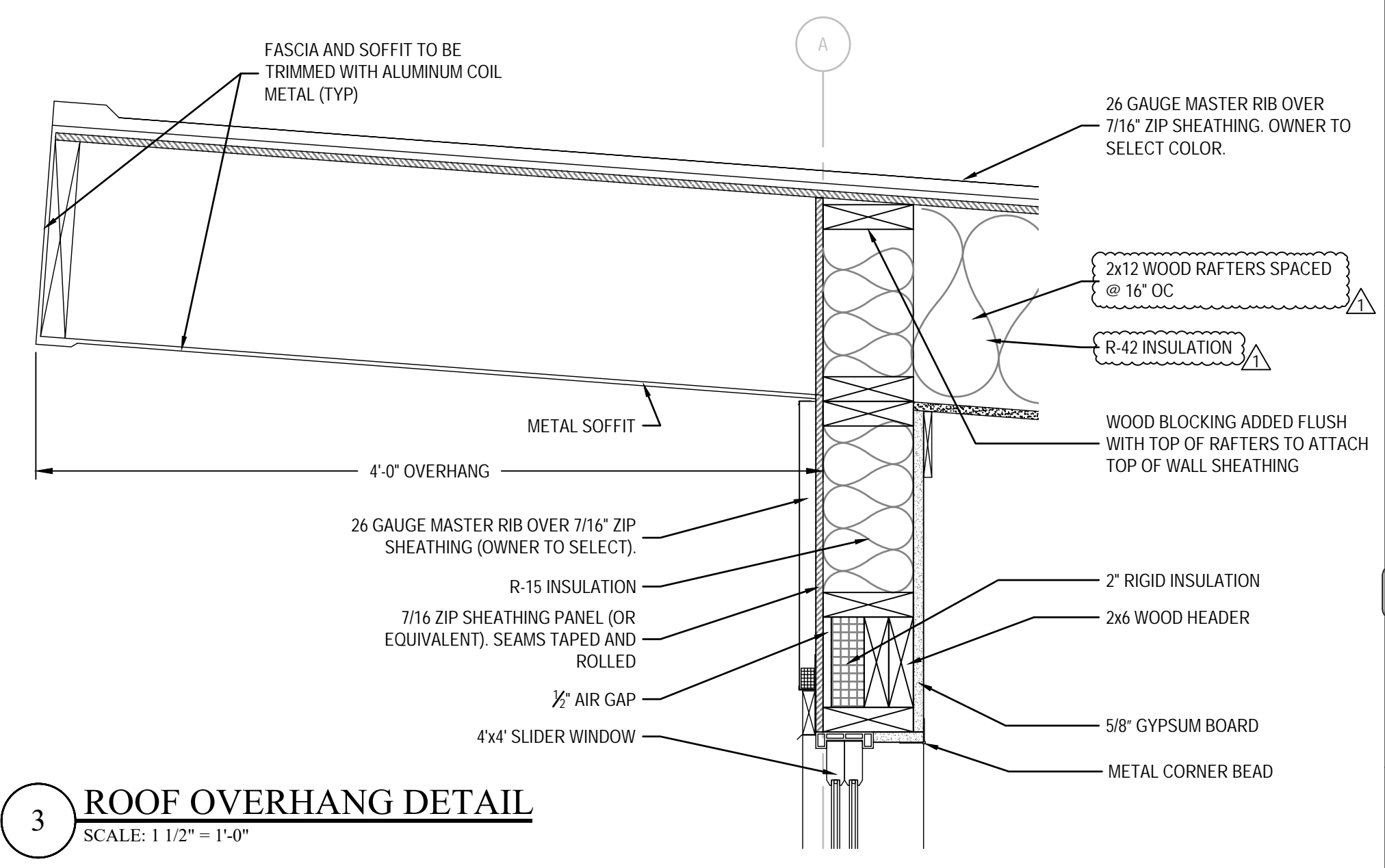


1 OVERALL BUILDING SECTION  
SCALE: 1/4" = 1'-0"

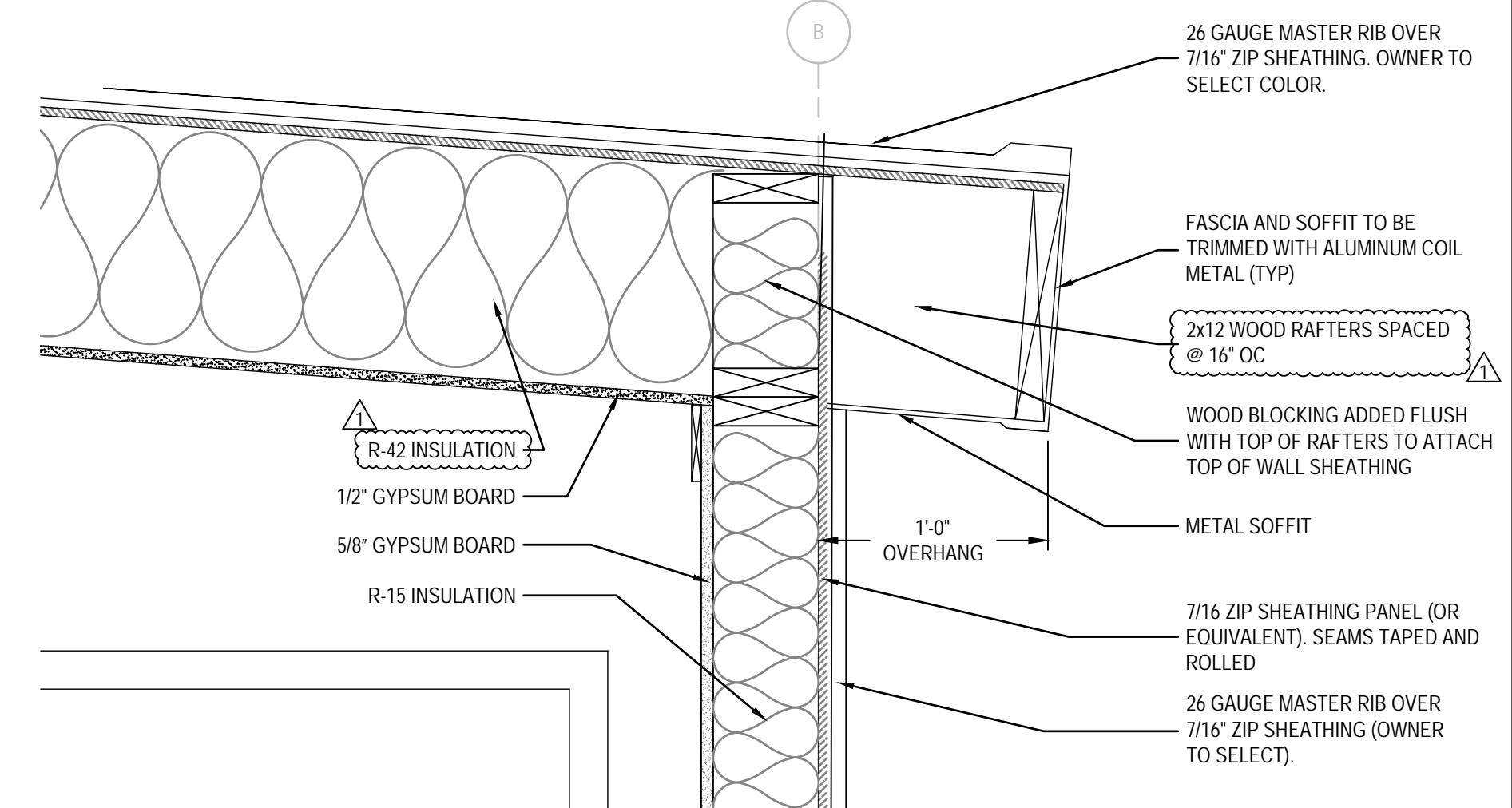


2 MEDIA PLATFORM SECTION  
SCALE: 1/4" = 1'-0"

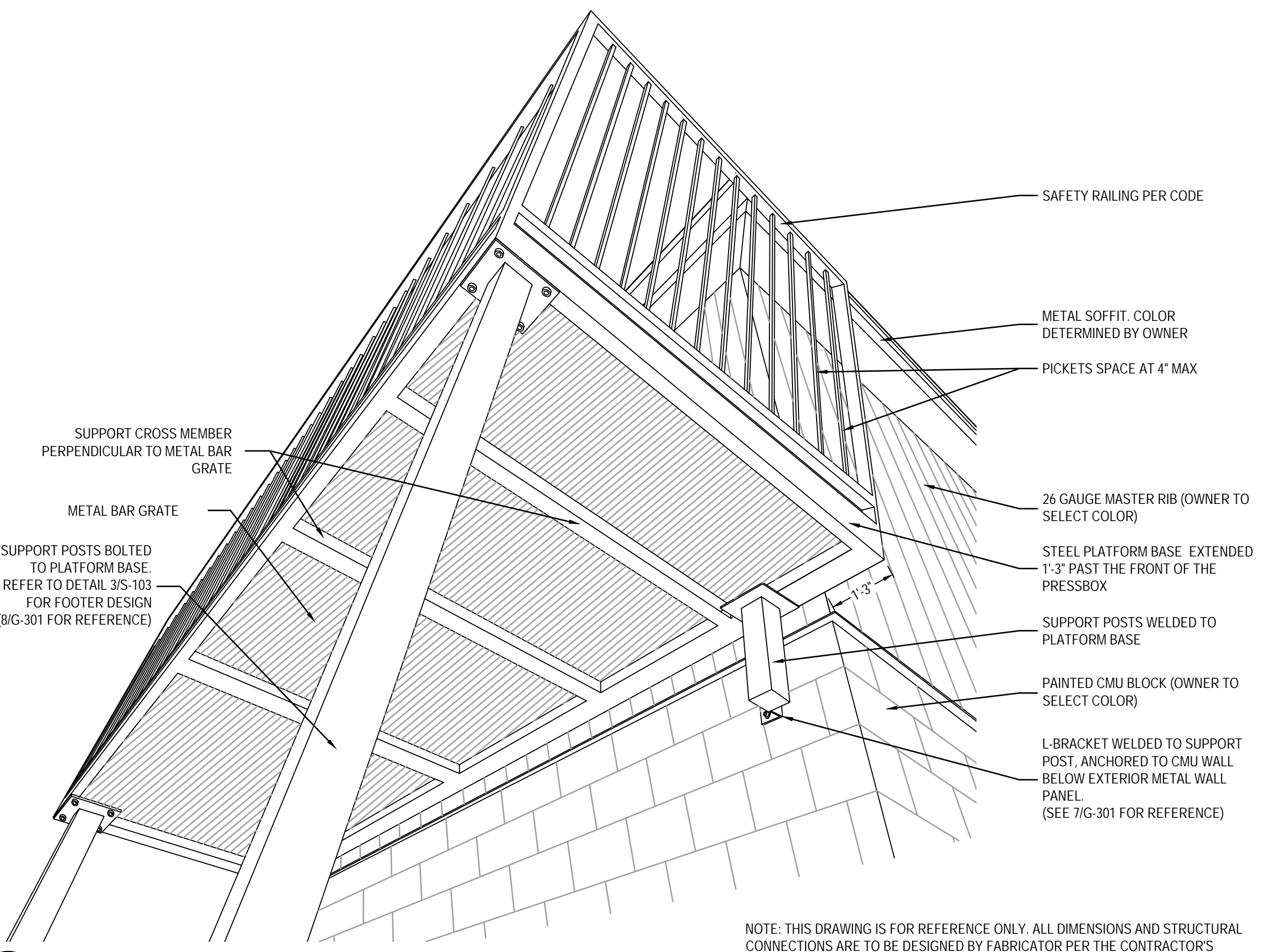
NOTE: WHERE SUPPORT BRACKETS ARE ANCHORED TO THE CMU WALL, THOSE CELLS ARE TO BE GROUT FILLED AND REINFORCED W/ #5 REBAR REINFORCEMENT.



3 ROOF OVERHANG DETAIL  
SCALE: 1 1/2" = 1'-0"



4 ROOF OVERHANG DETAIL  
SCALE: 1 1/2" = 1'-0"



5 MEDIA PLATFORM DETAIL  
NTS

NOTE: THIS DRAWING IS FOR REFERENCE ONLY. ALL DIMENSIONS AND STRUCTURAL CONNECTIONS ARE TO BE DESIGNED BY FABRICATOR PER THE CONTRACTOR'S REQUEST. THE STRUCTURAL ENGINEER WILL REVIEW THE DESIGN AND ADVISE AS NEEDED TO PROVIDE A SECURE AND STABLE PLATFORM. THE ENTIRE STRUCTURE IS TO BE BLACK POWDER COATED. STAIR CONNECTIONS TO THE BUILDING ARE TO BE DETERMINED BY THE FABRICATOR.



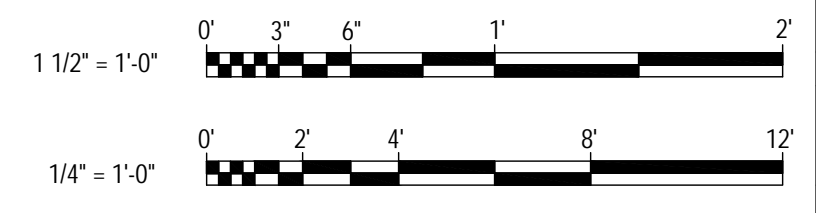
6 STAIR ANCHOR DETAIL  
NTS



7 PLATFORM BRACKET CONNECTION  
NTS



8 SUPPORT POST DETAIL  
NTS



**LL&J**  
CONSULTING ENGINEERS  
P.O. BOX 3119  
PEMBROKE, NC 28372  
TELEPHONE: (910)774-9306  
FAX: (866)649-7235

Professional Engineer Seal for L.L. JOHNSON, E. LOCKLEAR, License No. 41372, State of North Carolina, Seal No. 029469, dated 4/13/2023.

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PROJECT INFORMATION:

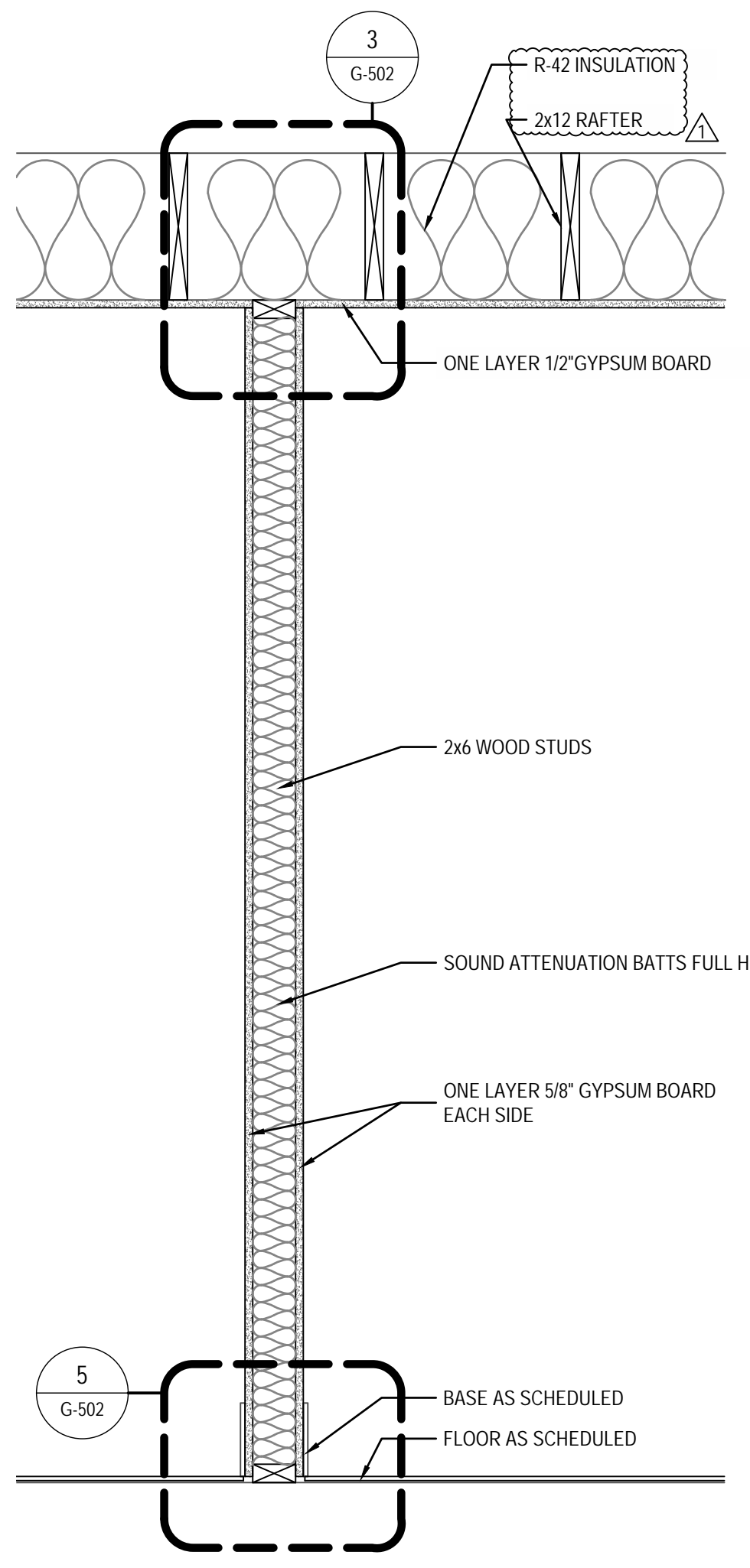
REVISION	DATE	DESCRIPTION
1	4/13/2023	ROOF RAFTERS AND INSULATION CHANGED; ELEVATIONS UPDATED.
2		
3		
4		
5		

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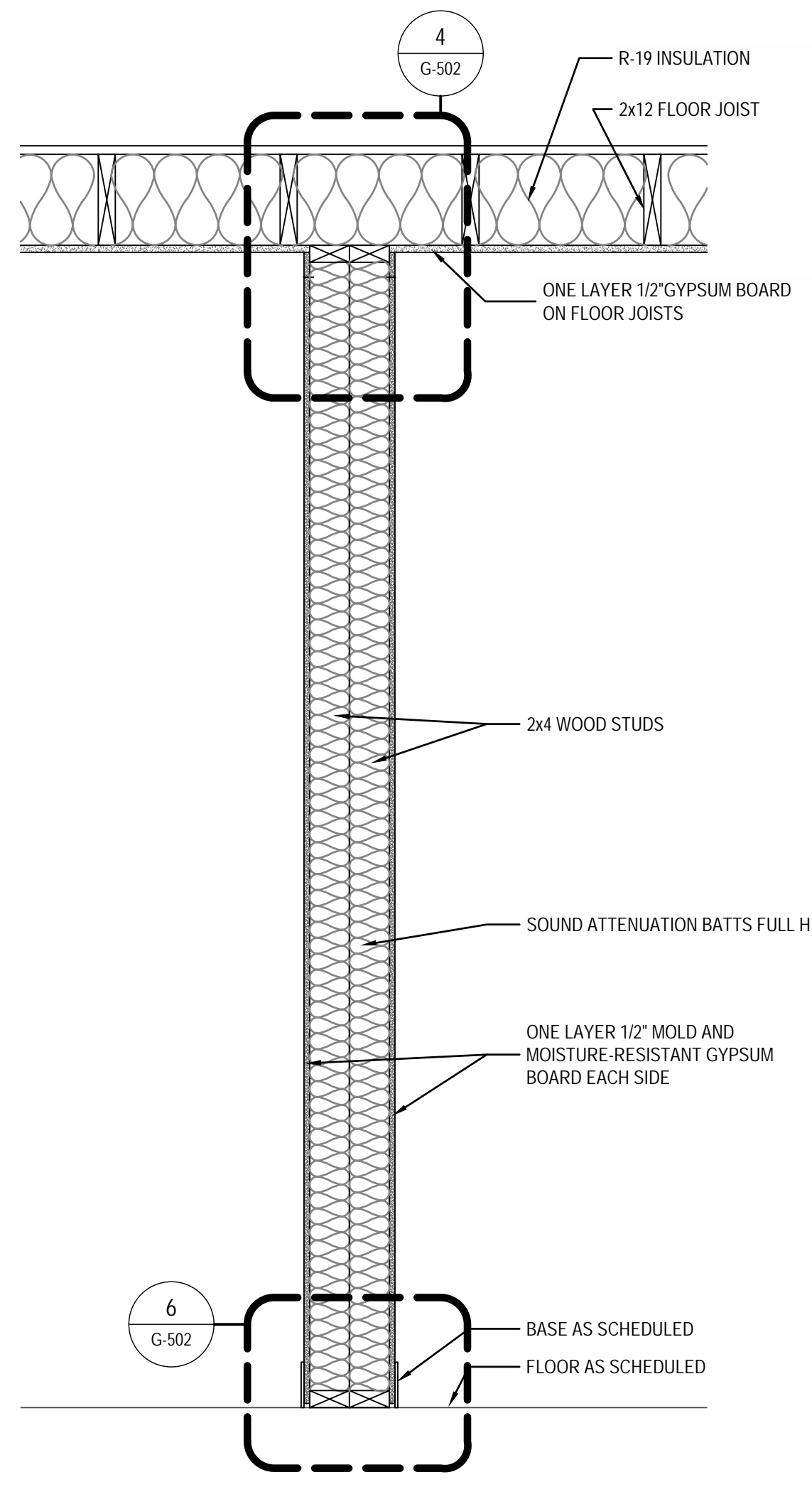
DATE: 1/10/2023  
DRAWN BY: RDH  
CHECKED BY: JEL

**BUILDING SECTIONS AND DETAILS**  
SHEET NUMBER  
**G-301**  
PROJECT# 21-11110

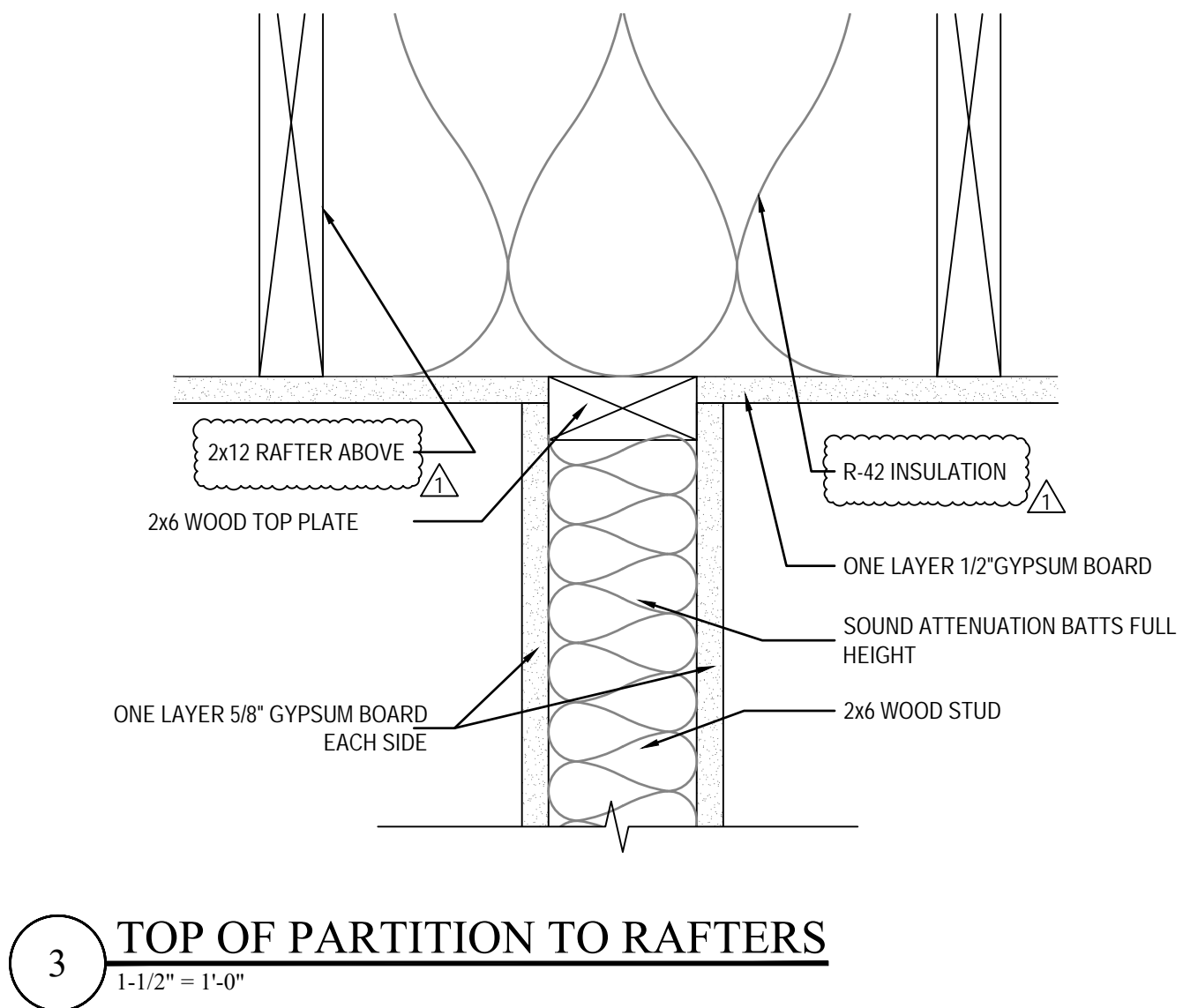
C:\Users\CARLOS-1\AppData\Local\Temp\AutoPublish\_22680\21-11110 Harnett Central Press Box.dwg, G-301 BUILDING SECTIONS AND DETAILS, Carlos-LL&J



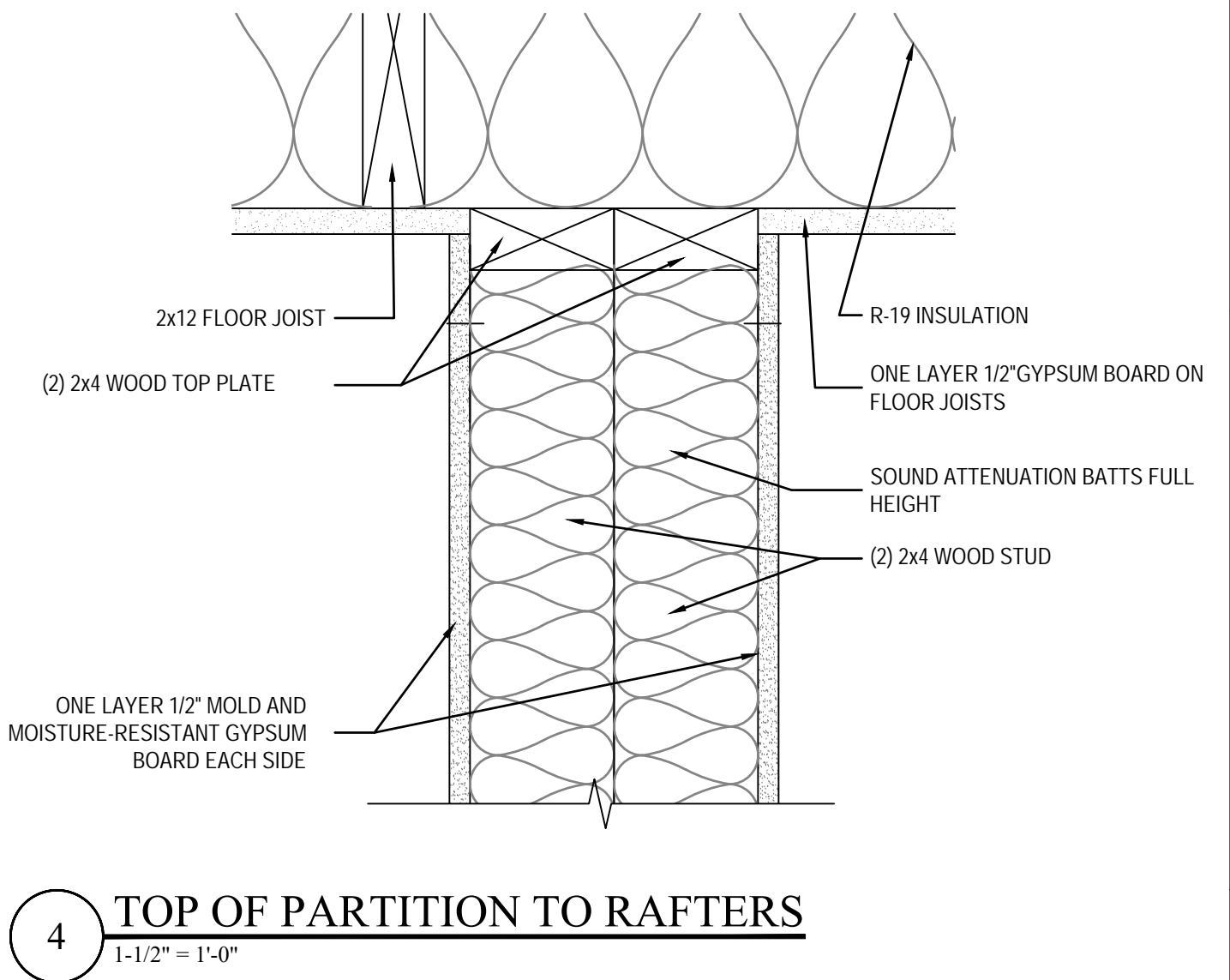
1 PARTITION TYPE P-1  
1" = 1'-0"



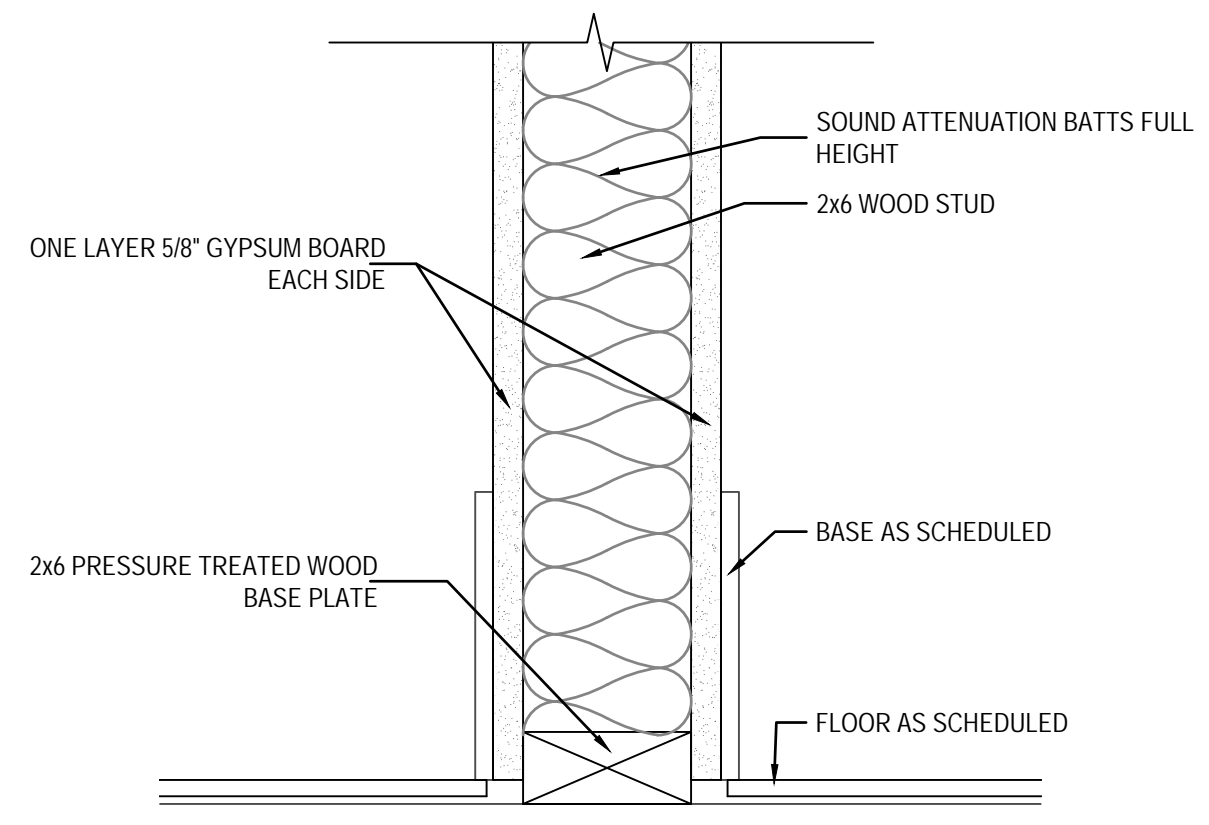
2 PARTITION TYPE P-2  
1" = 1'-0"



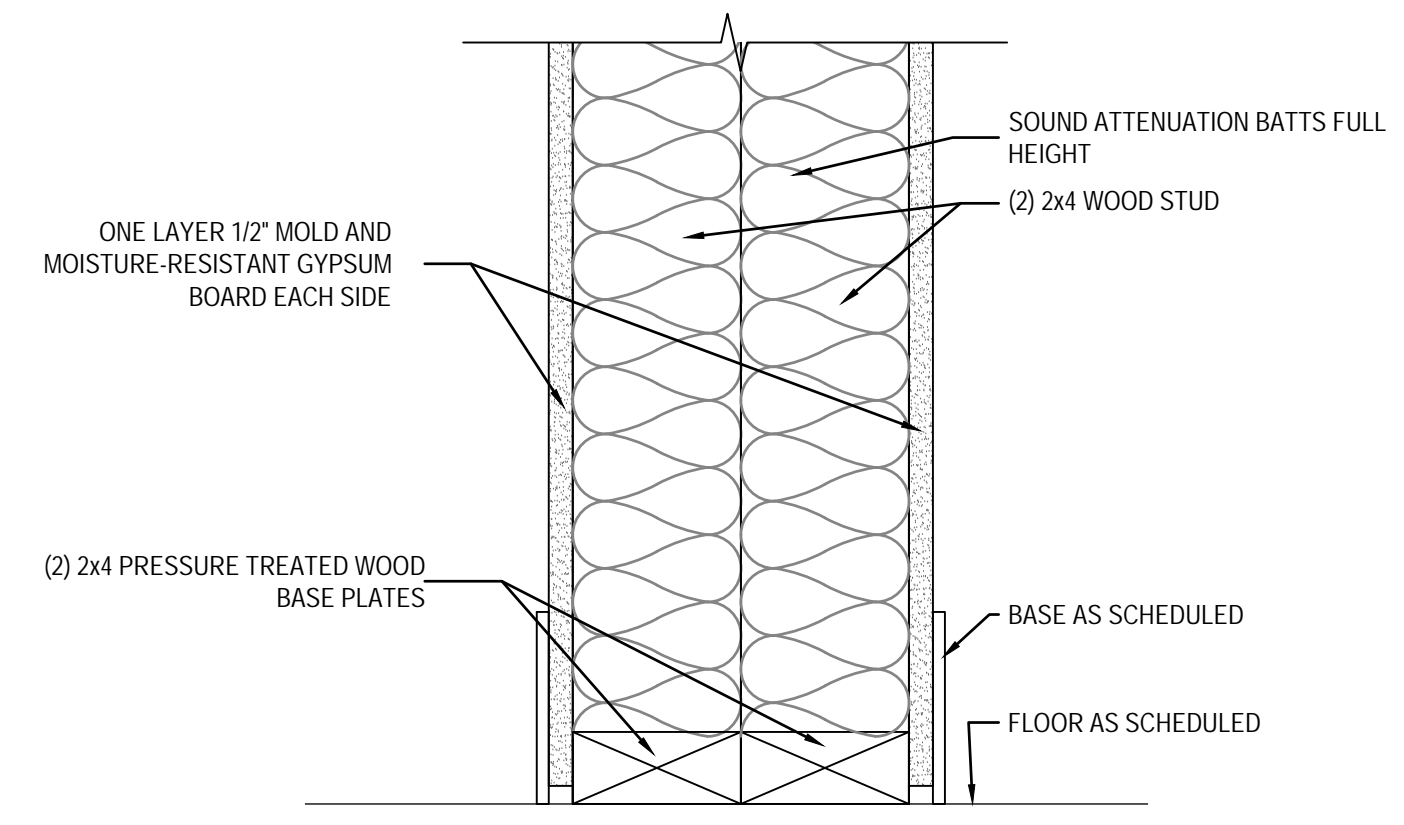
3 TOP OF PARTITION TO RAFTERS  
1-1/2" = 1'-0"



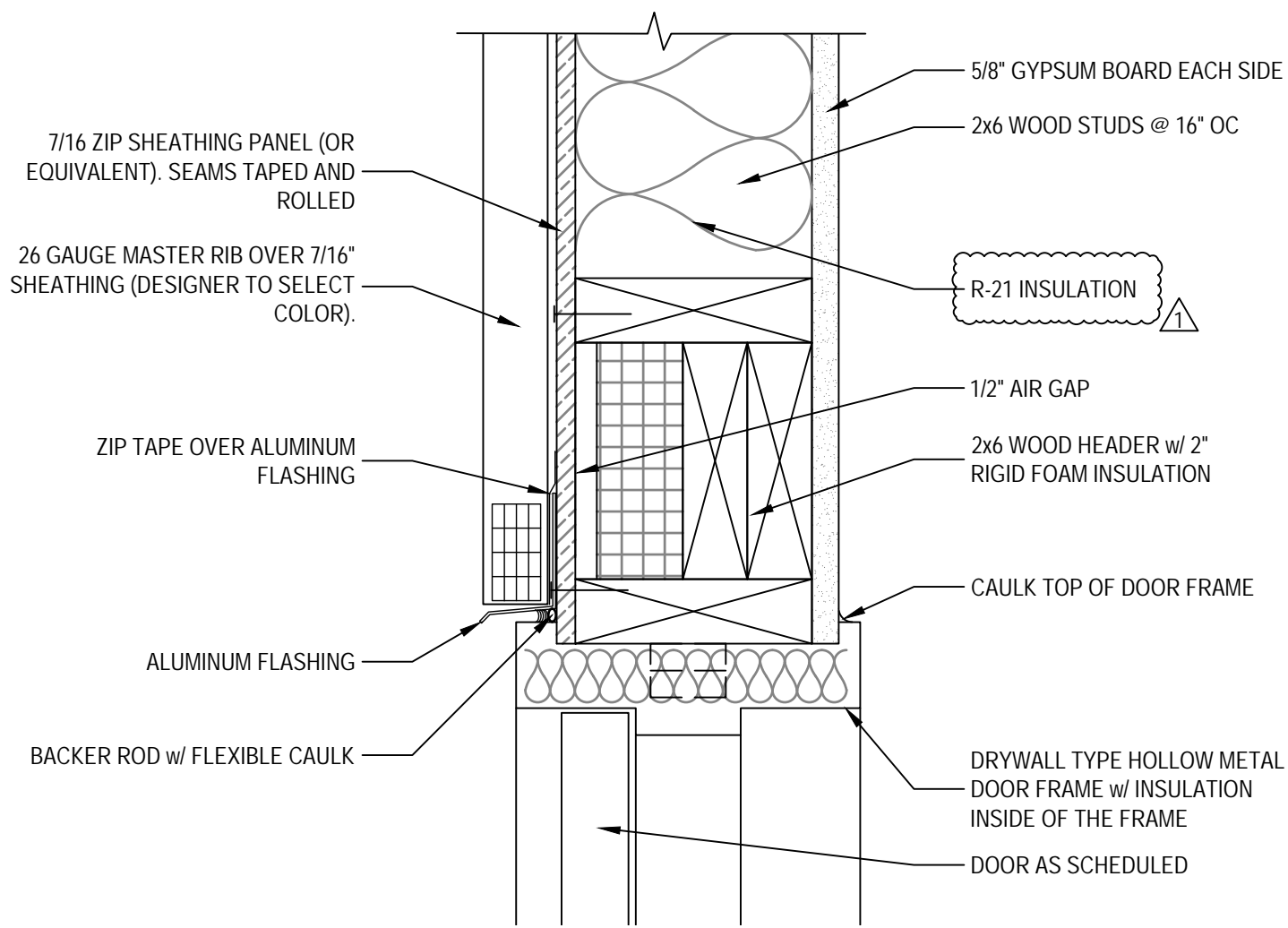
4 TOP OF PARTITION TO RAFTERS  
1-1/2" = 1'-0"



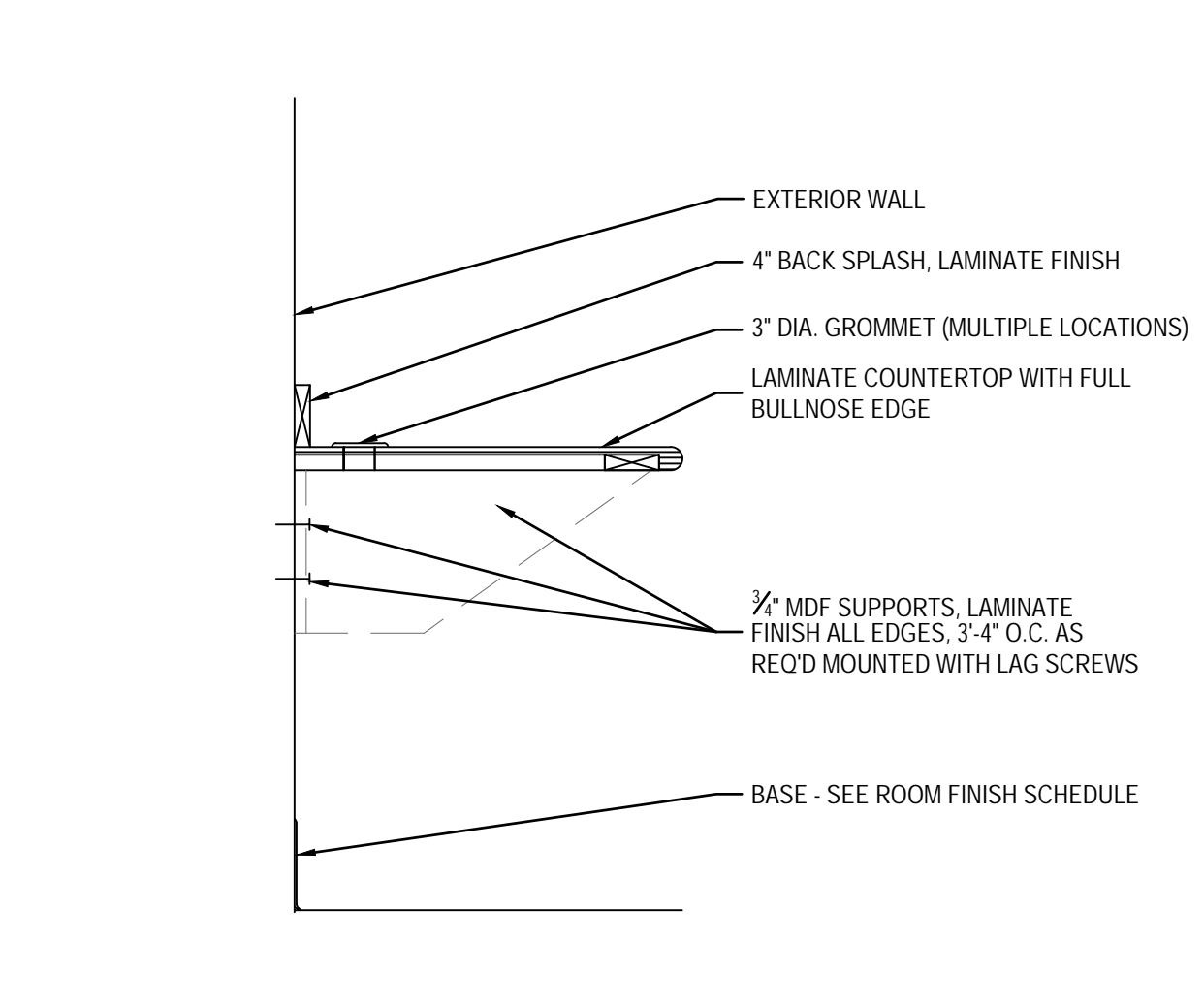
5 BASE OF PARTITION  
1-1/2" = 1'-0"



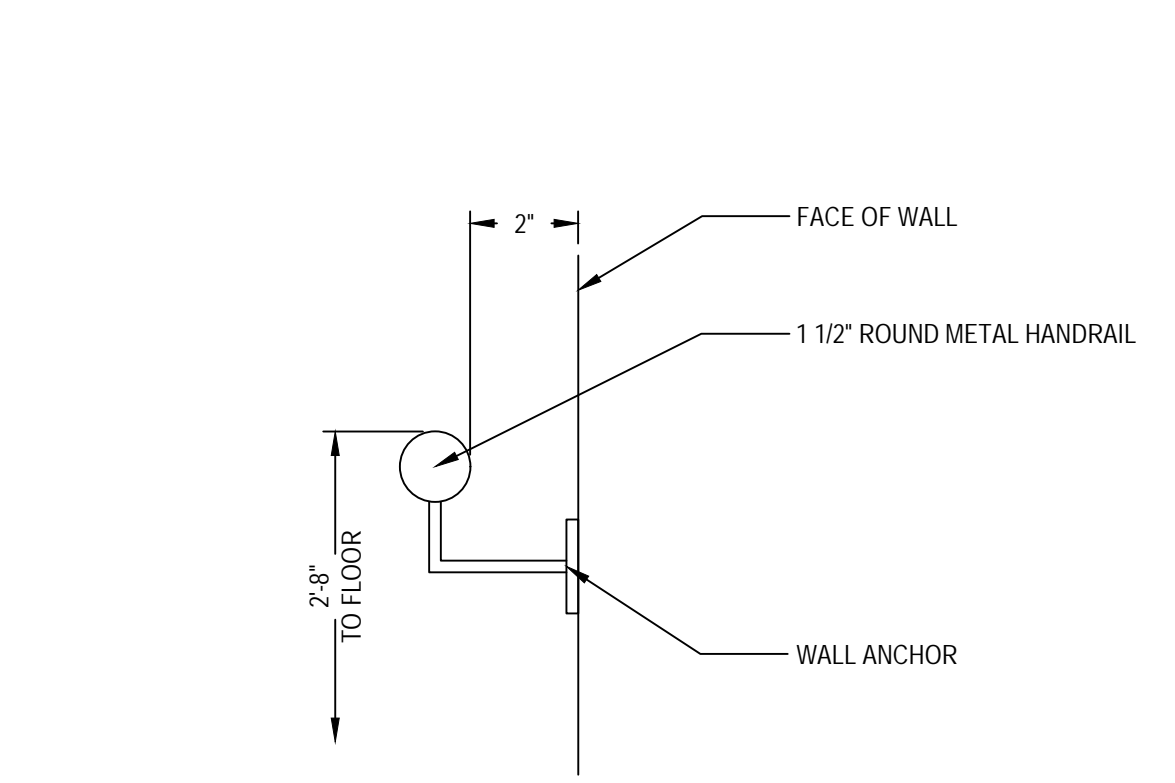
6 BASE OF PARTITION  
1-1/2" = 1'-0"



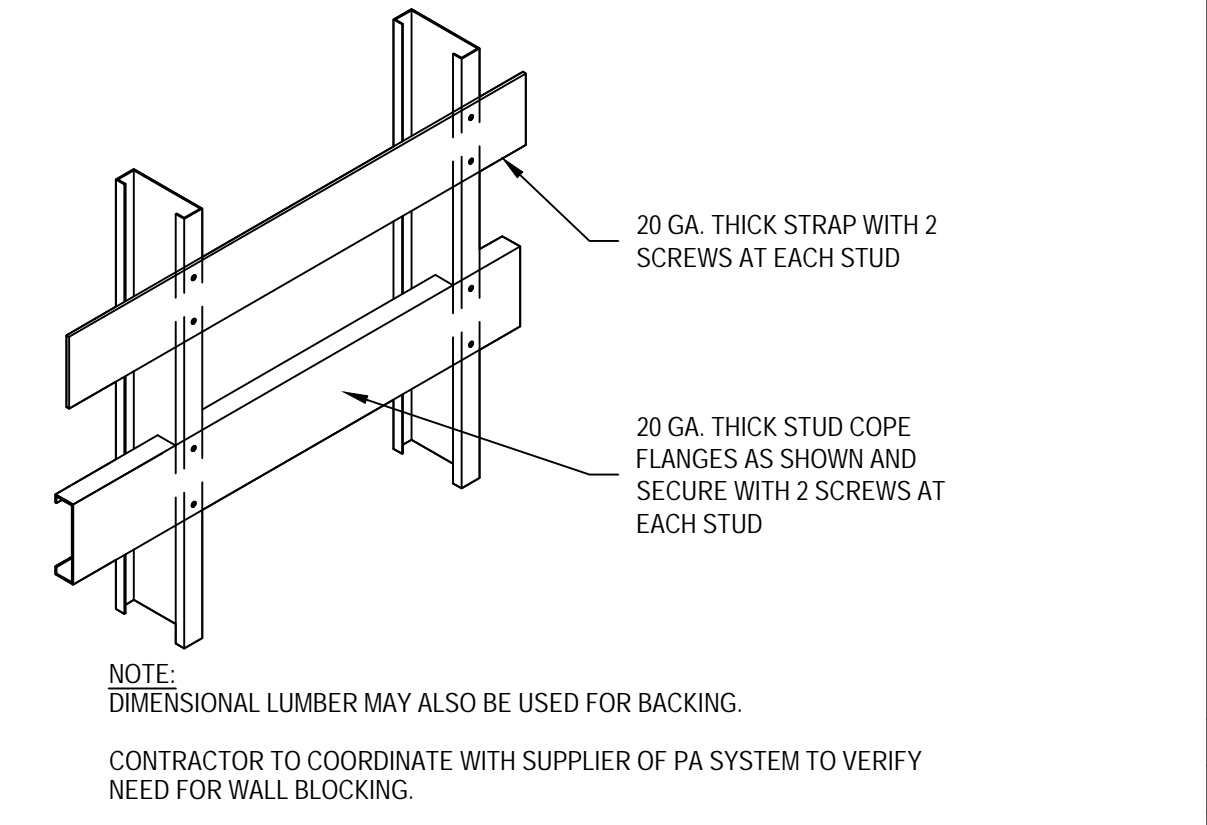
7 METAL PANEL EXTERIOR HEAD/JAMB DETAIL  
3" = 1'-0"



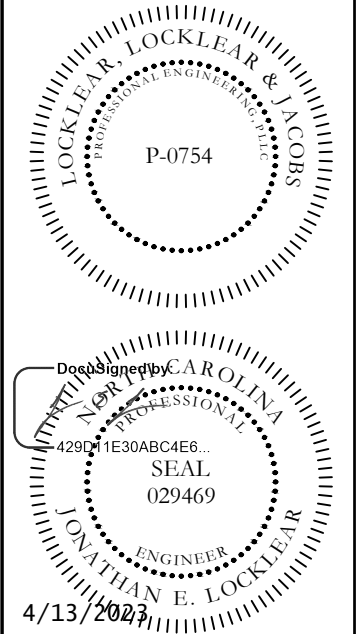
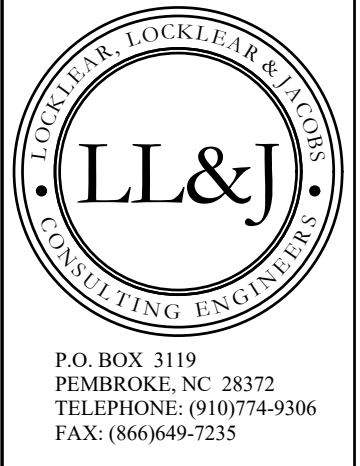
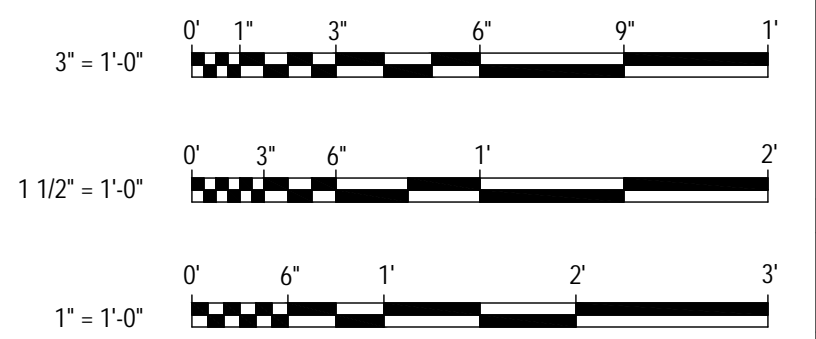
8 CONTINUOUS COUNTER TOP DETAIL  
1" = 1'-0"



9 HANDRAIL DETAIL  
NTS



10 CABINET BLOCKING DETAIL  
NTS



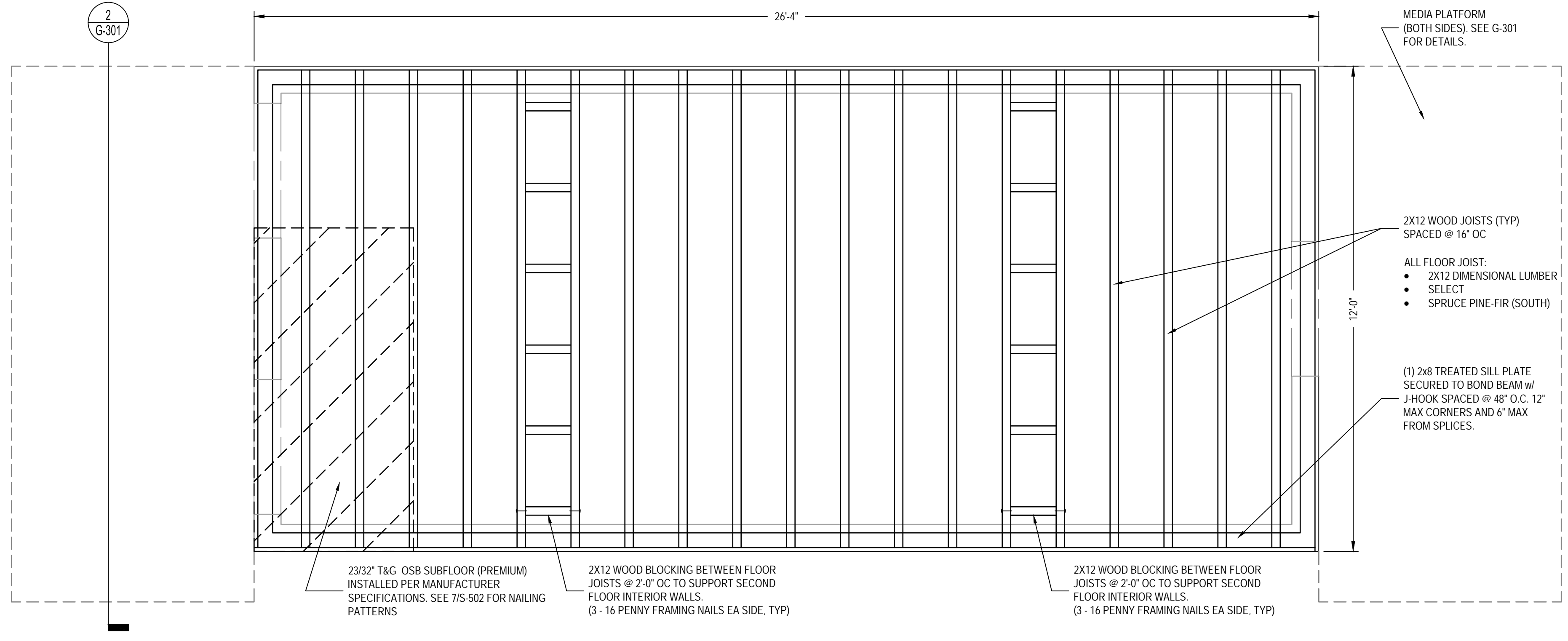
PROJECT INFORMATION:  
**HARNETT CENTRAL PRESS BOX**  
**HARNETT COUNTY SCHOOLS**  
 2911 HARNETT CENTRAL RD  
 ANGIER, NC 27501

REVISION - DATE - DESCRIPTION:	1	2	3	4	5
1. 4/13/2023					
ROOF RAFTERS AND INSULATION CHANGED					
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DATE: 1/10/2023  
 DRAWN BY: RDH  
 CHECKED BY: JEL

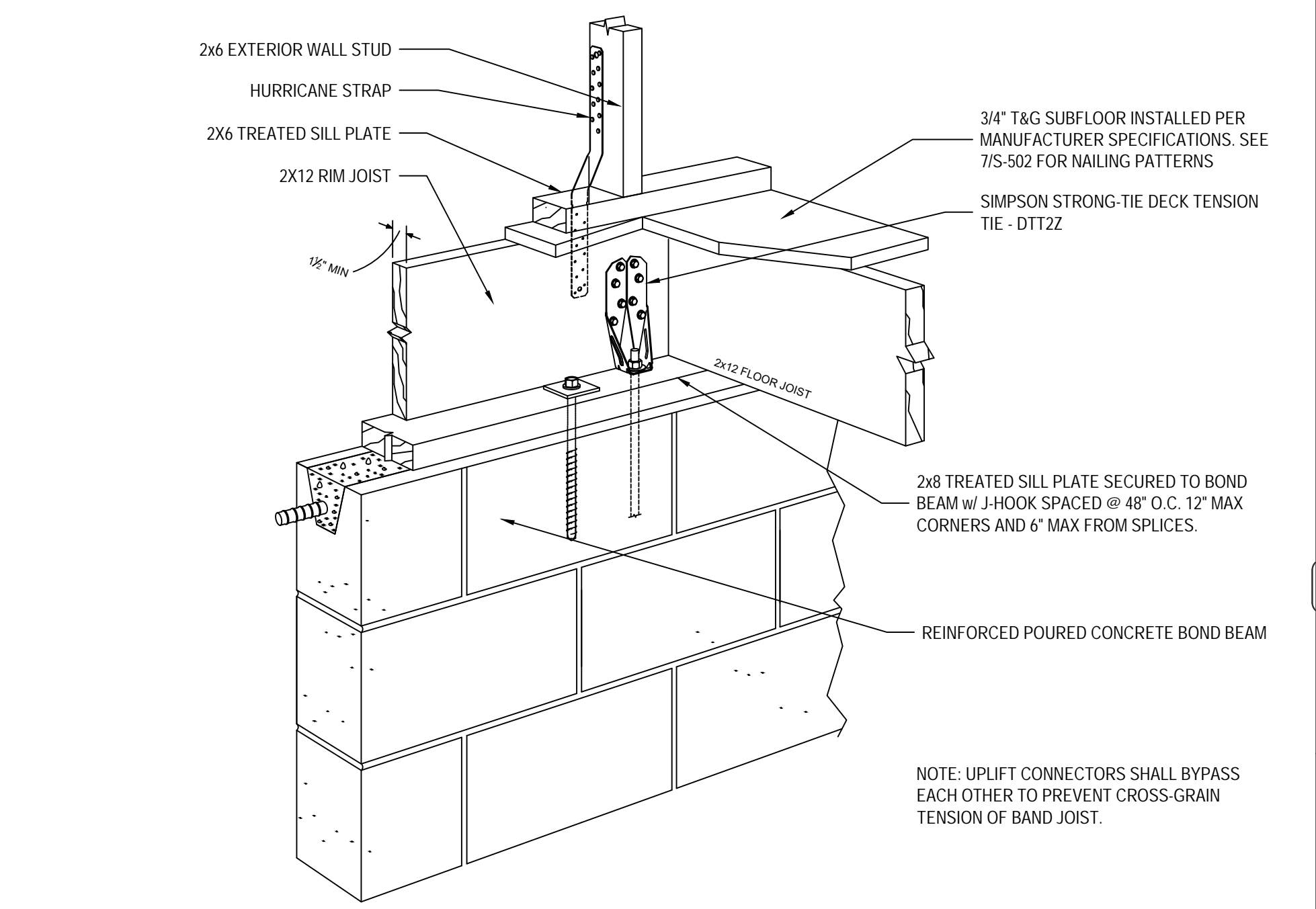
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**GENERAL DETAILS**  
 SHEET NUMBER:  
**G-502**  
 PROJECT# 21-11110

Printed: Thu 13-Apr-2023 - 01:18PM

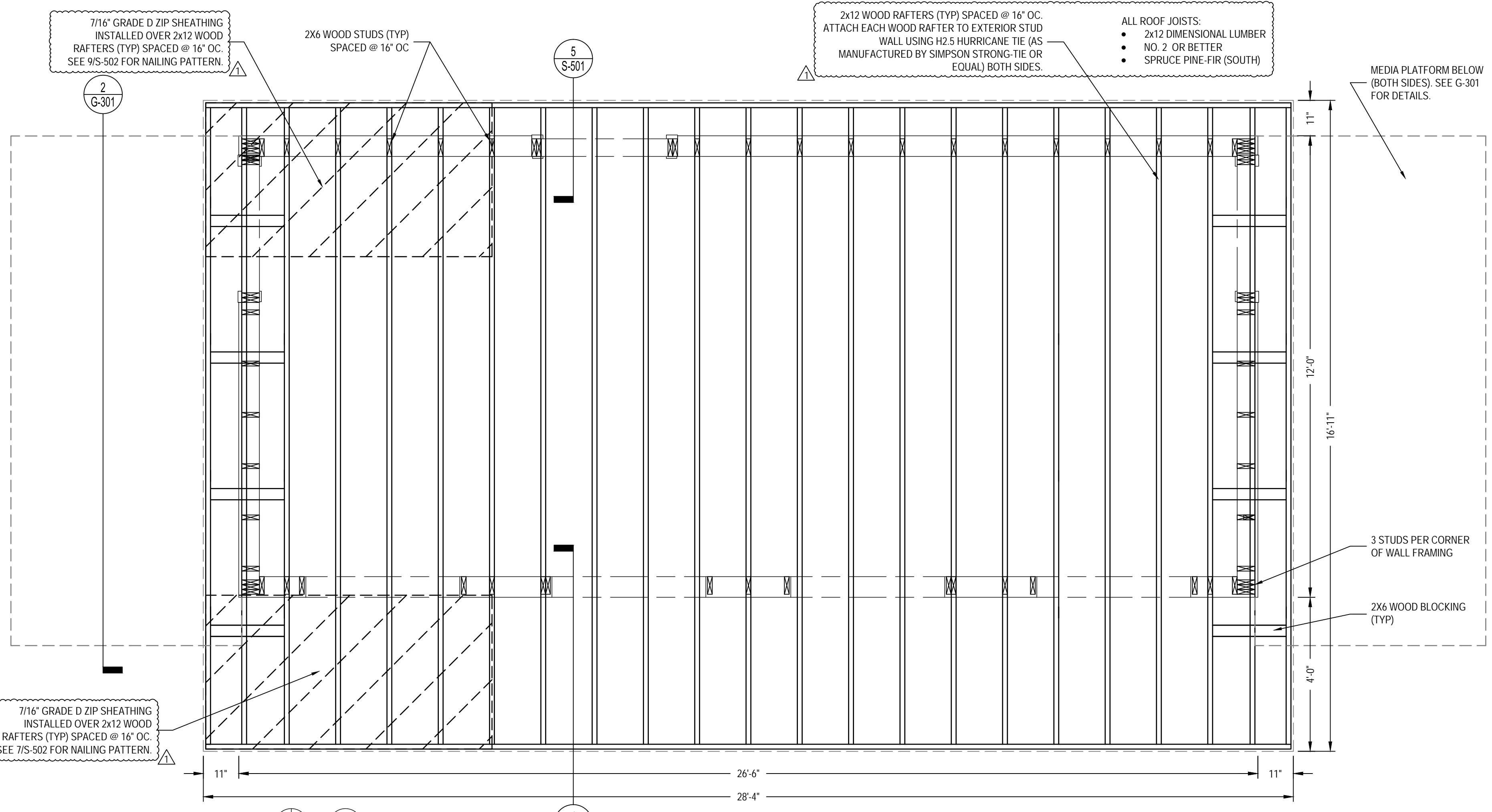


**1** SECOND FLOOR FRAMING PLAN  
 1/2" = 1'-0"

PLAN NORTH ACTUAL NORTH

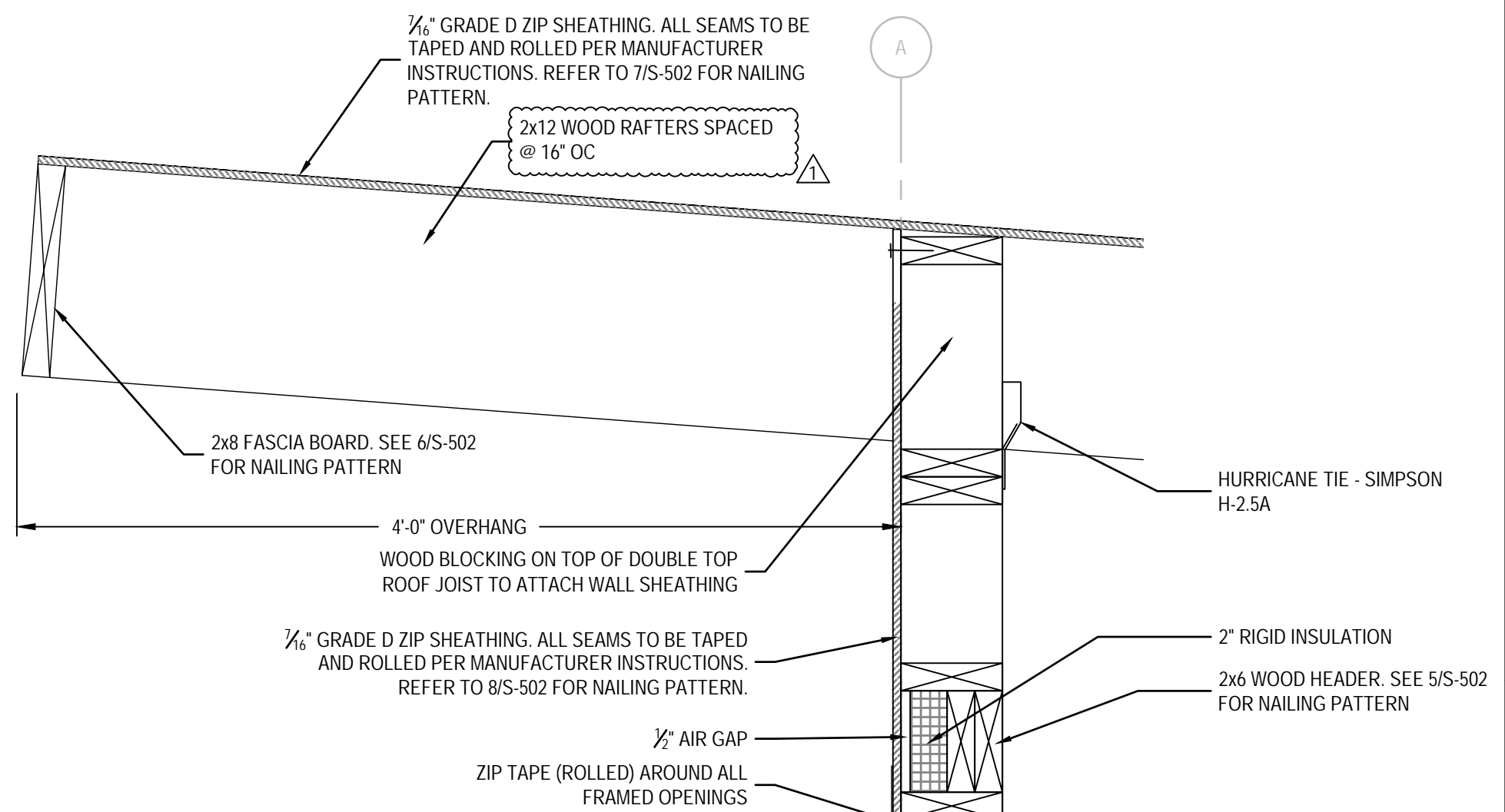


**2** FLOOR FRAMING DETAIL  
 N.T.S.

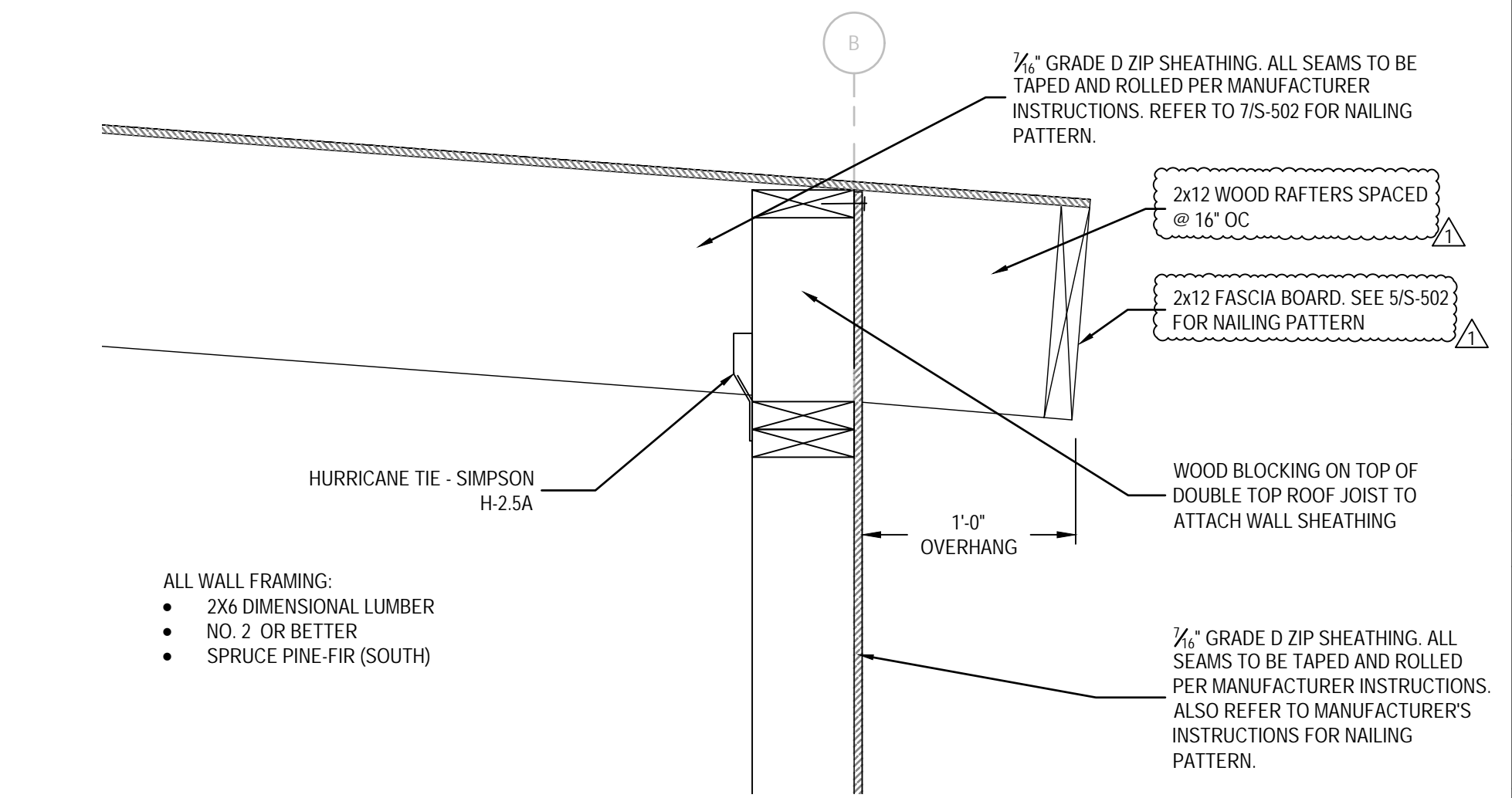


**3** ROOF FRAMING PLAN  
 1/2" = 1'-0"

PLAN NORTH ACTUAL NORTH



**4** ROOF OVERHANG DETAIL  
 SCALE: 1 1/2" = 1'-0"



**5** ROOF OVERHANG DETAIL  
 SCALE: 1 1/2" = 1'-0"

LOCKLEAR & LOCKLEAR ENGINEERS  
**LL&J**  
 CONSULTING ENGINEERS  
 P.O. BOX 3119  
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 TELEPHONE: (910) 774-9306  
 FAX: (866) 649-7235

LOCKLEAR & LOCKLEAR ENGINEERS  
 P-0754  
 CAROLINA PROFESSIONAL SEAL  
 029469  
 4/13/2023

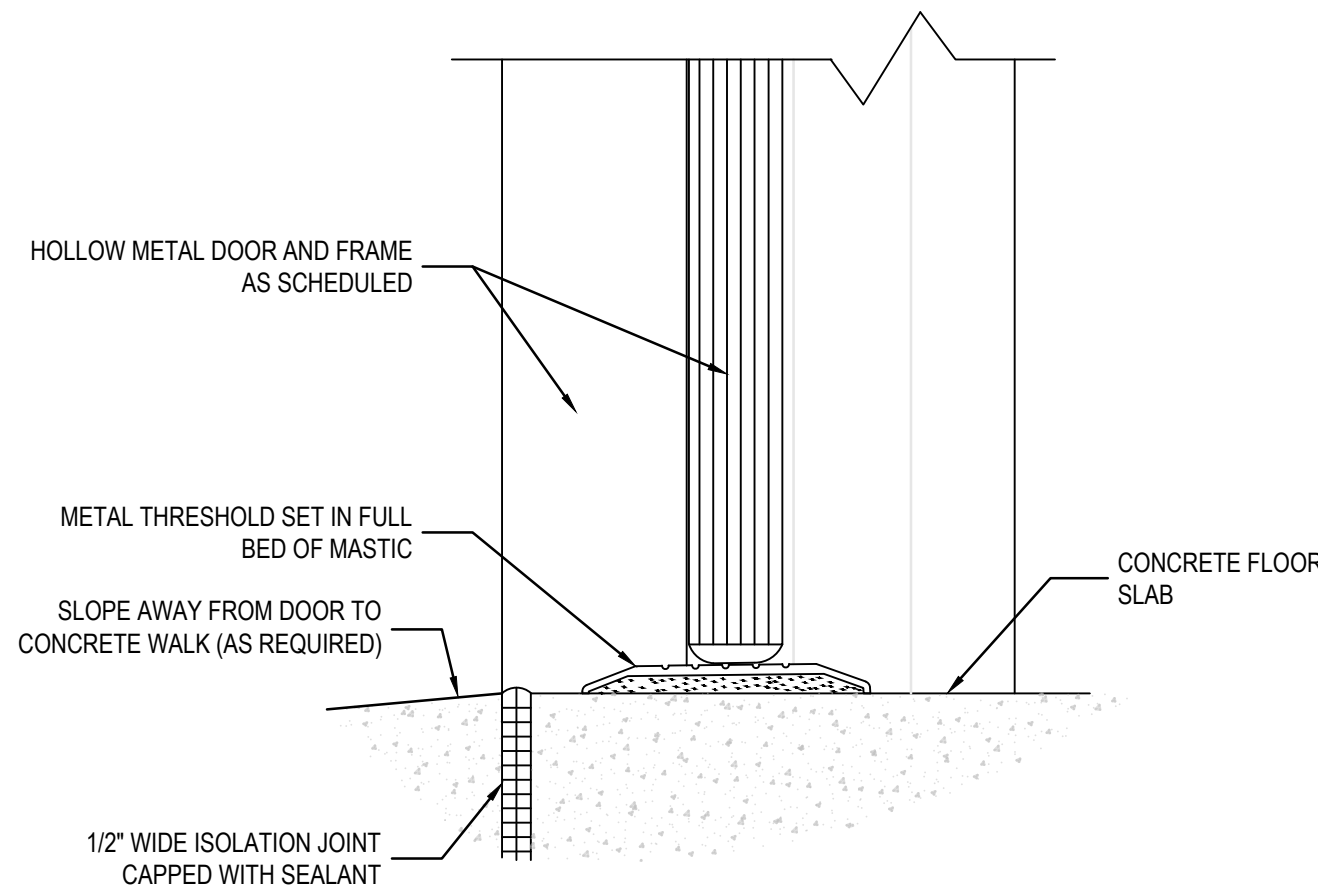
PROJECT INFORMATION:  
**HARNETT CENTRAL PRESS BOX**  
**HARNETT COUNTY SCHOOLS**  
 2911 HARNETT CENTRAL RD  
 ANGLIER, NC 27501

REVISION	DATE	DESCRIPTION
1	4/13/2023	ROOF RAFTERS AND INSULATION CHANGED
2		
3		
4		
5		

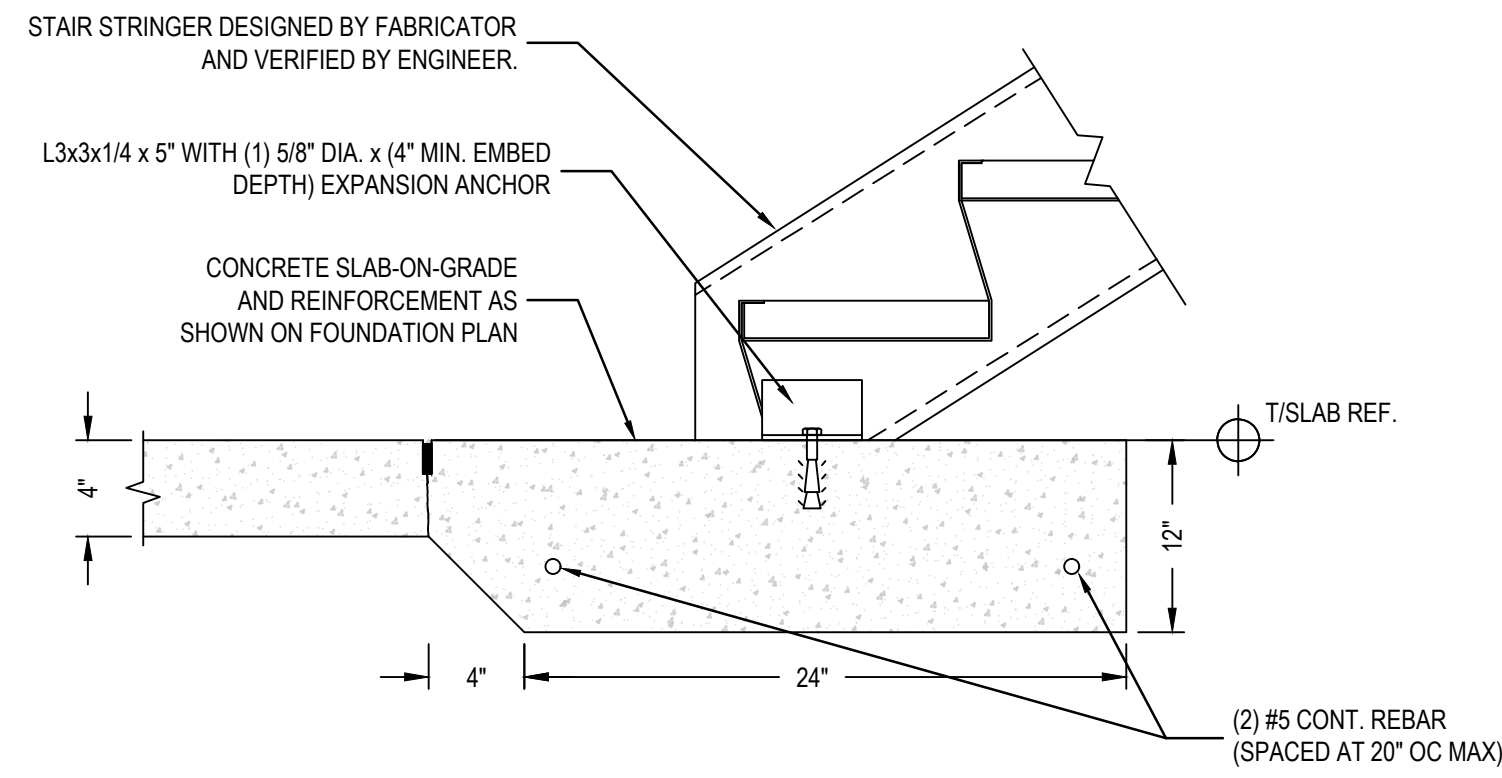
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DATE: 1/10/2023  
 DRAWN BY: CKD  
 CHECKED BY: JEL

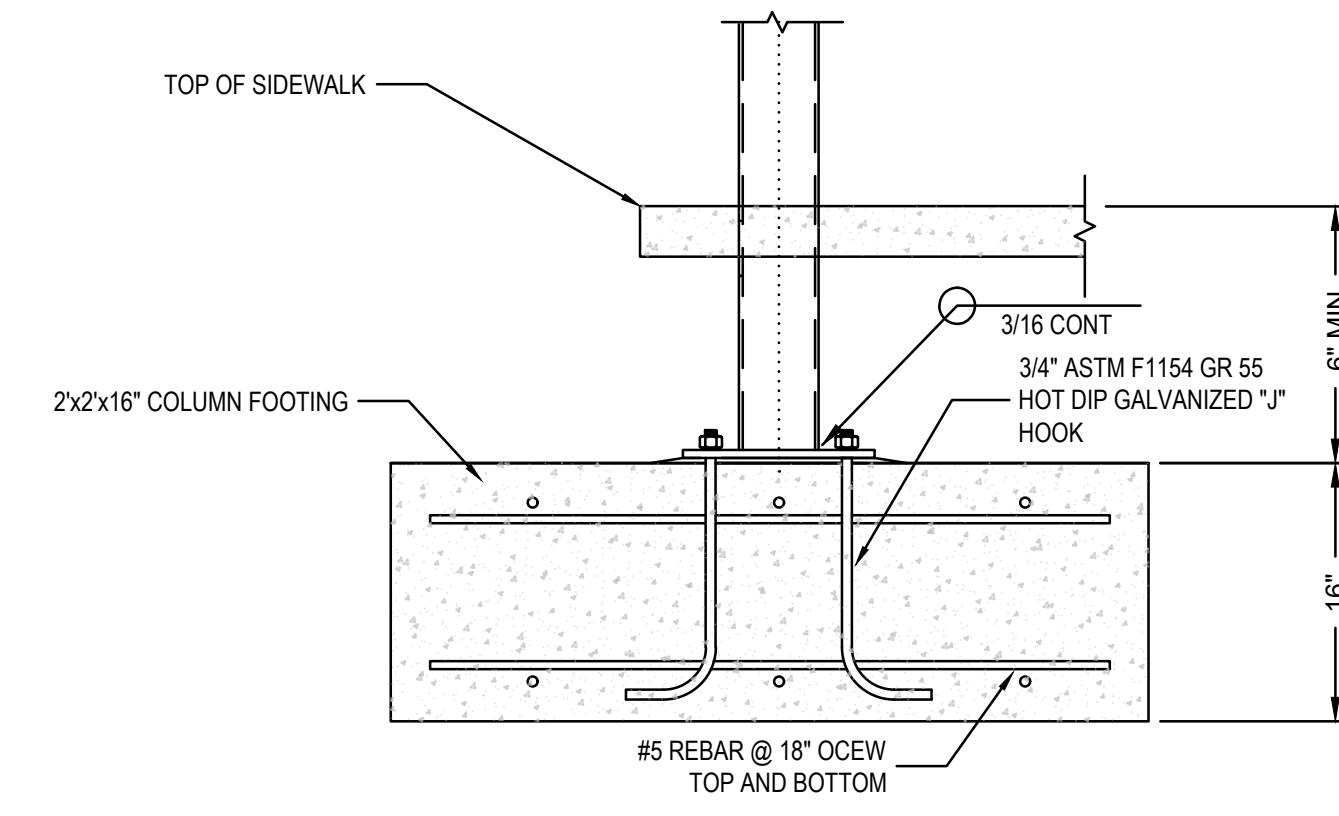
SHEET TITLE: **FRAMING PLAN**  
 SHEET NUMBER: **S-102**  
 PROJECT#: 21-1110



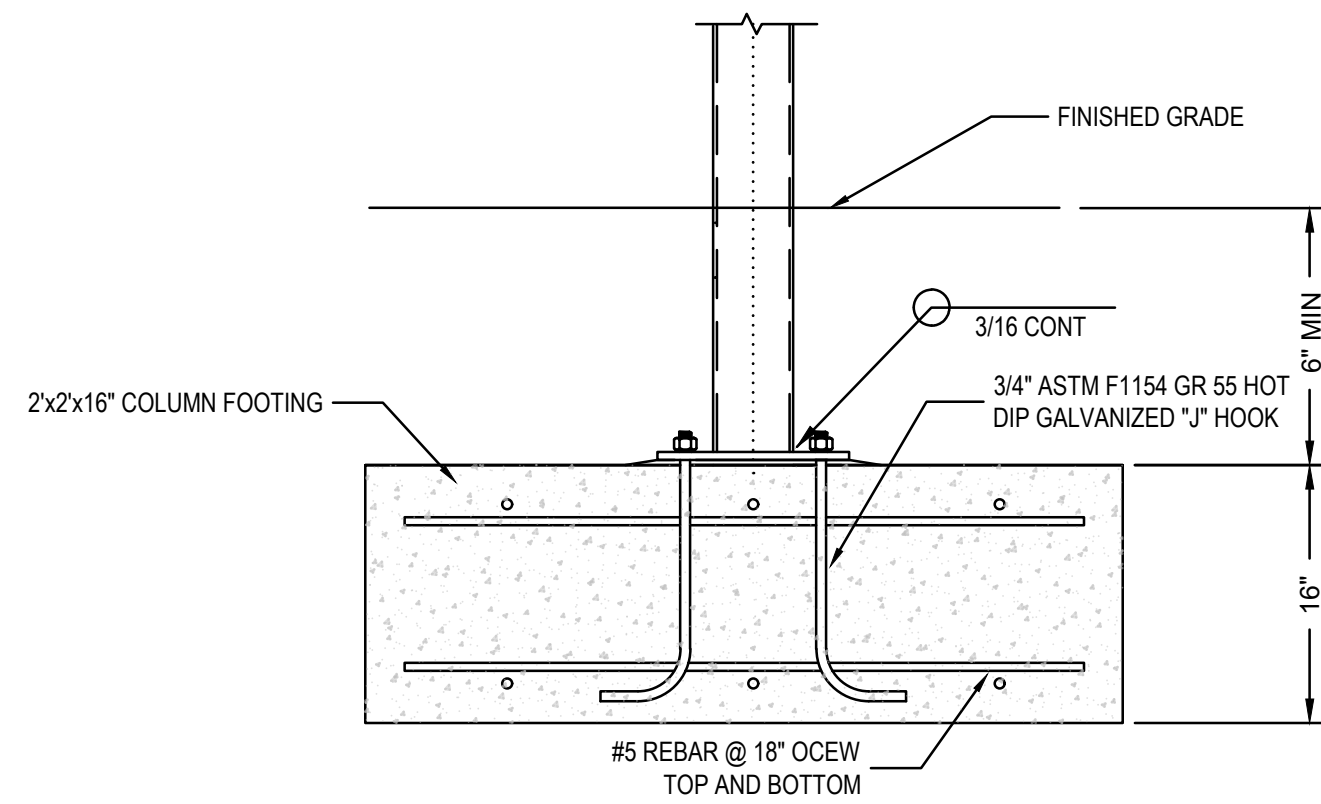
1 SILL AT EXTERIOR DOOR  
NTS



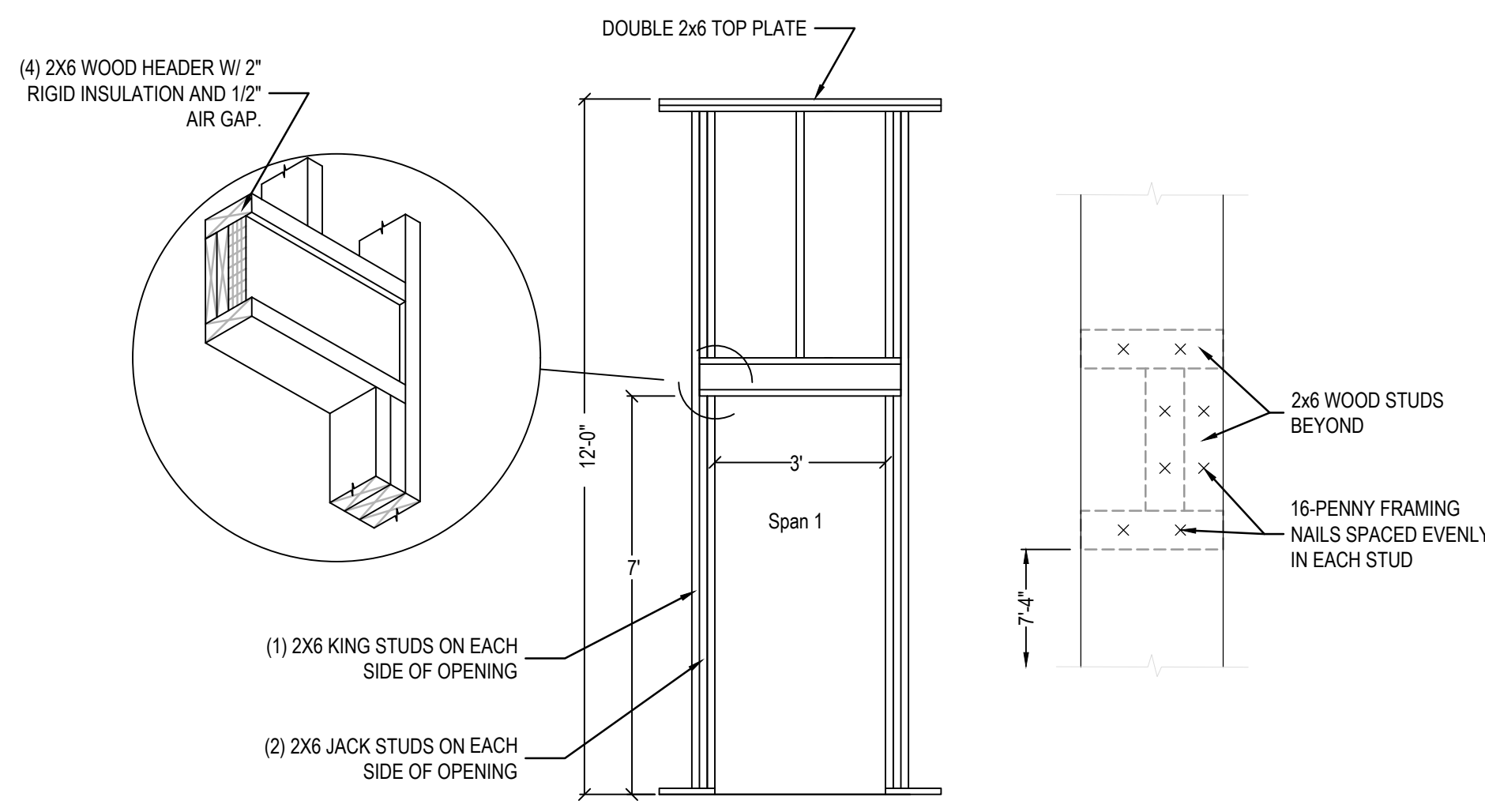
2 THICKENED SLAB ON GRADE UNDER STEEL STAIRS DETAIL  
NTS



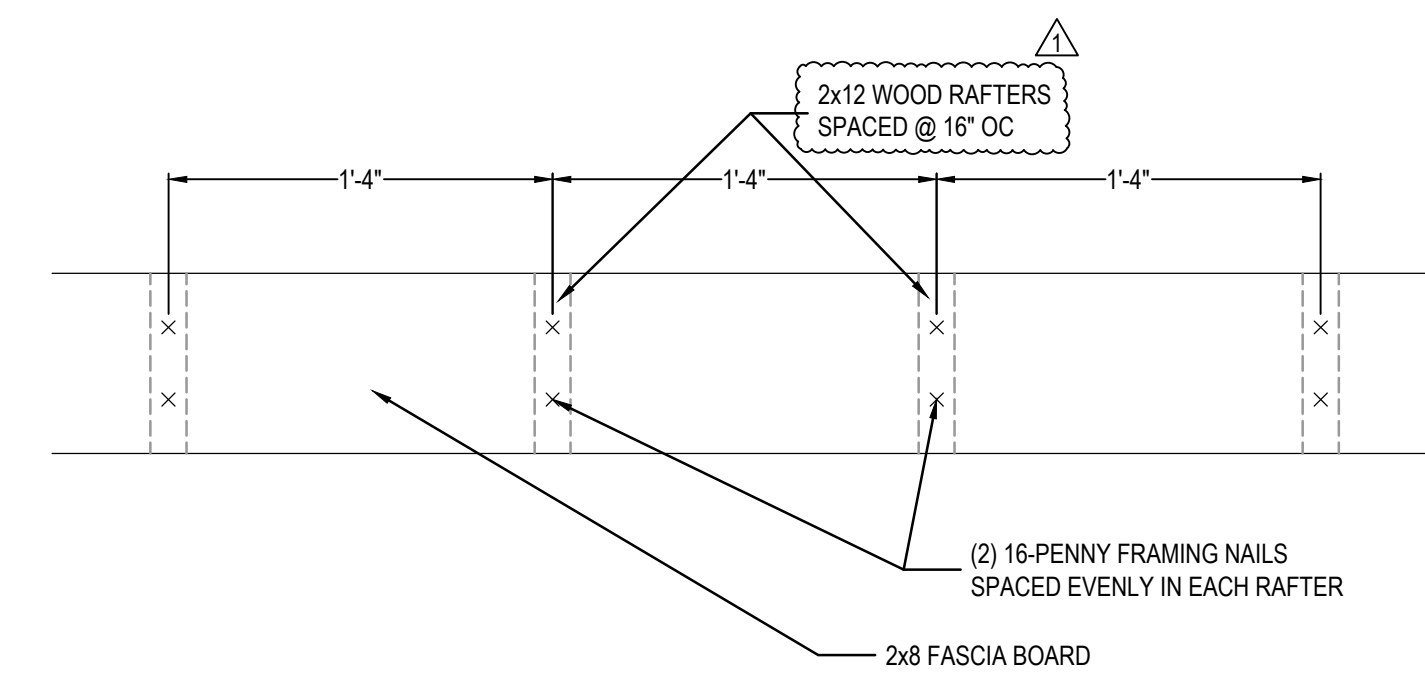
3 STEEL COLUMN FOOTER DETAIL  
NTS



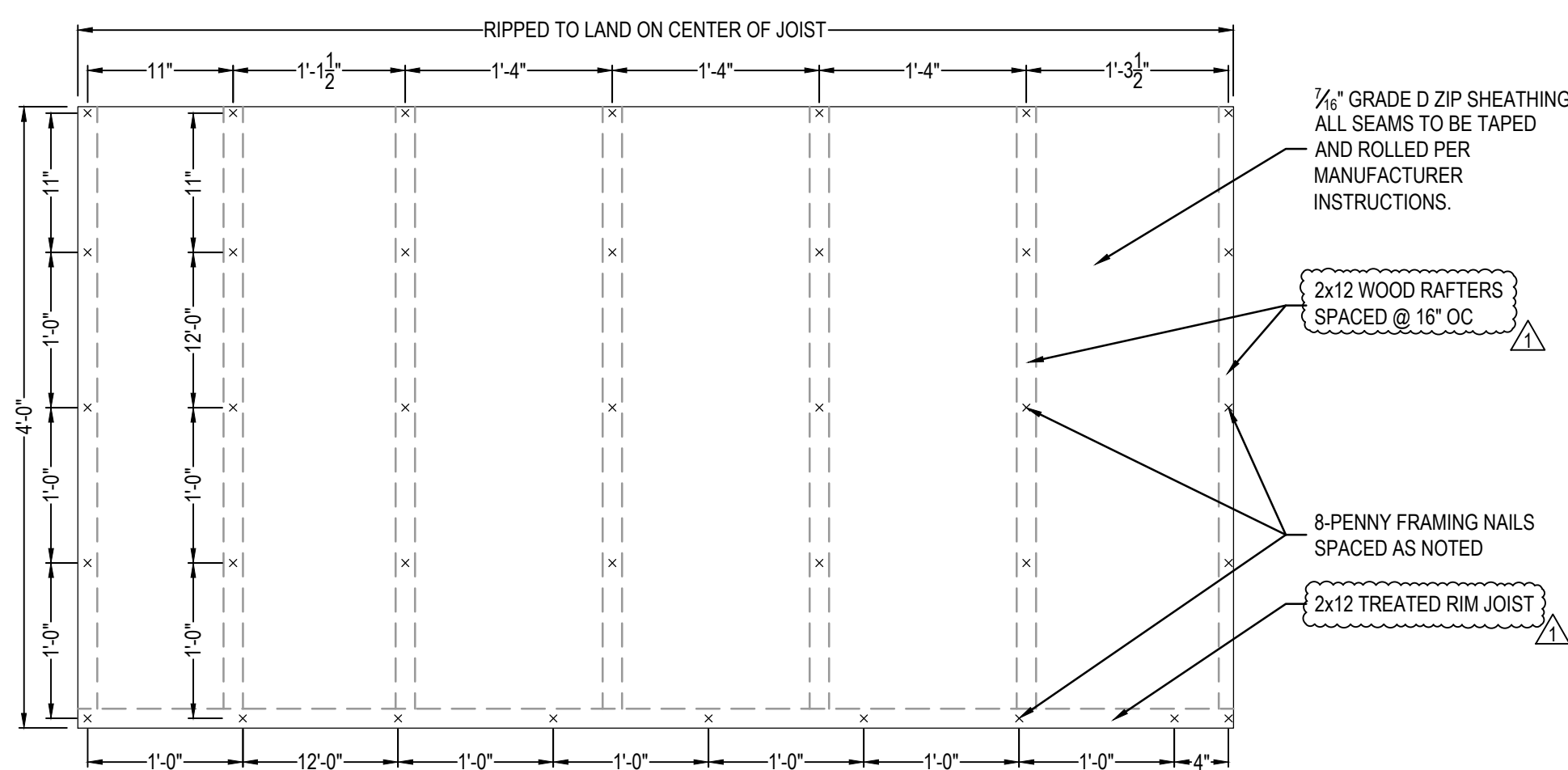
4 STEEL COLUMN FOOTER DETAIL  
NTS



5 TYPICAL 36" OPENING IN EXTERIOR WALL DETAIL  
NTS

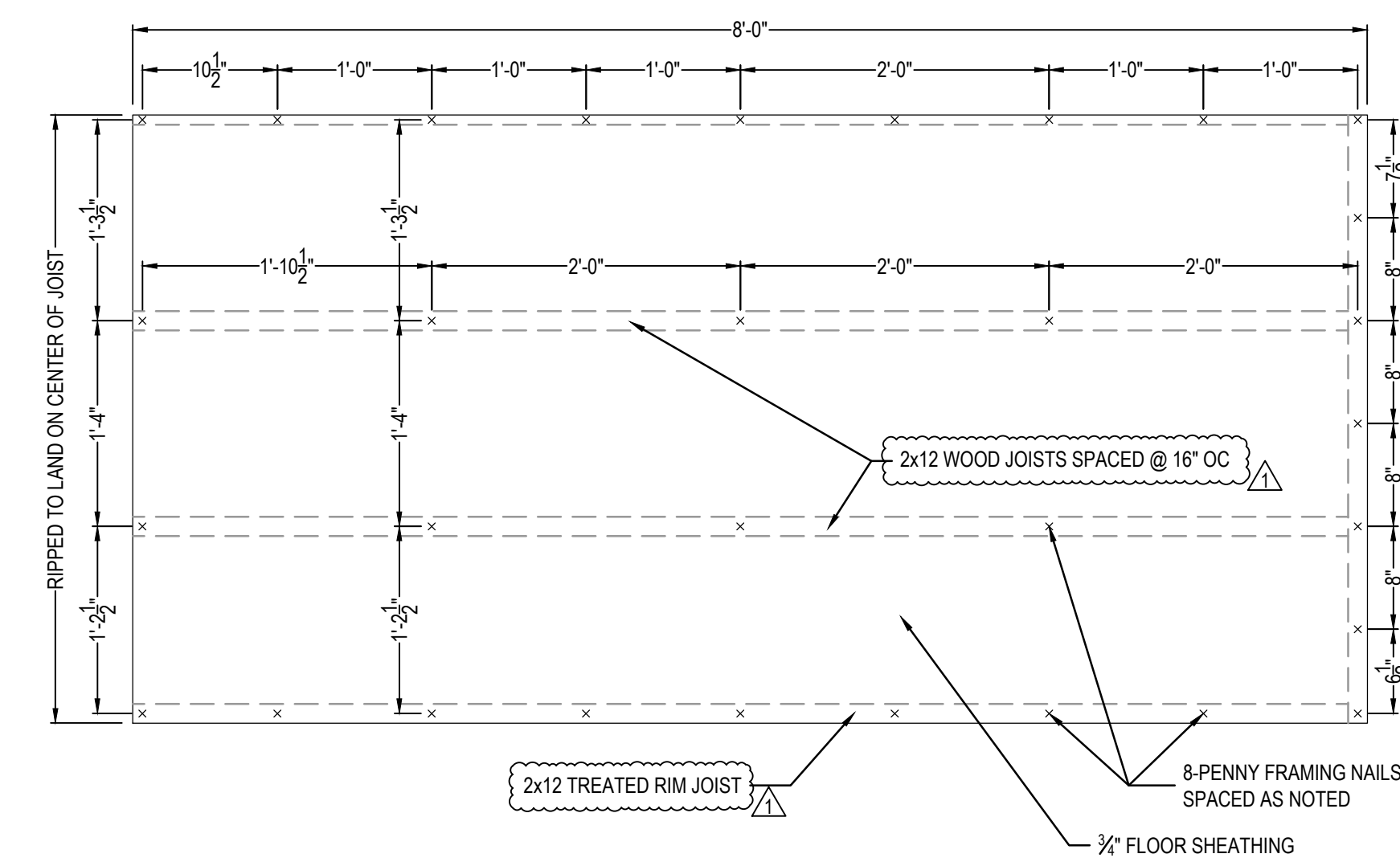


6 FASCIA BOARD NAILING PATTERN  
NTS

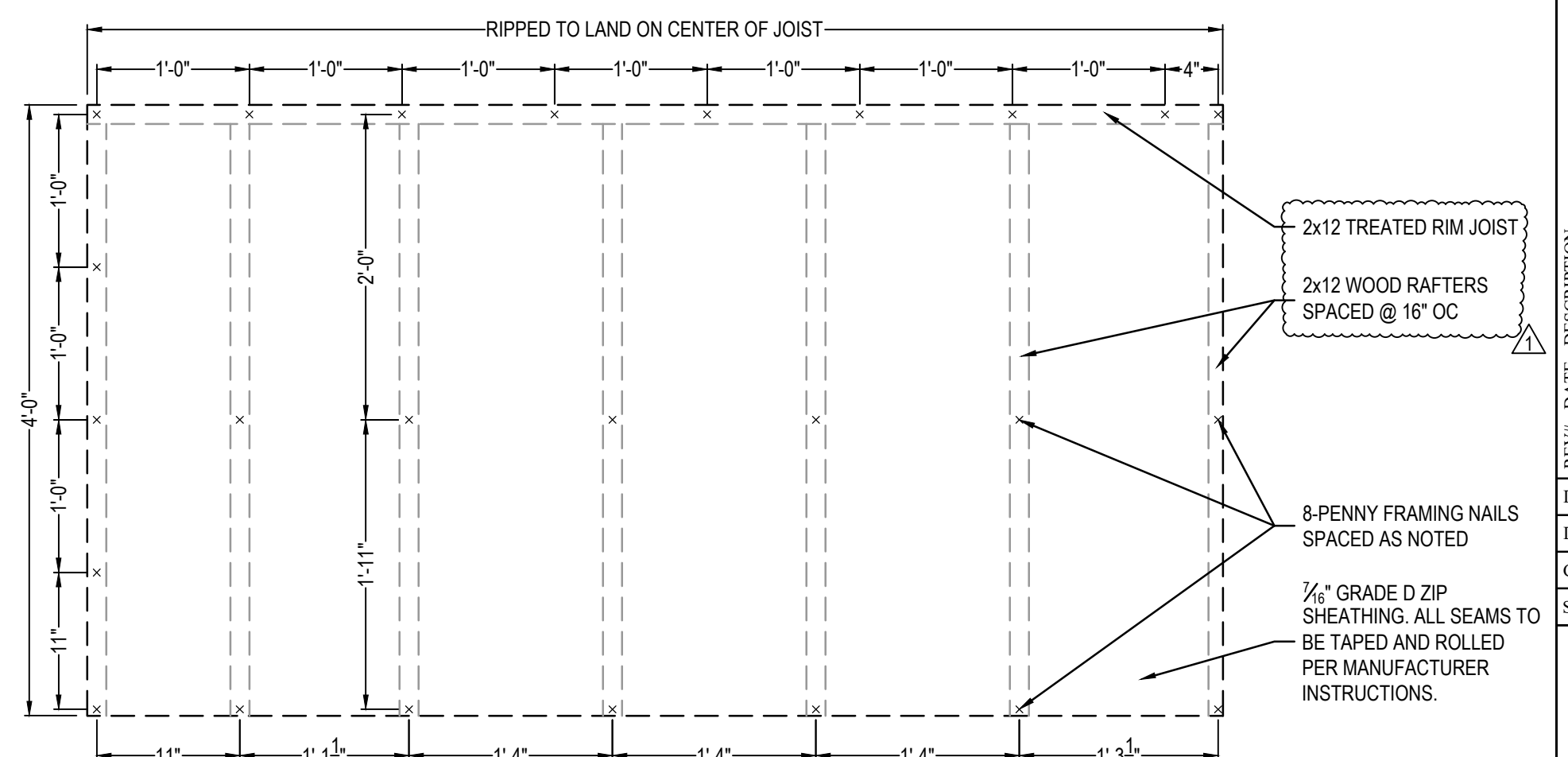


7 ROOF SHEATHING NAILING PATTERN  
NTS

NOTE:  
ON THE 4'-0" OVERHANG, THE NAIL SPACING IS TO BE 1'-0" OC.

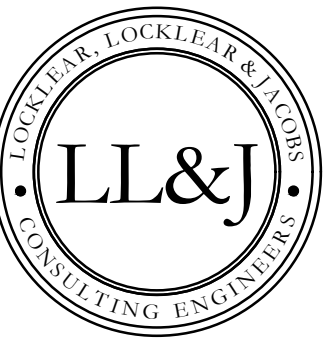


8 FLOOR SHEATHING NAILING PATTERN  
NTS

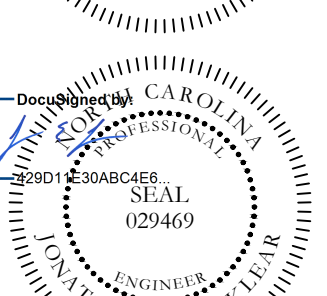
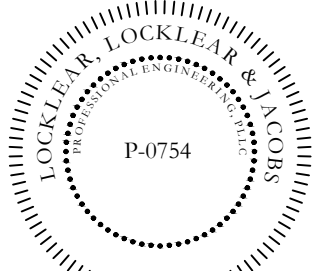


9 ROOF SHEATHING NAILING PATTERN  
NTS

NOTE:  
ON THE 1'-0" OVERHANG PART OF THE ROOF, THE NAIL SPACING IS TO BE 1'-0" OC ON THE PERIMETER AND 2'-0" OC TYPICAL ELSEWHERE.



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4/13/2023

HARNETT CENTRAL PRESS BOX  
HARNETT COUNTY SCHOOLS  
2911 HARNETT CENTRAL RD  
ANGIER, NC 27501

PROJECT INFORMATION:

REVISION	DATE	DESCRIPTION
1	4/12/2023	ROOF RAFTERS CHANGED, FLOOR JOIST SIZE CORRECTED.
2		
3		
4		
5		

DATE: 1/10/2023

DRAWN BY: CKD

CHECKED BY: JEL

SHEET TITLE

STRUCTURAL  
DETAILS

SHEET NUMBER

S-502

PROJECT# 21-11110

MECHANICAL NOTES

- 1. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF THE VENTILATION AND AIR CONDITIONING SYSTEMS. DETAILS OF CONSTRUCTION AND OF WORKMANSHIP WHERE NOT SPECIFICALLY DESCRIBED HEREIN OR INDICATED ON THE DRAWINGS SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL. IT IS THE INTENT OF THESE SPECIFICATIONS TO PROVIDE COMPLETE SYSTEMS, LEFT IN GOOD WORKING ORDER, READY FOR OPERATION, INCLUDING NECESSARY LABOR AND MATERIALS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR MENTIONED HEREIN. IT IS NOT THE INTENTION OF THESE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER TO AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER COST OR INSTRUCTIONS.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST APPLICABLE CODES AND STANDARDS LISTED BELOW. IN ADDITION THE WORK SHALL COMPLY WITH ANY LOCAL, STATE OR FEDERAL CODES, STANDARDS, AND REGULATIONS, HAVING JURISDICTION IN THE AREA WHERE THE EQUIPMENT OR WORK WILL BE INSTALLED.
AABC AMERICAN AIR BALANCE COUNCIL
AMCA AIR MOVING AND CONTROL ASSOCIATION, INC.
ANSI AMERICAN NATIONAL STANDARD INSTITUTE
ARI AIR CONDITIONING AND REFRIGERATION INSTITUTE
ASHARE AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS
ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS
NEC NATIONAL ELECTRICAL CODE
NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
SMACNA SHEET METAL AND AIR CONDITION CONTRACTORS NATIONAL ASSOCIATION
UL UNDERWRITERS LABORATORY
BOCA THE BOCA NATIONAL MECHANICAL CODE LATEST EDITION
ALL CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND EQUIPMENT LOCATIONS PRIOR TO FABRICATION AND PURCHASE OF NEW EQUIPMENT. (I.E. DIFFUSERS, ETC.,)
3. THE CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK, AND INCLUDE ALL MATERIALS AND LABOR IN HIS BID PRICE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
4. THE CONTRACTOR SHALL EXAMINE THE CONTRACT DOCUMENTS, CONDUCT A COMPLETE FIELD SURVEY TO FAMILIARIZE THEMSELVES WITH ALL THE REQUIREMENTS OF THE PROJECT, AND SHALL NOTIFY THE OWNER/ENGINEER OF ANY OBSERVED FAULTS AND AMBIGUITY IN THE CONTRACT DOCUMENTS.
5. BY SUBMISSION OF BID, THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THE CONTRACT DOCUMENTS AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK AND EXTRA COST CLAIMS BASED ON INADEQUACY OF CONTRACT DOCUMENTS WILL NOT BE CONSIDERED.
6. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUCTED AS EVIDENCE THAT EXAMINATION OF PLANS HAVE BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AS EXAMINATION.
7. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER/ENGINEER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR. PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE AND SAFE INSTALLATION OF HVAC SYSTEMS IN FULL CONFORMITY WITH REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION. INCLUDE ALL COSTS FOR PERMITS, LICENSES, CERTIFICATES, FILING AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION; AS INDICATED ON DRAWINGS AND/OR HEREIN SPECIFIED FOR THE SYSTEMS INCLUDED.
8. WORK SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL. ALL SYSTEMS SHALL BE CLEAN OF FOREIGN MATERIAL AND ROUGH SPOTS PRIOR TO BEING PLACED IN SERVICE AND BEFORE OPERATIONAL TESTS ARE PERFORMED. THE CONTRACTOR SHALL THOROUGHLY CLEAN HIS WORK AREA DAILY. CONTRACTOR SHALL THOROUGHLY CLEAN ALL AIR HANDLING UNITS AND REPLACE FILTERS, AS WELL AS REMOVE ALL TRASH AT COMPLETION OF WORK.
9. INSTALLATION OF ALL EQUIPMENTS AND THIS ACCESSORIES SHALL BE PER MANUFACTURER'S PUBLISHED RECOMMENDATIONS.
10. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF ACCEPTANCE BY OWNER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENTS SUPPLIED BY THE CONTRACTOR.
11. SUPPORT ALL DUCTWORK FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL FRAMING.
12. FOR EXACT LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS REFER TO REFLECTED CEILING PLAN AND DETAILS. OBTAIN FROM THE ENGINEER THE LOCATION OF ANY APPARATUS NOT DEFINITELY LOCATED ON THE DRAWINGS. LOCATE EQUIPMENT AND ACCESSORIES IN SUCH A MANNER AS TO PROVIDE EASY ACCESS FOR PROPER SERVICE AND MAINTENANCE OF ALL EQUIPMENT AND ITEMS REQUIRING MAINTENANCE.
13. REVIEW WITH THE ENGINEER ANY CONDITION WHICH PREVENT ADEQUATE ACCESSIBILITY FOR MAINTENANCE PRIOR TO INSTALLATION OF THE WORK. ALL EQUIPMENT AND/OR ACCESSORIES THAT ARE INSTALLED WITHOUT PROPER ACCESS, IN THE OPINION OF THE ENGINEER, AND INSTALLED WITHOUT THE ENGINEER'S APPROVAL, SHALL BE REMOVED AND REVISED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO OWNER.
14. ALL WALL AND ROOF OPENINGS SHALL BE WATER PROOFED AND AIR TIGHT SEALED AND SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
15. ALL DUCTS SHALL BE FABRICATED OF GALVANIZED LOCK FORMING QUALITY STEEL, AND INSTALLED IN STRICT COMPLIANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) BULLETIN 90A, THE SHEET METAL AND AIR CONDITIONING CONTRACTORS AND NATIONAL ASSOCIATION (SMACNA) DUCT CONSTRUCTION STANDARDS. SHEET METAL DUCTS SHALL BE FABRICATED USING THE FOLLOWING MINIMUM GAUGES FOR RECTANGULAR DUCT:
DIMENSION OF LONGEST SIDE OF DUCT MINIMUM GAUGE ALL FOUR SIDES
UP THRU 12" 26 (0.022")
13" THRU 30" 24 (0.028")
31" THRU 54" 22 (0.034")
16. ALL DUCT DIMENSIONS SHOWN ARE INSIDE METAL DIMENSIONS AND ARE IN INCHES. DUCT SIZES HAVE BEEN INCREASED, WHERE REQUIRED, TO ALLOW FOR LINING.
17. MECHANICAL CONTRACTOR SHALL TAKE ACTUAL MEASUREMENTS IN THE FIELD BEFORE FABRICATION AND SHEET METAL WORK AND SHALL OBSERVE AND ALLOW FOR CLEARANCES AND SPACE REQUIREMENTS FOR PIPING AND EQUIPMENT, OR OTHER OBSTRUCTIONS.
18. THE DUCTWORK SHALL INCLUDE FURNISHING AND INSTALLING GALVANIZED SHEET METAL DUCTS, FLEXIBLE CONNECTIONS ROOF/WALL EXHAUST CAP, DUCT SUPPORTERS, REGISTERS, GRILLES, DAMPERS, BRACING AND OTHER ACCESSORIES TO MAKE A COMPLETE AND OPERABLE SYSTEM.
19. PROVIDE SQUARE ELBOWS WITH TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES; ALL TURNING VANES SHALL BE 16-GAUGE SINGLE THICKNESS METAL WITH A 4-INCH RADIUS. DOUBLE WALL TURNING VANES ARE NOT ACCEPTABLE.
20. ALL JOINTS IN DUCTS, CASINGS, AND PLENUMS SHALL BE SEALED TO PREVENT AIR LEAKAGE. ALL SEALANT AND TAPES SHALL HAVE A FLAME RATING UNDER 25 AND A SMOKE DEVELOPED BY HARDCAST, INC., UNITED SHEET METAL DUCT SEALER OR APPROVED EQUAL, DUCTWORK TAPE SHALL BE HARDCAST, INC., TYPE DT-5300 OR DT-5400 OR APPROVED EQUAL. TAPE ADHESIVE SHALL BE HARDCAST, INC, TYPE FTA-20, OR APPROVED EQUAL.
21. BRANCH TAKE-OFF TO THE CEILING MOUNTED DIFFUSERS, NOT EXCEEDING 8FT. IN LENGTH, SHALL BE BY PRE-INSULATED FLEXIBLE DUCT. FLEXIBLE DUCTS SHALL HAVE A R-6 MINIMUM VALUE AND COVERED WITH AN OUTER VAPOR BARRIER JACKET. FLEXIBLE DUCTS SHALL BE ATTACHED TO SHEET METAL MAIN DUCTS USING SPIN-IN CONICAL BELLMOUTH FITTINGS WITH DAMPERS AND LOCKING QUADRANTS.
22. ALL HVAC PENETRATIONS THROUGH FIRE RATED WALLS AND CEILING SHALL BE PROTECTED WITH FIRE DAMPERS, CLASSIFIED UNDER UL STANDARD 555.
23. A FLEXIBLE CONNECTION AT THE INLET AND OUTLET OF EACH FAN AND AIR CONDITIONING EQUIPMENT SHALL BE PROVIDED. CONNECTION SHALL BE VENTLAS (VENTFABRIC, INC.) OR APPROVED EQUAL, NOT LESS THAN 4 INCHES LONG, INSTALL IN ANGLE OR SHEET METAL FRAMES SECURELY FASTENED TO DUCTS AND EQUIPMENT. JOINTS IN FABRIC SHALL BE SEWN AND MADE AIRTIGHT WITH AN APPROVED SEALER.
24. ACCESS DOORS SHALL BE PROVIDED AT EACH FIRE DAMPER LOCATION. ACCESS DOORS SHALL BE RUSKIN (OR APPROVED EQUAL).
25. FURNISH AND INSTALL FULL SIZE COIL CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING UNITS AS INDICATED ON THE MECHANICAL DRAWINGS AND APPROVED BY THE ENGINEER. PIPE SHALL BE TYPE "L" COPPER.
26. REFER TO MANUFACTURER GUIDELINES FOR COPPER REFRIGERANT LINES WALL THICKNESS, TEMPER GRADES, AND INSTALLATION. FLUSH ALL LINES WITH NITROGEN.
27. REFER TO MANUFACTURER GUIDELINES FOR INSULATING REFRIGERANT LINES.
28. MECHANICAL CONTRACTOR SHALL FURNISH SUBMITTALS CONTAINING EQUIPMENT, DUCTWORK AND CONTROL DRAWINGS FOR APPROVAL PRIOR TO ORDERING ANY EQUIPMENT, OR MATERIAL.
29. DUCT INSULATION: R-8 INSULATION FOR ALL SUPPLY AND RETURN DUCT LOCATED IN BUILDING. DUCTWORK OUTSIDE THE BUILDING SHALL BE INSULATED EXTERNALLY USING 2" POLY ISO FOAM BOARD.
30. ALL NECESSARY OFFSETS AND ELEVATION CHANGES ARE NOT SHOWN ON THE DRAWINGS. CONTRACTOR TO REFLECT/COORDINATE THE REQUIRED RISE/DROPS WITH FIELD CONDITIONS.
31. ALL DUCTWORK SHALL BE RUN CONCEALED ABOVE CEILINGS AS HIGH AS POSSIBLE AND CONCEALED IN WALLS, CHASES, OR FURROUTS IN GENERAL LOCATIONS SHOWN, UNLESS NOTED OTHERWISE.
32. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN.
33. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE REQUIRED PLUMBING WORK FOR HVAC EQUIPMENT AND SHALL INSTALL FIRE RATED SLEEVES WHEREVER PENETRATIONS OF RATED WALLS OR FLOORS ARE MADE. THE PATCHING REQUIRED FOR HVAC WORK SHALL BE BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS AND CIVIL SITE PLANS FOR WORK BY OTHERS.
34. ALL AIR HANDLING SYSTEMS TO BE TESTED AND BALANCED BY A NEBB OR AABC CERTIFIED FIRM.

MECHANICAL TAG LEGEND

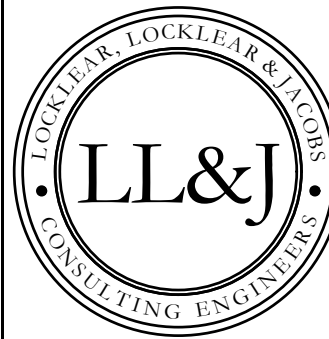
Table with 2 columns: SYMBOL and DESCRIPTION. Includes symbols for service types (S, R, E, T), locations (C, D, F, H, L), equipment designations (AHU, T, S, etc.), and various duct and valve symbols.

MECHANICAL ABBREVIATIONS

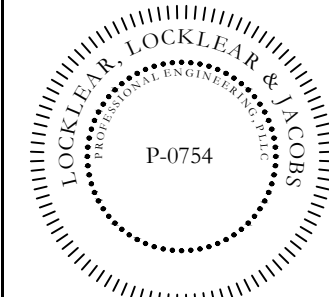
Table listing mechanical abbreviations such as ACCH (AIR COOLED CHILLER), AHU (AIR HANDLING UNIT), AHU (AIR HANDLING UNIT), and various units and materials like BTU, GPM, and GAL.

MECHANICAL SUMMARY table showing thermal zone conditions (Winter Dry Bulb, Summer Dry Bulb, etc.), interior design conditions, building cooling load, and mechanical spacing conditioning system details.

DRAWING INDEX table with columns for SHEET, SHEET TITLE, REV #, and DATE. Lists sheets M-001 to M-301.



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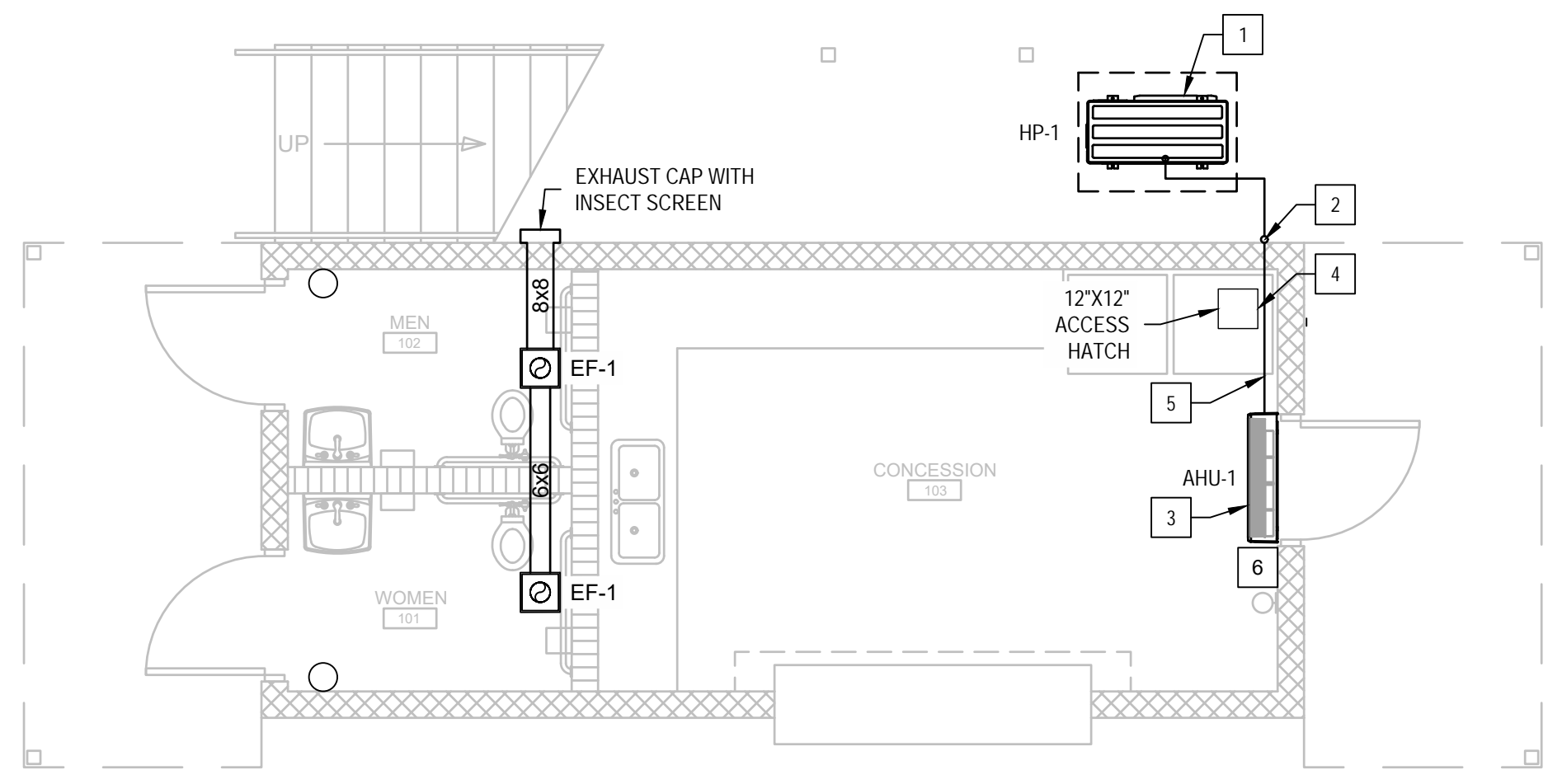
4/13/2023
Professional Engineer Seal for Robert J. Corlies, License No. 199405, State of North Carolina

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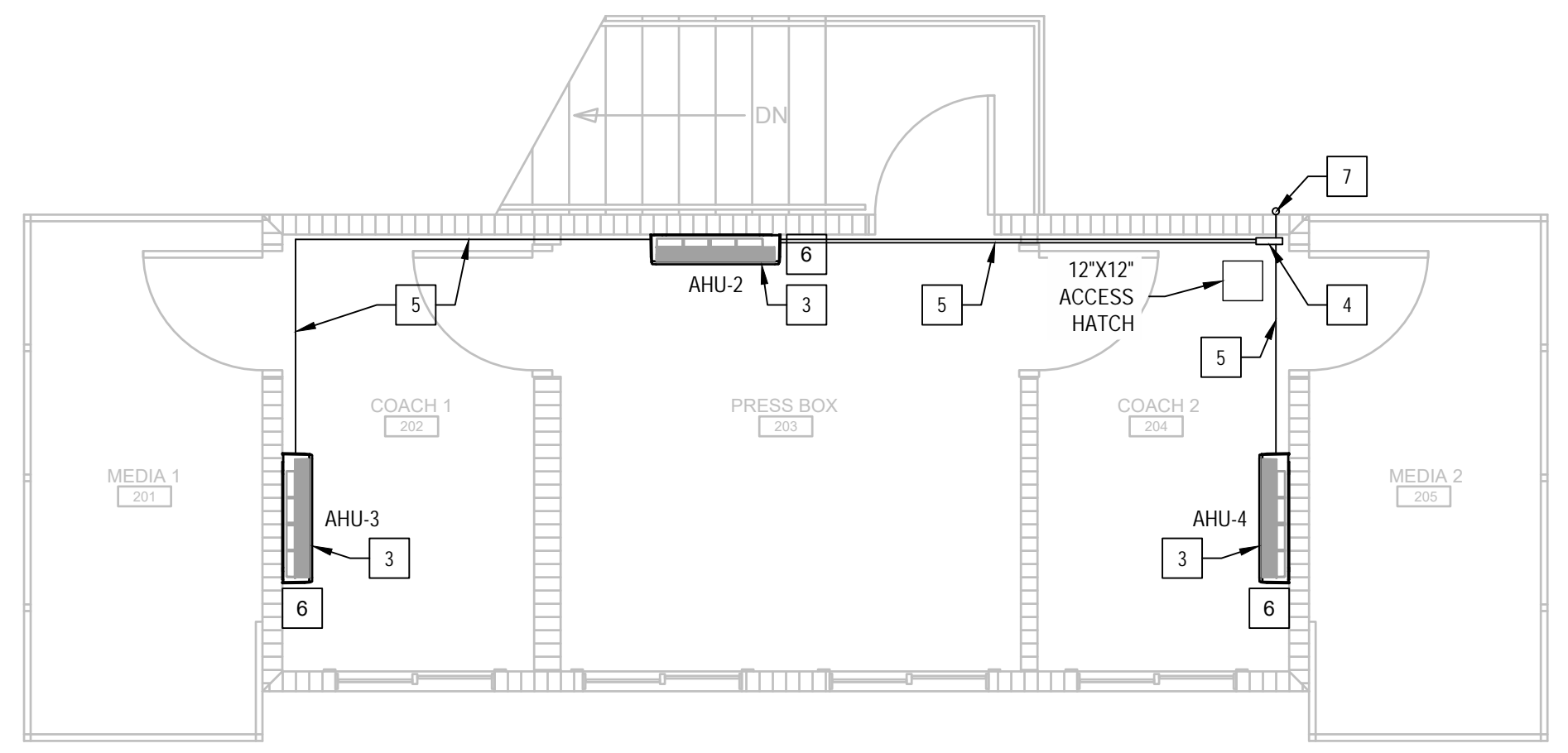
MECHANICAL NOTES LEGEND AND ABBREVS
SHEET NUMBER: M-001
PROJECT#: 21-11110



Printed: Thu 13-Apr-2023 - 01:18PM



1 FIRST FLOOR MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"



2 SECOND FLOOR MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"

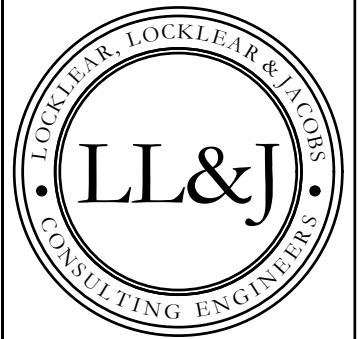
EQUIPMENT SCHEDULE										
TAG	MITSUBISHI MODEL #	DESCRIPTION	VOLT, $\phi$ , Hz	MCA	MOCP	AIRFLOW (CFM)	NOMINAL COOLING CAPACITY	NOMINAL HEATING CAPACITY @ 17°F	SEER	EER
HP-1	NTXMSM36A142AA	HEAT PUMP	208-230, 1, 60	29	40	N/A	36,000 BTU/H	26,400 BTU/H	23	15
AHU-1,2	TPKFYP012LM140A	WALL MTD.	208-230, 1, 60	0.24	15	152-297	12,000 BTU/H	13,500 BTU/H	N/A	N/A
AHU-3,4	TPKFYP008LM140A	WALL MTD.	208-230, 1, 60	0.24	15	141-237	8,000 BTU/H	9,000 BTU/H	N/A	N/A

- NOTES:
- EQUIPMENT AS MANUFACTURED BY MITSUBISHI OR APPROVED EQUAL BY FUJITSU / LG / CARRIER.
  - LINE SET COVERS AS MANUFACTURED BY DIVERSITECH OR EQUAL BY RECTORSEAL / FORTRESS.
  - HARD WIRED THERMOSTATS FOR FOR EACH AREA (TOTAL OF 4 WIRED THERMOSTATS).
  - REFRIGERANT LINES TO BE HARD COPPER, REFRIGERANT LINE SIZING PER MANUFACTURER'S GUIDELINES.
  - AHU'S 2,3,4 TO REQUIRE CONDENSATE PUMP.

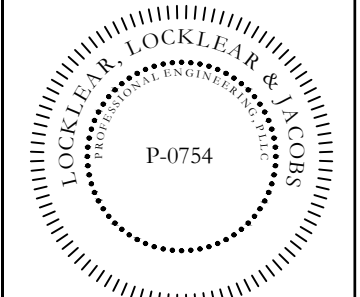
EXHAUST FAN SCHEDULE								
TAG	MAKE	MODEL	MOUNTING TYPE	CFM	EXT STATIC AT MAX FLOW (IN. WG)	MAX INPUT WATTS	AMPS	NOTES
EF-1	BROAN/NUTONE	765H80L	CEILING	80	.25	1300	12.5	FAN WITH 1300W HEATER

- NOTES:
- ACCEPTABLE ALTERNATE MANUFACTURES ARE BROAN AND PENN.
  - PROVIDE FAN WITH INSULATED HOUSING, FLEXIBLE DUCT CONNECTORS AND GRAVITY BACK DRAFT DAMPER.

- KEY NOTES:
- HEAT PUMP-1 (INSTALLED ON 4" CONCRETE PAD). COORDINATE LOCATION WITH OWNER/ENGINEER.
  - LINE SET TO TRANSITION UP EXTERIOR WALL TO THE FIRST LEVEL AND PENETRATE EXTERIOR WALL BELOW CEILING(COORDINATE LOCATION).
  - AHU (WALL MOUNTED). COORDINATE LOCATION WITH OWNER/ENGINEER.
  - BRANCH JOINT ABOVE ACCESS HATCH. COORDINATE LOCATION WITH OWNER/ENGINEER.
  - LINE SET(S) TO BE INSTALLED TIGHT AGAINST CEILING/WALL IN LINE SET COVER. LINE SET COVER TO CONTAIN ALL LINE SET(S), POWER, CONTROL, AND CONDENSATE. CONTRACTOR TO ENSURE LINE SET COVERS ARE ADEQUATELY SIZED.
  - INSTALL 7 DAY PROGRAMMABLE THERMOSTAT(TO BE MOUNTED ON THERMAL BLOCK). COORDINATE LOCATION WITH OWNER/ENGINEER.
  - LINE SET TO TRANSITION UP EXTERIOR WALL TO THE SECOND LEVEL AND PENETRATE EXTERIOR WALL BELOW CEILING(COORDINATE LOCATION).



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Robby Locklear  
ENGINEER  
4/13/2023

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REVISIONS:

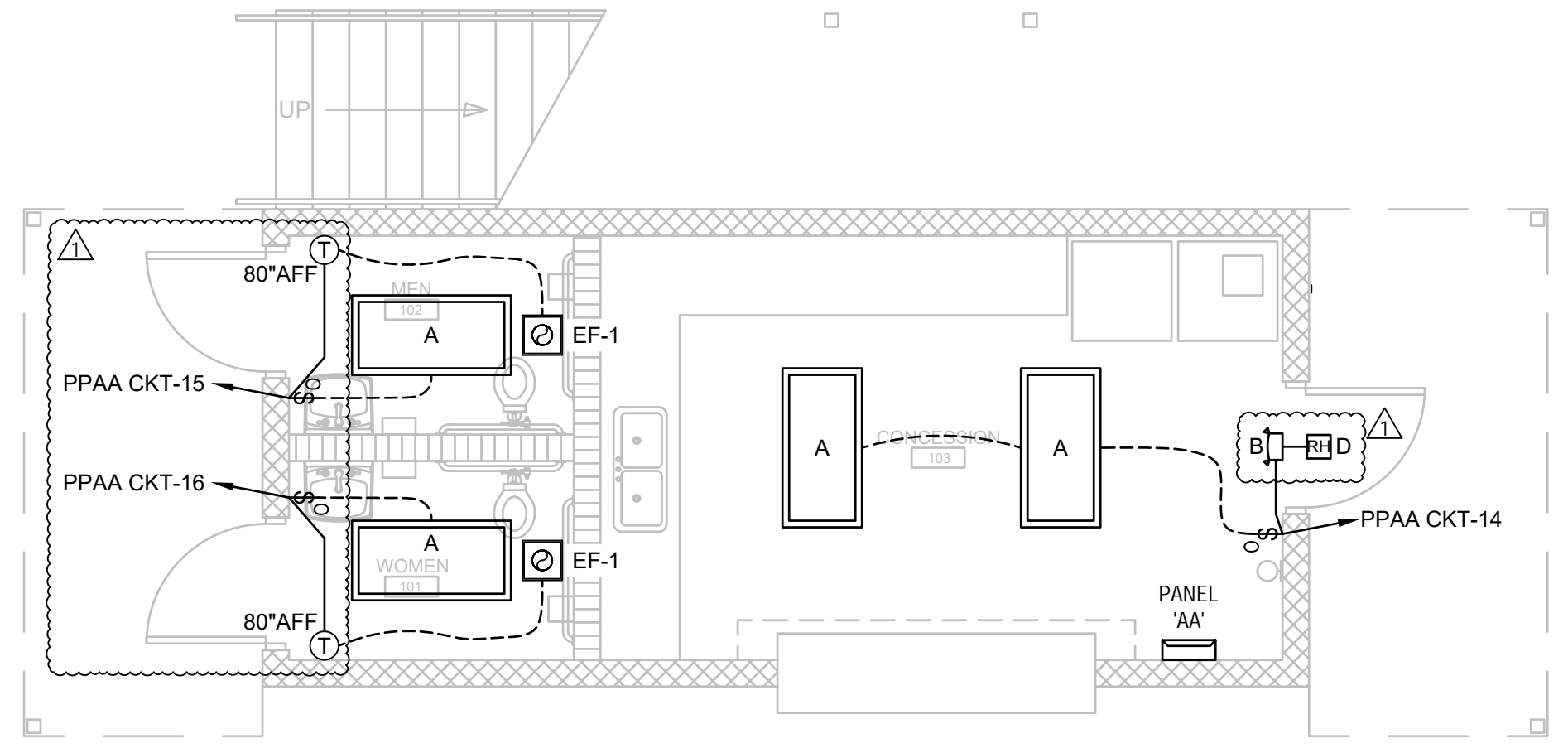
NO.	DATE	DESCRIPTION
1	4/13/2023	EXHAUST FAN MODEL CHANGED

DATE: 1/10/2023  
DRAWN BY: CKD  
CHECKED BY: RL

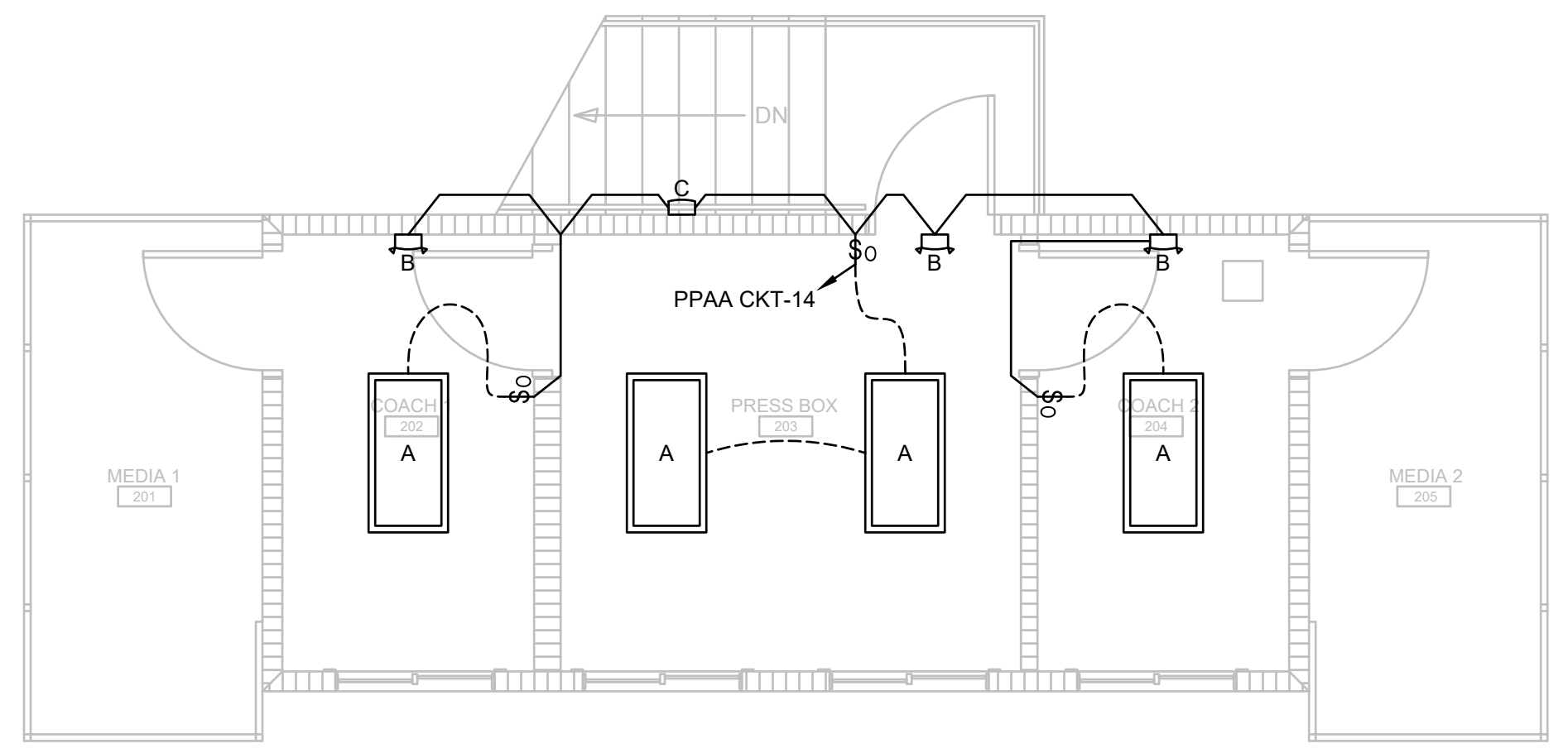
SHEET TITLE  
MECHANICAL PLAN

SHEET NUMBER  
M-101  
PROJECT# 21-11110

Printed: Thu 13-Apr-2023 - 01:18PM



**1 FIRST FLOOR ELECTRICAL LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"



**2 SECOND FLOOR ELECTRICAL LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE							
TAG	DESCRIPTION	MOUNTING	VOLTS / WATTS	LUMENS	LAMP TYPE	MANUFACTURER	MODEL #
A	2'X4' LED LIGHT FIXTURE	SURFACE	120V / 42W	4550	LED	COOPER	24FP4740C
B	EMERGENCY LIGHT	WALL	120V / 1W	N/A	LED	COOPER	CU2-LED
C	OUTDOOR EMERGENCY LIGHT	WALL	120V / 2W	300	LED	COOPER	SELDWA50
D	REMOTE HEAD	WALL	1W	N/A	LED	COOPER	APWR1

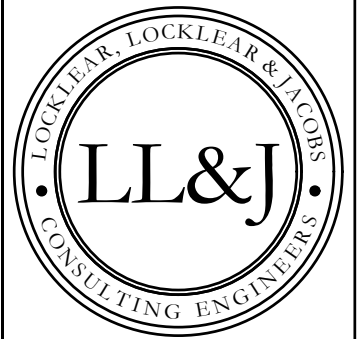
- NOTES:
1. LIGHT FIXTURES TO BE MANUFACTURED BY COOPER, LITHONIA OR METALUX.
  2. ALL LIGHTING FIXTURES SHALL BE U.L. LISTED.
  3. VERIFY ALL MOUNTING HEIGHTS WITH PRIOR TO ROUGH-IN.
  4. COORDINATE ALL COLORS/FINISH OPTIONS OF LIGHT FIXTURES WITH THE OWNER/ENGINEER PRIOR TO PURCHASING.
  5. ALL LIGHTING FIXTURES INDICATED WITHIN THE LIGHTING FIXTURE SCHEDULE SHALL BE PROVIDED WITH ALL REQUIRED MOUNTING HARDWARE, CONNECTORS AND ANY OTHER NEEDED FIXTURE OPTIONS FOR A COMPLETE AND OPERATIONAL INSTALLATION AS INTENDED ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED COMPONENTS AT NO ADDITIONAL COST TO THE OWNER.
  6. THE E.C. SHALL COORDINATE CLOSELY WITH THE ENGINEER AND/OR GENERAL CONTRACTOR FOR THE DESIRED MOUNTING METHODS OF THE LED LIGHT FIXTURES IN ALL LOCATIONS OF THE BUILDING AS SHOWN ON THE PLANS. THE E.C. SHALL COORDINATE AND VERIFY THE EXACT LOCATIONS FOR THE POWER SUPPLY (LOW-VOLTAGE TRANSFORMERS) WITH THE ENGINEER AND/OR GENERAL CONTRACTOR PRIOR TO ROUGH-IN. CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE AS REQUIRED TO MOUNT THESE FIXTURES AS DIRECTED BY THE ENGINEER.
  7. ALL LIGHT SWITCH COVER PLATES TO BE STAINLESS STEEL.

ELECTRICAL SYMBOL LEGEND	
Ⓢ	WALL MOUNTED OCCUPANCY SENSOR
Ⓣ	WALL MOUNTED THERMOSTAT
Ⓜ	100A, SINGLE PHASE 208V, PANEL 'AA'
Ⓛ	OUTDOOR EMERGENCY LIGHT
Ⓛ	EMERGENCY LIGHT
Ⓛ	2'X4' LED LIGHT FIXTURE
Ⓛ	EXHAUST FAN

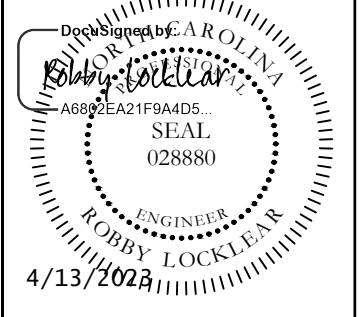
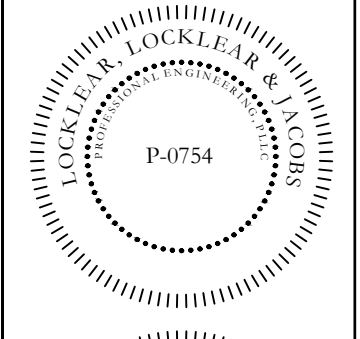
TYPICAL DEVICE MOUNTING HEIGHT	
RECEPTACLES	18" AFF
LIGHT SWITCHES	48" AFF
EXIT SIGNS	NOTE 3
EMERGENCY LIGHTS	7'-6" AFF
DATA OUTLETS	18" AFF

NOTES:

1. DIMENSIONS ARE TO DEVICE CENTERLINE UNLESS OTHERWISE NOTED.
2. REFER TO POWER SYMBOLS FOR ADDITIONAL DEVICE MOUNTING REQUIREMENTS.
3. WHERE SHOWN WALL MOUNTED, EXIT SIGNS SHALL BE MOUNTED 8'-0" AFF OR 1' ABOVE DOOR TO CENTER LINE OF FIXTURE UNLESS OTHERWISE NOTED.



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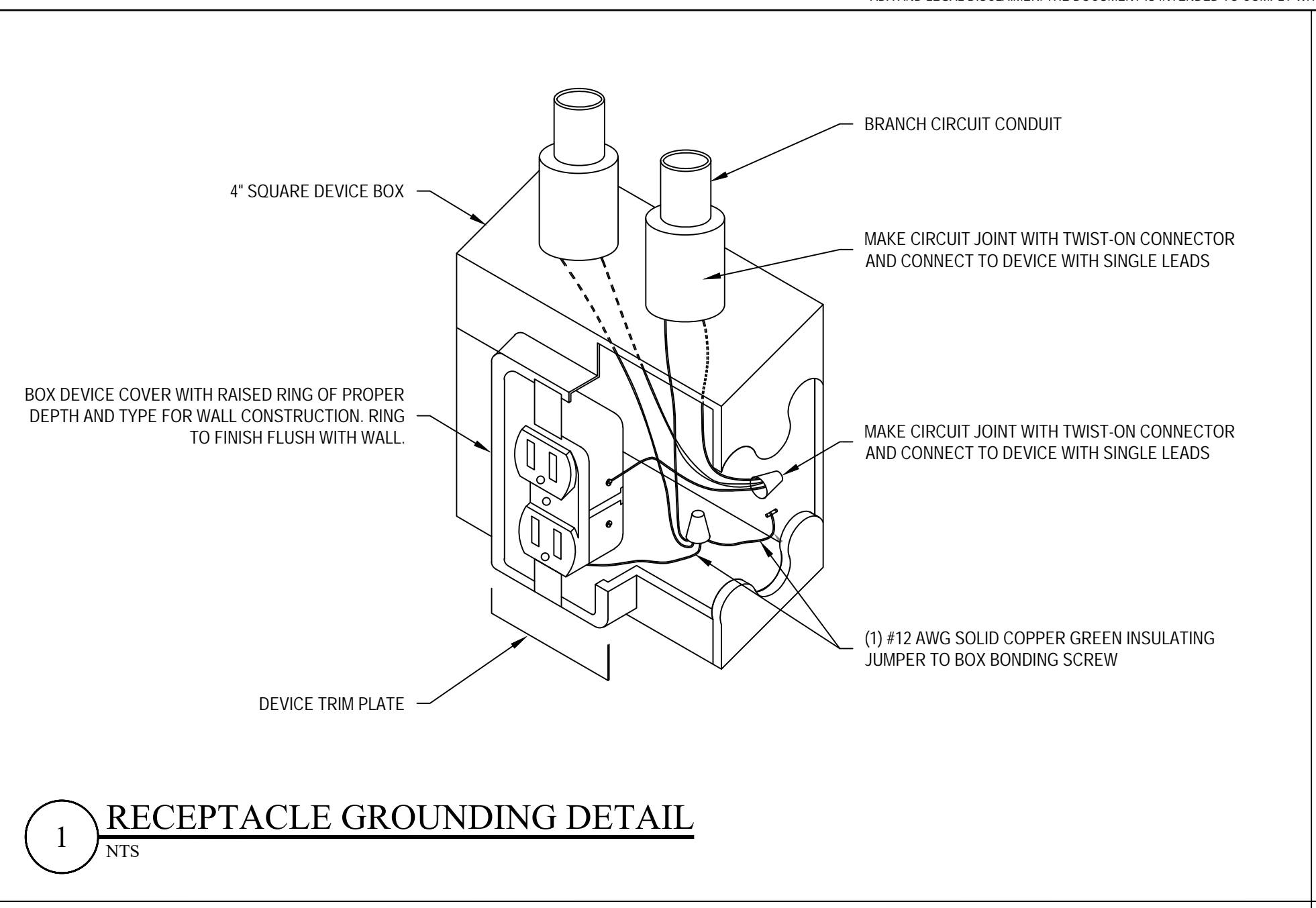
REV#	DATE	DESCRIPTION
1	4/12/2023	EXT FAN CHANGED, CONCESSIONS DIER, LOT RELOCATED AND REMOTE ID ADDED.
2		
3		
4		
5		

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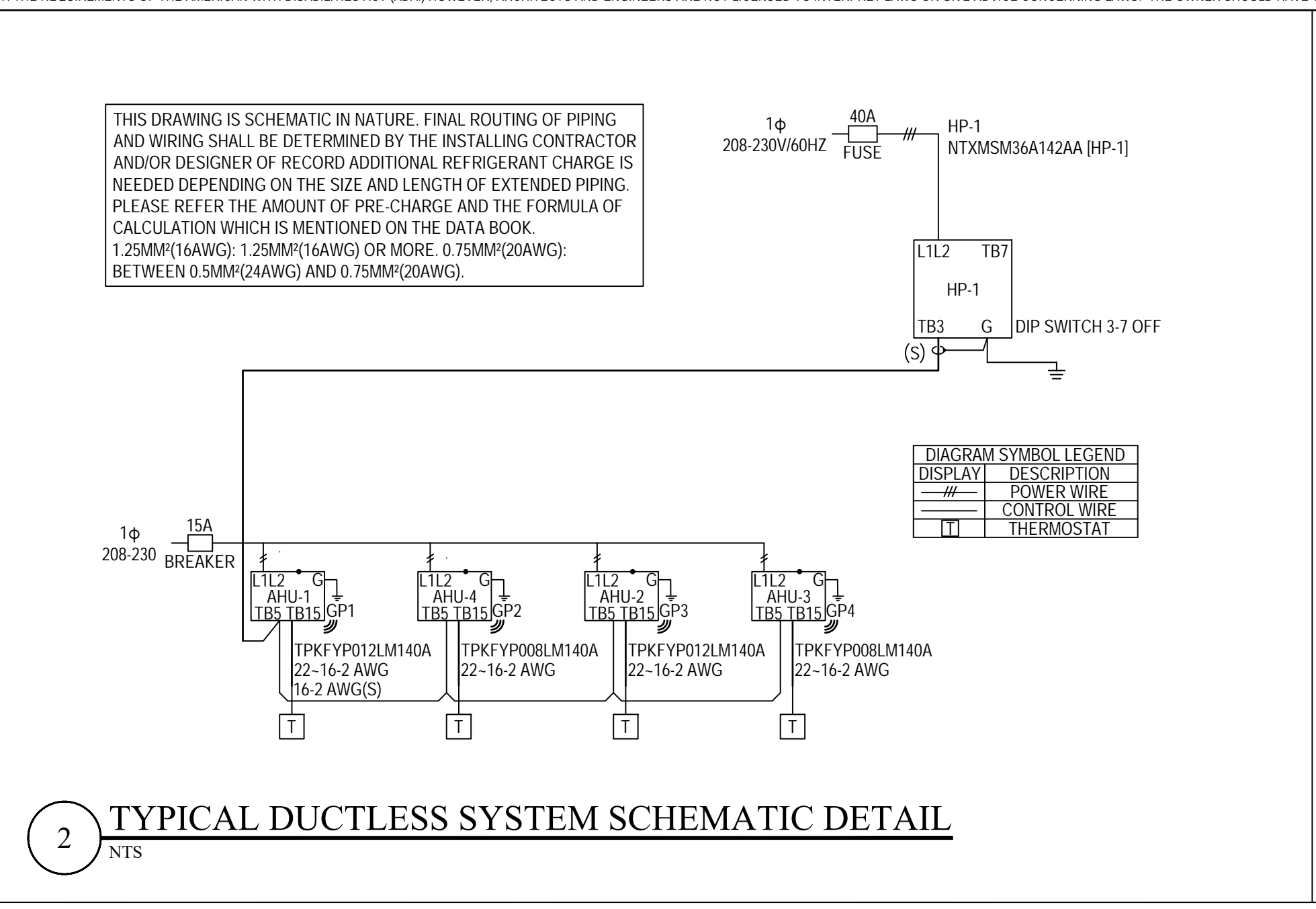
DATE: 1/10/2023  
DRAWN BY: CKD  
CHECKED BY: RL

SHEET TITLE:  
**ELECTRICAL LIGHTING PLAN**  
SHEET NUMBER:  
**E-201**  
PROJECT# 21-1110

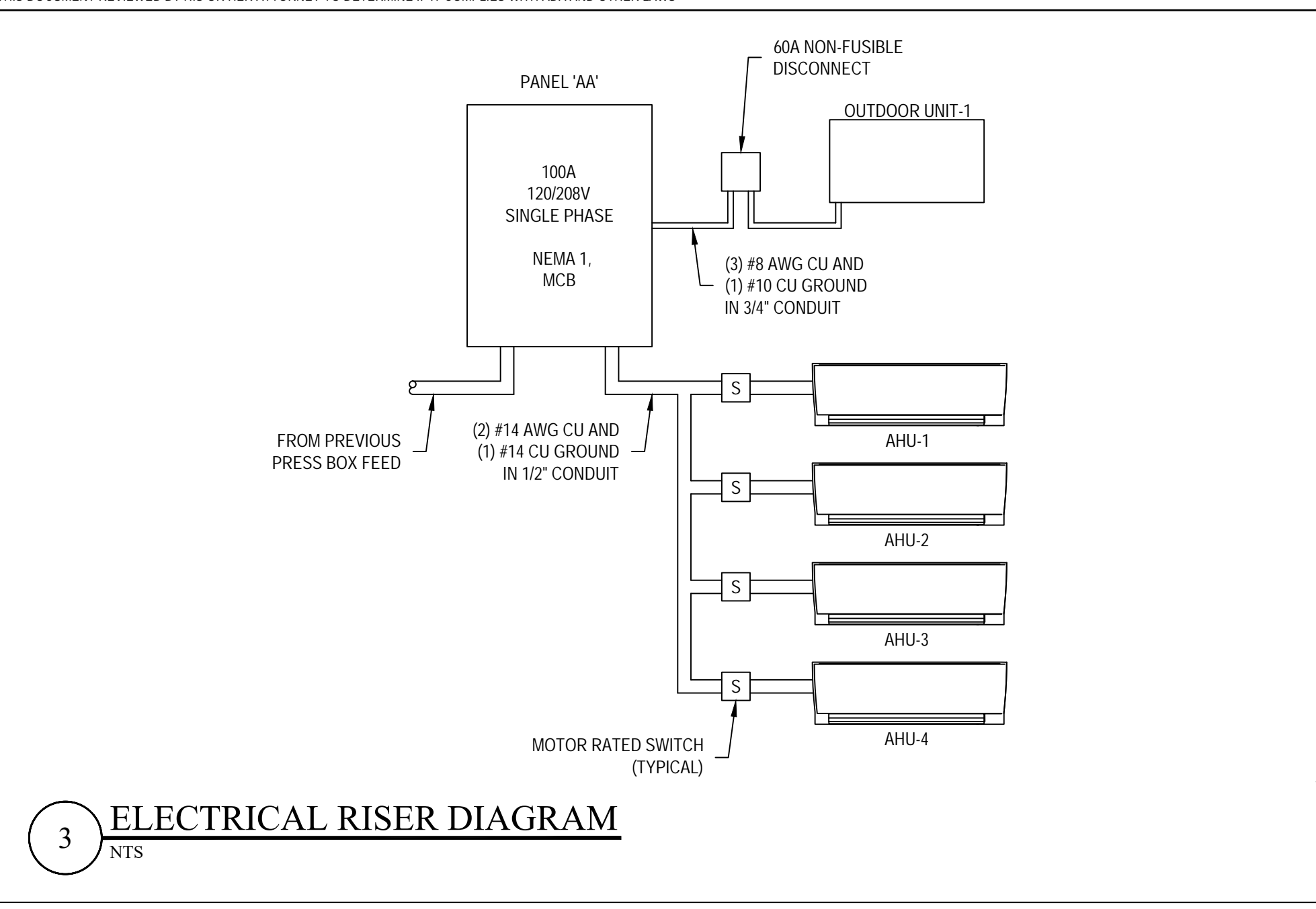
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1 RECEPTACLE GROUNDING DETAIL  
NTS



2 TYPICAL DUCTLESS SYSTEM SCHEMATIC DETAIL  
NTS



3 ELECTRICAL RISER DIAGRAM  
NTS

MN WIRE SIZE	PANEL 'AA'										GROUND BAR NEUTRAL		MN WIRE SIZE
	DESCRIPTION	Watts	Bkr.	#	Leg 'A'	Leg 'B'	#	Bkr.	Watts	DESCRIPTION			
8	HEAT PUMP-1	3640	40	1	4140	2	20	500	REFRIGERATOR	12			
12	FIRST FLOOR RECP.	360	20	5	720	6	20	360	FIRST FLOOR RECP.	12			
8	WATER HEATER	4160	40	7	4520	8	20	360	COMM BOARD	12			
12	SECOND FLOOR RECP.	540	20	11	540.5	12	15	0.5	AIR HANDLER UNITS	12			
12	SECOND FLOOR RECP.	540	20	13	915	14	20	375	LIGHTS	12			
12	MENS RR	1500	20	15	3000	16	20	1500	WOMEN RR	12			
				17	0	18							
				19	0	20							
				21	0	22							
				23	0	24							
TOTAL Watts Leg 'A'					9935.5	TOTAL Watts Leg 'B'					12200.5	Total Watts 22136	

BUILDING TOTAL LOADS			
TOTAL Watts Leg 'A'	9935.5	SERVICE ENTRANCE	100 AMPS
TOTAL Watts Leg 'B'	12201	CONDUCTOR SIZE	3 AWG
TOTAL WATTS	22136	GROUND SIZE	6 AWG
TOTAL AMPS	92.23	CONDUIT SIZE	1 1/2 INCH

4 PANEL 'AA' SCHEDULE  
NTS

**LL&J**  
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P-0754

REGISTERED PROFESSIONAL ENGINEER  
STATE OF NORTH CAROLINA  
NO. 21110  
4/13/2023

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PROJECT INFORMATION:

REV#	DATE	DESCRIPTION
1	4/12/2023	PANEL SCHEDULE UPDATED
2		
3		
4		
5		

DATE: 1/10/2023

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE: ELECTRICAL DETAILS

SHEET NUMBER: E-301

PROJECT# 21-11110

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